

THE GREEK ADDRESS SYSTEM OF THE ROMAN PERIOD AND ITS RELATIONSHIP TO LATIN¹

I. BACKGROUND AND EVIDENCE

Scholars familiar with classical Attic who venture into the world of documentary papyri are immediately struck by a profound difference in language: not only the spelling, but also the morphology, syntax, and lexicon of Egyptian documentary Greek can be drastically different from the language of Plato. Studies of these phenomena fill many volumes, and most features of the Greek of the papyri, however distant from classical Greek, can be shown to be natural developments from the classical language. There is, however, one whole class of differences that has never been convincingly linked to classical Greek: the use of forms of address. Since this feature of the Greek of the papyri is not as conspicuous as spelling changes, case syncretism, and the other famous late Greek changes, it has been little studied, and such work as has been done has examined only individual words. Yet the address system of the papyri, taken as a whole, reveals some of the most unusual developments in post-classical Greek, for there is an almost complete discontinuity between the classical Attic address system and that of Egyptian papyri of the Roman period. When all the evidence is assembled, there is only one good explanation for the address system of the documentary papyri: the classical Greek address system died out in the Hellenistic period, and in the early Roman period a new address system was created under Latin influence.

Such a claim can only be made on the basis of a substantial amount of data including all or nearly all the vocatives found in papyrus documents. The data for this study were collected² from a corpus consisting of all known letters and petitions,³ these

¹ This article grew out of papers delivered at the Berkeley Greek Workshop and the East Coast Indo-European Conference in the spring of 2002; I am grateful to Andrew Garrett, Don Ringe, and the participants at those conferences for inspiring me to work on this topic, suggesting bibliography, and offering valuable and stimulating criticism. Particular thanks are due to Roger Bagnall for detailed help in dealing with the papyri and papyrological resources, for overall guidance, and for asking many tough questions. I am also grateful to J. N. Adams, Raffaella Cribiore, Philomen Probert, Valerie Bailey Fischer, Brigitte Libby, and the members of the Columbia Papyrology Seminar for their advice and assistance, as well as to the Center for Hellenic Studies for generous support, perfect working conditions, and supremely helpful librarians.

² By hand; there is no way to search electronically for vocatives as such.

³ That is, all documents identified by the *Heidelberger Gesamtverzeichnis der griechischen Papyrusurkunden Ägyptens* (<http://www.rzuser.uni-heidelberg.de/~gv0/gvz.html>, as of May 2002) in response to entering 'Brief', 'Eingabe', or 'Bittschrift' under 'Inhalt', excluding documents misidentified as letters or petitions (none of which contains vocatives), those listed more than once because of multiple possible dates (these have been counted the first time they are listed, but not on subsequent occasions), those for which no actual text is published, those written entirely in Latin or Coptic (documents written partly in Greek and partly in another language are included, but only their Greek portions are considered), and those that are undatable or datable only to a span of more than two centuries (by the *Gesamtverzeichnis's* dating, which has been followed consistently, including the rare cases where it represents a revision of that assigned by the original editors). Each of the separate letters or petitions contained within a single papyrus is counted as a separate document, even if they are related; thus if the writer of a petition quotes an earlier

being the types of document that supply almost all papyrus vocatives.⁴ Since in a study of this type more inaccuracies would result from the inclusion of false data than the exclusion of real data, doubtful vocatives have generally been excluded.⁵

Of the eleven centuries for which we have papyrus documents, the third century B.C. to the eighth century A.D., all have produced at least some surviving letters and petitions, but the number of such documents varies enormously from century to century, and this variation is an important factor in the number of vocatives preserved. In order to look at meaningful variation in address usage, therefore, we shall have to look at usage relative to the number of preserved letters and petitions, rather than in absolute terms. Moreover, the papyri not securely datable to a single century must be dealt with in a way that makes statistical comparisons between centuries possible. Following the practice of an important study of the chronological distribution of documentary papyri,⁶ those papyri and their vocatives are here divided between centuries based on the proportions of datable papyri and vocatives in those centuries.⁷ The number of surviving letters and petitions per century is therefore as given in Table 1. The totals for surviving addresses and vocatives per century are given in Table 2; for these purposes, a phrase like *κύριε ἀδελφί* is counted as one address but two vocatives.

One can see from these results that there is a substantial quantity of data on vocative usage in the papyri, but that those data are very unequally distributed, and that such an unequal distribution cannot be accounted for simply by accidents of preservation. At some periods vocatives were common, and at others they were not used at all. Addresses are not infrequent in the third century B.C. (at least in petitions), but in the next century they fall dramatically; they then rise again, peaking in the

petition, the resulting document is counted as two petitions (I have not, however, counted as separate documents brief notes simply indicating that a copy of an earlier petition can be found below). The resulting figures for total letters and petitions per century are always slightly lower than the *Gesamtverzeichnis*' totals.

⁴ Electronic searches of the Duke Database of Documentary Papyri (<http://www.perseus.tufts.edu/cgi-bin/perscoll?collection=DDBDP>) for specific vocatives established that our corpus of letters and petitions does in fact contain most (but not absolutely all) vocatives found anywhere in the papyri; they also established that the hand count, though not totally accurate, is much more reliable than the electronic search, which picks up mis-spelled forms only if they have been flagged as such by the editor. As the total number of surviving documentary papyri is over 34,000, and as the vast majority of these are types of document that virtually never contain vocatives (such as census and tax records), a hand search of the entire body of papyri would be impractical and unlikely to yield anything of importance.

⁵ That is, words that do not have a distinct vocative form, such as *ἀδελφί* (or even *πατήρ* in some texts) are considered to be vocatives only when there is enough context to make it syntactically clear that they are used as vocatives. Words that are entirely editorial supplements are not included, while those that are partial supplements (i.e. at least part of one letter actually appears on the papyrus) are normally included but have been subjected to additional scrutiny.

⁶ W. Habermann, 'Zur chronologischen Verteilung der papyrologischen Zeugnisse', *ZPE* 122 (1998), 144–60.

⁷ Habermann does not spell out exactly what he means by this, but in this study it means that all papyri with a dating that suggests a greater probability of one century than another are assigned to the more probable century (e.g. one dated 'A.D. 90–130' would be assigned to the second century), and those with a date indicating equal probability (e.g. 'IV–V A.D.') are divided according to the following pattern: if there are 400 fourth-century papyri, 100 fifth-century papyri, and fifty papyri that could belong to either century, forty of the doubtful papyri are assigned to the fourth century and ten to the fifth. These calculations have been performed separately for total papyri, total vocatives, and each individual vocative.

TABLE 1. Surviving letters and petitions

| Century | Letters | Petitions ^a | Total | With proportional division of doubtful papyri |
|---------------|---------|------------------------|-------|---|
| III B.C. | 1,586 | 281 | 1,867 | 1,879 |
| III–II B.C. | 9 | 7 | 16 | |
| II B.C. | 300 | 287 | 587 | 599 |
| II–I B.C. | 11 | 1 | 12 | |
| I B.C. | 182 | 137 | 319 | 327 |
| I B.C.–I A.D. | 8 | 2 | 10 | |
| I A.D. | 291 | 146 | 437 | 475 |
| I–II A.D. | 134 | 10 | 144 | |
| II A.D. | 1,057 | 453 | 1,510 | 1,752 |
| II–III A.D. | 215 | 21 | 236 | |
| III A.D. | 945 | 286 | 1,231 | 1,414 |
| III–IV A.D. | 117 | 8 | 125 | |
| IV A.D. | 558 | 202 | 760 | 861 |
| IV–V A.D. | 57 | 6 | 63 | |
| V A.D. | 116 | 33 | 149 | 188 |
| V–VI A.D. | 81 | 8 | 89 | |
| VI A.D. | 265 | 36 | 301 | 470 |
| VI–VII A.D. | 153 | 9 | 162 | |
| VII A.D. | 143 | 5 | 148 | 210 |
| VII–VIII A.D. | 15 | – | 15 | |
| VIII A.D. | 94 | – | 94 | 100 |
| Total | 6,337 | 1,938 | 8,275 | |

^aDocuments identified by the *Gesamtverzeichnis* both as letters and as petitions have been counted with the letters.

TABLE 2. Surviving addresses

| Century | Addr. in letters | Addr. in petitions | Total addr. | Total vocs | Addr. with prop. div. | Addr. per 500 docs |
|---------------|------------------|--------------------|-------------|------------|-----------------------|--------------------|
| III B.C. | 5 | 178 | 183 | 183 | 183 | 49 |
| III–II B.C. | – | – | – | – | – | – |
| II B.C. | 2 | 13 | 15 | 24 | 15 | 13 |
| II–I B.C. | – | – | – | – | – | – |
| I B.C. | 7 | 5 | 12 | 18 | 12 | 18 |
| I B.C.–I A.D. | – | – | – | – | – | – |
| I A.D. | 33 | – | 33 | 40 | 35 | 37 |
| I–II A.D. | 27 | – | 27 | 29 | – | – |
| II A.D. | 398 | 103 | 501 | 585 | 569 | 162 |
| II–III A.D. | 72 | 5 | 77 | 93 | – | – |
| III A.D. | 332 | 59 | 391 | 482 | 447 | 158 |
| III–IV A.D. | 45 | 1 | 46 | 74 | – | – |
| IV A.D. | 336 | 89 | 425 | 649 | 481 | 279 |
| IV–V A.D. | 33 | 1 | 34 | 57 | – | – |
| V A.D. | 17 | 10 | 27 | 53 | 38 | 104 |
| V–VI A.D. | 29 | – | 29 | 36 | – | – |
| VI A.D. | 55 | 9 | 64 | 91 | 114 | 122 |
| VI–VII A.D. | 38 | 1 | 39 | 44 | – | – |
| VII A.D. | 19 | 1 | 20 | 22 | 29 | 69 |
| VII–VIII A.D. | – | – | – | – | – | – |
| VIII A.D. | – | – | – | – | – | – |
| Total | 1,449 | 475 | 1,924 | 2,481 | | |

fourth century A.D. when there is approximately one address for every two documents, and then decline rapidly until they disappear altogether in the eighth century A.D. One can also observe a shift between petitions, which account for nearly all addresses in the Ptolemaic period, and letters, which become the main source in the Roman period. In addition, the average number of vocatives per address changes over time: in the third century B.C. one-word addresses are standard, but in later centuries the combination of several words becomes more and more common.

II. TWO ADDRESS SYSTEMS

In order to see what lies behind these rises and falls in address usage, we need to consider the individual words used, for the vocatives that were popular in the third century B.C. need not be the same as those behind the rise in the fourth century A.D. Tables 3 and 4 reveal the complex picture produced by the most common of the individual terms.

Looked at closely, these tables reveal two distinct address systems with an almost complete break between them. The first, which is used almost exclusively in petitions and in which the principal vocative is *βασιλεῦ*, is found in the Ptolemaic period. The second, which employs a greater variety of vocatives and is initially found only in letters, begins with the start of Roman influence and increases in strength until the fourth century, after which there is a decline in the use of all major terms except *δέσποτα*.

We can start, therefore, by looking at the earlier address system. In its earliest phase, this system is remarkably simple: of 183 preserved addresses in the third century B.C., all but one consist of the vocative *βασιλεῦ*, unaccompanied by any other word.⁸ As far as one can tell, *βασιλεῦ* in these documents is always addressed to the king, and this is in accord with classical usage, in which *βασιλεῦ* is regularly used to monarchs outside Greece proper.⁹ The one other address consists of a name alone, directed to an official (*P.Cair.Zen.* 1.59034.18); this too is in accord with classical usage, in which the standard way to address a known male citizen was his name alone. The almost total absence of any type of address to people other than the monarch, however, is unexpected from a classical perspective. It is not that the documents preserved from the third century offer no opportunity for such addresses; on the contrary, letters and petitions addressed to people other than the king vastly outnumber those directed to royalty. While we have no equivalent body of private letters and petitions surviving from the classical period, the picture of address usage provided by surviving speeches and historical works suggests that in the fifth and fourth centuries it was common to use vocatives to officials other than kings, and a very large quantity of evidence from comedy and prose dialogues indicates that it was also common to use vocatives to friends and relatives. The rarity of address usage in third-century documents is thus unexpected from a classical viewpoint, but the addresses used are not.

⁸ E.g. at *P.Cair.Zen.* 4.59620.34, *P.Col.* 4.83.17, *P.Frankf.* 7.i.12, *P.Heid.* 6.376.13, *P.Petr.* 2.17.1.12, *PSI* 4.399.7, *P.Tebt.* 3.1.769.63, *P.Yale* 1.46.1.14, *SB* 6.9302.4, *UPZ* 2.151.23, and *P.Enteux* 1–113 *passim*. (All abbreviations of papyrological publications are taken from the *Checklist of Editions of Greek, Latin, and Demotic Papyri, Ostraca, and Tablets* by J. F. Oates, R. S. Bagnall, *et al.*, available at http://scriptorium.lib.duke.edu/papyrus/texts/clist_papyri.html.)

⁹ All statements about classical Greek address usage are based on the data collected for my *Greek Forms of Address* (Oxford, 1996); that work should be consulted for a listing of the evidence.

TABLE 3. Most frequent vocatives—actual numbers^a

| Century | κύριε/ κυρία | ἀδελφέ/ ἀδελφή | δέσποτα/ δέσποινα | βασιλεῦ | φίλιτα/ φιλιάτα | πάτερ/ μήτερ | Names | τιμώσατε/ τιμωτάτη | ἡγεμιών | ἀγαπητέ | τέκνον | πάτρων |
|-------------|-----------------|-------------------|----------------------|---------|--------------------|-----------------|-------|-----------------------|---------|---------|--------|--------|
| III B.C. | — | — | — | 182 | — | — | 1 | — | — | — | — | — |
| II B.C. | — | — | — | 11 | — | 1 | 1 | — | — | — | — | — |
| I B.C. | — | 6 | — | — | 1 | — | — | — | 1 | — | — | — |
| I A.D. | 8 | 13 | 1 | — | 3 | 5 | 6 | 2 | — | — | 1 | — |
| I–II A.D. | 5 | 17 | 1 | — | 1 | 1 | 2 | 1 | — | — | — | — |
| II A.D. | 221 | 154 | 3 | — | 52 | 27 | 29 | 46 | 18 | — | 9 | — |
| II–III A.D. | 29 | 29 | — | — | 7 | 8 | 9 | 4 | — | — | 3 | — |
| III A.D. | 133 | 97 | 10 | — | 111 | 29 | 35 | 13 | 22 | 2 | 3 | 2 |
| III–IV A.D. | 24 | 26 | 1 | — | 1 | 10 | 8 | — | 1 | 2 | — | 2 |
| IV A.D. | 225 | 137 | 58 | 3 | 15 | 41 | 20 | 12 | 32 | 24 | 5 | 16 |
| IV–V A.D. | 19 | 8 | — | — | — | 7 | 3 | 5 | — | — | — | 1 |
| V A.D. | 18 | 5 | 6 | — | — | 4 | — | 1 | 1 | — | — | — |
| V–VI A.D. | 4 | 1 | 17 | — | — | — | 2 | — | — | — | 3 | — |
| VI A.D. | 17 | 6 | 43 | — | — | 6 | — | 1 | — | 1 | — | 2 |
| VI–VII A.D. | 5 | 8 | 24 | — | — | — | 4 | — | — | — | — | — |
| VII A.D. | 3 | 1 | 16 | — | — | — | 2 | — | — | — | — | — |
| Undatable | 2 | 4 | 8 | — | — | 1 | — | 1 | — | — | — | — |
| Total | 713 | 512 | 196 | 196 | 191 | 140 | 122 | 86 | 75 | 29 | 24 | 23 |

^aIncluding only vocatives occurring in our corpus of letters and petitions. Outside this corpus I have found an additional six examples of *πάτερ*, eight of *μήτερ*, nine of *τιμώσατε*, and three of *ἀγαπητέ*, all from centuries in which those vocatives are common within the corpus.

TABLE 4. most frequent vocatives—per 500 documents

| Century | κύριε/ κυρία | ἀδελφέ/ ἀδελφή | δέσποτα/ δέσποινα | βασιλεῦ | φίλτατε/ φιλάττη | πάτερ/ μήτερ | Names | τιμιώτατε/ τιμιωτάτη | ἡγεμιών | ἀγαπητέ | τέκνον | πάτρων |
|----------|-----------------|-------------------|----------------------|---------|---------------------|-----------------|-------|-------------------------|---------|---------|--------|--------|
| III B.C. | — | — | — | 49 | — | — | 0.3 | — | — | — | — | — |
| II B.C. | — | — | — | 9 | — | 0.8 | 0.8 | — | — | — | — | — |
| I B.C. | — | 9 | — | — | 2 | — | — | — | 2 | — | — | — |
| I A.D. | 8 | 15 | 1 | — | 3 | 5 | 6 | 2 | — | — | 1 | — |
| II A.D. | 70 | 54 | 1 | — | 16 | 9 | 10 | 14 | 5 | — | 3 | — |
| III A.D. | 54 | 42 | 4 | — | 41 | 13 | 16 | 5 | 8 | — | 1 | 0.7 |
| IV A.D. | 150 | 93 | 38 | 2 | 9 | 31 | 15 | 10 | 19 | 15 | 3 | 11 |
| V A.D. | 56 | 13 | 24 | — | — | 11 | 3 | 3 | 3 | — | 3 | — |
| VI A.D. | 25 | 15 | 80 | — | — | 6 | 1 | 1 | — | 1 | 2 | — |
| VII A.D. | 10 | 5 | 55 | — | — | — | 14 | — | — | — | — | — |

In the second century the use of *βασιλεῦ* declines radically, and in those cases where the vocative does occur it is frequently accompanied by a complimentary modifier such as *μέγιστε*.¹⁰ There are also two addresses to people other than the monarch.¹¹ In one a man is addressed by his name, which is needed for clarity when the writer singles out one of the two brothers to whom the letter is addressed (*UPZ* 1.66.6). In another letter the writer describes a dream in which he addressed an older man as *πάτερ* (*UPZ* 1.78.36); this usage has good classical precedent (cf. Menander *Dysk.* 494).

In the first century B.C., from which we have very few documents, there are no addresses to the king, but other officials are addressed as *στρατηγέ, ἡγεμόν, διοικητά,* and *ἐπιστάτα*, sometimes with the modifiers *μέγιστε* or *σεμνότατε*.¹² After the first century B.C. addresses disappear altogether from petitions and do not reappear until the second century A.D., by which time there is a completely different address system. These first-century addresses are not classical, but they could represent a development or adaptation of the classical system to the social and political structure of Ptolemaic Egypt. It is not possible to determine the extent of their connection to the classical system in isolation from an understanding of the second address system, so discussion of this problem must be postponed (see below, section IX).

The second address system presents a very different picture. This system begins in the first century B.C., when it is found only in letters, and does not spread to petitions until the second century A.D. Its most important elements are *κύριε* and *ἀδελφέ*.¹³ This address system resembles that of the classical period in that it allows writers to address all sorts of people: officials, subordinates, friends, relatives, and so on. The vocatives used, however, represent a complete break with the classical period, for although both *κύριε* and *ἀδελφε* are attested in classical literature, they are both rare and found only in high-register poetry. It is clear from their total absence from comedy and prose that these vocatives were not part of the normal address system of fifth- and fourth-century Greeks. Moreover, the meanings of these vocatives, when they occur in the papyri, are very different from their classical meanings. From a classical perspective, one would expect that letters containing *κύριε* or *κυρία* would be addressed by women to their guardians or by members of a household to the head of the family, and that those containing *ἀδελφε* or *ἀδελφή* would be addressed to brothers and sisters (as are all the surviving examples of *ἀδελφε* and vocative *ἀδελφή* from the classical period). Yet such is very far from being the case; many, probably

¹⁰ See *βασιλεῦ* (*UPZ* 1.6.32, 1.15.23, 1.16.8, 1.20.7, *SB* 10.10224.2), *μέγιστε βασιλεῦ* (*UPZ* 1.41.4, *BGU* 10.1904.3?), *μέγιστε βασιλεῦ καὶ βασιλίσσα* (*P.Dion.* 9.24, *UPZ* 1.10.20–1), *Ἰλιε βασιλεῦ* (*UPZ* 1.15.33, 1.16.22), *θεοὶ Σωτήρες Ἐνεργεῖται* (*UPZ* 1.9.9–10).

¹¹ It could be argued that [*στρατηγέ σεμνότατε* at *SB* 14.11273.18 (where all surviving letters are dotted) is a third example, but recent study of this letter by the Columbia Papyrology Seminar has concluded that this reading (and the editor's reading of the lines preceding it) is incorrect. See R. S. Bagnall and E. Dickey, 'SB XIV 11273: no vocative', *ZPE* 146 (2004), 170–2.

¹² All I found are *ἡγεμόν(ν)* [[*βέλτιστε*]] *μέγιστε* (*BGU* 4.1140.3), *σεμνότατε διοικητά* (*BGU* 8.1756.15), *μέγιστε διοικητά* (*BGU* 8.1766.3, 7), [*στ*]ρατηγέ (*BGU* 8.1816.15), *σεμνότατε στρατηγέ* (*BGU* 8.1843.13), *σεμνότατε ἐπιστάτα* (*BGU* 16.2600.9–10). Outside my corpus there are some addresses to the king from 99 B.C.: *μέγιστε βασιλεῦ* at *UPZ* 1.108.23, 31, 33.

¹³ The vocative of *ἀδελφός* is properly accented *ἀδελφε* in Attic but *ἀδελφέ* in the koine; see Trypho quoted in Ammonius, *De adfinium vocabulorum differentia*, par. 405 Nickau. Trypho's assertion is supported by the difference in accentuation of the vocative in manuscripts (and modern texts) of the tragedians and the Bible.

most,¹⁴ papyrus letters containing ἀδελφέ were sent outside the family, usually on business, and both κύριε and ἀδελφέ can clearly be used in contexts without special intimacy, affection, or respect.

Another aspect of the disparity between this documentary address system and that of the classical period is the rarity in the papyri of types of address common in the classical period. By far the most frequent address to individuals in the classical period was the addressee's name, for names account for 76% of all singular vocatives in classical Attic prose. But in the first three centuries of the second papyrus address system, names account for only 6% of vocatives. Other addresses common in the classical period are also conspicuous by their absence from the papyri. The lack of classical titles is understandable, given the political changes, and so is the lack of classical insults, since letters and petitions rarely contain insults.¹⁵ But the total absence, at all periods, of the standard way of addressing women in the classical period, γύναι, cannot be explained by a lack of opportunity, nor can the rarity or complete absence of other common classical terms such as παῖ, ξένε, φίλε, and βέλτιστε.

The third difference between the classical and papyrus address systems is in the number of vocatives per address. In classical prose one-word addresses are the norm (if one does not count the particle ὦ as a word), so that in classical Attic prose the average number of vocatives per address (in the singular¹⁶) is 1.06. The second papyrus address system begins with a ratio somewhat higher than that of the classical period, 1.17 vocatives per address in the first three centuries, and this ratio increases noticeably over time, to more than 1.5 in the fourth century and even higher (though less accurately, given the smaller amount of evidence) later. This difference, along with the reduced use of names, is responsible for the virtual disappearance of the type of address standard in the classical period: in classical Attic prose, names standing alone in the vocative or accompanied only by the particle ὦ account for 73% of all singular addresses. But in the first three centuries of the second papyrus address system names used alone in this way account for only 1% of addresses.

III. RELATIONSHIP TO LATIN

While it clearly has little similarity to the classical Greek system, the second address system of the papyri is not without parallels; in fact, there is a striking parallel in the most similar body of Latin texts, the Vindolanda tablets. These wooden tablets come from Hadrian's wall in northern Britain and date to the late first and early second centuries A.D.; there are not as many of them as there are contemporary Greek papyri, but nevertheless enough to produce a corpus of ninety-two vocatives. Of these vocatives, the most common is *domine/domina*,¹⁷ followed by *frater/soror*.¹⁸ Not

¹⁴ It is a fundamental problem of working with documentary papyri that it is often impossible to tell what the exact relationship between writer and addressee is, even when a letter is preserved intact; with fragmentary documents, which make up the majority of the corpus, the problem is compounded. For this reason I can give no exact statistics that would rely on such knowledge. For a more detailed examination of the use of ἀδελφέ and other kinship terms outside the family, see E. Dickey, 'Literal and extended use of kinship terms in documentary papyri', *Mnemos.* 4th ser. 57 (2004), 131–76.

¹⁵ The only vocative insult I found in the letters is *κακόγῃρε, προδότα, πορνοβοσκέ* (*SB* 20.14463.2); these insults are not classical.

¹⁶ Multiple-vocative addresses are common in the plural, owing to the prevalence of addresses like ὦ ἄνδρες Ἀθηναῖοι and ὦ ἄνδρες δικασταί in the orators. But since addresses in papyrus letters are almost always singular, Attic plural forms are not relevant.

only are these words the lexical equivalents of the most common vocative in the Greek papyri, *κύριε/κυρία*, and the second most common, *ἀδελφέ/ἀδελφή*, but they are used in the same way, in casual correspondence between unrelated friends and colleagues.

Domine and *frater* are responsible for the bulk of the vocatives on the Vindolanda tablets, between them accounting for 76% of all vocatives. In the same way, *κύριε* and *ἀδελφέ* make up 64% of the vocatives in papyri in the first three centuries of the new system (the first century B.C. to the second century A.D.). The parallelism also extends to the third most frequent vocative: at Vindolanda this is *carissimel-a*,¹⁹ and in the first three centuries of the papyrus system the third most common vocative is *φίλτατε/-η*. Once again the Greek term is not only the lexical equivalent of the Latin one but also has the same usage: while the classical address *φίλτατε* indicates real affection, writers of papyrus letters use the term freely as a mildly polite way of greeting colleagues, associates, and officials, just as *carissime* is used at Vindolanda. These three addresses combined make up 89% of all vocatives on the Vindolanda tablets and 73% of those in the first three centuries of the papyrus address system.

There is also a striking similarity between the way vocatives are combined in the two bodies of text. Multi-vocative addresses are noticeably more common at Vindolanda than in classical Greek prose, and somewhat more common than in contemporary papyri: the ratio of vocatives per address is 1.37, and as we have seen, the papyri from the same period have a ratio of 1.17. The most common combination of vocatives at Vindolanda is *domine frater*, which occurs seven times in that order and once reversed with 'and' as *frater et domine*.²⁰ In papyri the most common combination is *κύριε (μου) ἀδελφέ*, which in the first three centuries occurs fourteen times in that order and twice reversed with 'and' as *ἀδελφέ καὶ κύριε*.²¹

Similarities like this can hardly be coincidental; it is clear that the two address systems are related. Such a relationship could have a variety of different causes: the address system of either language could have been borrowed from the other, both could have been borrowed from a third language, or influence could have worked in more than one direction, as part of a general convergence involving Latin, Greek, and perhaps other languages as well. Yet all these possibilities require language contact, and it is clear that there was no direct contact between the Greek of Egypt and the

¹⁷ Thirty-nine occurrences: A. K. Bowman, J. D. Thomas, and J. N. Adams, *The Vindolanda Writing-Tablets [Tab. Vindol. II]* (London, 1994), 166.2, 167.2, 168.2, 169.2, 170.1, 171a.2, 172.2, 173.1, 175.4, 176.2, 225.4, 234i.3, 238.3, 239.3, 247.2, 248.14, 250.4, 6, 252.ii.3, 255.15, 256ii.5, 257.3, 258.5, 260.4, 262.3, 264.3, 285.1, 288.4, 289.3, 294.3, 295.9, 306.4, 316.3, 318.2, 332.2, 344.7, 345ii.5, 350.2, 353ii.3. The corpus for this study includes only tablets published in *Tab. Vindol. II*, but one of the tablets published separately also contains a vocative, and that vocative is *domine*; see A. K. Bowman and J. D. Thomas, 'New writing-tablets from Vindolanda', *Britannia* 27 (1996), 299–328, 3.i.4.

¹⁸ Thirty-one occurrences: *Tab. Vindol. II* 210.4, 233b.3, 236a.3, 247.3, 248.3, 12, 250.17, 252.ii.3, 255.15, 259.3, 260.5, 265.3, 289.4, 291.3, 11, 12, 292i.2, 292b.back, 293, 295.10, 300.10, 301.4, 7, 306.5, 309.15, 310.4, 15, 311ii.1, 331.3, 345i.3, 345ii.5.

¹⁹ Twelve occurrences: *Tab. Vindol. II* 242.ii.3, 247.3, 255.16, 285.2, 288.5, 291.14, 292b.back, 293, 298.2, 306.5, 331.3, 341.

²⁰ *Domine frater* at *Tab. Vindol. II* 247.2–3, 252.ii.3, 255.15, 260.4–5, 289.3–4, 295.9–10, 306.4–5; *frater et domine* at *Tab. Vindol. II* 345ii.5.

²¹ *Κύριε (μου) ἀδελφέ* at *O. Buch.* 108.5–6, *P. Alex.* 25.27, *P. Brem.* 8.8, 9.22, 54.16, 56.1, *P. Oxy.* 18.2192.25, *P. Phil.* 34.13, *P. Princ.* 2.69.6, *PSI* 12.1259.27, *SB* 5.7743.26–7; *κυρία ἀδελφή* at *P. IFAO* 2.41b.10, *P. Mert.* 2.82.7, *SB* 8.9903.17; *ἀδελφέ καὶ κύριε* at *O. Claud.* 1.165.3, *P. Brem.* p. 130, line 20.

Latin of Hadrian's Wall, nor is there any third language that was in direct contact with both of these. Therefore the phenomena we have been investigating must have been more widespread in at least one of these languages.

No source like the Vindolanda tablets exists for other parts of the Latin-speaking world, but we do have some Latin letters on papyri and ostraca from Egypt, and a few of these letters contain vocatives. These vocatives conform to the pattern seen at Vindolanda.²² It is therefore likely that, even though the Vindolanda address system is different from that used by Cicero more than a century earlier, and from the address systems of the more polished epistles of Pliny and Seneca, it reflects a usage that was widespread in subliterate Roman epistolography of the first-second century A.D.

For Greek of the Roman period we have virtually no private letters preserved from regions other than Egypt, and it is therefore impossible to say for certain whether the address system seen in the papyri was also used for subliterate epistles in other areas. The vocatives characteristic of the second papyrus address system are, however, found in some low-register literary sources from outside Egypt, the New Testament and Epictetus' dialogues, and *κύριε* has persisted into modern Greek. It is therefore likely that the Greek address system we are examining, like the Latin one, was current throughout the empire, and this means that influence owing to contact between the two languages could have taken place anywhere in the empire where both languages were spoken. Choice among the different possibilities for the direction of that influence will require careful scrutiny both of the general likelihood of external influence on each language and of the individual words in question.

IV. GENERAL LIKELIHOOD OF EXTERNAL INFLUENCE

The general tendencies of influence are not immediately obvious. Traditionally it has been believed that Greek had a substantial effect on the development of Latin but that reverse influence was rare; recently, however, more attention has been paid to the way the Greek of the Roman period was affected by contact with Latin. Influence of other languages on either Greek or Latin is much less well attested.

The fact that the Vindolanda tablets come from an area immune to direct contact with Greek and languages in contact with Greek means that the address system found at Vindolanda must either represent a native Latin system that was the source of the Greek system or represent the end result of a complex process of change in

²² The Mons Claudianus Latin ostraca contain four addresses: *domine* (*O.Claud.* 2.367.3), *frater* (1.2.3), *frater karissime* (1.2.9–10), and a name (2.367.9). The Wādi Fawākhir ostraca contain three: *frater* (O. Guéraud, 'Ostraca grecs et latins de l'Wādi Fawākhir', *Bulletin de l'institut français d'archéologie orientale du Caire* 41 [1942], 1.10, 4.2) and *frater k[a]rissime* (2.19–20). The letters of Claudius Terentianus contain only the vocative *pater*, addressed to his father (*P.Mich.* 8.467.4, 18, 468.4, 8, 20, 23, 31, 41), so they are of little help in determining how correspondents outside the family would have been addressed, but Claudius Tiberianus uses *domine* outside the family (*P.Mich.* 8.472.8, 11, 20, 24). Other Egyptian Latin letters of the first century B.C. and first and second centuries A.D. provide a few more examples of *domine* (*P.Oxy.* 1.32.7, 21, *P.Ryl.* 4.608.6, *C.Epist.Lat.* 82.7, 149.3, 158.6, 174.3) and one each of *mi frater* (*C.Epist.Lat.* 8.7), *domine frater* (*P.Hibeh* 2.276.3) and *frater karissime* (*P.Oxy.* 7.1022.10); later centuries provide more examples of *domine*, *frater*, *domine frater*, *domine fili*, and so on (*C.Epist.Lat.* 183.2, 187.2.4, 191.1.8, 191.5.11, 191.6.8–9, 191.12.15, 191.38a.5, 191.38b.4–5, 191.39.9, 191.48.7, 191.52.1, 199.1.5, 199.2.4, 199.2.9, and so on). An unpublished third-century ostraca from Carthage, of which J. N. Adams has kindly supplied me with a provisional text, has four addresses: *frater*, *domine*, and two examples of *domine frater*.

Latin.²³ Other languages could have affected Vindolanda's Latin only by a gradual process: borrowings that entered Latin elsewhere in the empire would have had to spread across Europe until eventually they reached even the remotest corners of the Roman world. This process would result in a chronological disparity, so changes that began in Mediterranean areas should be visible there long before they turn up at Vindolanda, and Vindolanda's address system should always be a little 'behind' compared to that of Egypt.

Yet no such time lag can be detected. The parallelisms of address usage we have seen involve comparison of the Vindolanda tablets (written in the first and second centuries A.D.²⁴) with Greek papyri of the same period. Moreover, in its early centuries the main way in which the Greek documentary address system changed was in the increased frequency of address usage, from extreme rarity in the first century B.C. to thirty-eight vocatives per hundred letters/petitions in the second century A.D.; the average of the first and second centuries A.D. is twenty-four vocatives per hundred such documents. At Vindolanda there are ninety-two vocatives in 353 tablets, or twenty-six per hundred tablets; this is certainly not 'behind' Greek. In fact, it could be considered to be 'ahead' of Greek if one took into account the fact that the legible portions of the Vindolanda tablets appear to be, on average, considerably shorter than the preserved papyrus letters of the same period, or the fact that more of the Vindolanda tablets come from the first century than the second, so that a perfectly comparable set of Greek data would involve not the average of the two centuries, but a lower figure representing more of the first century than of the second.

Moreover, the hypothesis of imperial-period borrowings from other languages spreading across Europe and having major impact on the Latin of an area distant from the original point of transfer requires us to assume that imperial Latin had a high degree of receptivity to external influence. Often such an assumption seems easy to make, for a quick look at the works of Ovid, Statius, or Seneca reveals extensive Greek influence on Roman writers of the imperial period. Yet the Graecisms found in such literature are not evidence for widespread receptivity to external influence in the imperial period, not only because many of them are purely literary creations never used except in poetry, but also because many of them were already well established in the Latin literary language before the beginning of the empire. A literary Graecism inherited from Cicero or Vergil is evidence not of contemporary Greek influence on imperial Latin, but of the extent to which Graecisms had already become established in the Latin literary language by the end of the Republic.

At an early period, Latin was clearly receptive to external influence at many levels. Not only was the literary language Graecizing from its inception, but many foreign words entered the colloquial language very early on, even in cases where native Latin words for the same objects already existed.²⁵ Such words became fully naturalized at a time when the Roman world was small, and as that world expanded they spread with the rest of the Latin language to all parts of the empire; their ubiquity is thus no

²³ One could argue that the soldiers stationed at Vindolanda might have had contact with Greek earlier in their careers, but this is unlikely. The majority of the men came from Gallia Belgica and Germany, and the rest are believed to have come from the western empire, not the Greek areas. See *Tab. Vindol. II*, p. 30.

²⁴ To be precise, between A.D. 85 and 130, with most tablets coming from A.D. 92–103. See *Tab. Vindol. II*, pp. 17–18.

²⁵ E.g. *popina* and *rufus* are both loanwords from Italic languages; the native Latin forms are *coquina* and *ruber*. Early Greek borrowings include *poena*, *oleum*, and *gubernare*; see A. Meillet, *Esquisse d'une histoire de la langue latine* (Paris, 1966), esp. 108.

evidence that words or usages borrowed much later could have a similar success. Nor can such evidence be found in the Greek technical terms borrowed by imperial Roman scientific writers, since these terms were normally restricted to specific genres (for example, medical, grammatical, or philosophical writings), rather than becoming part of ordinary speech.²⁶

In fact, evidence for the degree of receptivity of imperial Latin to external influence can only come from examination of subliterate Latin texts of the imperial period with a view to finding signs of contemporary influence from other languages. Until recently, little work had been done on such questions, but that situation has now been changed by an immense new work on Latin bilingualism that concentrates on subliterate sources.²⁷ The author details numerous changes that imperial Latin underwent as a result of contact with other languages, primarily but not exclusively Greek, and it is clear that at that period most such changes were both local and short-lived.²⁸ There do not appear to be any imperial parallels for the kind of receptivity to foreign influence that would be needed for the Greek address system to be borrowed by Latin speakers in Mediterranean areas and then spread rapidly to effect a total takeover of the address system at Hadrian's wall.

When one considers the lexicon of the Vindolanda tablets themselves, similar conclusions emerge. The tablets contain remarkably few borrowings: there are some from Celtic (a language with which the Vindolanda writers were in contact),²⁹ and some from Greek, but not many from either language. Moreover, a considerable proportion of the loanwords that do occur are ones that entered Latin at a very early stage (for example, *epistula*, *laena*).

The Greek of papyrus letters presents a very different picture. The traditional view has been that Latin influence on Greek was minor, far less significant than Greek influence on Latin, but again this view is based primarily on the literary language and relatively early historical periods. Obviously the classical Greek authors show little external influence, and it is also true that imperial writers such as Lucian betray very little evidence of contact with Latin (or with other languages). Yet it is also clear that Lucian and his colleagues were making a conscious and largely successful effort to reproduce the classical literary language, so that one simply cannot tell from imperial Greek literary works what developments were occurring in the contemporary colloquial language.

Recent work is increasingly showing that, at the subliterate level, the Greek of the Roman period was highly receptive to Latin loanwords and even allowed grammatical and syntactic borrowings.³⁰ Inscriptions all over the Mediterranean show Latin

²⁶ On such terminology see e.g. D. R. Langslow, *Medical Latin in the Roman Empire* (Oxford, 2000) and J. N. Adams, *Pelagonius and Latin Veterinary Terminology in the Roman Empire* (Leiden, 1995).

²⁷ J. N. Adams, *Bilingualism and the Latin Language* (Cambridge, 2003).

²⁸ Adams (n. 27), ch. 4.

²⁹ See J. N. Adams, 'The language of the Vindolanda writing tablets: an interim report', *JRS* 85 (1995), 127–8.

³⁰ See B. Rochette, *Le latin dans le monde grec* (Brussels, 1997); L. Zgusta, 'Die Rolle des Griechischen im römischen Kaiserreich', in G. Neumann and J. Untermann (edd.), *Die Sprachen im römischen Reich der Kaiserzeit* (Cologne, 1980), 121–45, esp. 134; and bibliography cited in F. Biville, *Les emprunts du latin au grec: approche phonétique* (Louvain 1990–5), ii.521–3. Latin influence occurs even in Hellenistic Greek: see M. Dubuisson, *Le latin de Polybe: Les implications historiques d'un cas de bilinguisme* (Paris, 1985) and 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).

influence,³¹ a natural result of the pervasive contact with Latin occasioned by the Roman conquest. Throughout the Greek-speaking world there were Roman military units, a constant influx of Latin speakers at the top of the administrative hierarchy, and commercial contacts to bring Latin to the attention of Greek speakers. The Latin influence on Greek was not only ubiquitous, but also profound and lasting: in modern Greek some of the most basic words are Latin borrowings that have replaced their ancient Greek equivalents, such as *σπίτι* 'house' (*hospitium*) and *πόρτα* 'door' (*porta*).³²

The best evidence for subliterate Greek of the Roman period is the Egyptian documentary papyri, and here it is clear that imperial Greek was highly receptive to Latin influence of various types.³³ Words borrowed directly from Latin abound in the papyri; at their peak there was an average of more than one per papyrus fragment if one counts only those borrowings not obviously motivated by extralinguistic factors, or more than three per fragment if one includes all Latin borrowings.³⁴ Many other Latin words are represented in the papyri by calques, especially in the early Roman period, when direct loanwords were less popular as a means of representing Latin terms.³⁵ Even Latin epistolary conventions were taken over by Greek, so that the common epistolary closing formula *ἐρρωσθαί σε εὐχομαι* is a translation of the Latin *valere te opto*.³⁶

The receptivity of imperial Greek was, however, largely confined to Latin. In the papyri one would expect heavy influence from the native Egyptian language, which had been in contact with Egyptian Greek much longer than had Latin and whose speakers were far more numerous than Latin speakers in Egypt. Yet evidence of Egyptian influence is sparse and much less significant than that from Latin: Egyptian loanwords

³¹ See Biville (n. 30), Adams (n. 27), ch. 6, and R. A. Kearsley and T. V. Evans, *Greeks and Romans in Imperial Asia: Mixed Language Inscriptions and Linguistic Evidence for Cultural Interaction until the End of A.D. III* (Bonn, 2001).

³² See P. Mackridge, *The Modern Greek Language* (Oxford, 1985), 311; note also R. Cavenaile, 'Influence latine sur le vocabulaire grec d'Égypte', *Chronique d'Égypte* 26 (1951), 404.

³³ See Cavenaile (n. 32), 391–404; R. Cavenaile, 'Quelques aspects de l'apport linguistique du grec au latin d'Égypte', *Aegyptus* 32 (1952), 191–203; C. Wessely, 'Die lateinischen Elemente in der Grazität der ägyptischen Papyrusurkunden', *Weiner Studien* 24 (1902), 99–151, and *WS* 25 (1903), 40–77; I.-M. Cervenka-Ehrenstrasser with J. Diethart, *Lexikon der lateinischen Lehnwörter* (Vienna, 1996–2000); S. Daris, *Il lessico latino nel greco d'egitto* (Barcelona, 1991²); B. Meinersmann, *Die lateinischen Wörter und Namen in den griechischen Papyri* (Leipzig, 1927); Adams (n. 27), 527–641; A. Wouters, "'Latijns Grieks" en "Grieks Latijn"', *Hermeneus* 48 (1976), 179–91; J. Kaimio, 'Latin in Roman Egypt', in *Actes du XVI^e congrès international de papyrologie III, Papyrologica Bruxellensia* 18 (Brussels, 1979), 27–33.

³⁴ For the calculations behind this, see my 'Latin influence on the Greek of documentary papyri: an analysis of its chronological distribution' (*ZPE* 145 [2003], 249–57). The borrowings most obviously dependent on extralinguistic factors are the most common Latin loanwords: *δηνάριον*, which is required for reference to prices after the demise of the drachma, and words like *ἀγγοστός* that are needed for dating formulae.

³⁵ See Cavenaile (n. 32), 401–2 and S. Daris, 'Latino ed Egitto romano', in *Il bilinguismo degli antichi* (Genoa, 1991), 54–5. The use of calques is often presented as a resistance to Latinisation in comparison with the adoption of loanwords, and indeed calques probably show less foreign influence than straightforward loanwords, but they are nevertheless a type of Latinism, since they are created only out of a need for equivalents of Latin words. The Greek preference for calques in the initial period of Roman contact, followed by a switch to loanwords later (often involving the replacement of the original calques), is interesting in its own right and deserves further study.

³⁶ See the argument of Peter Parsons in *P.Rain. Cent.* 164.15 n.

are rare in comparison with Latin ones,³⁷ and Egyptian morphological, syntactic, and stylistic influence is much less apparent than that of Latin.³⁸

In Graeco-Jewish writings one would expect Hebrew and Aramaic influence, and if Philo and Josephus managed to avoid betraying such influence by being highly educated, the lower-register writings in the New Testament ought surely to be full of Semiticisms. Yet scholars constantly discover that more and more of the 'Semitic' features of New Testament Greek are not borrowings at all, but internal koine developments paralleled in contemporary Greek from other areas; while there are certainly some Hebrew and Aramaic loanwords in the New Testament (as there are also Latin loanwords), the language of the scriptures is for the most part unaffected by foreign elements.³⁹ The same cannot be said of the Septuagint,⁴⁰ but a general receptivity on the part of imperial Greek cannot be inferred from the Semiticisms of the Septuagint, since that work is a direct translation and in any case belongs to the Hellenistic rather than the Roman period.

Of course the Greek of different regions did adopt some local loanwords, particularly ones having to do with native customs or other new features for which there were no pre-existing Greek words, and sometimes local languages even had grammatical or syntactic influence on the Greek of inscriptions in that particular region. But, as in the case of Latin, these Greek developments remained local and short-lived, rather than spreading around the Greek-speaking world.⁴¹ There is one exception: some of the Hebrew and Aramaic words that entered Greek in the New Testament then spread along with Christianity. Yet these Semiticisms, however famous they may be,⁴² comprise only a few words that had to be used because they denoted ideas or objects without native Greek names, rather than being part of a general Hebraizing of the Greek language. Apart from this very limited example of lexical borrowing, the Greek of the empire seems to have been no more susceptible than was contemporary Latin to the spread of contact-induced language change beyond the area in contact with the donor language. Further evidence of this lack of receptivity

³⁷ If one excepts placenames, measurements, names of gods, and similar words whose usage, like that of *δηνάριον* and the other Latin loanwords excluded from consideration above, is dependent upon non-linguistic factors. See J. Vergote, 'Bilinguisme et calques (translation loan-words) en Égypte', *Atti del XVII congresso internazionale di papirologia III* (Naples, 1984), 1387; also E. Mayser, *Grammatik der griechischen Papyri aus der Ptolemäerzeit* (Berlin, 1923–35), 1.35–43.

³⁸ For this principle and some counterexamples see P. Fewster, 'Bilingualism in Roman Egypt', in J. N. Adams, M. Janse, and S. Swain (edd.), *Bilingualism in Ancient Society* (Oxford, 2002), 220–45, esp. 233–5; also G. Mussies, 'Egyptianisms in a late Ptolemaic document', in E. Boswinkel, B. A. van Groningen, and P. W. Pestman (edd.), *Antidoron Martino David, P.Lugd.Bat. 17* (Leiden, 1968), 70–6, esp. 70; S. G. Kapsomenos, 'Das Griechische in Ägypten', *Museum Helveticum* 10 (1953), 248–63, esp. 251–3; F. T. Gignac, 'Bilingualism in Greco-Roman Egypt', in A. Graur (ed.), *Actes du Xe congrès international des linguistes* (Bucharest, 1970), 4.677–82; F. T. Gignac, *A Grammar of the Greek Papyri of the Roman and Byzantine Periods* (Milan, 1976–), *passim*.

³⁹ See Bauer's introduction to W. F. Arndt, F. W. Gingrich, W. Bauer, and F. W. Danker, *A Greek-English Lexicon of the New Testament and other Early Christian Literature* (Chicago, 2000³), esp. xiv; J. H. Moulton and G. Milligan, *Vocabulary of the Greek Testament* (London, 1930), xi–xiii; Zgusta (n. 30), 125–6.

⁴⁰ On Semitic influences on the Greek of the Septuagint see G. Walser, *The Greek of the Ancient Synagogue* (Lund, 2001) and works cited therein.

⁴¹ See e.g. I. Rutherford, 'Interference or Translatione? Some Patterns in Lycian-Greek Bilingualism', and C. Brixhe, 'Interactions between Greek and Phrygian under the Roman empire', both in Adams et al. (n. 38), 197–219 and 246–66.

⁴² E.g. *σάββατον*, *πάσχα*, *σεραφεῖμ*.

can be gleaned from modern Greek, for the non-Latin loanwords in modern Greek come from Turkish, Italian, French, and English, not from other ancient languages.⁴³

Thus, although reliance on traditional wisdom would suggest that similarities between the address systems of the Vindolanda tablets and the Greek papyri ought to indicate Greek influence on Latin, closer examination of the particular time period and registers involved shows that reverse influence is more likely. This likelihood that emerges from the overall patterns in both languages is strengthened if one looks further at the specific contexts in which the borrowing appears to have taken place, since it is notable that a number of the examples of widespread Latin influence on the Greek of the papyri are in some way connected to vocative usage. The closing formula, for example, is the location in which vocatives are most often found. Unlike English letters, which begin with a vocative (for example, 'Dear Mr Smith'), Greek letters normally begin with a heading in which the addressee's name appears in the dative (for example, *Ἀσκληπιάδης Ζήνωνι χαιρεῖν* 'Asclepiades to Zenon, greetings'). Vocatives may then occur anywhere within the body of the letter, but they are most likely to appear near the farewell formula, for example as *ἔρρωσθαί, κύριε*, or *ἔρρωσθαί σε εὐχ(ομαι), φίλτ(ατε)*;⁴⁴ indeed it sometimes happens that a letter otherwise devoid of vocatives has several near the closing formula.⁴⁵ It is therefore striking that one of the most popular versions of this formula, *ἔρρωσθαί σε εὐχομαι*, is itself borrowed from Latin, and that Latin vocatives also tend to be attached to the closing formula, as *op<t>amus frater bene valere te domine or vale mi domine frater karissime*.⁴⁶

The letter heading, though it rarely contains a vocative, tends to use terms of relationship in a way similar (though not identical) to the way those terms are used when they appear as vocatives.⁴⁷ It is therefore notable that in the Roman period a number of these headings show clear evidence of Latin influence in their characterization of the addressee as *ιδίω*, a calque on the *suo* that so often appears in the headings of Latin letters.⁴⁸

The direct Latin borrowings in the papyri also fall into a relevant pattern. Using dictionaries of Latin loanwords,⁴⁹ it is possible to calculate the frequency of such words in Greek papyri of each century, and upon doing so one finds not only the high frequency already mentioned, but also a very interesting chronological distribution. The second address system of the papyri appears at the same time as the first direct Latin loanwords, and for the next four centuries the use of vocatives increases at a rate approximately parallel to that of the spread of Latin borrowings, as illustrated in Table 5.

Like the parallelism between the individual vocatives used in the papyri and in the Vindolanda tablets, the similarity here is too close to be coincidental. Both Latin

⁴³ See Mackridge (n. 32), 310–18.

⁴⁴ *O. Claud.* 2.364.13 and *P.Flor.* 2.191.16–17; see also *O. Claud.* 2.274.11, 287.12–13, 288.11–12, *P.Flor.* 2.167r.19, 194.33, 195.16, etc.

⁴⁵ E.g. *SB* 6.9156.12–15, 9415#30.17–18; *P.Oxy.* 12.1491.15–20, 1495.14–18, 33.2667.14; *P.Ryl.* 4.695.10–11; *P.Abinn.* 9.15–19.

⁴⁶ *Tab. Vindol. II* 248.12–14 and 247.2–3.

⁴⁷ For the similarities and differences between the two types of usage, see Dickey (n. 14).

⁴⁸ See Hélène Cuvigny, 'Remarques sur l'emploi de *ιδίω* dans le *praescriptum* épistolaire', *Bulletin de l'institut français d'archéologie orientale* 102 (2002), 143–53.

⁴⁹ Cervenka-Ehrenstrasser (n. 33) and Daris, *Lessico* (n. 33).

⁵⁰ All statements about Latin address usage other than in the Vindolanda tablets are based on

TABLE 5. Second papyrus address system compared to total Latinisms

| Century | Vocs of 2nd system per 100 letters/pets | Latin borrowings per 100 total docs ^a |
|----------|---|--|
| III B.C. | 0 | 0 |
| II B.C. | 0 | 0 |
| I B.C. | 3 | 2 |
| I A.D. | 9 | 9 |
| II A.D. | 38 | 16 |
| III A.D. | 39 | 23 |
| IV A.D. | 86 | 102 |

^aFor the complete calculations producing these figures, see 'Latin influence on the Greek of documentary papyri' (forthcoming in *ZPE*). Centuries later than the fourth are omitted because the number of Latin borrowings in the fifth century is uncertain.

loanwords and the second address system began when Egypt first started to have major contact with Rome, and both increased as that contact intensified.

It therefore seems that the address system of the Greek papyri is found in a context already heavily influenced by Latin, in which it is very likely that the address system itself was affected by Latin. By contrast influence of Greek on the Latin address system at Vindolanda, or influence of another language on both Latin and Greek, is much less probable.

V. INDIVIDUAL WORDS

Context is not sufficient to determine the direction of influence conclusively; we must also examine the histories of individual words. Since Latin has a continuously attested history of vocative usage, generally going back to the first century B.C. (when the majority of vocative-containing genres first appear) and in some cases reaching as far back as the comedies of Plautus and Terence (third and second centuries B.C.), the ancestries of the terms used at Vindolanda are relatively easy to trace.⁵⁰ *Domine* first appeared in the first century B.C. and was common as a mildly polite address for any type of acquaintance by the middle of the first century A.D. (Seneca, *Epistle* 3.1); its evolution can be explained within Latin and does not require any external influence. *Frater* and *soror* are commonly used to address siblings in Latin from Plautus onwards and could be directed to non-relatives at least from the early first century B.C. (see below); their extension outside the family is part of the standard pattern of development of polite addresses in Latin and is highly unlikely to be due to external influence. *Carissime* also dates to the first century B.C. and is part of a larger pattern of address system development that makes external influence unlikely.

The rarer vocatives at Vindolanda are equally easy to explain within Latin. Names are used;⁵¹ this type of address goes back to Plautus and is found throughout Latin literature. The endearment *anima mea* appears twice⁵² and can be traced to the first century B.C. (Cicero *Fam.* 14.14.2) without suggestion of external influence. No other vocatives occur more than once.

the data collected for my *Latin Forms of Address* (Oxford, 2002); that work should be consulted for the evidence.

⁵¹ E.g. *Tab. Vindol. II* 166.2, 172.2, 173.2.

⁵² *Tab. Vindol. II* 291.12–13, 292b back.

All the vocatives used repeatedly at Vindolanda can thus be explained as natural Latin developments. The situation with the Greek vocatives of the papyri is far more complex, and their origins are difficult to establish. Theoretically, a Greek vocative used in the Roman period could have any of three different sources: it could be a continuation of an earlier Greek address form, a new creation within Greek, or a new creation based on usage in another language. In the first case, we would expect to find evidence that the address in question was part of ordinary (that is, not exclusively poetic) language at an earlier period and that it survived as such until the Roman period; if the meaning of the term was different at the beginning and end of its history, we would expect the changes to fit the usual patterns of address system development in other languages.⁵³ Since it is common for addresses eventually to develop a different meaning from that of the same word used referentially, we would not necessarily expect the vocative and non-vocative meanings to match.⁵⁴ But in the second case, that of a new creation within Greek, we would indeed expect the vocative meaning to match that of the same word in referential usage, at least in the earliest uses of the new address; we would also expect the word in question to be relatively common in referential use and to have a meaning that made it likely to be turned into an address.⁵⁵ In the third case, that of external influence, we would expect to find a matching address in a plausible source language.

Since, as we have seen, the vocatives found in papyri of the Roman period almost never occur in Ptolemaic letters, straightforward continuity from the classical period cannot be proven even in the case of vocatives for which there is a perfect match between classical and epistolary usage. It is, however, possible that vocative usage to individuals other than the king was for some reason avoided in writing but persisted in conversation throughout the Ptolemaic period; if that were the case, there could be direct continuity between the classical and imperial address systems. Such continuity is, however, only plausible for those addresses that appear early in the development of the new address system; a vocative that first enters the papyri in the third or fourth century A.D. (after a gap of five or six centuries from the classical attestations) is very unlikely to be a direct continuation of a classical address.

The three possible sources we have outlined are not mutually exclusive, either for the address system as a whole or for any individual term. Since the education system of Roman Egypt involved contact with classical literature, it is conceivable that, even without direct continuity, an essentially new creation could have been influenced by

⁵³ On the patterns of address system change, see A. Kielkiewicz-Janowiak, *A Socio-Historical Study in Address: Polish and English* (Frankfurt, 1992) and F. Braun, *Terms of Address* (Berlin, 1988).

⁵⁴ For example, English 'dear' when used vocatively in letters (e.g. 'Dear Mr Smith', or even 'Dear Sir or Madam') is an example of an address we have inherited from an earlier phase of the language; it is well attested in the last few centuries and now has a different meaning from that of 'dear' in referential use (e.g. 'She's such a dear', or 'He's a very dear friend'). On the situations in which address and referential meaning are likely to be the same and those in which they are likely to differ, see Braun (n. 53), 259–65 and E. Dickey, 'Forms of address and terms of reference', *Journal of Linguistics* 33 (1997), 255–74.

⁵⁵ For example, English 'resident' when used vocatively in letters (e.g. 'Dear Resident') is an example of a newly created address: it is not attested before the past decade and has the same meaning as that of 'resident' in non-vocative contexts (e.g. 'Resident, 200 Birchwood Lane'). The choice of 'resident' to fill this new need for a vocative for anonymous mass mailings is unsurprising; we would not, however, expect to find 'denizen' used this way, since 'denizen' is rare in referential use.

classical usage. It is also possible that a new creation could be affected both by the referential usage of the word in question and by influence from another language. We shall therefore need to consider all three possibilities for each vocative, and rule out only those sources that can be specifically shown not to apply to that word. For the sake of completeness, all the major terms in the papyrus address system will be discussed, but only those that occur before the third century A.D. are likely to be relevant for the origins of the address system as a whole.

Titles

One of the most straightforward cases is that of *κύριε/κυρία*,⁵⁶ which cannot be a continuation of classical usage because the vocative is never used at that period (except for a single occurrence in Pindar, *Pyth.* 2.58) and cannot be an internal Greek development because the vocative is from the beginning not used like referential *κύριος*. *Κύριε* has long been considered a case of external influence, so the only question is the identification of the source language. The traditional explanation is that *κύριε* is a Semitic borrowing, and this could well explain its uses to God in the Bible, but in use to humans the fact that in the first century A.D. the vocative appeared (and quickly became enormously popular) simultaneously in many different parts of the empire means that *κύριε* must have been borrowed from Latin, the only language that was in contact with Greek all over the empire. Latin *domine/domina*, which was in use as a mildly polite and friendly address to ordinary citizens by the Augustan period, was extremely common and needed a Greek equivalent, and since the classical address *δέσποτα* had servile connotations that were inappropriate in a translation of *domine*, that mismatch naturally led to the creation of the new vocative *κύριε*.

While this development of *κύριε* indicates that the classical usage of *δέσποτα* was still remembered by writers of papyrus documents, it does not follow that the *δέσποτα/δέσποινα* of papyrus letters is necessarily a straightforward continuation of the classical address form. Although *δέσποτα* is well attested in classical prose and comedy, it does not become at all common in papyri until the third century A.D., too late for a simple continuation from classical usage. Yet in most of its appearances in the papyri, *δέσποτα* cannot be a translation of Latin *domine*, because its meaning does not match that of *domine* but is far more subservient. The best explanation is that in the late Roman period the address usage of *δέσποτα* was revived based primarily on the referential meaning of *δεσπότης*; a memory of classical *δέσποτα* probably existed and would have been helpful in the re-creation of the address, but the referential meaning would have been much more immediately present in the minds of Greek speakers at that period. The few early examples of *δέσποτα*, however, are different: in papyri of the first few centuries A.D. the address is sometimes used much less deferentially and addressed to friends or relatives, so it has a usage much closer to that of *domine* and further from that of *δεσπότης*. Some of these early uses, therefore, could well be attempts to translate *domine*.

The other two titles, *ἡγεμόν* and *πάτρων*,⁵⁷ are clearly influenced by Latin, since

⁵⁶ I have examined the history of *κύριε* and *δέσποτα* in detail elsewhere and shall only summarize the results here; for the evidence, see Dickey, 'Κύριε, δέσποτα, domine: Greek politeness in the Roman empire', *JHS* 121 (2001), 1–11.

⁵⁷ *ἡγεμόν* occurs as a vocative at e.g. *BGU* 3.747.i.3, 15.2460.2, *P.Amh.* 2.79.46, *P.Fouad* 26.24, 32, *P.Giss.* 41.9, *P.Laur.* 1.1.5, *P.Lund.* 4.1.13, *P.Mich.* 3.174.3, *P.Oxy.* 2.237.vi.12, 3.486.33, 7.1032.36, 8.1117.2, *P.Ryl.* 2.113.8; *πάτρων* occurs at e.g. *P.Sakaon* 56.11, *P.Abinn.* 4.22, 25.18, 29.24, *P.Herm.* 14.9, *P.Iand.* 6.124.3, *P.Oxy.* 51.3646.25, *SB* 12.10841.5, *Stud.Pal.* 20.111.5.

these words are Latinisms in the papyri even in referential usage. *Πάτρων* is a direct borrowing of Latin *patronus*, for which the vocative *patrone* is attested sporadically from Plautus onwards. *Ἡγεμίων*, which has a Greek pedigree going back to Homer, is not used in the vocative in the classical period. Although it appears in Ptolemaic papyri as a Greek title, *ἡγεμίων* is in the Roman period commonly used to translate Latin *princeps*, *dux*, *praefectus Aegypti*, *praeses provinciae*, *legatus*, *praefectus*, and *magistratus*.⁵⁸ A number of these titles are usable as vocatives in Latin.

Thus, all the titles commonly used as vocatives in the papyri in the early centuries of the second address system are probably based on Latin. The only non-Latinate title in the group is the later incarnation of *δέσποτα*, and that appears too late to be relevant for the development of the address system.

Kinship terms

The kinship terms *ἀδελφέ*, *ἀδελφή*, *πάτερ*, *μητέρα*, *υἰέ*, *θύγατερ*, and *τέκνον* present a more complex picture, both because there are more possible sources and because the masculines and feminines are not always equivalent.⁵⁹ *Πάτερ* and *μητέρα* are the least helpful for an understanding of address system development, as they could have any origin. These vocatives are common in classical prose and comedy, where they are used primarily to parents but also on occasion as flattering addresses for non-relatives (cf. Menander *Dysk.* 492–5); their use in the papyri is the same and could easily be a continuation of classical usage, provided that their complete absence from three centuries of Ptolemaic letters can be explained. But if that gap reflects a real break in use, *πάτερ* and *μητέρα* could have been re-created in Greek without external influence, since *πατήρ* and *μήτηρ* are common in referential use, and the address and referential meanings match closely. It is also possible that *πάτερ* and *μητέρα* reflect Latin influence, for the vocatives *pater* and *mater*, while not found at Vindolanda, are common from Plautus onwards; they are standard in address to parents, and also usable outside the family, at all periods. The use of *pater* and *mater* thus exactly matches that of *πάτερ* and *μητέρα* in the papyri, and their lack of attestation at Vindolanda is unsurprising, since they are used primarily for parents, who do not figure among the Vindolanda addressees.

Υἰέ, *θύγατερ*, and *τέκνον* present fewer possibilities. Although all three are attested in classical literature, only *θύγατερ* was at that period a feature of normal language; since sons were normally called *παῖ* in the classical period, both *υἰέ* and *τέκνον* are poetic addresses and extremely rare in classical prose. These two vocatives therefore are not straightforward continuations of classical usage when they occur in papyri, and *θύγατερ* is not one either, for it does not appear in papyrus letters until the fourth century A.D. *Υἰέ* and *θύγατερ* might be new creations within Greek, since *υἰός* and *θυγάτηρ* are common words, and their address and referential usages match; alternatively, these vocatives could be based on Latin *fili* and *filia*. *Fili* is used to sons from Cicero onwards, and vocative *filia* dates back to Plautus; in the empire both

⁵⁸ See H. J. Mason, *Greek Terms for Roman Institutions* (Toronto, 1974), 52, 144–51.

⁵⁹ I have examined elsewhere the various uses of kinship terms in papyrus letters and shall only summarize the results here; for the evidence, see ‘Literal and extended use of kinship terms in documentary papyri’, forthcoming in *Mnemosyne*, and ‘Words without reasons? Words for children in papyrus letters’, forthcoming in J. H. W. Penney, *Perspectives on Indo-European Languages* (Oxford).

addresses could also be used outside the family, making them a good match for their Greek equivalents in the papyri.

But what of *τέκνον*? This vocative is probably not a new creation based on referential use, since the vocative occurs only in the singular, while in other cases the word is almost always plural in the papyri. And it can hardly be derived from the closest Latin equivalent of referential *τέκνα*, *liberi*:⁶⁰ not only is *liberi* not normally used in the vocative, but *liberi* is exclusively plural while vocative *τέκνον* is exclusively singular. Yet something about *τέκνον* must have been particularly attractive to the writers of papyrus letters, since in the early centuries of the Roman period it is the primary vocative used for children; *υἰέ* is first attested in papyri that could belong either to the second or to the third century, and *θύγατερ* not until the fourth century.

If none of the three possible sources can independently provide a satisfactory explanation for *τέκνον*, the address must have a double source. Since *υἰέ* and vocative *τέκνον* are both found in Homer, the major school text of the ancient world, some awareness of their classical usage probably persisted among later Greek speakers despite their poetic character. And Homeric use of these two words is sharply divided: *υἰέ* is used with a genitive to form vocative patronymics, as *Ἄτρῆος υἰέ* (*Il.* 2.23) or *Τυδέος υἰέ* (*Il.* 4.370), while *τέκνον* is used alone or with an adjective to indicate that the addressee is the speaker's real or metaphorical child, as *τέκνον, τί κλαίεις;* (*Il.* 1.362) or *φίλε τέκνον* (*Il.* 22.84). When they wanted an address meaning 'child' and implying connection to the speaker (a want that could have been produced by exposure to Latin *fili*), the writers of papyrus letters might have thought of the Homeric usage of *υἰέ* and *τέκνον* and realized that *τέκνον* was closest in usage to *fili*, even if in other cases *υἰός* might seem like the obvious translation of *filius*.

Ἀδελφέ and *ἀδελφή* pose a different set of problems. They occur in classical literature, but rarely and only in tragedy;⁶¹ the fact that they are completely absent from prose and comedy means that they were not part of the non-literary address system in the fifth and fourth centuries, and this in turn means that their use in the papyri is probably not a continuation of classical usage.⁶² Also indicating discontinuity are the change in accentuation of the masculine singular, from Attic *ἄδελφε* to koine *ἀδελφέ*,⁶³ and a major shift in usage between the two periods. In

⁶⁰ It could be objected that the closest equivalent of *τέκνον* is really *gnatus/gnata*, and for the third and second centuries B.C. that equivalent would indeed be closer. But since *gnatus* and *gnata* were obsolete by the first century B.C., they are not relevant for the papyri.

⁶¹ Only at Sophocles *El.* 461, 1346, 1484, Euripides *Med.* 1272, *Or.* 1019, 1037, *IA* 471, 497, 1241.

⁶² In the interval between Euripides and the earliest papyri containing *ἀδελφέ/ἀδελφή*, the vocative appears only in the Septuagint, where it is common in the book of Tobit (third and second centuries B.C.) and occurs sporadically elsewhere (Sos. 4:9, 4:10, 5:1, 5:2; 2 Sam. 1:26, 13:11, 13:12, 13:16, 13:20, 20:9; 1 Ki. 9:13, 13:30; Jer. 22:18, all second century B.C.). Since it used to be thought that Tobit had been composed in Greek, these examples were once important evidence for the early development of the extended (non-familial) use of the address; now, however, a manuscript discovered with the Dead Sea Scrolls has been identified as the Aramaic original from which the Greek version of Tobit was translated. This means that all the examples of this address in the Septuagint (except 4 Maccabees 13:11 and 13:18, which date to the early first century A.D. and so are later than the first papyri) are simply literal translations from Hebrew or Aramaic and so tell us nothing about actual Greek usage in the Hellenistic period; see Walser (n. 40).

⁶³ See n. 13. It is possible that this change is dialectal rather than diachronic, since *ἀδελφέ* might have been the form used in a non-Attic dialect in the fifth century and, if so, might have entered the koine from that dialect rather than from Attic; but since there is no evidence for a

tragedy these addresses are used only to actual siblings, but in the papyri they are freely applied to spouses, friends, and colleagues; the difference between classical and epistolary usage is particularly striking in the case of the masculine *ἀδελφέ*, which from its first appearance in the papyri seems to be used to colleagues and business partners more often than to relatives,⁶⁴ and which even at that early stage does not appear to carry connotations of special affection when used outside the family.⁶⁵

This new meaning of the vocatives matches the contemporary referential usage of *ἀδελφός* and *ἀδελφή* except on one point (see below), so it is possible that the vocatives could be new creations within Greek. But since *ἀδελφέ* is the earliest of the vocatives of the second papyrus address system (there are six occurrences in the first century B.C.), and since it was not an isolated local development but by the end of the first century A.D. had spread all over the Greek world in its new extended usage,⁶⁶ a theory of new creation runs into the question of motivation. It is easy to see how a vocative of *δεσπότης* could be needed once a system of vocative titles was in place and it was customary to use such vocatives in letters to superiors, but what prompted the creation of a vocative for *ἀδελφός* at a period when vocatives were not normally used in letters at all? Is it possible that a development originating in Egypt could spread over the empire in a single century? If not, what kind of stimulus could have caused the same development to occur independently in different provinces? While it is not impossible that such a catalyst could have come entirely from within Greek, the example of Latin and its frequent vocatives is an obvious factor that could have been influential in starting off the use of vocatives in papyrus letters.

There is also a slight but perhaps important discrepancy between the referential and vocative usage of *ἀδελφός* and *ἀδελφή* in the early centuries of the new address system. In Egyptian Greek, these terms could be applied not only to friends and colleagues, but also to spouses. Since the extension to spouses of terms originally designating siblings is characteristic of the pre-Greek Egyptian language but not of non-Egyptian Greek, the use of *ἀδελφός* and *ἀδελφή* for spouses may be one of the rare Egyptianisms in the papyri.⁶⁷ It is therefore significant that while the spousal use

non-Attic *ἀδελφέ* in the fifth century, and since most koiné words are derived from Attic, the accent shift is probably diachronic.

⁶⁴ The earliest example in which it is possible to be reasonably certain about the relationship between the writer and the recipient of *ἀδελφέ* is *SB* 16.12835.8, from A.D. 6, in which the address is used outside the family. In 5 of the 6 examples earlier than this papyrus the address is probably used outside the family (*P.Amst.* 1.88.8, *BGU* 8.1871.7, 16.2647.6, *SB* 18.13273.6, 11), and in the sixth it is unclear whether or not there is a relationship (*BGU* 16.2650.10).

⁶⁵ The extension of a familial address to non-relatives is a common development in address systems, but it normally happens gradually and involves a period in which the familial connotations of the literal usage are still visible in the extended address, rather than appearing already fully weakened like the *ἀδελφέ* of the papyri.

⁶⁶ The vocative is found in the New Testament at Philemon (c. A.D. 60) 1:7, 1:20; Luke (c. A.D. 70–90) 6:42; Acts (c. A.D. 70–90) 9:17, 21:20, 22:13; all these examples are addressed to people unrelated to the speaker. Epictetus (c. A.D. 100), who came from Phrygia and taught in Greece and Rome, uses the address at 1.2.25, 1.25.15, 2.16.16, 2.17.35, 4.13.18; only one is addressed to a brother. Note also Josephus (late first century A.D.) *A.J.* 7.168; Plutarch (first and second centuries A.D.) *Caes.* 66.9, *Ag. & Cl.* 49.6; Chariton (second century A.D.?) 4.3.6.

⁶⁷ See D. Franke, *Altägyptische Verwandtschaftsbezeichnungen im mittleren Reich* (Diss. Hamburg, 1983), esp. 167–8 and 310. It used to be thought that the use of *ἀδελφός* and *ἀδελφή* for spouses was connected to the Egyptian practice of sibling marriage, but the two phenomena are now generally recognized to be completely separate. The use of sibling terms for spouses in Egyptian can be traced to the eighteenth dynasty of the Pharaonic period, long before the development of sibling marriage in the common population. (Sibling marriage may not have been

of ἀδελφός and ἀδελφή can be traced at least as far back as the second century B.C. in non-vocative usage,⁶⁸ such use of the vocative is not attested until the second century A.D.⁶⁹ The lack of attestation might be coincidental, but if it in fact shows that the new vocatives ἀδελφέ and ἀδελφή were not used for spouses until several centuries after they became usable for friends and colleagues, it suggests that the vocative usage of these two terms was guided by something other than the referential meaning of ἀδελφός and ἀδελφή in Egyptian Greek.

Moreover, the spousal use of ἀδελφέ and ἀδελφή remained a strictly Egyptian phenomenon, like the use of these words for spouses in non-vocative cases, and did not spread all over the empire like the use of ἀδελφέ outside the family. If the vocative use of ἀδελφέ and ἀδελφή had developed within Greek on the basis of the referential usage, we might expect it to have originated in Egypt, where it is first attested, and then to have spread to the rest of the Greek world; in that case, not only should the vocatives have been usable to spouses from their first appearance, but the spousal usage might have been expected to spread outside Egypt along with the other uses of the vocative.

This discrepancy between vocative and non-vocative usage is, however, easy to explain if the use of ἀδελφέ and vocative ἀδελφή is based on Latin *frater* and *soror*. These Latin addresses are frequent and colloquial, like the ἀδελφέ/ἀδελφή of the papyri, and they are used to siblings, friends, and colleagues in the same way—except that they are not addressed to spouses. If the vocative use of sibling terms was borrowed from Latin, and this Latinized vocative usage happened to match the referential meaning of ἀδελφός and ἀδελφή closely except in the case of spouses, it would not be surprising if at first the vocative usage matched that of the Latin models but eventually the extra meaning found in other cases was added to the vocative use as well.

There is also other evidence in favour of a connection between ἀδελφέ and *frater*. Since κύριε is based on *domine*, and since the parallel between the common Greek combination κύριε ἀδελφέ and its Latin twin *domine frater* is so close (see above), κύριε ἀδελφέ must be based on *domine frater*. Therefore, in that context at least, ἀδελφέ must come from *frater*.

At the same time, there are apparent chronological problems with deriving ἀδελφέ from *frater*. Ἀδελφέ first appears in papyri of the mid-first century B.C., significantly earlier than κύριε, and one may wonder both whether Latin influence was possible at that period and whether Latin *frater* had an extended usage so early; after all, the letters of Cicero, which seem more relevant than the Vindolanda tablets for early borrowings, employ an address system notably different from that of the papyri and never use *frater* outside the family.

These chronological difficulties are not, however, insuperable. Latin influence is well attested in papyri of the later first century B.C., not only with calques such as ἀυτοκράτωρ for *imperator* and σεβαστός for *Augustus*,⁷⁰ but even with direct loanwords such as κεντυρίων (*centurio*), λεγίων (*legio*), and πάτρων (*patronus*).⁷¹

practised before the Roman period and certainly does not predate the Ptolemaic period, except in the case of Pharaohs themselves.)

⁶⁸ See UPZ 1.59.1, *P.Bad.* 4.51.1.

⁶⁹ Ἀδελφή at *P.Sarap.* 80.24.

⁷⁰ E.g. at *BGU* 2.543.3 (27 B.C.), 4.1137.3 (6 B.C.), 4.1198.10 (6–5 B.C.), *P.Amst.* 1.41.1.2 (10 B.C.), *SB* 16.12312.1.6 (25 B.C.).

⁷¹ E.g. at *P.Oslo* 2.26.23 (5–4 B.C.), *SB* 6.9223.3 (2 B.C.), *BGU* 4.1155.13 (10 B.C.); Daris (n. 33) lists twelve Latin words that occur as loanwords in Greek papyri of the first century B.C., several of which are found repeatedly in that century.

Such loans begin soon after the battle of Actium (31 B.C.) and increase in frequency towards the end of the century. Of the six early examples of ἀδελφέ, two come from the end of the first century B.C.,⁷² two cannot be precisely dated,⁷³ one may come from before 31 B.C.,⁷⁴ and one probably does come from before 31 B.C.⁷⁵ I have not found other evidence of Latin influence in the papyri before 31 B.C., but the fact that many papyri cannot be precisely dated, coupled with the fact that comparatively few documents survive from the first century B.C. (see Table 1), means that the lack of evidence does not by any means prove a lack of Latin influence before 31 B.C. The Romans began taking control of other Greek-speaking areas long before Actium, and Latin influence on Hellenistic Greek is well documented.⁷⁶ Greek-speaking Egyptians in the early first century B.C. must have had some contact with Greek speakers from Romanized areas, as well as with Latin-speaking travellers and merchants.

Moreover, the extended use of Latin *frater* can be traced to the first half of the first century B.C. Even if this address was not favoured by Cicero in his own correspondence, he certainly knew about it as early as 70 B.C., when he quoted a letter in which one of Verres' henchmen addressed another as *mi frater* (*Ver.* 3.155); the extended address use of *frater* is also mentioned by Horace as being common in 21 B.C. (*Ep.* 1.6.54–5).⁷⁷ The internal evolution of the Latin address system can even explain why ἀδελφέ occurs so much earlier than κύριε: Latin *frater* became common in extended use earlier than *domine*, which does not seem to have been generalized as a flattering address until the very end of the first century B.C. or the early first century A.D. So, if Greek speakers were using a calqued version of the Latin address system in the first few centuries of the empire, they did not simply take over the Latin system they first encountered and then allow it to develop independently. Rather, they were sensitive to changes in the source language and adapted their own system to reflect the evolution of its parent.

It is thus likely that ἀδελφέ and ἀδελφή were based at least partly on Latin *frater* and *soror*. As a group, therefore, the kinship terms present a more ambiguous picture than the titles. They could all be based on Latin, though in the case of τέκνον there was probably some influence from classical Greek usage as well. It is also possible that many of these vocatives came primarily from Greek sources, though in the case of ἀδελφέ, ἀδελφή, and τέκνον at least some influence from Latin is probable. These terms therefore provide only slight evidence about the principal source of the address system, but they (particularly ἀδελφέ and τέκνον) offer valuable insight into the borrowing process and indicate that a single vocative could have multiple sources.

⁷² *BGU* 16.2650.10 (13–12 B.C.) and *BGU* 16.2647.6 (8 B.C.).

⁷³ *SB* 18.13273.6, 11 (first century B.C.?). This papyrus was dated purely on the basis of handwriting and then disappeared before publication, so there is no way to get a more precise date.

⁷⁴ *P.Amst.* 1.88.8 (89 or 2 B.C.). This papyrus was dated by its editor to 156 or 89 B.C., on the basis of a mention of a twenty-fifth year of a reign and handwriting of the second or first century B.C. Discussion in the Columbia Papyrological Seminar favoured first century rather than second; it is uncertain whether the reign of Augustus can be excluded with complete confidence.

⁷⁵ *BGU* 8.1871.7 (61 B.C.).

⁷⁶ See the works cited in n. 30.

⁷⁷ In addition, the only vocative found in a Latin papyrus letter of the first century B.C. is *mi frater* at *C.Epist.Lat.* 8.7, dated to 24–21 B.C.

Other terms

Φίλτατε,⁷⁸ τιμιώτατε,⁷⁹ and γλυκύτατε⁸⁰ are more straightforward. Φίλτατε is attested in classical prose and comedy, and so was probably part of the normal conversational address system at that period, but γλυκύτατε is very rare in classical literature and τιμιώτατε is not attested at all until the first century A.D.⁸¹ On this basis, φίλτατε in the papyri might be a continuation of classical usage, but the other two vocatives are not. However, the classical usage of φίλτατε takes the word essentially in its literal sense, while the later usage is much weaker. Such a difference in meaning is not by itself proof of discontinuity, since the weakening of polite and affectionate addresses is a common process in address-system development in many languages.⁸² Nevertheless, it is odd that we do not find evidence of a gradual process of weakening with Greek φίλτατε, only the initial and final stages of the transformation. It is also strange that of the wide range of affectionate adjectives originally used as addresses (φίλε, ἀγαθέ, βέλτιστε, ἄριστε, μακάριε, θαυμάσιε, δαιμόνιε, and so on), so few should have survived to any meaningful extent into the language of the papyri, and that those that did survive should all be superlatives. In addition, most of these classical addresses come from words in common use in non-vocative cases as well as in the vocative, but τιμιώτατος and γλυκύτατος are relatively infrequent, so it is hard to understand why they could replace the classical vocatives, either if the address system was inherited from the classical period or if it was newly created from purely Greek sources.

Latin influence can provide a partial explanation. The Latin development and weakening of affectionate adjectives is well attested and easily traceable, and it affected a wide range of words. The most common of these words, and the only one to appear in the Vindolanda tablets, is *carissime*, for which the obvious Greek equivalent is φίλτατε. The Latin equivalent of γλυκύτατε is *dulcissime*, which, although not as common as *carissime* and not found at Vindolanda, is well attested elsewhere. If the address system of the papyri was based on Latin, the predominance of φίλτατε and existence of γλυκύτατε is easy to understand. Τιμιώτατε, however, remains problematic, since it has no obvious Latin source; the best possibility is *honestissime*, which occurs in a few Latin letters and could on lexical grounds be a plausible parallel for τιμιώτατε, but *honestissime* is rare and not found before the second century A.D.⁸³ It is, however, notable that φίλτατε, τιμιώτατε, and γλυκύτατε are all superlatives, and that the Latin address system of the imperial period normally employed the superlatives rather than the positives of affectionate and respectful adjectives, whereas the classical Greek system made much more extensive use of positives.

The other complimentary adjective involved in the address system of the papyri,

⁷⁸ Φίλτατε/-η/-οι occurs at e.g. BGU 16.2636.11, P.Haun. 2.24.9, P.Lond. 1.130.33, P.Giss. 11.12, 16.8, 26.19, P.Oxy. 44.3167.11, 60.4060.74, P.Petaus 17.21, P.Yale 1.79.29, SB 12.10884.17.

⁷⁹ Τιμιώτατε/-οι occurs at e.g. BGU 1.248.22, O.Florida 4.12, P.Alex. Giss. 38.20, P.Brem. 5.15, 10.15, 22.14, P.Gen. 1.7.16, 2.103ii.29, P.Giss. 27.11, 66.15, 91.10, P.Mich. 11.623.17, P.Oxy. 42.3057.30.

⁸⁰ Γλυκύτατε/-η/-οι occurs at O.Claud. 1.151.7, BGU 2.417.31, P.Brem. 48.35, P.Hamb. 2.192.31, P.Lond. 6.1923.21, P.Mert. 2.85.15, 29–30, P.Mich. 3.207.13, P.NagHamm. 71.2, 1767.26, SB 3.6263.21–2, 4.7335.4, 14.12030.4.

⁸¹ Γλυκύτατε occurs at [Plato] Hipparchus 227d and Menander Epitir. 143, 953; the earliest appearance of τιμιώτατε in literature is in Josephus, *Contra Apionem* 2.1.

⁸² See Braun (n. 53), 59–64.

⁸³ Only at Fronto *Epistles* 34.14 and 68.14.

ἀγαπητέ,⁸⁴ is clearly different from these three. Ἀγαπητέ is a specifically Christian vocative that first appears in papyrus letters in the third century A.D. and is largely confined to Christian contexts.⁸⁵ It has no classical antecedents, and while Latin *dilecte* might in theory be the source of the vocative as it appears in the papyri, in practice it is obvious that the real source is the language of the New Testament.⁸⁶ Because of its late entry into the papyrus address system, ἀγαπητέ is not relevant for our present inquiry into the origins of that system.

The only other type of address that is at all frequent in the early centuries of the second papyrus address system is the use of names.⁸⁷ Names were ubiquitous in the classical Greek address system, and therefore their use in the papyri could be derived from classical usage; since names are also common in referential use in letters, this type of address could also be a new creation within Greek. But names are also used in address at Vindolanda and regularly elsewhere in Latin, so it is also possible that their vocative use in the papyri has a Latin source. Indeed, the way names are used in papyri is more similar to their usage at Vindolanda than to the classical Greek use of names as addresses: in the classical period names are normally used alone in the vocative, and they are by far the most common type of address (except in poetic language), but at Vindolanda and in the papyri names are infrequent and normally accompanied by another vocative.⁸⁸ It is notable that in referential use, writers of documentary papyri use names freely, usually unaccompanied by modifiers of any sort; the vocative usage of names in papyri is therefore closer to the Latin vocative usage than to referential usage in the same texts or to classical vocative usage.

Examination of the individual terms that make up the papyrus address system,

⁸⁴ Ἀγαπητέ-οί occurs at e.g. *P.Alex.* 29.2, 14, *PSI* 9.1041.1, 17, *P.Lond.* 6.1916.9, 1917.14, *P.Giss.* 103.26, *P.Lond.* 3.981.14, 5.1658.5, *P.NagHamm.* 68.10, 78.15.

⁸⁵ Some reference works (e.g. Arndt et al. [n. 39], 7) claim that it dates to the first century B.C. in papyri, citing *P.Oxy.* 2.235.2. But (i) this papyrus, a horoscope, is actually dated (both by its editor and by the *Gesamtverzeichnis*) to the first century A.D.; (ii) the papyrus is damaged so that the first five letters of the vocative are doubtful, and its position immediately before a lacuna makes it impossible to ascertain that a vocative is wanted here; and (iii) the ἀγαπετέ reconstructed by the editors contains a type of misspelling that rarely occurs in such a phonetic environment (see F. T. Gignac, 1976 [n. 38], 1.242–3). One cannot therefore place much confidence in this reading, and it is the sole example of ἀγαπητέ in papyri before the third century.

⁸⁶ E.g. Romans 12:19, Hebrews 6:9, 2 Corinthians 7:1, 3 John 2, 11.

⁸⁷ There are many other vocatives that occur rarely or only at a late period; although these are not helpful for understanding the origin of the address system, they can be interesting in their own right. For a study of some of them, see H. Zilliacus, *Untersuchungen zu den abstrakten Anredeformen und Höflichkeitstiteln im Griechischen* (Helsinki, 1949).

⁸⁸ In the Vindolanda tablets names never occur alone; there are eight addresses in which a name is preceded by *domine* (*Tab. Vindol. II* 166.2, 167.1, 168.2, 169.2, 170.1, 171.2, 172.2, 173.1–2) and one in which a name seems to be followed by *karissime* (242ii.2–3), meaning that 13% of all addresses on the tablets involve names. In Greek papyrus letters of the first century B.C. to the second century A.D. names occur alone perhaps seven times (*BGU* 1.140.10; *O.Claud.* 2.240.4; *P.Giss.* 71.10; *P.Oxy.* 3.526.1; *P.Ryl.* 2.229.20; *SB* 14.12176.1; and maybe *P.Stras.* 7.652.79); there are eight addresses in which a name is preceded by κύριε (μου) (*P.Brem.* 19.1, 20.17, 73.1; *P.Mil.* 2.75.1; *P.Oxy.* 14.1664.1, 49.3469.1, 58.3917.11; *P.Rein.* 1.48.1), one in which a name is followed by κύριε (*SB* 8.9643.25), nine in which a name is accompanied by a complimentary adjective (*P.Alex.Giss.* 38.20; *P.Brem.* 19.11–12; *P.Gen.* 1.7.16; *P.Giss.* 26.19; *P.Harr.* 1.105.14–15; *P.Lond.* 1.130.33; *P.Mich.* 8.485.21; *P.Sarap.* 103.18; *SB* 4.7335.4), eight in which a name is accompanied by a kinship term (*O.Claud.* 2.226.11, 237.5–6; *P.Brem.* 55.12; *P.Lond.* 3.899.1; *P.Phil.* 34.15; *P.Sarap.* 80.24, 83a.17; *SB* 5.7987.12), and four in which a name is accompanied by several vocatives (*P.Brem.* 22.14–15, 56.1–2; *P.Giss.* 91.10–11; *P.Oxy.* 14.1664.15–16), meaning that 6% of all addresses in these papyri involve names.

therefore, shows that Latin influence was at least a major component of its origin. Of those terms that occur early enough and frequently enough to be relevant for the development of the system, *κύριε*, *ἡγεμόν*, *γλυκύτατε*, and the early examples of *δέσποτα* are almost certainly based on Latin usage; *ἀδελφέ*, *ἀδελφή*, *φίλιτατε*, *πάτερ*, *μητέρα*, and the use of names are probably or possibly based on Latin; *τέκνον* probably has a mixed source involving both Latin and Greek components; and the source of *τιμώτατε* is unclear.

VI. WORDS ATTACHED TO VOCATIVES

Two words commonly attached to vocatives may also tell us something about the origins of the second papyrus address system. In classical Attic vocatives are normally preceded by the particle *ὦ*, whereas in Latin the use of *o* with vocatives is rare; it is therefore noteworthy that *ὦ* is almost never used with vocatives in papyrus letters. Although the papyri agree with Latin usage rather than that of classical Greek on this point, such agreement does not show that Latin influence was necessarily responsible for the reduction in the use of *ὦ*. The particle declined rapidly in frequency after the classical period; whereas Aristophanes uses it 80% of the time, Menander does so only 12% of the time. Papyri of the third and second centuries B.C., which employ the older, classical-based address system, never use *ὦ* at all. Significant Latin influence on Menander and on Egyptian Greek of the third century B.C. is most unlikely, and therefore if there was any continuity between an earlier Greek address system and the one we are investigating, the non-use of *ὦ* could have arisen naturally within Greek.

More revealing is the use of *μου* with vocatives. Possessives are almost never used with vocatives in classical Greek, but *mi* is common with Latin vocatives in certain contexts. Many of the vocatives in Greek papyri of the Roman period are followed by *μου*, and this feature has long been recognized as a borrowing of *mi*.⁸⁹ The appearance of *μου* in the papyri is therefore an indication of Latin influence on the Greek address system, and it can also tell us something about the way that influence occurred. Generally speaking, *mi* is common in letters, including those of Cicero, Seneca, Trajan, and Fronto; however, it is rare in the Vindolanda tablets,⁹⁰ which in other respects have the vocative system closest to that of our papyri. And none of the (rare) surviving vocatives in the Mons Claudianus ostraca, Wâdi Fawâkhir ostraca, and Latin letters of Claudius Terentianus are accompanied by *mi*.⁹¹ Since there is no question that Greek speakers must have had enough contact with *mi* to cause them to borrow it, this distribution of *mi* shows that our evidence for the Latin with which they were in contact is inadequate. Perhaps *mi* was common with vocatives in Egyptian Latin, and our small sample of surviving documents happens not to be representative on this point. Or perhaps the transmission followed a more circuitous route, so that Greek *μου*

⁸⁹ See J. Wackernagel, 'Genetiv und Adjektiv', in *Mélanges de linguistique offerts à F. de Saussure* (Paris, 1908), 151; note also J. Svennung, *Anredeformen: Vergleichende Forschungen zur indirekten Anrede in der Dritten Person und zum Nominativ für den Vokativ* (Uppsala, 1958), 245, and E. Dickey, 'O dee ree pie: the vocative problems of Latin words ending in -eus', *Glotta* 76 (2000), 37–9.

⁹⁰ Only two secure examples, both in the feminine form *mea*, at *Tab. Vindol. II* 291.13, 292b.back; also three possible examples of the masculine (242.ii.2, 247.2, 288.4).

⁹¹ Of the addresses listed in n. 22, only one is accompanied by *mi* (*mi frater* at *C. Epist. Lat.* 8.7). It may not be accidental that this address dates to 24–21 B.C. and so is by far the earliest vocative attested in Egyptian Latin.

could be borrowed from the *mi* used by Cicero and Seneca even though that *mi* had vanished, or nearly vanished, from Latin letters written in Egypt. In either case, the lost source of *μου* might also be the source of other aspects of the address system. Perhaps *honestissime* or another Latin equivalent of *τιμιώτατε* was also more common than seems apparent with our surviving evidence.

There is also another peculiarity to *μου*. Latin *mi* is a feature of positive politeness⁹² and is used primarily for intimates and inferiors, rather than in respectful contexts; thus it accompanies 75% of Trajan's vocatives to Pliny but is never used with Pliny's vocatives to Trajan. That *μου* followed *mi* in this respect is suggested by the fact that *μου* first appears in papyrus letters in the first century A.D. but does not occur in petitions until the third century A.D. It is therefore surprising that *μου* is far more likely to be attached to *κύριε* than to any other vocative;⁹³ no such tendency can be observed with *mi* and *domine* in Latin, and while *κύριε* is not especially respectful, it is more likely to be used to superiors than are *ἀδελφέ* and *φίλιτατε*, which are much less likely to be accompanied by *μου*. There are two possible explanations for this situation. Perhaps our Latin evidence is once again inadequate, and in the type of Latin from which *mi* was borrowed into Greek the possessive had a usage slightly different from that in the majority of extant texts. Alternatively, the Greek use of *μου* might have been from its very beginning different from that of its Latin model, either because the Latin form was misunderstood or because it was immediately adapted to a slightly different purpose by Greek speakers.⁹⁴

VII. THE LOSS OF THE CLASSICAL SYSTEM

So far, we have considered the general direction of influences between imperial Latin and Roman-period Greek, the individual words used as vocatives, and the words normally used with vocatives; most of this evidence has pointed in the direction of substantial Latin influence on the Greek address system, resulting in the replacement of the classical Greek address system with one based primarily on Latin. It is now time to consider the implications of this situation and the process by which the classical address system could have been replaced.

Although we have seen that the Greek of the papyri was receptive to Latin influence, there were limits to the extent of that receptivity. In most areas of the language Greek

⁹² The type of politeness characterized by attempts to gratify the addressee, as opposed to negative politeness, which is characterized by efforts to avoid hindering or annoying the addressee and is employed primarily to social superiors; see P. Brown and S. C. Levinson, *Politeness: Some Universals in Language Usage* (London, 1987), esp. 101, 129.

⁹³ In the first century A.D. *μου* is found with *κύριε* at least three times (*P.Phil.* 34.13, *P.Oxy.* 49.3469.1; possibly also at *P.Rein.* 1.41.11–12 and *SB* 20.14132.17) and only once with another vocative (*φίλιτατε* at *P.Tebt.* 2.409.10). In papyri of the first/second and second centuries *μου* is attached to *κύριε* or *κυρία* fifty-four times (*BGU* 2.423.11, 3.821.1, 3.892.27; *P.Brem.* 8.8, 12.27, 13.18, 14.18, 19.1, 20.17, 49.18, 50.9, 56.1, 62.4–5, 65.11, 73.1; *P.Giss.* 15.6, 45.10, 47.25, 47.30, 64.14, 65a.3, 65a.7, 85.16, 92.20; *P.Laur.* 2.39.10; *P.Mich.* 8.480.5, 8.503.18, 15.751.34, 15.752.9; *P.Mil.Vogl.* 2.61.29; *P.Oslo* 2.60.11; *P.Oxy.* 6.931.10, 12.1482.26, 14.1664.1, 10, 15, 18.2192.25, 24.2411.55; *P.Princ.* 2.69.2; *P.Rein.* 1.48.1; *P.Ryl.* 2.234.20; *P.Stras.* 7.652.20, 42; *P.Warr.* 13.3, 15, 20, 13A.2; *P.Würzb.* 21.12, 18; *SB* 3.6263.8, 17, 5.7743.26, 12.11148.6–7, 14.11900.14, 16.12766.18) and to other vocatives four or five times (*τιμιώτατε* at *P.Brem.* 21.13, a name at *BGU* 1.140.10, kinship terms at *O.Florida* 19.5, *P.Mert.* 1.22.19, and perhaps *CPR* 6.80.24).

⁹⁴ I must retract the suggestion made in my study of *κύριε* (n. 56), 10, that *κύριε* might have been more often used with *μου* than are other vocatives because it had more of a Latin origin than they did; *μου* is very rarely used with *πάτρων* or *γλυκύτατε*, both of which are certainly as Latinate as *κύριε*.

remained recognizably Greek, and Latin borrowings did not normally replace native words completely, at least in the first few centuries A.D. If Greek-speaking Egyptians of the early Roman period had an address system descended from that of classical Greek, if they had established patterns of vocative use to friends and relatives, it seems implausible that they would have simply abandoned that system for one based on Latin. But if the classical address system had died out and Greek speakers were not accustomed to using vocatives at all, then it is not unlikely that they could have borrowed the Latin system once contact with Romans gave them a desire to use vocatives again.

The evidence of the papyri indicates that the classical address system had in fact died out long before the Roman conquest of Egypt, since vocatives are almost never used in Ptolemaic papyri except in address to very important officials. The question is whether we can believe that written record: does the lack of vocatives in letters mean that Greek speakers in the Ptolemaic period did not use vocatives in spoken communication to people of less than exalted rank? At first glance, it seems implausible on typological grounds that they had no address system at all; linguists have been studying the address systems of many languages for decades, and as far as I know no language has been reported to lack free address forms (vocatives) completely.⁹⁵ On the other hand, linguists studying address usage have not been working on whether addresses are used, but rather on which addresses are used, so it is possible that languages using few or no direct addresses were ignored without comment at an early stage of the selection of study subjects. Certainly researchers have found considerable variation in the extent to which addresses are used from one language to another,⁹⁶ and the fact that this feature can vary widely means it is not theoretically impossible that it could have zero as one of the variants.⁹⁷

If one assumes for typological reasons that the writers of Ptolemaic papyri must have used vocatives in speech, it is difficult to understand why those vocatives do not turn up in the written record. Perhaps there was a feeling that vocatives belonged exclusively to the conversational register and were not formal enough for written communication, but given all the errors of spelling, grammar, and syntax that occur in papyrus letters, it would be odd not to find more letters that made the 'mistake' of including a vocative if the rules of written style were the only reason for the omission of vocatives from letters. Also, since the standard of post-classical written Greek tended to be the language of classical literature, in which vocatives are freely admitted, it is hard to see why vocatives would have been considered subliterate in the Ptolemaic period. Moreover, the use of vocatives for the king and other top officials does not fit well with this theory.

⁹⁵ For some of the literature on address use, see F. Braun, A. Kohz, and K. Schubert, *Anredeforschung: Kommentierte Bibliographie zur Soziolinguistik der Anrede* (Tübingen, 1986).

⁹⁶ See Braun (n. 53), 184–5; A. M. Zwicky, 'Hey, whatsyourname!', in M. W. La Galy, R. A. Fox, and A. Bruck (edd.), *Papers from the Tenth Regional Meeting of the Chicago Linguistic Society* (Chicago, 1974), 797; J.-R. Hwang, *Role of Sociolinguistics in Foreign Language Education* (Diss. Austin, 1975), 21.

⁹⁷ An apparent solution to the typological dilemma, but one that is ultimately unhelpful, is the possibility of indirect address (the use of words referring to the addressee in a case other than the vocative). Did the writers of papyrus letters avoid the use of vocatives by using constructions like *ἀγαπῶ σε τὴν κυρίαν μου μητέρα* instead of *ἀγαπῶ σε, κυρία μου μήτηρ*? Such constructions do occur, but they are common only in the very late period; indirect address is extremely rare in papyri earlier than the fourth century A.D. and so cannot help fill the gaps in the early history of the address system.

In general, when a construction occurs primarily or exclusively in the most formal documents, it is likely to be omitted from less formal documents because it belongs to too high a register, not because it belongs to too low a register. If vocative usage had died out in the ordinary spoken language of Ptolemaic Egypt, it would still have been remembered as a feature of classical literature. Given the extent to which the education system was based on that literature, well-educated drafters of petitions would have been able to employ the classical address system at least to the extent of inserting the occasional *βασιλεῦ* in documents addressed to the king, even if they never used vocatives at other times. Whether the use of vocatives was a feature of spoken as well as written interaction with the king cannot now be determined and is probably not important: it is possible for the spoken as well as the written versions of courtly languages to be archaic and remote from ordinary speech. If we assume that the usage in private letters is an accurate reflection of a general lack of vocatives in Ptolemaic Greek, the use in petitions can easily be explained as an archaism characteristic of courtly language, and the introduction of the new address system in the Roman period can easily be understood as filling a newly perceived void. If, on the other hand, we assume that every language must have an address system and that therefore vocatives must have been in general use in Ptolemaic Egypt, it is hard to understand why those vocatives appear in writing only when addressed to top officials, and equally hard to understand why Latin had such a profound effect on the address system.

VIII. GREEK OUTSIDE EGYPT

It therefore seems probable that the classical address system had died out in Egypt by the third century B.C. Such a conclusion immediately raises the question of what happened in the rest of the Greek world while address usage in Egypt was dying out and being replaced by a Latin-based system. Was Ptolemaic Egypt so isolated that it could simply lose an address system in use elsewhere? And when the use of addresses came back into fashion in Egypt, why were those used elsewhere in the Greek world not taken as a model instead of Latin? The answer to these questions is clearly that neither Ptolemaic nor Roman Egypt was so cut off from the Greek world, and that the phenomena we have observed in the papyri are by no means confined to Egyptian sources; indeed, one of the important sources we used to reconstruct the evolution of individual vocatives was their use in non-Egyptian Greek texts.

In short, if the classical address system died out and was replaced in Egypt, it must also have died out and been replaced all over the Greek world. At first glance such a suggestion seems preposterous, because many major works of Greek literature composed in the Roman period clearly use the classical address system or one derived from it. Plutarch and Lucian, for example, frequently include vocatives in their writings, and those vocatives are usually unadorned names (or the appropriate classical alternatives in the case of women, children, and so on), not *κύριε*, *ἀδελφέ*, or *φίλτατε*. But these authors were not writing in the normal conversational language of their own day, rather in a literary language based heavily on that of the classical period. Their use of vocatives comes from the same source as their spelling and their grammar: the literary tradition.

A few authors of the Roman period, however, are generally acknowledged to have written in a less literary form of Greek. Not all of these use vocatives, but the philosophical diatribes of Epictetus, who was born in Phrygia and taught in both Greece and Rome, are an important exception. Epictetus' address system is unique and

clearly reflects his individual teaching style, which required a high percentage of philosophically loaded insults such as *ἀνδράποδον*. At first glance, therefore, Epictetus' system seems to have little in common with that of the papyri, but a closer look at the few polite passages reveals that Epictetus took for granted the existence of an address system like the one in the papyri, even if he rarely used it himself. When he quotes other people's interactions with friends, colleagues, and so on, he frequently employs *κύριε* and *ἀδελφέ*,⁹⁸ and at one point he comments that women are routinely called *κυρία* from the age of fourteen onwards (*Ench.* 40). *Φίλτατε* is much rarer (only at 2.1.25), but it does occur. On the other hand, the addresses common in the classical period are rare except in quotations or imitations of classical literature.

The New Testament is our other important source of non-literary vocatives in the early empire. Like Epictetus, it is not an ideal source, because its characters and subject matter are so different from those found elsewhere that its address system is bound to be unique in some respects. In addition, there is the complex issue of Semiticisms in the New Testament; this problem has been much debated and cannot be treated adequately here, but a few points must be mentioned.⁹⁹ Though some Semitic elements entered the language of the New Testament both from contemporary spoken Aramaic and from the Septuagint, it is thought that their effect on the language was minimal, because the language of the New Testament is very similar to that of contemporary Egyptian papyri; it is a generally accepted principle of New Testament scholarship that features of New Testament Greek shared with the papyri are not Semiticisms but features of koiné Greek.¹⁰⁰ At the same time, many of the address forms in the New Testament have traditionally been considered Semiticisms. This judgement is clearly right for a number of the most common addresses used to God and to Jesus; for example, *ῥαββί* and *ῥαββουνί*, which are frequently used to Jesus,¹⁰¹ are obviously not Greek, and *διδάσκαλε*, which is also a term for Jesus,¹⁰² is indubitably a calque of these terms.¹⁰³ Many of the addresses to God in the gospels come in quotations from the Septuagint or in language clearly intended to echo Septuagint usage, and in such passages the use of *κύριε*—in a very different sense from that found in the papyri—is traceable to Hebrew via the Septuagint.¹⁰⁴

There is a sharp difference between these addresses to God and Jesus and the ones that occur in parables and other passages in which non-religious interaction between ordinary people is depicted. In such passages one does not find the Semiticisms just mentioned; instead, the address forms are very similar to those in the papyri. *Κύριε* is frequent and has the same generalized usage as in the papyri, while extended *ἀδελφέ* is not uncommon.¹⁰⁵ Names used alone, and other types of address common in the classical period, are rare or absent. The traditional view that New Testament address forms are largely Semitic in origin therefore needs to be refined: it applies only to the more religious addresses, not to those found in parables and other depictions of

⁹⁸ *Κύριε* at 1.29.48, 2.7.9, 2.7.12, 2.15.15, 2.16.13, 2.20.30, 3.10.15, 3.22.38, 3.23.11, 3.23.19, 4.1.57, *ἀδελφέ* at 1.2.25, 1.25.15, 2.16.16, 2.17.35, 4.13.18.

⁹⁹ For a recent study with an overview of the history of the question, see Walser (n. 40).

¹⁰⁰ See e.g. the introduction to Moulton and Milligan (n. 39), or Walser (n. 40) 8–9.

¹⁰¹ E.g. at Matthew 23:7, 26:26, 26:49, Mark 9:5, 10:52, 11:22, John 1:49, 3:2, 4:31.

¹⁰² E.g. at Matthew 8:19, 12:38, 19:16, Mark 4:39, 9:17, 13:1, Luke 9:38, 11:45, 20:39.

¹⁰³ See John 1:38, 20:17. It is notable that Luke, whose Greek is more classicizing than that of the other evangelists, never uses *ῥαββί* or *ῥαββουνί*, but only *διδάσκαλε*, while John never uses *διδάσκαλε* but takes pains to gloss both *ῥαββί* and *ῥαββουνί*.

¹⁰⁴ See my article on *κύριε* (n. 56), 5–6.

¹⁰⁵ E.g. *κύριε* at Matthew 13:37, 21:30, 25:11, 25:20, 25:22, 25:24, 27:63, Luke 13:8, 14:22, 19:16, 19:18, 19:20, 19:25, John 12:21, 20:15; *ἀδελφέ* at Philemon 1:7, 1:20, Luke 6:42, Acts 9:17, 21:20, 22:13.

interaction between ordinary people. The addresses of this latter category, since they so closely resemble the papyrus addresses, ought by the normal rules of New Testament linguistic analysis to be a feature of general koiné Greek, and they show that the address system of the papyri was not confined to Egypt.

Therefore the New Testament (in passages depicting non-religious interaction) and Epictetus (in passages depicting non-philosophical interaction) both show that the lower-register literature of the early Roman period had an address system closer to that of the papyri than to that of classical literature, which is strong evidence that that address system was widespread in Greek and that the classical system was by then preserved only as a part of literary language. But what of the Hellenistic period? The tendency to imitate classical usage was less strong at that time, so surely the use of classical vocatives by Hellenistic authors must be taken more seriously than that of Plutarch and Lucian?

Indeed, if Hellenistic prose authors did make extensive use of classical vocatives, we would have to consider their evidence very carefully. But in fact there is only one Hellenistic prose text that uses vocatives to any great extent, and that is the Septuagint. Since the Septuagint was literally translated from Hebrew and Aramaic sources, its vocative use can tell us little about native Greek practice. When one examines Hellenistic prose works actually composed in Greek, the lack of vocatives is striking. Of course, not every literary text can make use of vocatives, and even in the classical period direct address was more popular in some genres than in others; for any given Hellenistic text the lack of vocatives is not particularly remarkable. But when one considers the totality of Hellenistic prose, the fact that the Septuagint is the only major source of vocatives is startling.

Consider, for example, the philosophers. Plato uses more vocatives per page than almost any other Greek author, but Aristotle and Theophrastus almost never employ addresses, and the fragments of the Hellenistic philosophers, while admittedly scanty, also appear to make very little use of vocatives. The change from dialogue to treatise format is responsible for part of this change, but a treatise can contain addresses: in later works of this type one often finds addresses to the dedicatee, addresses to the reader, and addresses to imaginary opponents of various types.

Historians use vocatives sparingly, so it is not surprising that Polybius and Diodorus Siculus use addresses less often than Plato. But that they should use respectively one-third and one-tenth as many vocatives per page as Thucydides is revealing: Polybius has only forty-four addresses in 1,682 pages of text, and Diodorus only thirty-six in 2,553 pages. Hellenistic prose writers clearly made minimal use of vocatives, much less than classical authors working in the same genres, and this shift in usage supports the theory that vocatives were not a part of normal non-literary usage in that period.

It is therefore probable that the loss of the classical address system and its replacement by one based on Latin was not an Egyptian phenomenon at all, but rather something that happened to the Greek language all over the Mediterranean and for which the primary evidence happens to come from Egypt because of the survival of the papyri. Such a scenario forces us to rethink the Egypt-based assumptions we have used in dealing with the papyri. If the new address system was a widespread phenomenon, there is no reason to suppose that the contact with Latin behind it must have taken place only, or even primarily, in Egypt. The main area in

which the transmission of the address system occurred could have been Asia Minor, Greece itself, or the Greek settlements in Italy—or transmission could have occurred to an equal extent in many different areas.

There is some evidence that the transmission of the Latin address system to the Egyptian papyri had a double source: both direct contact with Latin speakers and indirect influence from Romanized Greeks elsewhere in the Greek world. Direct contact is suggested by the close contemporary parallelism between the papyri and the Vindolanda tablets, by the chronology of most of the vocatives, and by the way increasing vocative usage parallels that of Latin loanwords. At the same time, some of the details that appeared odd when investigated in a purely Egyptian context are satisfactorily explicable only by a theory of indirect transmission. The prevalence of *μου*, which must be derived from *mi*, in combination with the apparent non-use of *mi* in Roman Egypt, has already led us to suggest an indirect route of transmission, perhaps involving a somewhat earlier time frame than would be practical in Egypt. Similarly, the appearance of ἀδεληφέ in Egyptian letters written before the battle of Actium suggests influence from Romanized Greeks outside Egypt.

If, as our evidence suggests, the classical address system had been lost by the third century B.C., Greeks all over the Mediterranean would have been without a native address system when first conquered by the Romans. If contact with Latin resulted in a perceived need for a Greek address system and therefore in the creation of a Latin-based address system, such an address system would have been created at different times in different regions, as the Hellenistic kingdoms were gradually conquered by the Romans. Greek speakers in Italy and Sicily might conceivably have started using Latin-based vocatives as early as the third century B.C., while those in Greece, Macedonia, and much of Asia Minor might have done so in the second century B.C., meaning that Egypt, by remaining unconquered until the late first century B.C., would have been one of the last major Greek-speaking areas to adopt the Latin-based address system. Egypt was not in direct contact with all Greek-speaking Roman provinces in the first century B.C., but there were close connections to Asia Minor, Palestine, and Cyprus. In such circumstances it is only to be expected that traces of the developments in these other regions would occasionally appear in the Egyptian Greek address system.

Of course, in the absence of texts from these areas that could contain vocatives, such hypotheses cannot be proven. Yet there is much indirect evidence in their favour. We have seen that in Egypt vocative usage was closely tied to Romanization, and if the Roman conquest had such an effect on Egypt, it would be odd if it had no similar effects on other Greek-speaking provinces. Moreover, the use of *μου* is almost inexplicable except on the assumption of transmission from a type of Latin like that exemplified by Cicero's letters, and such transmission is more likely to have taken place outside Egypt in the time of Cicero than in Egypt at a later date.

IX. THE ROLE OF THE CLASSICAL ADDRESS SYSTEM

The picture we have drawn of the development of the new address system leaves little place for influence from the classical language. This situation is surprising, given the importance of classical Greek to Greeks of the Roman period and the role of classical literature in their education system, and one may well wonder why, if the Greeks felt the need for an address system, they would have created a new one rather than resurrecting the older one. Yet the conclusion that they did not resurrect the old

system is inescapable: the immense differences between the two make it clear that the classical address system was not the model for the later one.

Perhaps the reason for the adoption of the new system lay in its fundamentally different character. The classical Athenian address system was extremely egalitarian and left little room for nuances of politeness: adult male citizens were normally addressed simply by name, regardless of status, and others tended to be addressed by the qualities that separated them from adult male citizens, such as *παῖ*, *γύναι*, or *ξένε*. The Latin system allowed far more scope for flattery, expressions of friendly affection, and recognition of subtle differences in status. If Greek speakers conquered by Romans felt the need for an address system because of contact with Latin, they would have wanted one that allowed them to be polite in the Latin manner. They needed equivalents of *domine*, *frater*, and *carissime*, because undifferentiated address by name was no longer acceptable, and those equivalents could not be found in the classical Greek system.

At the same time, the early date of the adoption of the new system may have played a role in the choice of models. Our Egyptian evidence shows the new address system becoming common in the second century A.D., at a time when classicism was at its height, and the failure to resurrect the ancient system is most striking. But we have just observed that the main transmission of the address system probably occurred in many areas before the first century A.D., at a time when less attention was paid to classical precedent.

The classical address system was not entirely without influence on the development of the new system. The vocative forms themselves have a clear connection to the classical period: *φίλτατε* is a classical form, and *κύριε*, *ἀδελφέ*, *τιμώτατε*, and so on were obviously created following the classical rules for vocative endings. Even idiosyncratic vocative forms like *πάτερ*, *μήτηρ*, and *δέσποτα* are not infrequently (though by no means always) produced according to their classical paradigms. Classical meanings as well as forms could be relevant in shaping the address system, for we have seen evidence of classical influence in the use of *τέκνον* rather than *υἰέ* and *κύριε* rather than *δέσποτα*.

At this point we need to take another look at the first papyrus address system, the one used in the Ptolemaic period to address high officials. We observed earlier that while in the third century B.C. this address system was very simple and entirely classical, consisting of the unadorned vocative *βασιλεῦ* used to the king only, by the first century B.C. it had evolved into a variety of titles and complimentary epithets for officials. Although these titles and epithets are not classical, one cannot tell by looking at them in isolation whether they evolved naturally from the classical system, and therefore discussion of them had to be postponed. Now we can say that natural evolution is unlikely, for the classical address system had long been lost at the time that it would have occurred, and a completely fossilized remnant like that found in the papyri of the third century B.C. is not usually capable of evolution.

Perhaps the final stages of the first papyrus address system reveal Latin influence in a more subtle way than those of the second address system: they could reflect a desire to display a Roman type of politeness and incorporate more status distinctions into the vocative system. If such a desire came not directly from contact with Romans, but from contact with Greek speakers from Romanized areas, it could easily become divorced from the particular words that Romans used for their polite vocatives. Egyptian officials who travelled in the Greek East or entertained travellers from other Greek-speaking areas might have observed the new type of politeness and wanted to

imitate it, without particularly desiring to copy the exact words involved, or even remembering them. They might then have started to create their own new address system, using elements from classical and contemporary forms of Greek because there was no particular reason for them to use Latin models. Had it been left to develop on its own, this address system might in time have evolved into a widespread and interesting alternative to the Latin-based one, but the Roman conquest of Egypt put an end to its development by providing Greek-speaking Egyptians with a fully worked out system usable for all levels of society.

X. CONCLUSIONS

All the evidence so far presented can be put together to form a coherent picture of the history of the Greek address system. In the fifth and fourth centuries B.C. a native Greek address system was used, but in the Hellenistic age this system was lost and vocatives disappeared from normal use, though they were retained to a limited extent in formal documents addressed to top officials. As the Romans conquered the Greek world, contact with Latin led to a perceived need for a Greek address system that would allow the expression of contemporary types of politeness, and this need was met (perhaps after some experimentation with other methods, at least in Egypt) by calques of the most common Latin vocatives. The classical system, which was still known because of the continuing importance of classical literature, had some effect on the creation of this new system, chiefly in the production of the vocative forms and in the choice of Greek equivalents for the Latin addresses.

The new address system proved popular all over the Greek world, and since some provinces were Romanized earlier than others, it sometimes spread through Greek channels even in advance of Roman domination. Its popularity in Egypt increased steadily as Greek adopted more Latin loanwords and became Latinized in other ways. For a while its development was linked to that of the Latin address system, so that when new Latin addresses such as *domine* emerged the Greek system adapted to include them. Later, however, the Latinate address system became an integral part of the Greek language that could develop independently from Latin (for example, by the re-creation of *δέσποτα* as a more deferential title than *κύριε*), as well as assimilating new Latin borrowings such as *πάτρων*.

Columbia University

ELEANOR DICKEY
ed202@columbia.edu