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THE GREEK OF THE PETRA PAPYRI

The Petra papyri are preserved in a very fragmentary state and thus the linguistic analysis given here cannot be comprehensive. We can, however, see that a rather high (Atticist) orthography and morphology was preferred by the majority of writers. This overview will consider phonological, morphological, and syntactic aspects of Greek, the main language of the dossier. Arabic and Aramaic toponyms and personal names are reviewed separately in the current volume, while Latin legal terminology was already examined in P. Petra IV. Multilingualism will be briefly discussed at the end of this chapter.

WRITER GROUPS

A high number of literate individuals appear as writers among the Petra papyri: there are ca. 280 “acts of writing” attested in the 87 published texts, though the exact number of writers itself cannot be established.¹ It is clear that some writers had received appropriate education in writing as well as in legal and administrative language, while others are barely able to write even their own name. Thus, it may be useful to study the linguistic features of the texts by first dividing the writers up into three different groups according to their estimated levels of education. This division is primarily based on handwriting styles, which were found to correlate to a certain extent with the text types and therefore also with the writer types and levels of education, which again would impact the writers’ linguistic skills. The following descriptions of the groups give further details. Table A at the end of this chapter shows how the documents have been assigned to each group based on the main hand.²

Group A comprises writers of official taxation documents, including the elaborate requests for transfer of taxation (*epistalmata tou sōmatismou*), written in a wide column format, and the shorter tax receipts, written in the *transversa charta* format. The handwriting is always a stylish cursive slanting heavily to the right. This handwriting style was not restricted to texts in column format, since some longer *transversa charta* documents have also been written in a cursive hand sloping to the right.³ Since the writers of this latter document group would belong to Group A based on their hand but to Group B based on document format, a hybrid category of “A-B” is used for these writers, as well as for those of a few tax receipts that bear a mixed type of handwriting.⁴

Group B comprises scribes of the notarial contracts (i.e., private legal documents written in the *transversa charta* format). We know some of the notaries (*symbolaiographoi*) by name because they signed the documents.⁵ Unfortunately, in the majority of cases, the signatures have not been preserved. Moreover, it remains uncertain whether the *symbolaiographos* himself also wrote the contract (see 50, where the signature and the body of the document are thought to have been written by the same person). The handwriting in notarial documents is most often a large upright and rounded cursive.⁶

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1. By “act of writing,” we mean a portion of text written by one hand in one and the same document. Some writers have performed several acts of writing within the dossier, and we can sometimes identify them, though more often not (see Tables B and C, at the end of this chapter). The writers of Petra are discussed in more detail in Vierros, *Scribes and other writers*.
 2. The classification was not always easy, especially with many poorly preserved texts in the current volume, for which the “main hand” or “document type” may have been difficult to ascertain.
 3. E.g., 28 (division), 36 (draft), 39 (settlement) 40 (*defensio*), 43 (agreement), 52 (draft of a will), 53 (draft or annotations).
 4. See further, e.g., 72, which was written by a practiced but upright cursive hand; the nature of the document is not quite clear.
 5. Alpheios, s. of Valens (22 m9), Alpheios, or N, s. of Alpheios (29 m10; similar notarial signature in 30 m7, 31 m6, and 12 m5/m2), N, s. of Alpheios (50 m1, m4), Anastasios (43 m7), Leontios (28 m6, cf. 62 m4), Vales (57 m8).
 6. The “notarial” handwriting places also, e.g., 74 in this group, even though it seems to be a list, not an agreement.

Group C comprises people who wrote miscellaneous smaller documents and whose handwriting often shows a lack of regular practice. A small group of writers of poorly preserved documents were not classified.

Three other writer groups must be considered separately from the main scribes: first, the signatories (i.e., people who wrote their own signatures at the end of the contracts); second, the people who wrote signatures on behalf of illiterate parties (proxy/p.p.); third, the witnesses. All these people signed with their own name, so we can identify some people who wrote more than once (see Table B). Some of the signatories, proxies, and witnesses may be assigned to the groups mentioned above (e.g., some signatories could be counted as Group C writers based on their handwriting and linguistic skills, while some witnesses may be placed into Group A on the basis of their handwriting). It is also natural to assume that seasoned writers were favored as proxies or witnesses. In the *Tables of Orthography* in the end, the symbols S and W refer to signatories and witnesses (including proxies).

The anonymous scribes of taxation documents and notarial contracts can occasionally be recognized in several documents by their handwriting. While this method of identification is not always reliable, we have nevertheless presented in Table C the documents we believe to have been written by the same hand.

FRONT VOWELS

PHONEME /i/ – ORTHOGRAPHIC VARIANTS ι, ΕΙ

The interchangeability of graphemes ι and εἰ in marking the phoneme /i/ is common in all kinds of positions: prevocalic, between consonants, and in stressed and unstressed syllables.⁷ This is a very frequent graphemic interchange in the Petra papyri and takes place also in the texts of better-educated scribes: basically the only orthographic mistakes in **2**, written in Gaza, are between ι and εἰ. However, Group A and B writers more commonly err in the direction ι > εἰ,⁸ a relatively rare mistake for Group C writers (see Table 1), who tend to have much more variation in the direction εἰ > ι (Table 2). This difference may indicate that Group C writers more often wrote the sound as they heard it, with little regard for orthographic rules, while Group A and B writers tried to adhere to a learned orthography, though they were not always successful and thus ended up quite often writing hypercorrect forms. In any case, it is clear that the raising of /e:/ (previously represented by the digraph εἰ) towards /i:/ had already taken place.⁹ The vowel's etymological length no longer seems to play a role.¹⁰

Nouns ending -ια, -ιον are often written -εἰα, -εἰον, and sometimes vice versa, presented according to the direction of the mistake in Tables 1 and 2. Since both -ια/-ιον and -εἰα/-εἰον were orthographically standard depending on the word in question, one needed to know in each instance which ending was the norm, making this an interesting case of scribal education. The writer of **3–5**, who in general made very few orthographic mistakes, confused ι and εἰ especially in these nouns, favoring -ια where he should have written -εἰα, except in the word ἐπαρχία (“province”), which he wrote as ἐπαρχεία. It seems that by the sixth century the spelling ἐπαρχεία had become as good as standard in many places, including Palestine.¹¹ Nevertheless, some writers in Petra still

7. The occurrences of all words with orthographic variation in the Petra Papyri are collected in tables 1–11, at the end of this chapter. Heavily reconstructed words were not taken into account. Orthographic variants in document **39** are discussed separately at the end of this chapter (see also Table 12).

8. Following the use of Gignac, *Phonology*, ι > εἰ means that the standard *iota* is written εἰ in the papyrus.

9. See Gignac, *Phonology*, 189: “There is very frequent interchange of εἰ and ι (whether long or short etymologically) in all phonetic environments throughout the Roman and Byzantine periods. This indicates the identification of Classical Greek /ei/ diphthong with the simple vowel /i/.” See also Horrocks, *Greek*, 160–63.

10. In second-century Attic inscriptions, e.g., the original long /i:/ was replaced with εἰ more often than the short /i/ even after the loss of distinctive vowel lengths; cf. Threatte, *Phonology*, 198–200.

11. A search in the Papyrological Navigator (23 June 2016) produced 102 hits for “επαρχία” (some attestations were abbreviated in the end) and 54 hits for “επαρχεἰα.” Of these 54 cases, seventeen (and almost all before the 4th century) come from the region of Palestine (eight from the Babatha archive, three from P. Hever, and six from Petra). The Babatha texts usually refer to the new era (κατὰ δὲ τὸν ἀριθμὸν τῆς ἐπαρχείας Ἀραβίας). Later, Antinoopolis (especially the Dioskoros archive) features quite prominently as well.

used the original, correct form of ἐπαρχία (22 and 25).¹² Another word frequently used in the dating formula is ὑπατεία (“consulship”): the non-standard spelling ὑπατία was used only in 3 and 81C. Moreover, the word συντέλεια (“taxes”) was often written as συντέλια, but the correct form is found among all writer groups.¹³

Especially with personal names, it is not always clear what the “correct” spelling was. For example, the name Ἀλφειος / Ἀλφιος appears written both with ει and ι. We may adopt a Greek interpretation and take it as Ἄλφειος (the stance taken in our *apparati critici*). However, sometimes it was systematically written Ἀλφιος. The names Ἀλφιος and Ολφιος occurred frequently in inscriptions from the Southern Levant and may be traced back to Arabic or Aramaic *ḥlf* or *ḥlf*.¹⁴ Thus, for some writers in Petra Ἄλφιος might rather have been the norm.

Phoneme /i/ or /y/ – Orthographic variants οι, υ, η

The graphemes ι or ει were very rarely confused with η, or οι, υ, or other itacistic alternatives (see the few examples in Table 3). When they are, most errors occur among Group C writers—i.e., less professional ones, like Flavius Nonnos, e.g., εἴκησιν pro οἴκησιν and ἀρχηδιακῶν pro ἀρχιδιακόνων (37), and from signatories or witnesses, e.g., ἐμὶ instead of ἐμῆ (46 m3) and ἐμεῖ pro ἐμῆ (37 m3). Since the confusion between ι/ει and η is so rare in our material, we may suspect that these individuals had a different linguistic background than the majority of our writers, e.g., they might have had Greek as a native language.

Slightly more common was the confusion between οι and υ/ι, between υ and ι, and between other spellings that reflected the sound /y/ or /i/ (Table 4). According to Gignac, the interchange of οι and υ was very common and occurred unconditionally from the first century on.¹⁵ We must note, however, that only a couple of Gignac’s examples come from the sixth century. The interchange of υ and η occurred “frequently,” and υ and ι “occasionally,” according to Gignac, but we find proportionally more occurrences of them between the sixth and ninth centuries and the same tendency can be found in the confusion between οι and ι, between υ and ει, and between ει and οι.¹⁶ In Petra, these spellings come mainly from Group C, but the presence of the Group B writer of 17 is noteworthy. An extreme case with regard to these graphemic interchanges is Flavius Thomas, son of Nikephoros, a signatory in 42 (m3): τ[ὸ] περὶ καὶ μένιν καὶ τυχῶν instead of ποιεῖν καὶ ἐμμένειν καὶ στοιχεῖν.

In 55, we find one and the same name written both in Latin and Greek. In Latin, the name of a presbyter, Cyricus, son of Petrus, was spelled with *y*. In Greek, it was written as Κηρυκός, referring to both the presbyter Kyrikos and the martyr Kerykos (see 55 7 and 21–22 comms.). The martyr is attested as Κηρυκός also in 39, while, as the name of a living person, it was written with *upsilon* both throughout Egypt as well as in Petra: Φλ(άουιος) Κύρικος, husband of Arista (37), and Κύρικος (1 and 16).¹⁷ In 55, the martyr’s name may have affected the spelling of the presbyter’s name as well.

Phoneme /e/ – Orthographic variants η, ε, αι

The letter *eta* was usually not confused with the letters representing the /i/ sound in Petra, so it does not seem to have followed the itacistic development that occurs very frequently in papyri from Egypt. On the contrary,

12. Our editorial policy has not been entirely consistent here: the form was sometimes not standardized in the *apparatus criticus* (17 and 23), while it was once corrected in the opposite direction (25). These are now listed in the Corrigenda.

13. For example, the writer of 19 and 23 (and its copy 24); the scribe of 22 (but not in signatures); Nonnos, writer of 37, has several different variants with ε/ι and η/ε.

14. Al-Jallad, *Graeco-Arabica I*, 120.

15. Gignac, *Phonology*, 197–99.

16. Gignac, *Phonology*, 262–73; for example, a search in the Trismegistos Text Irregularities database yielded 156 occurrences of υ instead of η from the period between 300 b.c. and a.d. 499, and 122 from the period a.d. 500–800 (<http://www.trismegistos.org/textirregularities/index.php>).

17. While κῆρυξ/κήρυκος (“messenger”) and its derivatives appear in the *DDbDP* around 120 times, we find only eight instances where the string κηρ has been corrected in editions to κυρ: Κήριος, Κηρηναῖος, Κηριακη, Κηριλλοῦν, Κῆρις, συγκηρούτων (bis), ἄκηρον; the only word where *upsilon* was corrected to *eta* was πριμικυρί-. Thus, the personal name Κυρικός normally appeared with *upsilon*, whereas the common noun was always written with *eta*. Apparently, the martyr had ceased to be a “normal” person.

it was commonly confused with *epsilon*. This is an interesting feature in relation to the fact that the short high vowels of the Arabic dialect in Petra are realized lower than their Classical Arabic counterparts, with *i as /e/ written with ε (with *iota* only in closed stressed syllables). The Arabic long *i was also written with ε/η in close vicinity to emphatic consonants.¹⁸

On Egyptian papyri, Gignac notes: “There is an interchange of η with the symbols for the /ε/ phoneme ε and αι throughout the Roman and Byzantine periods. Most examples of these interchanges occur in specific phonetic conditions” (*Phonology*, 242). The phonetic conditions then given by Gignac cover quite a broad spectrum, but still do not always describe the instances in the Petra papyri. For example, η > ε following or preceding γ/κ or θ/τ is quite common (Table 5). These contexts coincide sometimes with the Petraean Arabic emphatic consonants, and therefore the substrate language might at least partly explain why this orthographic variation was so common in the Greek of Petra.

There is some diversity among the different writers in Petra. First, some writers do not confuse these letters at all, e.g., the Group A and A-B scribes of **2**, **3–5**, **18**, **19**¹⁹, **22**, **25**, **32–34**, and **40**. However, some Group A scribes did confuse ε and η, e.g., those of **23** and **28** to a considerable extent and those of **55**, **66**, and **68** once. Among the signatories, Patrophilos, son of Bassos, for example, confused them in several documents, as in **18**. The non-professional writers of Group C had more difficulties with these graphemes, especially in the direction η > ε.

For the Latin *e*, the basic rule is that *ĕ* was transcribed with ε, while *ē* was transcribed with η, though there was some fluctuation. In Petra, the usual ληγάτου was written in **36** as λεγάτου. A shortening of sorts is ἐδήκεν pro ἐδέηκεν, interpreted as a spelling error (see **30**–**39** with comm.). For variation in the spelling of *defensio*, see below.

For the old diphthong αι, pronounced as /e/ in the Roman period at the latest and often confused with ε, which Gignac counts as the most frequent interchange in the papyri after ει and ι, we have less evidence in Petra than for the interchange between ε and η (Table 6). Group A writers are notably absent from Table 6 (the only exception being **41**), suggesting either that the writing of the old diphthong was taught very efficiently or that there was in fact some difference in pronunciation. The fact that the hypercorrect spelling ε > αι is more common than αι > ε suggests that difference in education may be the more likely explanation. The existence of the diphthong /ay/ in Arabic may also have been a factor helping to preserve the spelling αι in Petra. Note finally that the Latin loanword for “prefect” was written πραιφέκτων in **23**.

BACK VOWELS

Back vowels did not produce a significant amount of variance in spelling in Petra. Only a couple of instances can be found between the sounds /a/ and /o/, in the direction o > α, or between the sounds /a/ and /e/ (Table 7). In her study of Greek inscriptions from the Near East, Di Segni discusses the sounds /a/ and /o/ specifically, the shift between which was in her view elsewhere unparalleled, pointing to Arabic vocalization as the likely reason behind this phenomenon.²⁰ We may consider this general Semitic influence, since in the Egyptian papyri Gignac counts Coptic interference as the reason for the same phenomenon, because in all Coptic dialects /o/ was only an allophone of /a/ (occurring merely in stressed positions).²¹ In the papyri, however, confusion between the sounds /a/ and /e/ is more frequent (cf. Gignac, *Phonology*, 278–86).

The old diphthong ου was pronounced as a monophthong already in Classical times; its confusion with the /o/ sound was frequent in Roman and Byzantine papyri (Gignac, *Phonology*, 208–14) but not very common in Petra (Table 8). This issue relates also to the case system of the masculine nouns ending in -oc, where the

18. See p. 35, below. For Egypt, see Gignac, *Phonology*, 235f.

19. Although, if the scribe of **19** is identical with the scribe of **23**, he did show confusion between ε and η.

20. Di Segni, *Greek Inscriptions in Transition*, 367.

21. Gignac, *Phonology*, 286–89; examples from papyri of interchanges between /a/ and /o/ (α > o occurred exclusively in unaccented syllables, mainly in final syllables ending in -c, whereas o > α is attested both in accented and unaccented syllables).

dative ending (-ω) may have been replaced by the genitive (-ου). In a couple of instances in Petra, we cannot decide whether the reason for the graphic interchange of <ου> and <ω> is due to a phonological cause or case confusion (see also the section “Dative,” below).

VOWEL LENGTH

Vowel length opposition was lost in the /o/ sound already in Hellenistic times (Horrocks, *Greek*, 118), and, according to Gignac, the interchange between ο and ω occurred very frequently in papyri throughout the Roman and Byzantine periods in all phonetic conditions (*Phonology*, 275). The interchange was common in the Petra papyri as well (Table 9). It must be noted, however, that the error ω > ο was considerably more frequent than the other way round. In 43 the writer corrected himself twice upon having first erroneously written *omega* and subsequently correcting it to an *omikron* (in ὑπέθεντο, [τ]ὸ).

In Latin loanwords, *omikron* was occasionally used to transcribe an etymologically long vowel: ἰνδικτίωνος pro ἰνδικτίωνος (3–5, 20, 22, 50, 51, 65 m3, 66, 71); ἀδνωτατίον[ο]ς pro ἀδνωτατίωνος (29); δηληγατίονι pro δηληγατίωνι (47). However, all these instances concerned oblique cases, whereas Greek third-declension nouns had a short stem-vowel even if the nominative had a long vowel (e.g., δαίμων, δαίμωνος). Thus, the graphemic representation of vowel length in these examples seems to have followed Greek rather than Latin grammar, suggesting that such loanwords had been integrated into Greek morphology. It might therefore be argued that such instances would not need to be corrected in the *apparatus criticus* (and they are thus not included in Table 9).²² Note, however, the great variation of both *epsilon/eta* and *omikron/omega* in 39: δηφεγείωνος, [δ]ηφονείωνος, δηφενείωνι, δεφηνειονι, δηφενείωνι, δηφε[vc]ί[ο]ς[ν].²³

A similar problem with the standard form underlies the military title *priōr*. A search in the Papyrological Navigator shows that this word occurs in singular only in Petra. The accusative was there written both with *omikron* and *omega*: πρίορα (43 156 m4) and πρίωρα (l. πρίορα) (39 54, 43 170 m6). The nominative attestations are all somehow uncertain, but they have been read with *omega* as πρίωρ.²⁴ Most dictionaries, however, give only the plural οἱ πρίορες, while *LBG* gives as singular πρίορες/πρίωρης. *WB* does use the singular πρίωρ, and the examples therein are all in plural. Again, whether we read the standard nominative singular with *omega* or not, the oblique cases should have *omikron* in accordance with Greek orthography. The lack of distinction in pronunciation must have confused the writers in oblique cases.

The /e/ sound in λεγάτου pro ληγάτου (36) illustrates a different case concerning vowel length, but it may be considered together with the general confusion between ε and η (see above).

CONSONANTS

False aspiration, e.g., in the word ἔτος (“year”), was consistent in the Petra papyri, as can be seen from its combination with the preposition κατά, always written καθ’ ἔτος instead of κατ’ ἔτος. This phenomenon, well attested also in Gignac’s material, was due to the loss of initial aspiration in speech. In some words false aspirations may have arisen by association with similar words, e.g., in the case of ἔτος from ἡμέρα (“day”).²⁵ That ἔτος in particular was aspirated without exception in Petra is noteworthy. As Gignac notes, traditional spellings were always more common than irregular ones, and the papyrological material from sixth-century

22. Gignac, *Morphology*, 48, notes that Latin nouns ending in *-(i)ō*, *-(i)ōnis* were normally declined *-ίων*, *-ίωνος*, but *indictio*, e.g., fluctuated between ἰνδικτίωνος and ἰνδικτίωνος. In Petra, *omega* may be found only in a very uncertain case (87). In most instances, the word was abbreviated.

23. We have not been entirely consistent in the *apparatus* of previous volumes, as δηφηνείων has been treated differently in comparison to other words: in the *apparatus* (39), *omikron* has been accepted in the oblique cases, except by mistake in two instances, which have now been amended in the *Corrigenda*.

24. 39 232 [πρί]ωρ, 39 501 m7 πρίωρ, 59 5 πρίωρ, 31 πρίωρ (l. πρίωρ). In addition, there are abbreviated or restored attestations: 37 45: πρ(ίωρος?), 39 146 [πρίωρ], 43 147, 163.

25. Gignac, *Phonology*, 133–36, esp. p. 133 n. 5.

Egypt includes significantly more instances of the non-aspirated κατ' ἔτος than aspirated. False aspiration in ἀγθεξομ[ο]λ[ογοῦντος] προ ἀντεξομολογοῦντος in **23** may be explained by association with the verb ἀνθομολογέω without the intervening preposition ἐκ. Such phenomena, as well as the use of φάκτον for πάκτον in **50** 6 (see also comm.), might also have been related to the tendency of the Petraean Arabic dialect to use the aspirated version of voiceless stops (see below, p. 37). However, some confusion appeared also with the voiced dentals, as in ἦθη pro ἦδη (**23**). The Macedonian month Ξάνδικος was spelled Ξάνθικος (**67**), but this seems to have been a universal phenomenon.²⁶

Assimilation of nasals. The writers present a significant number of nasals which were at word-junctions (graphemically) and unassimilated to the following consonant (Table 10). This goes against the trend proposed by Gignac (*Phonology*, 166), where unassimilated spellings dominate assimilated ones at a ratio of 10:1 in the first century, then of 5:1 in the second century, becoming subsequently less and less frequent, so that, in the sixth century, assimilated spellings were used “predominantly.” It is illustrative that the scribe of **1** wrote the unassimilated form ἔνγραφον, whereas in the same document both Patrophilos and Theodoros used ἔγγραφον in their signatures. The scribe of **28** did not assimilate the forms ἔνγραφον or [ἐ]νμένον[τι] either, and the same habit continued in Elaphia’s signature, written by a proxy, in ἐγμένω for ἐμμένω. In the Latin loan word *invent(ari)um*, the nasal had been assimilated in **2** and **55** (ἰμβεντάριον, ἰμβεντον). The Latin words presumably reflected actual pronunciation, while the Greek words betrayed the education of scribes, as they seemed to favor unassimilated spellings of the prepositional prefixes.

Some writers voiced the velar stop in compounds, e.g., ἔγλημψιν pro ἔκκληψιν (**17**, **48** m3) and ἐγνικήεωσ pro ἐκνικήεωσ (**50**), and the writer of **17** even in πάγ[τα] pro πάκτα. Note also the addition of the nasal /m/ in front of the labial in ἔγλημψ- for ἔκκληψ- (**17**, **48** m3, **52**, **59**).

Gignac notes that, for γίνομαι, the older Attic orthography with γινν- became more common in Byzantine papyri, after γινν- had been the normal spelling in the Roman period.²⁷ In Petra, we have no evidence of the spelling γινν- and only once γινομένων pro γινομένων (**4**) and γεινομεν- pro γινομεν- (**25**). The participial form, which was commonly used in Petra, was derived from the aorist stem γενομεν-/γεναμεν-.

Gemination and degemination. The doubling of single consonants took place occasionally in Petra. Gignac connects this phenomenon to the loss of the quantitative distinction of vowels, associated with the change of the Greek accent to one of stress.²⁸ In the Petra examples (Table 11), gemination mostly occurred at the end of the accented (stressed) syllable—that is, in our opinion the stress lengthened the vowel *and* the following consonant, which properly belongs to the following syllable (e.g., Τ[ρ]ίττης pro Τρίτης, ἔννατον pro ἔνατον, μάλλειστα pro μάλιστα). It happened in syllables which were otherwise “weak” (or “open”)—i.e., that end in a vowel (CV). The gemination “closed” the syllable—i.e., made it “heavy” (CVC). It was thus possible to place the stress on it if one followed Arabic rules for what types of syllables can be stressed.²⁹ In the cases in Table 11 where the accent does not fall on the vowel preceding the added consonant, the gemination still seems to originate from the stressed syllable of the word’s basic form (i.e., nominative singular or first person singular present indicative, non-compound word), e.g., τυγαγνούσης (τυγγάνω), καταλιμπανόμενα (καταλιμπάνω), πρόκριμμα (κρίμα), ἐσσώτερα (ἔσω), τετρα/τριακοκκίόστου (-κόσιοι); this was probably, by analogy, also the case behind εἴκοσσι, despite its own basic form of εἴκοσι. Thus, gemination of the consonant may be taken to mark the stressed

26. See **67** 2 comm.: the spelling with *theta* was common in the late antique Near East, whereas previously *delta* was favored. For the use of the Macedonian calendar in Petra, see P. Petra III, pp. 7–11.

27. Gignac, *Phonology*, 176.

28. Gignac, *Phonology*, 154–55 and 325–26.

29. I thank Sonja Dahlgren for bringing the idea of the Arabic stress to my attention. Although Arabic grammatical treatises did not discuss stress, it is assumed that in Classical Arabic the stress was placed mainly on a closed syllable: on the penultimate if it was closed and on the antepenultimate if the penultimate was open; local vernaculars may have had rules of their own, and the same applies to historical dialects (Fischer, *Grammar*, 20; Versteegh, *Arabic*, 90). Heavy and weak syllables function similarly in Greek meter, so the weight of the metric syllable might have been relevant in the new Greek stress/accent system.

syllable in the basic word form. The Latin name of the province Καλλουταρία[c] pro Καλουταρίαc is the only instance where an explanation along these lines is difficult (unless we go all the way back to *salus*). In general, the individual writers were not systematic in their use of gemination. However, it seems simplest to explain that it served occasionally as a marker of Greek lexical stress.

Degemination (i.e., writing only one consonant where two would be standard) took place more rarely but mostly in similar places to gemination. This apparent caution suggests that the risk of erroneous gemination was recognised by some writers, and, when trying to avoid it, they occasionally ended up using hypercorrected single consonants. Gemination and degemination did not occur in the texts of the same writer. We may also note that, while gemination was most common with nasals and sibilants, there are no examples of the degemination of nasals and only two of sibilants. In contrast, liquids were more often degeminated than geminated.³⁰ The word ἐκκλησία (or ἐκκλησιαστικός) was quite often written with a single stop: ἐκκληc- (e.g., **2**, **12**, **17**, **25**, **37**, **42** m4, m7, **62**, **76** m4, **85**, **87**) but sometimes also according to the norm (**31**, **39**, **48**, **49** m3, **55**, **64**).³¹

Sound /v/. The Latin consonantal u (v) was transcribed either with <ου> or <β> (cf. Gignac, *Phonology*, 68–70). In Petra, it seems that the first alternative was used before /a/, in Οὐάλης, Οὐαλέριος, and the second alternative before /e/ and /i/, in Βίκτωρ, ἰβεντάριον, ἴβεντον, and βέρβα. The word Φλάουιος was always abbreviated as Φλ(), so we do not know which letter(s) the people of Petra would have used for the /v/ sound. The forms Φλάβιος, Φλαβία, and Φλαβιανός also appear in the papyrological corpus but seem to be quite exceptional, with only 39 examples in the Papyrological Navigator.

NUMERALS

The use of numerals in dates varied, especially since there were several systems used (see P. Petra III, pp. 7–11). The Roman date contained cardinal numbers, e.g., τὸ ιθ̄ πρὸ τρειῶν καλανδῶν Ἰανουαρίων (**25**). The Macedonian date had either ordinal numbers with or without καί in figures above twelve, e.g., μηνὸς Λῴου εἰκοστῇ ἐνάτῃ (**23**) and μηνὸς Περιτίου πεντεκαίδεκάτῃ (**25**), or substantival numerals ending in -άc, e.g., [μηνὸς] Γορπ[ιαίου]v τριακάδι (**66**).³² The use of the substantival numeral in dates can already be found in Ptolemaic papyri, e.g., P. Eleph. Wagner 1.3 (3rd c. b.c.): ἦτους (l. ἔτους) δωδεκάτου Ἄθῦρ τετράδι καὶ εἰκάδι.

DATIVE

The use of the dative case was generally falling out of use already in the Hellenistic period. However, in Byzantine high-register literature, the dative was used even more widely than before due to its Atticist tendency. The dative was a marker of style, though it did not always adhere to Attic conventions. It has also been suggested that the use of the dative increased in the Byzantine period not only in high-level literature but in all text types (Wahlgren, *Case, Style and Competence*). Recent studies on syncretism of the dative case show that, in Greek papyri in the Roman and Byzantine periods, there was a steadily increasing tendency to replace the dative with genitive or accusative.³³ However, the (personal) dative was not lost in the secondary object function of the dative in the vernacular before the tenth century.³⁴

We do find the dative used in the Petra papyri in a variety of functions, which can be categorized roughly as follows: 1) verbal complement (i.e., as secondary object—recipient or possessor); 2) instrumental (temporal or spatial); 3) with prepositions.

In requests for transfer of taxation, the verb ἐπιτελλῶ (“order, command”) is formulaically used, taking as a

30. In **22** a personal name Ichmallos was written with two *lambdas*, [Οβεδουc Ιχμ]αλλου, by the scribe, but with only one, Οβεδουc Ιχμαλου, by the signatory Flavius Ailianos, son of Monaxios (m4).

31. Cf. Gignac, *Phonology*, 160, where this same word features very prominently with a single *kappa*.

32. Cf. Gignac, *Morphology*, 205.

33. Stolk, *Case Variation*; with focus especially on the personal pronouns.

34. Horrocks, *Greek*, 185, based on Humbert, *Disparition du datif*; cf. also Wahlgren, *Case, Style and Competence*.

complement the second-person singular pronoun in the dative, *coi*, often followed by a definite article, honorific title, and the name of the person to whom the request was addressed, all in the dative case, e.g., ἐπιτετέλλω σοι τῷ αἰδεσιμωτ(άτῳ) Βασιλείῳ καὶ τοῖς κατὰ καιρὸν αἰδεσ[ι]μωτ(άτοις) ὑποδ[έ]κταις (19 12–13; see also 23–25). The personal pronoun could also be replaced with the possessive personal pronoun *cóc* (“thy, thine”) and an abstract honorific noun, e.g., ἐπιτετέλλω τῇ *cῆ* αἰδεσιμώτ(ητι) (l. αἰδεσιμότητι) (4 8). The person to whom the order was addressed is also presented in the dative case at the beginning of the request. In 3 3 the addressee precedes the verb, and the verb is then followed by a direct object in the accusative: ἐπιτετέλλω τὰ ὑποτεταγμένα (cf. 25 2–4). In 23 4, the recipient is greeted as in a letter, and the pronoun is also included: *coi* τῷ εὐδοκιμωτ(άτῳ) Ἀλφεῖῳ Οὐάλεντος δημοσίῳ χαρτ[ο]φύλακει χα(ίρειν).

Another group of verbs which took a personal dative as the secondary object denote the transfer of property to others—i.e., giving, donating, or selling (e.g., δίδωμι, ἐκχωρέω, παρέχω, πιπράσκω, τίθημι, and their compounds with prepositional prefixes). Dative pronouns were used with finite forms of these verbs as well as with participles.³⁵ In this function, the dative seems to have been very stable, as there was no confusion with other cases, and even the less educated Group C writer of 6 correctly used with δίδωμι the dative cases of both the first- and third-person pronouns. The plural first-person pronoun was very rarely found in the dative in Petra but is found with δίδωμι in 55 115, ἐκδοθῆναι ἡμῖν τὰ πεπραγμένα. In 39, both ἡμῖν and ὑμῖν/ὑμεῖν are exceptionally well attested, most often as secondary objects, e.g., παρέχομεν ὑμεῖν (39 288). The likely reason for the frequent use of the plural forms of the first- and second-person personal pronouns only in 39 is the fact that a large part of this text is written in direct speech, whereas contracts more often employ the third person and singular number.

The verb ὑπάρχω (“belong to”)³⁶ has received a detailed treatment in Stolk, *Phraseological Variation*. Stolk notes that the genitive case gained more ground as the complement of ὑπάρχω to indicate the possessor over against the previously more common dative complement. According to Stolk, the genitive was generally used by the sixth century. In Petra, we see some fluctuation between the genitive and dative with ὑπάρχω, but the dative was indeed still being employed. It is worth considering this in more detail. First, as Stolk shows, the verb could be used in three types of construction: 1) verbal use (ὑπάρχει μοι); 2) attributive use of the participle (τὰ ὑπαρχοντά μοι noun); and 3) substantival use of the participle (τὰ ὑπαρχοντά μοι/μου πάντα). In the third case, where the participle is modified by *πάς*, it was understood as a substantive (“all possessions”), which could again be modified by a normal genitive possessor. In the Byzantine period, the first type was used much less frequently than the second and third types (only 3%; see Table 1 in Stolk). It was more popular in the Ptolemaic period (29%), though even then the second type was the most common (61%). In light of these figures, it is interesting that, in Petra, we find an example of the verbal use in a.d. 539–40: 19 3 χωρίον ἀμπελικὸν ἐμοὶ τ[ῷ] Θεοδώρῳ ὑπάρχει (“I, Theodoros, own a plot of vineyard”). The document is an *epistalma*, so the writer belonged to Group A. Participial uses were, of course, more frequent than the verbal ones, and the third type with a genitive possessor seems to prevail in our material, e.g., πάντα α[ὐ]τῶν τὰ [ὑ]παρχοντα] καὶ ὑπάρξον[τα πράγματα] (1 76); τῶν ἐν Σερίλ[ων ὑπαρ]χ[όντων] πατρῶων αὐτοῦ πάντων (18 6; cf. also 50 132, 51 167).

35. 1 20 [πάντα τὰ] ἐκχωρηθέντα αὐτῷ, 39 τὰ αὐτῷ διαφέροντα, 75 ὑποθήμενοι (l. ὑποθέμενοι) ἀλλήλοις; 3 4 παρέχειν τῷ αὐτῷ λαμπρο(τάτῳ) Παγολβίῳ; 6 11 ἔδοκα αὐτῷ (l. ἔδωκα αὐτῷ), 13–15 οὐκ ἀνέδοκεν (l. ἀνέδωκεν) μοι αὐτά; 23 7 δ[ι]αφερο[ύς]ης ἐ[μο]ῖ, 9 παραδο[ύ]ς αὐτῷ, 12 τὴν ἐπ[ι]γεγραμμένην μοι, 15–16 (m2) τῆς ἐπιγεγραμμ[έν]ης (l. τὴν ἐπιγεγραμμ[έν]ην) μοι; 25 4 πέπρα[κα] τῷ θεοφιλεστάτ[ῳ] Φιλουμέ[ν]ῳ, 4–5 τ[ῆ]ν διαφέρουσαν μ[οι] ἐπί[ρ]ρον μ[ί]αν γεωργίαν; 28 71 προσθέντων κάμοι (l. καὶ ἐμοὶ) παρὰ σοῦ; 29 αὐτῷ δοθέντα; δοθείσης [αὐτῷ]; πε[ρὶ] τῶν [π]ρ[ο]σ[γ]ραμμένων αὐτ[ῷ] πα[ρ]α[τ]θέντων [καὶ] αὐτῷ παρ’ αὐτοῦ δοθέντων; δέδωκεν κατὰ τὸ προσὸν αὐτῷ; 31 [λ]όγον δέδωκα σοι ετέργειν; 39 191–92 ἔδωκεν ἐμοὶ ἀνέδραστ[ο]ν [καὶ] ἄκαιρον ὄρκον, 259 τοῦτο δεδομένον τοῖς βουλομένοις, 462 τοῦ πρᾶθέντος Λεοντίῳ Θεανούμου, 487 ὅτι ἔδοξεν δοῦναι Λεοντίῳ τῷ μακαρ(ιωτάτῳ), 492 ἐτύπωμα δοῦναι τῷ μακαρ(ιωτάτῳ) σου πατρὶ; 40 2 πρ[ο]σθέντων μ[οι], 4 πέπρακά σοι, 6 παραδεδοκότο<c> (l. παραδεδοκότος) σοι, 7 [τ]ὸ πρᾶθέν [c]οι παρ’ ἐμοῦ; 41 col. iii 4 ὅτι πέπρα[κ]έν σοι, 9 π[ο]λ[ύ]ησαι μοι, 13 τῆς οἰκίσεω[ς] πρᾶθείσης μ[οι] παρὰ τοῦ σοῦ πατρὸς; 50 143 δι[η]νεκὲς παραδέ[δο]κα σοι σωματικῶς, 151 δι[η]νεκὲς παραδέδω[κ]ά σοι σωματικῶς; 70 6 περιποιεῖν σοι, 8] μαι ποιέε[ς] (l. ποιήσαι) σοι τὴν παρούσην ἀπόδειξιν, 25 (m3)].. παραδεδ[ω]κότα σοι v[.]

36. Literally, ὑπάρχω means “exist.” As in the dative of possession, however, “there exists an X to Y” amounts to “Y owns an X.”

Unfortunately, in many cases the possessor is lost in a gap, but it has usually been restored in the genitive. One example of a dative can be found, again with a Group A writer: μέρο[ς δί]μοιρον [τού]των τῶν ὑ[π]αρχόντων ἀπὸ τῶ [..]. τῶν (4 4). The uncertain word following the dative leaves open the question of whether we should take this as an attributive or substantive use of the participle.³⁷

In addition to ὑπάρχω, the verb λαγχάνω is also common in the Petra papyri. Used with a similar meaning as ὑπάρχω, λαγχάνω denotes property which had fallen into one's lot or share. The participle is always used attributively, and, if present, the possessor is always in the dative.³⁸ The verbal use is somewhat more common than with ὑπάρχω: it is used intransitively in 30 and 31³⁹ but transitively in 17⁴⁰ (see ll. 62–64 comm. and p. 88 for a discussion).

The impersonal ἔξεστι (“it is allowed, possible”) appears in the Petra papyri with dative personal complements (“to whom something was possible”): 1 42 ἐξεῖναι τῷ βουλομένῳ πιπρ[ά]ς[κειν]; 17 112–13 πρὸς τῷ ἐξεῖναι ἀπὸ τῷ Ἐπιφανίῳ ἐπιβῆναι ἐπὶ τῷ δώματι (“in addition, that the said Epiphanius be allowed to enter onto the roof of the house”). Another similar structure appeared with the verb (συν)δοκέω, with a dative complement (“it seems good to someone, they agree”), e.g., ὁμοίως δὲ καὶ τοῦτο αὐτοῖς συνέδοξεν (1 44).⁴¹ The dative here was sometimes replaced by the genitive preceded by the preposition μεταξύ, e.g., ὡς ἔδοξεν μεταξύ ἀπὸ τῶν (30 146). This seems to have taken place mostly in participial phrases.⁴²

Apart from the dative “proper,” dative is also used independently in the instrumental sense,⁴³ found in Petra especially in legal phrases, e.g., 18 51 [τῷ ἰδ]ίῳ αὐτοῦ κινδύνῳ; 10 12 ἴδιο (l. ἰδίῳ) μου κινδ[ύν]ῳ; 17 31, 120 ἰδίῳις πόνοις κ(αὶ) ἀναλώμασιν; 1 6–7 ἐκουσία ἀπὸ τῶν γνώμη καὶ αὐθιρέτω (l. αὐθιρέτω) πρ[ο]αίρέσει; 17 62, 72, 76, 89, 135, 159, 176, 198, 214⁴⁴ ἀκολουθῶς ταῖς πηχθ(εῖσαι) ὀρ(ο)θ(εῖσαι). Body parts constituted a middle category between locative and instrumental uses and thus often appear in the signatures of our texts in the dative, e.g., χειρὶ ἐμῇ (“with my own hand”). The legal phrases and instrumental usage were familiar also to Nonnos, a Group C writer, e.g., 37 22 εἰδ[ί]ῳ μου κινδύνῳ, and 45 χειρὶ.

The locative dative occurs mostly in prepositional phrases.⁴⁵ Of course, the preposition ἐν with the dative was commonplace in Petra, e.g., ἐν ἀλλῇ ποτε Οὐάλεντ[ος] Ῥωμανοῦ (17 201).⁴⁶ As time was typically conceived of metaphorically in spatial terms, the same construction was used temporally as well, e.g., ἐν μηνὶ Λωίῳ (18 21). However, there are also some instances of the dative without preposition used temporally (the regular expression for “time at which” in Classical Attic), all of which occur in receipts in which the expression is abbreviated and/or restored, but the omission of the preposition seems clear, and, at least in 10 7, we see that the case used was the dative.⁴⁷ In addition, ἐν with the dative represents the so-called container metaphor,⁴⁸ for which we have several examples in Petra, denoting *in which document* something had previously been agreed, e.g., ἐν τοῖς ἀ[ὐ]τοῖς ὑπομνηστικοῖς (4 5).

The dative also appears in legal phrases with the comitative preposition σύν, e.g., σύν παντὶ δικαίῳ (“with every right,” e.g., 17) and σύν θεῷ (e.g., 3 8, 23 13, 24 3). Only a couple of uncertain cases are attested

37. The space seems too large to accommodate merely πάντων, nor do the traces quite fit. It is not totally out of the question that a *nu* could have followed after αὐτῶ, producing the genitive ἀπὸ τῶν, but the plural pronoun would be strange since Panolbios was the referent.

38. 3 7 ἐκ τοῦ λαχόντος ἀπὸ τρίτου [μέρου] (cf. also l. 6); 17 63] ἐν [α]ὐτῷ τῷ λαχόντι ἀπὸ [..], 120 λαχόντος τῷ Βάσσο ἀδελφῷ (cf. l. 212); 30 103 τοῦ λαχόντος τῷ εὐδοκιμωτ(άτῳ), 221 λαχόντος μοι.

39. 30 46 [ὃ ἔλαχεν] Θεοδώρῳ, 88 ἔλαχεν ἀπὸ; 31 40 ἔλαχεν τῷ ἀπὸ τῆς θε[ο]φιλεστάτ[ου], 158 ο[ἱ] κήματα ἔλαχεν τῷ ἀπὸ.

40. E.g., l. 136 ὁμοίως ἔλαχεν ὁ αὐτὸς αἰδ(εσιμώτατος) Ἐπιφάνιος, 138 ἔλαχεν καὶ Καβεῖ[νος].

41. See also 1 36, 55; 29 46–47; 36 89; 39 450, 491; 51 103, 137; 56 33.

42. Cf. 23 11 τὰ μεταξύ μου καὶ αὐτοῦ ε[σ]υν[δε]δογμένα; 42 40?; 43 137–38 [τὰ μεταξύ] μου καὶ σοῦ δόξ[αν]τα (cf. ll. 123–24); 52 125 [πάν]τα τὰ μεταξύ μου (καὶ) αὐτοῦ δόξαντα.

43. Luraghi, *On the Meaning*, 63.

44. This list includes only the instances where the dative article is wholly or partly preserved.

45. Luraghi, *On the Meaning*, 63.

46. Note also 17 211 διεταλμένον ἐν τῇ ῥύμῃ (“opening to the street”). This usage may reflect direction or location.

47. 7 5 [ἐγράφ]ε μηνὶ (l. [ἐγράφ]η), 10 7 ἐγράφ(η) μηνὶ Λῳῳ, 48 45 ἐγράφ(η) μ[ην]ὶ.

48. For the semantic roles of ἐν, see Luraghi, *On the Meaning*, 82–94.49.

outside of such expressions, viz. *cún* ἀ[τοῖς] (22 103) and *cún* παραφέρνοιο (42 53). For this comitative sense, the preposition *μετά* with genitive was far more common, as was true throughout the history of Greek from Classical times onwards. It is rather noteworthy that *cún* appears at all, because it was generally rare already in Koine Greek as, e.g. in the New Testament.⁴⁹

OTHER VARIATIONS OF THE MORPHOLOGICAL CASE

There may be an accusative form instead of the expected dative in the witness statement of 43 159 (m5): πα[]ρήμεν Θωμᾶν instead of παρήμην Θωμᾶ. This phrase, however, uses the dative in a similar statement a few lines before (l. 152: παρέμεν Θωμᾶ), and, since the patronymic of Thomas begins with a *nu* (Νικηφόρου), we might take this simply as an instance of dittography.⁵⁰

In 37 37, we cannot be sure if the writer actually intended to use the dative case or if he meant to use the accusative but instead wrote *omegas* of *omikrons*: τὸ ἀζέμιω[ν] pro τὸ ἀζήμιον. However, since he confuses *o* and *ω* in other places, too, while this same line has accusative plurals ending in *-ουc*, it is probable that he did mean to use the accusative and that this is just an example of shaky spelling.

The accusative of the words *θυγάτηρ* and *μήτηρ* is, in Petra, at least occasionally written *-αν* instead of *-α*: [κα]τ[α]λεῖψαι τ[ὴν] αὐτὴν Cτεφανοῦν τὴν κοcμοιτάτην γαμετῆν [μ]ὲν Θεο[δ]ώρου, αὐτοῦ δὲ [Πατροφίλου] θυγατέραν (l. θυγατέρα) (1 29); ὡc εἰ cυμβῆ Παλλαδ[ί]αν τὴν εὐλαβεcτάτην [μ]ητέραν (l. μητέρα) (1 56); Θεοδώραν τὴν αὐτῆc θυγατήραν (l. θυγατέρα) (52 143).⁵¹ This is a sign of the partial merger of the first- and third-declension case endings.⁵² However, in 55, the correct accusative form is repeatedly used (τὴν ἐμὴν μητέρα). In the other texts where *θυγάτηρ* and *μήτηρ* occur, they are used in the genitive or dative. The word *πατήρ* is correctly inflected in the accusative as *πατέρα* (and *πατήρα*) in 19 and 39, and *γυνή* as *γυναῖκα* in 39.

In a list (6) where other items were in the accusative, the nominative singular (ὄρνιc) is used for six birds instead of the expected accusative plural (ὄρνιθαc). Another possible case of a nominative instead of an accusative is 18 52, ὑποθέμενοι pro ὑποθεμένους, but this scribe also had problems in distinguishing *ου* / *οι*.

Perhaps an accusative plural (τυγχάνονταc) was used instead of the genitive plural (τυγχανόντων) in 55 19 (repeated in the other copies, once as τυγχάνοντε[c], once with gemination). However, the syntax in this passage is not altogether clear.

A genitive instead of an accusative is found in the signature of Dusarios in 23 15 (m2): τῆc ἐπιγεγραμμ[έν]ηc pro τὴν ἐπιγεγραμμένην, which is supposed to agree with *cυντέλιαν*, located some distance away in the following line. This word was most likely attracted to the subsequent word, in genitive.

PREPOSITIONS

The most common preposition used in the Petra papyri is *εἰc*, although *κατά* is almost as popular. These two are followed (in a rough quantitative order)⁵³ by *ἐν*, *ἀπό*, *παρά*, *ἐκ* (ἐξ), *πρόc*, *ὑπέρ*, *ἐπί*, *μετά*, *διά*, *ὑπό*, *πρό*, and *περί*. The least frequent are *ἀνά* (once) and *ἀντί* (twice). This order of frequency is in line with the general development of the Greek prepositions, as evidenced, for example, in the Gospel of Mark: in addition to *ἀνά* and *ἀντί*, which did not occur at all in Mark, the absence of *ἀμφί* is also in common with our material, replaced by *περί*, and only six occurrences are attested in the whole papyrological corpus.⁵⁴

49. Cf. Bortone, *Greek Prepositions*, 184: “*μετά* supplants *cún*; the fact that the latter required a dative was probably a factor.”

50. See also 43 159 comm. for speculation caused by the space within the verb πα[]ρήμεν.

51. In 52, the papyrus breaks off right after *θυγατήραν*, so we cannot exclude the possibility that the *nu* in fact belonged to the following word.

52. See Horrocks, *Greek*, 120–21 and 286. Cf. also Gignac, *Morphology*, 45, for similar examples in the words “mother,” “daughter,” and “father.”

53. The Index does not give an accurate count of preserved instances, because restored words are included.

54. In a search querying #αμφι# in the Papyrological Navigator (June 14, 2016), three of the hits returned occur in very fragmentary positions and one is probably the beginning of a name. On prepositions in the Gospel of Mark, see Bortone, *Greek Prepositions*, 178 (Table 5.1), cf. 184.

Some of the prepositions are worth examining more closely (on ἐν and σύν, see above). The preposition εἰς usually expresses the time up to which a certain state of affairs was to continue⁵⁵ (often “forever,” εἰς τὸν ἐξῆς ἅπαντα χρόνον) or a target (including humans) to(wards) which an action was directed,⁵⁶ εἰς τοὺς κατὰ καιρὸν ὑποδέκτ[ας], or εἰς κληρονόμους (51 20).

The preposition ἀπό occurs only with inanimate nouns, most often with the (indiction) year, which explains its frequency in our contracts. However, as noted by Bortone, ἀπό was, in Hellenistic and later Greek, gaining ground on ἐκ (ἐξ). In Petra, ἐκ is the more common of the two, e.g., when a person’s place of residence is given, but we do also find, e.g., ὀρμώ[μενος] ἀπὸ τοῦ αὐτοῦ κάτρου (59 6–7), and ἀπό could be connected with words like “house” or “inheritance,” e.g., ἀπὸ τοῦ δόματος (6 7).

The preposition διά is used both with animate and inanimate headwords and most often with the genitive case (e.g., 10 9, 16 διὰ σοῦ, or 55 73 διὰ ταύτης μου τῆς νόσου). The accusative appears in a few cases, e.g., with the substantivized infinitive in 39 (e.g., ll. 249, 317, 454, but genitive in l. 245) and 84 21 (διὰ τὸ εἶναι) and only twice with a noun (39 316 διὰ τὴν εἰρημένην; 56 30 διὰ τὸν Κύριον). Whether there was a semantic difference between the use of the accusative and genitive is difficult to assess, because the examples are so fragmentary.⁵⁷ However, the development through which the accusative became the most common case used with all prepositions had not yet taken place in the Greek of Petra.⁵⁸ The accusative also prevailed with the preposition κατά.

The preposition ἐπί could govern all three cases, between which there was significant semantic overlap.⁵⁹ In Petra, ἐπί is also attested with the three cases, though the dative is clearly the most frequent. With prepositions where a semantic distinction was otherwise sharp between cases, it was still clear as well in Petra. Thus, μετά denoted “after” with the accusative, e.g., μετὰ τὴν ὑπ(ατείαν), μετὰ ταῦτα, μετὰ δὲ θάνατον, and “with” with the genitive, e.g., μετὰ κληρονόμων αὐτῶν διαδόχων, μετὰ συναινέσεως.⁶⁰

The prepositions παρά and ὑπό occur with all oblique cases but mostly express the agent with the genitive of animate nouns, e.g., 39 488 ὑπὸ Ἀβοῦ Χερέβου τοῦ φυλάρχου. As expected, παρά is somewhat more frequent than ὑπό, as παρά was used in postclassical prose more widely than ὑπό, a style that was falsely considered an Atticism.⁶¹ The often fragmentary context of our occurrences precludes a detailed analysis of the verb types here, but it should suffice to say that both agentive expressions could be used in the same sentence:

πάντα τὰ παρ’ ἐμοῦ καταλιμπανόμενα οἰαδήποτε πράγματα διοικεῖσθαι ὑπὸ Κηρ[υ]κοῦ Πέτρου (55 73–74)

“All the belongings whatsoever I leave behind should be administrated by Kerykos, son of Petros.”

τῆς ἀγαθῆς πίστεως παρὰ σοῦ ἐπηρ[ωτημένης κα]ὶ σοὶ ὑπὸ ἐμοῦ ὁμολογη[μ]ένης (59 30–31)

“Good faith has been asked by you and agreed upon for you by me.”

The preposition παρά with the dative of a personal pronoun is found in the autograph subscriptions of Theodoros and Stephanos (archdeacon and deacon) in 39 513, 522 ἐπὶ τοῖς τεθείαι παρ’ αὐτῶ ἐνεχύροις. This is not to be understood as an expression of agency, however, in spite of the translation (“on the sureties placed by him”) but rather in a more concrete sense, (“beside him;” see comm.). In addition, ὑπό with the dative is found in the fragmentary text of 2 164 and with an inanimate noun in 39 337 (ὑπὸ [τῆ] ἀψίδι); at least in the latter case, the meaning is “under.”

The preposition παρά is found with an accusative only in a monetary context, namely when carats were subtracted from *solidi*, παρὰ κεράτια x (“minus x carats”).⁶² The original meaning of proximity denoted by

55. Cf. Luraghi, *On the Meaning*, 110.

56. Cf. Luraghi, *On the Meaning*, 107–9.

57. Moreover, the semantic difference between the genitive and accusative with διά is a complicated issue; see Luraghi, *On the Meaning*, 168–87.

58. See, e.g., Bortone, *Greek Prepositions*, 183–84.

59. Luraghi, *On the Meaning*, 298.

60. For the predominance of the accusative also in the meaning “with” in Medieval Greek, cf. Bortone, *Greek Prepositions*, 204–5.

61. Hult, *Syntactic Variation*, 37–39.

62. See 55 24–25 comm. for the *solidi* and carats.

παρά with the accusative (“beside”) was transformed to express abstract location (“beyond/below”) and, as here, “apart from.”⁶³ On the other hand, ὑπό with the accusative is attested only in one fragmentary place (52 84 ὑπὸ τὴν κρ. εαν).

Bortone notes that the use of the so-called “improper” prepositions (i.e., prepositions that cannot act as prefixes) clearly increased in Hellenistic Greek.⁶⁴ In Petra, the number of improper prepositions is not very significant, with the exception of the rather common μεταξύ. For some reason, quite many of them appear solely in 17 (ἐγγύς, ἔνδοθεν, ὀπίσω, πλησίος, ὑποκάτω), or in only a few other documents (ἔξωθεν, ἐπάνω). Somewhat more widespread were ἐκτός, ἔνεκεν, ἐντός (ἐντοσθεν only in 39), ἔμπροσθεν, ἔξωθεν, ἔως, μέχρις, and χωρίς.

OPTATIVES AND SUBJUNCTIVES

The construction comprising conditional εἰ with the optative was revived in the Byzantine period after an epoch in which it had been virtually absent. This construction is found in the papyri both in Petra and in Egypt.⁶⁵ In Petra, there are fewer than ten instances, all of which occur in formulaic contract clauses, presenting different scenarios and their implications for the contract: 1 67–68 ἔτι δὲ κα[ὶ] συνέδοξεν ὥς] εἰ φανεῖν ὁ εὐδοκ[ιμότατος Πατρ]όφι[λος] (“if the most honorable Patrophilos should turn out”); 4 6, 9 εἰ οὕτω τύχοι (“if it should so happen,” referring to possible extraordinary taxes); 17 225–27 εἰ δέ τις αὐτῶν πειραθείη (l. πειραθείη) παραβῆ[ν]αί τι τῶν προγεγραμμένων (“But if any one of them should attempt to violate any of the above-written (clauses)” and similarly in 29 171–73, 51 154–55, and 64 116); and 52 116 εἰ ἔλοιτο. The only example of a present optative with εἰ is 42 46–47 [εἰ δὲ] τελευτᾶν μέλλοι (“if she should be about to die;” cf. future periphrases, below). Since the Petra material consists mainly of contracts, conditional clauses are common. The regular alternative construction here is εἰ (or εἰάν) with an aorist subjunctive, e.g., 1 18: ὥς εἰ μὲν συμβῆ (“that if it should happen;” cf. also ll. 26, 42, 56); 55 16, 35, 55, 73, 88, 104: εἴγε διὰ ταύτης μου τῆς νόσου τοῦ παρόντος βίου ὑπεξέλθω (“if, indeed, I do withdraw from the present life through this illness”). However, the imperfect indicative is also used as an alternative for the optative in conditional clauses, e.g., 39 187 εἰ δ’ ἔθελον - - τὴν ὑδραγωγίαν - - μεταγαγῆν.

For optatives independently denoting a wish, we only have three examples. They are again all formulaic additions appearing in both the present and aorist (cf. Mandilaras, *Verb*, §627–29): 1 22–24 ὅπερ ἀπειή (“let this not happen”); 31 136 παντελῶς ἐφ’ ὅσον περιεῖη χρόνον (“altogether as long as he lives”); 42 32–33 [γένοιτο] ἢ μὲ (l. μὴ) γένοιτο (“should it happen or not”).

For the potential optative (i.e., optative with ἄν), we have only two examples from the same document, though neither has a strictly potential sense and both seem to convey a generic meaning: 51 23–27 [ὄν] ἄν βουλευθῆν (“as he would wish”); 117 ἀστοχίαν ὁποῖα ἄν εἴη καὶ συμ[β]- (“failing, whichever kind it should be”). Again, the aorist subjunctive with ἄν (the regular expression of generic meaning) also appears, e.g., 31 186 ὥς ἄν βούληται (“as he would wish”); 51 95 κἄν τε ἐπιμελέθη, κἄν τε ἀμελ[έθη] (“whether it would be cared for or neglected”); 52 13 ὡς ἄν συμβῆ αὐτοῦς (“as often as it would happen that they”); 61 63 καὶ ἄν τις ἐπέλ[θη?] (“and if someone would proceed”). It is not clear what form was meant by ἔχει in 39 153: ὥς ἄν εἰς σήμερον ἔχει δίκαιον (“claiming that he still today has this right.” It may have been a correctly written present indicative, or a poorly spelled optative ἔχοι or subjunctive ἔχη (i.e., “as if he had”).

PAST TENSE FORMS

The perfect tense, like the dative, was in a process of disappearing often characterized as a merger of the

63. See Luraghi, *On the Meaning*, 144–45; Luraghi offers lengthy discussions on both παρά (pp. 131–45) and ὑπό (pp. 225–43), explaining the shift from the original meanings towards agentivity.

64. Bortone, *Greek Prepositions*, 180; see also 118–19 for the term and a list of the most common “improper” prepositions.

65. See Mandilaras, *Verb*, §649, Gagos—van Minnen, *Settling a Dispute*, 82–83 comm.

aorist and perfect.⁶⁶ However, like the dative, in Byzantine literature the perfect was used as a marker of high style, though there was variation between different genres.⁶⁷ Ioannes Malalas in particular stands out, as his texts almost entirely lack the perfect tense. This is probably one of the reasons why he is generally thought to be closer to the vernacular than most other authors. In the Petra papyri, the aorist is clearly dominant over the perfect, and the aorist is often used with the function of a perfect. In fact, finite perfect forms are extremely rare if we exclude the formulaic *πεποίημαι* in signatures.⁶⁸ Evidence of confusing different aorist stems and endings is also very rare, but an interesting case is, e.g., ἐλάθεεν pro ἔλαθεν(?) (39 332).⁶⁹ The imperfect appears occasionally, e.g., 39 298 ἐδόκουν but 450, 461, 477, 489, 491 ἔδοξεν.⁷⁰ In the case of the verb “to be,” the Koine imperfect conjugations (ἦμην as the first person singular instead of ἦ/ἦν) appear regularly in the witness statements.⁷¹

Non-finite perfect forms are another matter, however, and the perfect passive participle is the only ancient perfect form to survive even in Modern Greek. In Petra, participles are abundant, often used as nouns, e.g., περὶ τῶν ὑποτεταγμένων (1 11). Probably the most popular ones are εἰρημένος (“the said”) and προγεγραμμένος (“the above-written”), which belong to Byzantine administrative and legal phraseology. The perfect infinitive, too, appears more often than the finite forms, e.g., 28 69 διαμεμερίσθαι; 31 33 δεδωρῆσθαι; 37 8 ἀπεσχηκέν[αι καὶ] πεπληρῶσθαι). These perfect infinitives are all governed by the verb ὁμολογῶ, marking the prior time of the decision the party has (just) made: “I agree/He agrees to have divided *vel sim.*”

FUTURE (PERIPHRASES)

The use of the future tense was declining in the Hellenistic and Roman periods, and it was mainly replaced by the present tense and subjunctive forms.⁷² Several phonological mergers, e.g., η / ει, and ο / ω (and ου), made future forms interchangeable with the aorist subjunctives also in other persons than the first.⁷³ Since the subjunctive was also used to indicate future actions, it is no surprise that the forms became indistinguishable. The Petra papyri evidence a stage in this confusion, as it is not always clear whether a writer is aware of the difference between the future and the aorist subjunctive. For example, the following forms could simply be taken as first-person singular futures: 18 82–84 (m4) παρασκευάσω, [π]αρήξω, πληρώσω; 30 225 [κ]αθαροποιήσω, 235 [καθαροποιήσω καὶ] βεβαιώσω.⁷⁴ However, when the same phrase is used in plural, the forms seem to be those of aorist subjunctive: 17 220 οἰκοδ[ομή]ματα ἀ[λ]λήλοισι βεβαιώσουσιν καὶ καθαροποιήσουσιν ἀπὸ παντὸς (“they will mutually secure all these landholdings and clear them”).⁷⁵ Furthermore, in one phrase, a passive aorist subjunctive was accompanied by a form that could be either future or aorist subjunctive: 39 517–18 (m9) εἰ δὲ

66. See, e.g., Horrocks, *Greek*, 131 and 174–78.

67. Hinterberger, *The Synthetic Perfect* is an interesting study on what the perfect represented in different authors' works.

68. One clear case is 1 6 τήνδε τὴν ἔνγραφον ἀσφάλιαν πεποίηται πρὸς ἀλλήλους, another 41 iii 4 ὅτι πέπρα[κέ]ν σοι. In 50 137 (m2), we have a perfect accompanied by an aorist: [ἀντι]δέδωκα καὶ ἀντέλαξα (l. ἀντήλλαξα). Less certain occurrences are 51 110 κ[α]τὰβέβληκεν, and 80 23 δέ[δ]ωκεν (the following letters cannot be read with certainty, so it is not sure that what we have here is a finite form). In signatures, *πεποίημαι* is frequently used, e.g., in 1 82 (m2) πεπ[ο]ίημαι, and 37 50 (m2) πεπύεμε.

69. Cf. Horrocks, *Greek*, 110. The *kappa*-aorist forms of the verb δίδωμι are quite common in our material, thus the two possible instances of the perfect reduplication (see previous note) are interesting. As Horrocks notes, *Greek*, 177, reduplication basically lost its significance in the Koine, when the aorist and perfect began to merge.

70. See also 51 3 with comm., συνεδόκει τ[α]ύτη[ν] αὐτῷ ἐμφυ[τεύσασθαι]. Several imperfect forms appear in 39 (see below).

71. Cf. Horrocks, *Greek*, 154.

72. Markopoulos, *Future*, 46–47.

73. Horrocks, *Greek* 117; Mandilaras, *Verb*, §540–46

74. See also 40 10 ἀπὸ τ[οῦ νῦ]ν χωρ[ή]σῃ κατ[ὰ] τ[οῦ] Γεωρ[γ]ίου; 61 81 [. . .] πωλήσῃ τῶν κληρ(ονόμων); 65 10 κατεδεξάμην καὶ κουφί[σ]ω καὶ βαρή[σ]ω.

75. See 17 220 comm.: “The two forms are to be understood as βεβαιώσουσιν and καθαροποιήσουσιν, since the future tense is standard in finite and participial *bebaiosis* clauses.” However, the example used there, P. Lond. V 1686.38, has the verb in the first person singular, which does not allow this deduction. A search in the Papyrological Navigator (July 3, 2017) yields only four preserved examples of the future form βεβαιώσουσιν: BGU I 316.30 (359), BGU VI 1222 (144 b.c.) P. Louvre I 10.12 (written βαιβαιώσουσι, 1st c.), and PSI VIII 909.19 (44).

ἐναντιωθῶ καὶ παραιτήσομαι τοῦτο ποιῆσαι (“if I oppose and refuse to do this”).⁷⁶ In the same subscriptions of **39**, we also find a form that could be a contract future, though, by this time, the contract future is expected to have been replaced by the sigmatic future: ll. 506 (m8) and 516 (m9) ἐνμενῶ καὶ ποιήσω καὶ πληρώσω (“I shall stand by and do and keep my promise”).⁷⁷ It is, of course, possible to take ἐνμενῶ simply as the present tense.

Even unambiguous future forms are occasionally attested. For example, the third-person singular copula ἔσται is used in validity phrases, e.g., κύρια καὶ βέβαια ἔσται (**18** 56, **28** 52, 65–66, **29** 200). In similarly formulaic expressions, the present and future infinitives may be paralleled, e.g., **29** 212, 225 μηδὲ ἀγωγὴν μήτε δίκην ἔχειν ἢ ἔξειν μὴ κεινεῖν ἢ κεινήσειν (cf. **57** 176). However, occasionally the aorist ending replaces the future one: **29** 207–8, (cf. 244 m2) κ[ύρια] καὶ βέβαια καὶ [ἀ]κάλευτα τὰυ[τα] ἡγίεσθαι καὶ εἰς ἀεὶ [ἡ]γήσασθαι; however, this may have just been an accident (cf. the medial third person plural present and future in **29** 147–48 κύρι[α] καὶ βέβαια καὶ εἰ[σχυρὰ καὶ] ἀκάλευτα ἡγοῦνται καὶ ἡγέονται τὰ παρόντα ἀ[νθ]ομολογα).⁷⁸ Similar coupling of present and future forms in legal phrases occurs with participles, e.g., πάντα μου τὰ ὑπάρχοντα καὶ ὑπάρξοντα πράγματα **31** 297; **61** 73; a future participle is also found, e.g., in **4** 9 συμ[β]ηχομένω[ν].

The declining future tense was also replaced by auxiliary verb constructions (i.e., periphrastic forms), e.g., μέλλω with an infinitive.⁷⁹ According to Markopoulos, μέλλω with an infinitive gained popularity in the Hellenistic and Roman periods and remained so in Early Medieval Greek (fifth to tenth century): the tense of the infinitive in the early medieval papyri was usually aorist. Horrocks, on the other hand, notes ὀφείλω alongside μέλλω as the earlier auxiliaries in future periphrases; later, ἔχω and θέλω were the preferred alternatives.⁸⁰ The Petra material contains some examples of μέλλω and ὀφείλω, which occur especially in **39** (for the special features of **39**, see below). However, since the context is often fragmentary, the semantic interpretation (the futurity) may be uncertain (see the list of examples below). We may also note that the participle of the verb μέλλω often referred to the future, e.g., **3** 8 τῆς [εὐ]θεῶ εἰδέναι μελλούσης δευτέρ[α]ς [ἐπι]νεμῆσεως.⁸¹ In Petra, μέλλω did not have only aorist infinitives as complements, as was suggested by Markopoulos, but also present ones. It is noteworthy that the contemporary writer Malalas also used mainly present infinitives as the complements of μέλλω, including many examples of μέλλω plus τελευτᾶν, as in **42**.⁸² The verb θέλω appears only in **39**, where it can be said to express a wish rather than mere futurity and is never connected with ἵνα.⁸³ Thus, the elements of the Modern Greek future were not yet visible in Petra. All the instances of ὀφείλω in **39** denote past events and unfulfilled future actions from the past perspective. As far as other Petra documents are concerned, it would be possible to interpret the relevant examples involving a reduced sense of obligation and a corresponding shift towards futurity (the translations are as they stand in the editions). It seems that the verbs βούλομαι and ἔχω were not used as future auxiliaries in Petra.⁸⁴

76. The same phrase also occurs in l. 507 (m8), where the letters are uncertain.

77. Cf. Gignac, *Morphology*, 284.

78. We have also an example of the opposite, of a future stem used with an aorist ending where the aorist was meant: **50** 115 καλή[σαι ἢ ἐπ]ελεύ[σ]ασθαι ἢ παρακαλεῦσαι; see comm.: “The form ἐπελεύσασθαι joins an aorist ending to a future stem, a common phenomenon for this verb already in Ptolemaic papyri; see Gignac, *Morphology*, 333–34. As the two other verbs here display a correct aorist form, it is clear that the scribe believed ἐπελεύσασθαι to be an aorist as well.”

79. Markopoulos, *Future* 46–47, 88–91.

80. Horrocks, *Greek* 130. Markopoulos, *Future*, 60, dates the ἔχω periphrasis earlier, suggesting that a semantic shift from ability or obligation to futurity occurred with this auxiliary already in the 1st/2nd century. Markopoulos only examines the auxiliaries μέλλω, ἔχω, and θέλω.

81. “The coming, God willing, second indiction year;” cf. **4** 13, **5** 6, **51** 4, 21, **59** 42, **65** 3, 8.

82. D. Kölligan, “Future periphrases in Malalas,” paper presented in the conference *Postclassical Greek: Intersections of Philology and Linguistics*, Mainz, February 2016.

83. Rather, θέλω is connected with a present infinitive in **42** 150 [καὶ θέλ]ει οἰκοδομεῖν [(“and wishes to build”), ll. 187–88 εἰ δ’ ἔθελον πρὸ [. . .] αὐτοῦ τὴν ὑδραγωγίαν τῶν οἰκ[ημ]άτων αὐτοῦ μεταγαγεῖν (“If I wished before his . . . to reroute the water conduit of his house.”); cf. also ll. 202, 259–61, 415, 429.

84. A possible case of a future auxiliary might be, e.g., **59** 17 [c. 6] βουλόμενον εἰσακολλ[ο]υθῆναι εἰς γῆν (“wishing to obey?”), but most instances clearly denote desire and wish, e.g., **39** 224, 317 “my opponent did not want;” **52** 123. Only one instance of ἔχω in Petra could be interpreted as a future periphrasis: **39** 259–60 εἶχον πολλοὶ ἀποκτηρεῖσθαι (“many people would be deprived of their own rights”).

- μέλλω: 39 190 καὶ οὐκ ἔμελλον αὐτῷ περὶ αὐτοῖς ἐγκλησάμενος τῶν προδούλων τοῦ ὑποκάμπρου (“and I would not accuse him in this matter over the servitudes of the downturning spout?”)
- 39 210 [εἰ] [μ]έλλει ἔτι διασωθῆναι (“if he thinks he can still save himself”)
- 42 47 [εἰ δὲ] τελευτᾶν μέλλοι τοῦ ἀνδρὸς ἔτι περιόντος -ca.?-] (“if she happens to die”)
- 52 78 μέλλοντος ἀποκίεσθαι χρυσίον .ε. (“... gold to be stored in reserve”)
- ὄφειλω: 39 201 ὄφιλεν ὁ ἐμὸς διάδικος κατὰ παλαιὸν - - - εἶθε [α] (“my opponent should have, according to the old [custom]”)
- 39 253 [ὁ ἐμ]ὸς διάδικος ὡς κατέμαθεν τὰς τ[οποθ]εσίας ὄφιλεν πεισθῆναι (“my opponent, as soon as he learned about the surveys?, should have been persuaded?”)
- 39 270 ὄφιλω ἔχειν τὸ ἐμὸν ἀυλίδριον (“I ought to have my outbuilding”)
- 39 357 οὐκ [ὄ]φιλεν εἰς τὴν τοιαύτην συκοφαντίαν ἐλθεῖν (“he should not have committed such chicanery”)
- 39 405 ὄφελεν [μ]ὲν ὅτι ἀπέδειξέν με (“he ought to have demonstrated that I”)
- 51 113 ὄφειλοντα γεωργεῖν καὶ (“being obliged to cultivate and”)
- 52 43]οις μετὰ γεωργῶν ὀφιλούσης ἀγορασθῆναι (“with tenants, due to be bought”)
- 52 57 ὀφιλούσης ἀγορασθῆναι κ.λ. (“due to be bought”)

INFINITIVES

Infinitives are used in various way in Petra. Plain infinitives are frequently employed as complements to verbs, like objects for verbs denoting an order or command (cf. Mandilaras, *Verb*, §796), e.g., in requests for the transfer of taxation, where the normal formula is “ἐπιτέλλω - - - κούφισαι μὲν - - - βαρῆσαι δὲ.” With verbs denoting agreement, like the common ὁμολογῶ, an infinitive is used as the object, either in the present or perfect tense, e.g., [ὁ]μολογῶ ποιεῖν καὶ πληροῖν (18 64 m2); ὁμολογῶ διαμεμερίσθαι πρὸς σὲ (28 69). The impersonal δοκεῖ (“it is decided”) and συμβαίνει (“it happens”) often received an infinitive complement with the accusative (cf. Mandilaras, *Verb*, §791), e.g., ἔδοξε [ν] ἐμὲ παρέχειν (3); ἔδοξε [ν] ἐμὲ - - - μέρος δίμοιρον τούτων καταβ[ά]λλειν - - - καὶ συντελεῖν (4); ἔδοξε [ν] αὐτοὺς Ἰακ[ά]ρα[ι]ον κ[α]ὶ [Γρηγο]ρ[ί]αν [τὴν] γ[υ]ν[α]ικ[α] αὐτοῦ καθαροποιεῖσθαι (39 127–28); εἰ δὲ συμβῆ τὸν εἰρημένον [εὐ]δοκίμ[ό]τατον Πατρόφιλον - - - [κα]τ[α]λεῖψαι (1 26–27).

The articular infinitive was a very popular construction in the Koine and in the papyri from Egypt, being a part of the “bureaucratic” register of Hellenistic chancelleries.⁸⁵ In Petra, it appears quite frequently as well, most often with prepositions (πρὸς, πρό, εἰς, διά, ἐπί, μετά). For example, in 18, articular infinitives recur in the signatures (in the text proper, they fall in *lacunae*): ll. 66–67 (m2): [ἐ]πὶ τῷ διαπαγῆναι (l. διαπαγῆναι) [μετὰ] τῷ (l. τὸ) ὡς εἴρηται ἀλλ[α]γῆναι (l. ἀλλαγῆναι) τὰ προικῶα (“on the condition that it remains fixed, as stated, after the marital assets have been exchanged”); ll. 76–77 (m3): ἐπὶ τῷ διαπαγῆναι μετὰ τὸ ὡς εἴρηται ἀλλ[α]γῆναι; l. 84 (m4): εἰς τῷ (l. τὸ) [π]αρήξω (l. παρέξω) μετὰ τὸ ἀλλαγῆναι. Here, the instability between *omikron* and

85. Horrocks, *Greek* 94–96. The reason for its popularity given by Mandilaras, *Verb*, §839, seems unwarranted (“the earlier final and causal constructions have suffered a loss of expressive force”).

omega obscures the identification of the infinitives' grammatical case. In **17**, the articular infinitive appears with prepositions *πρός* (ll. 113, 206, 222) and *εἰς* (ll. 118–19, 218). In **19** 10, *διά* is used with an infinitive in the accusative: *διὰ τὸ το[ς]αὐτὰ καταβεβλήσθαι ὡς εἴρηται* (“because as much has been paid as stated above”). In **39**, however, *διά* was used both with genitive and accusative, though the meaning seems to have been the same in both cases: l. 245 *διὰ τοῦ ἀμελεῖσθαι* (“because of the neglect of its care”); cf. l. 249 *διὰ τὸ μὴ εἶ[ν]αι* (“because it is not”), l. 317 *διὰ τὸ μὴ βούλῃσθαι* (l. *βούλεσθαι*) - - - *οἰκοδομῆσθαι* (“because [my opponent] does not want to build”). According to Mandilaras' list (*Verb*, §840), *διά* does not appear with genitive in the papyri at all. The genitive does occur, however, with the preposition *πρό*: **39** 210 *[εἰ] [μ]έλλει ἔτι διασῶθῆναι πρὸ τοῦ ὄρκῳ πληροφορησαί* (“if he thinks he can still save himself before satisfying [me] by oath”). The articular infinitive may have been used more often in signatures and in **39**, which reproduced the parties' direct speech, than in the contracts proper, drawn up by professional scribes, e.g., **25** 18, m4 *διὰ τὸ ἐμὲ μὴ ἠκριβῶσθαι* (l. *ἠκριβῶσθαι*) *καλῶς γράφειν καὶ κατὰ τ[ι]χίον γράφοντα περιφθνεῖν* (“because I am not accurate enough to write well and I am in great pain if (when) I write letter by letter”).

DIRECT SPEECH IN P. PETRA IV 39

P. Petra **39** is treated separately here because it differs in several respects from the other Petra contracts. The document is a settlement of a dispute, considered to be private because it was not drawn up in a court but rather in the presence of just the parties, the arbitrators, and the scribe and without a notarial signature. Nevertheless, it is the longest text in the dossier. The hand of the main scribe (m5) is a professional, fluent cursive slanting to the right. Yet it is not in all respects similar to the hands of the Group A writers, since certain letters remind us more of the notarial upright cursive (especially *tau* and *pi* and occasionally *theta*). The spelling is also reminiscent of Group B writers, e.g., *omega* instead of *omikron* is relatively common, something which does not usually happen with Group A writers.

As explained in the Introduction to **39**, the text is unique in having major parts representing the direct speech of the disputing neighbours, Theodoros, son of Obodianos, and Stephanos, son of Leontios. We therefore have several acts of speech both by Theodoros (1st: ll. 90–142, 2nd: ll. 201– ca. 271, 3rd: ll. 334–48, 4th: 379– ca. 389) and by Stephanos (1st: ll. 145–98, 2nd: ll. 272– ca. 334, 3rd: ll. 350–77, 4th: ll. 391–449); these were written down by the main scribe. In addition, we have the autograph signatures of Theodoros (ll. 504–14) and Stephanos (ll. 515–23). The scribe was responsible for formulating the beginning of the document (ll. 44–89) and the intermediate clauses where the speaker changed and for recording the decision of the arbitrators (ll. 449–97), all of which are presented in an objective format. Especially interesting is the fact that written statements were prepared for the first acts of speech by Theodoros and Stephanos but not apparently for the following three, given orally. Therefore, it seems worthwhile to examine the language of these acts of speech separately in order to see how much (or how little) the scribal orthography changed between the statements of the speakers and the objective reports of the text and also within the statements of the speakers themselves, between those that were written and those that were presented orally. Finally, in general terms, it will be useful to look for different syntactic or lexical features in the direct speech over against the formulaic contracts which form the majority of the Petra dossier.

Some characteristic spelling features are present in all sections written by the main scribe, especially the interchange of the graphemes *ι* and *ει*. For example, the word *κοπροδοχεῖον*, one central topic of the dispute, was consistently written *κοπροδοχίον*. However, it may, for instance, be significant that, in Theodoros' first round of speech, based on a written statement, the correct form of *πατέρα* is used twice, whereas *πατήρα* is used twice in the scribe's introduction and once in Stephanos' first round of speech. Moreover, the interchange between *omikron* and *omega* occurs only in the direction *ω > ο* in Theodoros' first round of speech but in both directions in all other places. Stephanos' written statement is said to have been written by a notary (l. 144 *ἐγγράφως* *ϕ[υμβο]λαιογραφῶν*). The notary in question may possibly have been the same person who also drew up **39**

itself (although, in that case, not in the role of a notary; see **39** 26 comm. on ἰδιόχειρα). Note that, in contrast to most documents in our dossier, **39** was written not in Petra but in Sadaqa, where Stephanos also resided. It is interesting that, with the graphemes ε and η, the mistakes in all of Theodoros' rounds of speech almost exclusively follow the direction ε > η, whereas, in the scribe's texts and Stephanos' rounds of speech, they occur in both directions and more frequently as well. Theodoros' rounds of speech again differ from the texts of the scribe and Stephanos in terms of gemination: while no gemination as such is attested, in Theodoros' signature we do find degemination. Stephanos' rounds of speech, by contrast, have several occurrences of gemination, and the scribe has one similar example (λαμβάννοντος). We may never be able to explain satisfactorily such differences. They might be mere coincidences, unless the parties had some influence on the written form of their oral statements, e.g., at some point checking what the scribe had written down.

The introductions to the acts of speech are not well preserved but seem to take the form of a participial construction. For example, Theodoros' speech in l. 201 begins with οὗ[τ]ωσ λέγων (l. λέγων) ("saying as follows:"). Stephanos' first round of speech, based on a written deed, was introduced in ll. 144–45 ἐ[v]ε[πέ]δωκε[v] ἡμῖν ἐγγράφωσ - - τὸν αὐτοῦ δικαιο[λό]γιον ἔχον οὗτωσ ("[Stephanos] submitted - - - his plea in written form - - - as follows:").

The majority of the ὅτι clauses in the Petra papyri also come from **39**, which may simply point to the spoken element present in this document. In most cases, ὅτι was directly followed by a finite verb, e.g., l. 99 [λ]έγων ὅτι ἔχει [, 127 ὅτι ἔδοξε[v] αὐτοῦσ, 186 ὅτι ἔλυσα, etc.

Present and imperfect tenses, otherwise rare, appear suddenly in **39**. While imperfects were used occasionally in other acts of speech (ll. 67, 73(?), 190, 224), there is a cluster of them in Stephanos' second round of speech, where he narrates what happened before—i.e., giving background information (ll. 282, 293(?), 298, 310, 321(?), 328). This use of the imperfect tallies well with the aspect of the imperfect, but it is exceptional in our archive.

Interestingly, Stephanos' first act of speech, which is said to be based on a written statement, includes an obscure passage of genitive absolute constructions and otherwise strange syntax (ll. 163–66): μάλλειστα (l. μάλιστα) ἐμοῦ ἐγκαλήσαντοσ μετὰ οὗ[τοσ] ἐν ζωῇ τοῦ πατρόσ μου καὶ μετὰ θάνατον αὐτοῦ ὅτι ἠνίκα ἐβούλε[ευσεν ὁ] φύλαρχο[σ] Ἄβου Χήρηβοσ (l. Χέρεβοσ) ἐπαρῖν (l. ἐπαρεῖν) τὴν [ἄμ]πελον συνετάξατ[ο ὅπωσ] ὑπὲρ εὐνοίας καὶ ἀμ[ε]νι[μο]ῦ τοῦ τ[ε]λετυαί[ου τε]ίση νομίματα δύο. First, there is the adverbial μάλλειστα ("above all"), which does occur in papyri throughout the Hellenistic and Byzantine periods, but usually in letters and petitions, thus giving a certain spoken flavor here. The consecutive genitive absolute constructions ("Above all, as I accused together with my father, when he was still alive") appear to come from someone who is not accustomed to using genitive absolute but feels that they would suit this type of official statement. For the interpretation of the rest of the syntax, see **39** 163–66 comm.

The oath which was demanded from Stephanos, and later from Theodoros, included the oath particle μά—see ll. 480 and 491, εἰπεῖν ὅτι μὰ τὰσ ἀγίας γραφὰσ ταύτασ ("and say that 'by these holy scriptures'"). The particle is sporadically attested in documentary papyri but usually in combination with words like "Lord," "God," or "Salvation."⁸⁶

MULTILINGUALISM

Evidently, Greek was, in the sixth century, the major written language in Petra.⁸⁷ Still, we have every reason to believe that the people's native languages were Arabic and/or Aramaic.⁸⁸ Thus, in addition to the bilingualism

86. Search for #μὰ# (not ignoring diacritics/accents) yielded 53 hits in the Papyrological Navigator (Jan 25, 2017).

87. Cf. Di Segni, *Greek Inscriptions in Transition*, 356: "Greek was the dominant written language in late antique Palestine and Arabia, especially among the Christians, who by the sixth century were the majority of the population in the region."

88. On this, see below, p. 41; Griffith, *From Aramaic to Arabic*; Di Segni, *Greek Inscriptions in Transition*, on Christian Palestinian Aramaic (CPA) being the native language of Christians in the regions of Palestine and Transjordan. CPA was a written language, too, but surviving texts in CPA are mainly translations from Greek. Di Segni notes that CPA and Syriac were very rarely used in inscriptions.

of Arabic and Aramaic, there was quite a significant segment of the society that possessed very good skills in Greek as well, at least in writing. We do not have much evidence of the extent to which Greek was spoken. Some people knew Latin as well; the Latin lines in **55**, for instance, may have been written by the same person who wrote the body of the document (m1 and m3) in Greek. Perhaps a Latin education is evidenced also in the avoidance of *omega* in Latin loanwords (especially in Group A), because Latin did not use different graphemes for long and short vowels.⁸⁹ The measures *koriaia*, *satiaia*, and *kabiaia* in **3** and **5** seem to be the only integrated Semitic loanwords in the Petra papyri.

A direct reference to the multilingual environment has been preserved in one of the Petra papyri, where the recitation of a translation (ἐρμηνεία) of a plea is mentioned (**39** 333), while, in another passage, Stephanos requests to have the same information both in Greek and Syriac or Arabic (?) letters: ἐκ ἧς κα[ὶ] ἐγγρά[φος] παρ[έχει τὰς μαρτυ]ρία[ς] τὰς αὐτὰς γράμμασι· Ἑλληνικοῖ ἔ' καὶ Ὀ[υ]ρ[ια]κοῖς (“of which he presents in written form the same evidence in Greek and Syriac letters,” **39** 366–67). Unfortunately, the name of the other language has not survived intact. We might read *arabikois*, though *syriakois* is more plausible in terms of space and surviving letter forms—Syriac should here refer to Aramaic (see comm.). Earlier in the same document (l. 155), Theodoros refers to the translation of an old sale document made by his father. This must have been a translation into Greek, suggesting perhaps that Theodoros did not understand the Aramaic original, though his father possibly did. Another possibility is that the legal authorities required the contract to be translated into Greek at some point.

The impact of any substrate language on the writers' Greek is very difficult to trace, since the orthography and syntax are in line with the phonological and syntactic development of later Greek, and also reflect the literate education and the maintenance of Atticist writing standards. The almost silent hints of the writers' vernacular, Arabic, may be found in the vowel confusion between ε and η and the possible impact of the Arabic stress system in the gemination of consonants.

CONCLUSIONS

In the Petra papyri, the effort put into the education of writing is apparent in the differences between the writer groups classified herein. Classical spelling standards were clearly maintained. No haphazard variation existed between different ways of writing phonemes that sounded the same, as standard spellings prevail over nonstandard ones. Even the spelling confusion present in all writers' texts, between ι and ει, does not appear arbitrarily. The writers of Groups A and B tried to adhere to the standard they had learned, since they end up more often writing hypercorrect forms, whereas the writers of Group C show less knowledge of the standard and thus used simpler alternative (ι) more often. As regards vowel lengths (basically ο/ω), Group C writers had more nonstandard spellings between ο and ω than between ι and ει. Moreover, the group of signatories and witnesses shows a remarkable amount of confusion between ο and ω. Thus, it seems that the issue of itacism had been more carefully emphasized and taught than that of vowel lengths.

There is generally a good command of classical morphology with only occasional mistakes in declinations and stems or endings. We do not find many features of later Greek in the syntax. For instance, the dative case is still a living feature attested with prepositions and as a secondary object case even in Group C writers. The shift to the periphrastic future forms may be discerned to some extent. The accusative with infinitive is attested abundantly and not often replaced with ὅτι structures. All these statements must, of course, be read in consideration of the formulaic language we are dealing with in these texts; such language might preserve structures not necessarily used in daily communication. Moreover, the fragmentary state of the texts may obfuscate many morphosyntactic peculiarities.

89. On Latin legal terminology in Greek, see Buchholz, *Römisches Recht auf Griechisch*.

TABLES ON WRITERS

Table A. Writer Groups

<i>Writer group</i>	<i>Document (main hand)</i>
A	3–5, 7–10, 11(?), 19, 21, 23–25, 35, 40, 41, 45–47, 55, 60, 65, 66, 67(?), 68, 78, 79, 84
A-B	18, 20, 28, 32–34, 36, 39, 43, 52–54, 72, 73
B	1, 2, 12–16, 17, 22, 29–31, 42, 44, 50, 51, 56–59, 61, 62–64, 71, 74, 75, 76, 77, 82
C	6, 26, 27, 37, 38, 69, 70, 86, 87
Not classified (nc)	48, 49, 80, 81

Table B. Signatories and witnesses who have written in more than one document

<i>Name of signatory/witness</i>	<i>Document and hand</i>
Fl. Ailianos s. of Monaxios	22m4; 45m3, 46m4?, 47m3
Fl. Dusarios s. of Valens	18m4; 23m2 (rapid cursive), 65m3
Fl. Eustathios s. of Theon (curator of Theodoros)	1m4, 18m5
Fl. Nikias s. of Monaxios	22m5, 45m4, 46m4?
Fl. Patrikios s. of Diphilos	5m3, 35m2; possibly: 87m1
Fl. Patrikios, s. of Ailianos	22m3, 45m2, 46m2, 47m2, 50m2, 65m2
Fl. Patrophilos, s. of Bassos	1m2, 18m2, 29m3 (hand unlike that of 1)
Fl. Theodoros, s. of Obodianos *= handwriting different from the basic slanting cursive	1m3, 12m3, *18m3, 23m3, 25m2, *29m2, 30m2, *31m2, 39m8, 61m2; uncertain: 58m2 or m3, 64m2, 76m2
Fl. Thomas s. of Nikephoros	42m3, 43m2
Fl. Diphilos s. of Gessios, <i>politeuomenos</i> (W)	29m6, 61m6
N. son of Euthenios, <i>politeuomenos</i> (W)	28m4, 29m5, 31m3

Table C. Scribal hands identified in several documents

<i>Scribal hand</i>	<i>Documents</i>
Scribe i	3, 4, 5
Scribe ii	7, 8, 10
Scribe iii	29, 30, 31 (+ 12, 51, 71?)
Scribe iv	45, 46, 47 (cf. 8, 25, and 66)

TABLES ON ORTHOGRAPHY

Table 1. ι > ει

Spelling	Writer group	Examples (document number)
ι > ει	A, A-B	κεινη- pro κινή-, προικεί pro προικί (18) ὄρε[ι]ων pro ὄριων; κώδικει pro κώδικι; μέχρει pro μέχρι (19) δηληγατίωνει pro δηληγατίωνι (20) αἰω[ν]είου pro αἰωνίου, Αὐγου[σ]τοκοφ[λω]γεία pro Αὐγουστοκολωνία, ἐπειρήμω pro ἐπιρήμω, Παλαιστεινή pro Παλαιστίνη, χαρτ[ο]φύλακει pro χαρτοφύλακι, ἐπ[οι]κείου pro ἐποικίου, ἐπέισταλμα pro ἐπίσταλμα (23), αἰωνείο[υ] pro αἰωνίου, τρειῶν pro τριῶν, γειν[ο]μένω[ις] pro γιν[ο]μένο[ις] (25); θεϊκὴν pro θεϊκὴν (36); γείνεσθαι pro γίνεσθαι (43); ὁσάκει pro ὁσάκις, κείνητα pro κίνητα (52); γεινομέν[οι]ς pro γινομένοις, ἐπί[π]ερ pro ἐπίπερ (66)
	B	ἀκεί[ν]ητα pro ἀκίνητα, ἀνέιχυρον pro ἀνίσχυρον, βασιλικὴν pro βασιλικήν (1); Μαιῶν pro Μαίω, χωρε[ί]ς pro χωρ[ί]ς, ἀρχικὴν διαλαλεί[α]ν pro ἀρχικὴν διαλαλία[ν], Διφιλος, Διφιλος pro Διφιλος, [ἀ]ναλείσκοντες pro ἀναλίσκοντες, μεχρεῖ pro μεχρὶ, φημὶ pro φημί; κεινη- pro κινή- (2); Καβεί[ν]ος pro Καβίνος, θεικὴν pro θεϊκὴν, ἐμμέ[ν]ο[υ]σιν pro ἐμμένουσιν, χ[ρ]υ[σ]εῖνους pro χρυσίνους, εἴκοσει pro εἴκοσι (17) κεινήσει pro κινήσει (et al.), διάλυειν pro διάλυσιν; εἰ[σ]χυρῶ[ν] pro ἰσ[σ]χυρῶ[ν], κανόσειν pro κανόνειν, πᾶσειν pro πᾶσιν, ἄπασειν pro ἄπασιν, αὐθεῖς pro αὐθίς (29); πολλάκει pro πολλάκις, μεταθέσειν pro μεταθέσειν (31); γεινομέν- pro γινομέν- (42); [Π]ετραϊκὴν pro Πετραϊκὴν, γεινομένων pro γινομένων, ἐπι[χ]ειρήσειν pro ἐπιχειρήσειν, βεβαίσειν pro βεβαίωσιν (50); ἐλ[η]λύθασειν pro ἐληλύθασιν, γεινομένων pro γινομένων, μέρεσειν pro μέρεσιν, ἐπιχειροῦσειν pro ἐπιχειροῦσιν, ἀκεί[ν]ητα pro ἀκίνητα (51); μητρὶ pro μητρὶ, ἀσφαλείσασθαι pro ἀσφαλίσασθαι (56); αὐτοκείνητα pro αὐτοκίνητα (57); γ[ε]ινομένω[ν] pro γινομένων (58); ἀνέκοντι pro ἀνήκοντι (59); ἐκουεῖ[α] pro ἐκουεῖα, πασειν pro πασιν (64)
	C	θεο[φ]ειλεστ[ά]τ[ω] pro [θεο]φιλεστ[ά]τ[ω], εἴκουσει pro εἴκοσι, εἰδ[ί]ω pro ἰδίω (37)
	S, W	χειρεῖ pro χειρὶ (1m4, 18m5, 25m4); τρεῖα pro τρία, [προ]ικεῖ pro [προ]ικί (18m2, m3); κεινεῖ[ν] pro κινεῖ[ν] et al; πᾶσειν pro πᾶσιν (29m2+m3); εἰουγέρου pro ἰουγέρου (37m3)
-ια, -ιον > -εια, -ειον	A, B, nc	ἐπαρχείας pro ἐπαρχίας (1, 3, 4, 23, 66); (συν)ομολογεία- pro (συν)ομολογία- (2 passim); Αὐγου[σ]τοκοφ[λω]γεία pro Αὐγουστοκολωνία, ἐπ[οι]κείου pro ἐποικίου (23); αἰωνείο[υ] pro αἰωνίου (25); Ἀγείαν pro Ἀγίαν (50); βαθουργείαν pro βαθουργίαν, φιλοκαλεί[α] pro φιλοκαλία (59); ὁμολογείαν pro ὁμολογίαν, ἐκουεῖ[α] pro ἐκουεῖα, (64); [οἰ]κείας pro οἰκίας (81C)

Table 2. ει > ι

Spelling	Writer group	Examples (document number)
ει > ι	A, A-B	συντινούσας pro συντεινούσας (19) διακί[μ]ένου pro διακει[μ]ένου (20) ἐπίπε[ρ] pro ἐπίπερ, ἰκότως pro εἰκότως (23); ἐπέ[σ]τιλα pro ἐπέστελα, προ[κ]ιμένης pro προκειμένης, πλίω pro πλείω (24) Βασιλίου pro Βασιλείου (25) ἡμείας pro ἡμείας, πλίω pro πλείω, ἐπίπερ pro ἐπίπερ (28); ἀπόδιξιν pro ἀποδείξιν (35); τελίως pro τελείως (36); οὐδὶς pro οὐδεὶς, γίτ[ον]ας, πλωμ[έ]νο[υ]ς, ἔδι pro ἔδει, πειρώνται pro πειρῶνται, ἐκίνου pro ἐκείνου (40); ἀγαλαβὴν pro ἀναλαβεῖν (41); [ἀ]ρμόττιν pro ἀρμόττειν, πειραθεῖ pro πειραθεῖ, πλωμ[έ]νο[υ] pro πειρωμένο[υ] (43); γιτονία pro γειτονία, ὀφιλούσης pro ὀφειλούσης (bis), ἀποκίσθαι pro ἀποκείσθαι, κημλιοφυλακίω pro κημλιοφυλακίω, ἐμμίνα pro ἐμμείναι (52); ἐνοφιλομένην pro ἐνοφειλομένην (68 bis)
	B	ἐκίσε pro ἐκείσε (16); ἐπικίμ[ενον] pro ἐπικείμενον, μαγειρεῖ[ι]ου pro μαγειρείου, γιτονες pro γείτονες, ἔχιν pro ἔχειν, με[τ]έπειτα pro μετέπειτα, πειραθεῖ pro πειραθεῖ (17); ὑποκίσθαι pro ὑποκείσθαι; [β]λάβει pro βλάβει (22); ἀνελλίπτω[σ] pro ἀνελλείπτως, ἀμιότ[ω]ς pro ἀμειώτως, ἀπομίν[αντος] pro ἀπομείναντος, τίκτιν pro τίκτειν, μίζονα pro μείζονα, πειραθεῖ pro πειραθεῖ, ἡγίσθαι pro ἡγεῖσθαι (29); ἡμείας pro ἡμείας (30); καταλίμα pro καταλείψαι (31); ἡγίται pro ἡγεῖται (57); ὀφιλόντων pro ὀφειλόντων (77)
	C	κλιδίων pro κλειδίων (6); ἔχιν pro ἔχειν (37); λυπὶ pro λυπεῖ (26); γρ[α]φίσαν pro γρ[α]φείσαν (37); γα[μ]εθίσης pro γαμηθείσης (38); ἀποδίξι pro ἀποδείξει (70)

	S, W, nc	προδιηγεθίσαν pro προδιηγηθεῖσαν (1m2); ἄγιν pro ἄγειν (18m2); χερὶ pro χειρὶ (18m4, 25m5, 29m7, 37m4, 44 m3, 59m4); ἔχιν pro ἔχειν (22m3); ἐπέστειλα pro ἐπέστειλα, π]ροκειμένης pro προκειμένης, πλίω pro πλείω (23m2); ἀπιλεφήναι pro ἀπειληφέναι, [ῆ]γίχθαι pro [ῆ]γείχθαι (29m3); ἀπόδιξ(ις) pro ἀπόδειξ(ις) (32m4, 33m2, 34m2); ἀπόδιξιν pro ἀπόδειξιν (35m2); ἐπεροτεθίς pro ἐπερωτηθεῖς (37m2); εἰουγέρου pro ἰουγέρου (37m3); προκειμένοις pro προκειμένοις, πειοῖν καὶ <ἐμ>μένιν καὶ στυχῖν pro ποιεῖν ἐμμένειν στοιχεῖν (42m3); --τιν ἐμῆνιν pro --τιν ἐμμένειν, [πρ]οκίμ[ενα pro προκείμενα, ἀρισθίς[pro ἀρεσθίς[(43m3); λειτουργῶν pro λειτουργῶν (48m3, 49m3); ἀπόδιξιν pro ἀπόδειξιν (48m4); ἰδέναι pro εἰδέναι (57m4); ἀποδίξω[ς pro ἀποδείξεως (70m3); ἀπόδιξιν pro ἀπόδειξιν (70m4); ἐπερωτηθίς pro ἐπερωτηθεῖς (76m2); ἰκοστῶ pro εἰκοστοῦ (81Am6); χερὶ pro χειρὶ (81Bm3)
-εια, -ειον > -ια, -ιον	A, A-B, B, C, S, nc	ἀσφαλια- pro ἀσφαλεια- (1, 7, 10, 18m2); ὑπατία pro ὑπατεία; ἀδίας pro ἀδείας (3); συντελίας pro συντελείας (4, 5) συντελιῶν pro συντελειῶν (8, 9); δεσποτίας pro δεσποτείας (22m1); συντέλιαν pro συντέλειαν (22m4, 23m2, 25m4, 31, 36, 37m2, 81A) δεσπ[οτ]ίαν pro δεσπ[οτ]εῖαν (31); κοπροδοχίον (39, 41); ἐπικέρδιαν pro ἐπικέρδειαν, τελίων pro τελείων, μεθοδίας pro μεθοδείας (51); δεσποτίαν pro δεσποτεῖαν, θεραπείαν pro θεραπεῖαν (bis), ξενοδοχίου pro ξενοδοχείου, χρίας pro χρείας (52); ξενοδοχίον pro ξενοδοχείον (56); δεσποτια[, δεσποτίας pro δεσποτια[,δεσποτείας (57); [εὐς]εβίας pro εὐσεβείας (64); δε]σποτίαγ pro δεσποτεῖαν (69)

Table 3. η~ι~ει~ε

Spelling	Writer group	Examples (document number)
ι > η	C, W	ἤχνη pro ἕχνη (27); ἀρχηδιακόνου pro ἀρχιδιακόνου (29m8); ἀρχηδιακ-α/ω-νω pro ἀρχιδιακόνω (37)
η > ι	C, W	πειραθι pro πειραθῆ(?) (18) ἐμι pro ἐμῆ (46m3) ἐξικου[στοῦ] pro ἐξηκο[στοῦ] (37); NB ἐμῆ pro ἐμῆ (37m5)
ει > η	S/W	ὄρη pro ὄρει (48m4)
η > ει	S/W	ἐκλεις[ίας] pro ἐκκλης[ίας] (12m2); ἐμει pro ἐμῆ (37m3)
ι > ε	B	Βελεαρίου pro Βελικαρίου (1); ἐνεφανεξε pro ἐνεφάνισε (2); Ἄρτεμε[σί]ου pro Ἀρτεμίου (75)
ε > ι	A-B	ἐμειτεύθησαν pro ἐμειτεύθησαν (18m4); ἰβνταρίω pro ἰβενταρίω (52)

Table 4. οι~υ~ι~η(~ει)

Spelling	Writer group	Examples (document number)
υ > οι	A, B, C?	ποιλῶνος pro πυλῶνος (17); νοινὶ pro νυνὶ (38); τοιγᾶνον[τα] pro τυγᾶνον[τα] (41)
οι > υ	B, C	ἀνῶξα[ι] pro ἀνοῖξαι (17); πεπύμε pro πεποίημα (37m2); στυχεῖν pro στοιχεῖν (42m2+m3) κυνονίαν pro κοινωνίαν (42m3); ἐκτιθεμέ{ς}νυς pro ἐκτιθεμένοις (43m5, comm.); see Table 12.
οι > ι	C?	στ[ι]χίον pro στοιχεῖον (25m4)
οι > ει		εἴκησιν pro οἴκησιν (37); πειοῖν pro ποιεῖν (42m3)
ου > οι	A-B	πλ[η]ροῖν pro πληροῦν (18 scribe and Theodoros)
ι > υ	C	κυνδύω pro κινδύω bis (37); δύμοιρον pro δίμοιρον (37), see Table 12.
υ > ι	S	ἦμις pro ἦμιν (18m3)
η > οι	S	τοῖς εἰρεμένοις pro τῆς εἰρημένης (37m3)
η > υ		See Table 12.

Table 5. ε~η

Spelling	Writer group	Examples (document number)
ε > η	A, A-B	τη pro τε (7, 10, 20); ε[ί]δην pro εἶδεν (9), μεταθήσεω pro μεταθέσεω, συνέθη[το] pro συνέθετο (23); αὐθαιρήτω προαιρή[σει] pro αὐθαιρέτω προαιρέ[σει], οἰκήτου pro οἰκέτου, συνοικεῖου pro συνοικεῖου [but also συνοικέειον]; ἀσφαλῆε pro ἀσφαλῆε, διαμεμερίσθαι pro διαμεμερίσθαι (28); ἐτέληε pro ἐτέλεσε (36); διηλθεῖν pro διελθεῖν (41); ἄφην pro ἄφειν, ἐλευθηρουμένων pro ἐλευθερουμένων, ἐμῆ pro ἐμέ (bis), Δημετρίου pro Δημητρίου, εἶδην pro εἶδεν, ρητηρίσασθαι pro ρητερίσασθαι, θυγατήραν pro θυγατέρα (52); αἰδῆε[μότητα] pro αἰδεε[μότητα] (66); ἐπληρόθεν pro ἐπληρώθην (68)
	B	συντιθημένω pro συντιθεμένου, [συνα]γῆσεω[σ] pro συναινέσεω, ὑποθήμενοι pro ὑποθέμενοι (1); ἀστυγῆτου pro ἀστεγῆτου (17); [συν]ήρην pro συνήρεσεν (29); [ἐν]καλή[σαι] pro ἐγκαλέσαι (50); ἠύχῆε pro εὐχῆε, ἐλευθηρίαν pro ἐλευθερίαν (57); ἐτήλεε[α] pro ἐτέλεσα (58m10); προαιρήσει pro προαιρέσει (59) NB ἐδήεν pro ἐδέηεν 30
	C	[μητρ]οπόλῳ pro μητροπόλεω, ἦνδε pro ἐνδε, πέντη pro πέντε, ἠνιαυτ[ῶν] pro ἐνιαυτῶν, συντηλεία pro συντελεία, σὺν[τ]ηλί[α] pro συντελεία, πενθηρῶ pro πενθερῶ, τη pro τε (37); σὺντήλει(αν) pro συντέλει(αν) (86)
	S, W, nc	[π]αρήξω pro παρέξω (18m4); συννήσεω pro συναινέσεω (29m8); ἦκτου pro ἔκτου (bis) (37m2) ἦνδε pro ἐνδε (37m3=S/W); ἡμοῦ pro ἐμοῦ (43m5); εὐαρησάσαν pro εὐαρεσάσαν (61m2); ἐγένη[το] pro ἐγένετο (81A)
η > ε	A, A-B	[ἐ]γράφη pro ἐγράφῃ (7); γεγένεται pro γεγένηται (23); ἐπλη[ρ]ώθεν pro ἐπληρώθην (35); λεγάτου pro ληγάτου, ἔτοι pro ἦτοι (36); [πρ]οσοφλεθεντ[] pro προσοφληθεντ[], ὑπομε[σ]τ[ικὰ] pro ὑπομνηστικά (43); [ἐ]κκλησί[α] pro ἐκκλησία (55)
	B	βαθουρηθῆν pro –γηθέν (17); ἐπερωτήσεν pro ἐπηρώτησεν, ἐ[π]ερωτημένης pro ἐ[π]ηρωτημένης (29); διαιρεθῆναι pro διαιρεθῆναι (30); διενεκή pro διηνεκή (31); μὲ pro μῆ (42); ἐπιμελέθη pro ἐπιμελήθη (51); ἀνέκονται pro ἀνήκονται (59)
	C	ἐδεξάμεν pro ἐδεξάμην, κρεμάσε pro κρεμάσει ⁹⁰ (6); ξεροκ[ήπιον] pro ξηροκήπιον (27); ἐμῆε pro ἐμῆε, [ἐ]μῆε pro ἐμῆ, ἀζέμω[ν] pro ἀζήμιον, [περ]ιποιέω[.0–7] pro [περ]ιποιήσω or περιποιήσω, ἐπιζε[τεῖ]ν pro ἐπιζήτειν (37); [γα]μεθῆε pro γαμηθείς (38); ἐπινεμέσεω pro ἐπινεμήσεω (69)
	S, W, nc	προδιγεθῆσαν pro προδιγεθῆσαν, ἐμῆ pro ἐμῆ (1m2); Εὐθενίου pro Εὐθηνίου (12m2); ὑ[πομν]ηστικὸν pro ὑ[πομν]ηστικόν, [εἰ]ρημένον pro [εἰ]ρημένον, διαπαγῆν pro διαπαγῆναι (18m2); ἐπ[ινε]μέσεω pro ἐπινεμήσεω (22m4); παρέμην pro παρήμην (22m7, 76m4, m5); [πα]ρέμην pro παρήμην (25m6, 61m6); οἰονδέποτε pro οἰονδήποτε (29m3); [ὠμ]ολόγησα pro ὠμολόγησα (30m3); [συντι]θημένω pro [συντι]θεμένω (31m5); ἐμῆ<ε> pro ἐμῆε, τένδε pro τήνδε, τέν pro τήν, ἐπερωτηθεῖς pro ἐπερωτηθεῖς, ὠμολόγησα pro ὠμολόγησα, εἰρεμέ[ν]η pro εἰρημένη (37m2); εἰρεμένοισι pro εἰρημένης (37m3); κατεδεξάμεν pro κατεδεξάμην (42m2); παρέμην pro παρήμην (42m4); πεποίημη pro πεποίημαι (43m2); [ὑ]πῆθέμην pro ὑπεθέμην (43m3), παρέμην pro παρήμην (43m4, m6); Οὐάλεε Βωέθου pro Οὐάλεε Βοήθου (43m5); ἀλλέλουε pro ἀλλήλουε, [ὑπο]μνηστικά pro ὑπομνηστικά (43m6); ἀντέλαξα pro ἀντήλλαξα (50m2); [παρ]ήμην pro παρήμην (59m4); ἐπιστοσάμεν pro ἐπιστοσάμην (64m3); [ἐ]μῆ pro ἐμῆ (76m2)

Table 6. αι~ε(~η)

Spelling	Writer group	Examples (document number)
ε > αι	A, B, C	ἀναβαθμαιῶνος pro ἀναβαθμεῶνος, (συν)διαλομέν- pro (συν)διελομέν-, δωραιοστικῶ pro δωραιοστικῶ, καθαροποιήσασθαι pro καθαροποιήσεσθαι (17); μαι pro με (24); ⁹¹ εχαιται pro ἔρχεται/ ἔχεται? (26);]ἀνέρχαιται pro ἀνέρχεται (27); ἐνναιακαδέκα[τον] pro ἐννεακαδέκατον (28); δωραιοῦν pro δωρεῶν (31, 31m3); ἐπι[π]αἰδουε pro ἐπιπέδουε (41); δωραιοῦε pro δωρεῶε (42); εὐχαίρωε pro εὐχερωῶε? (57)

90. See Ast, *Review*.

91. This occurs in the signature but is written by the scribe (m1) who copied the entire document. Apparently, he also reproduced the spelling errors.

αι > ε	B, C, W	αὐθερετο pro αὐθαιρέτω (1); με]εῶν pro μεσαῖον, ἐπεωρουμένου pro ἐπαιωρουμένου (17); ὑπο[γρ]άψε pro ὑπογράψαι (25m5); Πετρέων pro Πετραίων, συνενήσεως pro συναινέσεως (29m8) διερέσε[ως pro διαιρέσεως (30m5); πεπύεμε pro πεποίμαι (37m2); πεποίμε pro πεποίμαι (48m3); συγνεοῦντος pro συναινοῦντος (64m2); ποιέε pro ποιηαί (70)
η > αι	B	θαιμοβολῶνος pro θημοβολῶνος (17)
αι > η	S	διαπαγῆνη pro διαπαγήναι, ἀλλ[αγῆ]νη pro ἀλλαγήναι (18m2); πεποίμη pro πεποίμαι (43m2)

Table 7. α~ο~ε

Spelling	Writer group	Examples (document number)
α > ε	A, A-B	τέσσαρες pro τέσσαρας (3, 5, 5m2); κατέβαλε(v) pro κατέβαλα(v) or κατέβαλο(v) (32); ἀμετέθετον pro ἀμετάθετον (36)
ο > α	A-B, B, C	[γε]ναμέ[ν]ης pro γενομένης, γεγαμέ[ν]η pro γενομένη (1, 41), γεναμένη pro γενομένη (30); κατέβαλε(v) pro κατέβαλα(v) or κατέβαλο(v) (32), αρχηδιακ-α/ω-νω pro ἀρχηδιακόνω (37)
ε > ο	W	ὑπόγρ[αψα] pro ὑπέγραψα (64m5)

Table 8. ο~ου~ω

Spelling	Writer group	Examples (document number)
ου / υ > ο	A, A-B	Αὐγόστου pro Αὐγούστου (3), Αὐγός[των] pro Αὐγούτων ? μετρομενο μετρουμενο (28); ποιοντ[] pro ποιουντ[] (40); Αὐδοναίου pro Αὐδουναίου (or: Αὐδναίου) (81A)
ου > ω	B, C, S, W	βεβαιόσωιν καὶ καθαροποιήσωιν pro βεβαιώσωιν καὶ καθαροποιήσωιν (17); Θεοδώρω pro Θεοδώρου (29m8); δόλω pro δόλου (37), ζυμβίω pro ζυμβίου (37 m2)
ο > ου	C, S	εἰκουτοῦ pro εἰκοστοῦ, ἐξικου[στοῦ] pro ἐξηκο[στοῦ], εἴκουει pro εἴκοι (37) ποιούμενους pro ποιούμενος (37 m2)
ω > ου	B, C	Αἴλιανου pro Αἴλιανῶ, [ἰλ]λιετρίου pro [ἰλ]λουετρίω(?) (37); εὔρουσιν pro εὔρωσιν (64)

Table 9. ο~ω

Spelling	Writer group	Examples (document number)
ω > ο	A, A-B	ἴδιο pro ἰδίω (10); Εὐζοῖο(v) pro Εὐζωῖου (19); ἔδοκ[εν] pro ἔδωκεν, Θ[εό]δορος pro Θεόδωρος (20); Ἄντωνιανῆ pro Ἄντωνιανῆ, κολωνίων pro κολωνίων (23); [πα]τριμωγ[αλ]ίου pro [πα]τριμωγ[αλ]ίου (25); κόματα pro κόματα? (28); παγιθῆν pro παγιθῆν, Αὐγο]υστοπόλεος pro Αὐγουστοπόλεος, διακολῦσαι pro διακωλύσαι, κυπαρίσον pro κυπαρίσσων (36); παραδεδοκότο<c> pro παραδεδοκότος (40); ὄριμι[ένοις] pro ὄριμένοις (43); ὄρμωμένου pro ὄρμωμένου, χαλκόμασιν pro χαλκώμασιν, ψυχοφελῆ pro ψυχοφελῆ, κιμηλιοφυλακίω pro κειμηλιοφυλακίω, ἐναντίοσιν pro ἐναντίωσιν, ἔζωθεν pro ἔζωθεν (52); Ἄαρὸν pro Ἄαρὸν (54); [πα]τριμονίου pro πατριμονίου (66); ἔδοκ(εν) pro ἔδωκ(εν), ἐπληρόθεν pro ἐπληρώθη (68)
	B	αὐθερετο pro αὐθαιρέτω, κομοιότης pro κομοιωτής (1), εὐδοκιμώτατος pro εὐδοκιμώτατος (1, 22); μακαριοτ- pro μακαριωτ- (1, 22) ἐ[λ]αιῶνος pro ἐλαιῶνος (2); γονία[ς] pro γωνίας, βεβαιόσωιν pro βεβαιώσωιν, φρικωδέστατον pro φρικωδέστατον (17); αὐτῶν pro αὐτὸν, πιετροάμεγ[ος] pro πιετροάμεν[ος], ὁμολογημένης pro ὁμολογημένης (29); Ὀκτο[βρίων] pro Ὀκτο[βρίων], Ἄντ]ονιανῆ pro Ἄντ]ωνιανῆ, πυλῶνος pro πυλώνος (30); [τ]ελευτῶν[τα] pro [τ]ελευτῶν[τα] (31); διομοσίας pro διομοσίας (57); ἐν τ[ῶ] Ζ[α]δ[α]κ[α]θ[ων] δικ[α]ίω pro Ζαδακαθων but in l. 6 correctly Ζαδακαθωγ (59); παραδεδοκῆν[αι] pro παραδεδοκῆν[αι], ἰδιοτικῶ pro ἰδιωτικῶ (61); κόμη pro κόμη, Πέτρον pro Πέτρων (62); ἐνωμοτ[] pro ἐνωμοτ[] (64);

	C	γνώσις ὄν ἀπόλεσα ἐγὼ pro γνώσις ὄν ἀπόλεσα ἐγώ, ὑπονοο pro ὑπονοῶ, δόματος pro δώματος, ἔδοκα αυτο pro ἔδωκα αὐτῷ, ἀνέδοκεν pro ἀνέδωκεν (6); ἐναρέτος pro ἐναρέτως? (27); ὄρ[μω]μενο pro ὄρ[μω]μένω, χωρίου pro χωρίου bis, εἰρημένον pro εἰρημένων, Θεωδῶρ[ο]υ pro Θεοδῶρ[ο]υ, [περ]ιποιέσο[0-7] pro [περ]ιποιήσω or περιποιησο[, διαδοχο pro διαδόχων(?) (37); Ζαδακαθον pro Ζαδακαθων, ὀκτὸ pro ὀκτῶ, ἐπ[ι]νεμέσεος pro ἐπινεμήσεως (69); κληρονόμον pro κληρονόμων (70); π[ε]πληρῶ[ε]θα[ι] pro πεπληρώσθαι, Θ[ε]ῶδορος pro Θεόδωρος (86)
	W, S	Θεόδωρ[ο]ν pro Θεόδωρον (1m2); [ἐπ]ωμοσάμην pro [ἐπ]ωμοσάμην (1m2, m2); πρόσπονον pro πρόσωπον (5m3 bis); πιετοσ[ά]μενοι pro πιετωσάμενοι (12m4); ὄρικα pro ὄρικα (12m5); ὁμολόγεσα pro ὁμολόγησα (13m2, 50m2, 76m2); ἐξωμοσάμην pro ἐξωμοσάμην (18m2); ἀνυπερθέτος pro ἀνυπερθέτως, προδεδήλωται pro προδεδήλωται (18m4); ἐξό[μοσα] pro ἐξώμοσα (22m4); πλίω pro πλείω (23m2); ἠκριβῶσθαι pro ἠκριβῶσθαι (25m4); ὄρικα pro ὄρικα (29m3), ἀγωγὴν pro ἀγωγήν, ἀκολούθος pro ἀκολουθῶς (29m4), εὐδοκιμοτ(άτου) pro εὐδοκιμωτ(άτου) (29m6), ὀρμόμηνος pro ὀρμώμενος (29m8), ἐπεροτεθίς pro ἐπερωτηθεῖς ὁμολόγεσα pro ὁμολόγησα (37m2); τὸ pro τῶ (40m4); αὐτὸ pro αὐτῷ (42m2); τὸνδε τῶν προικῶν pro τῶνδε τῶν προικῶν (42m5); Γεωργίου pro Γεωργίου (42m9, 43m2); δεκαοκτὸ pro δεκαοκτῶ (43m2); ἀκολούθος pro ἀκολουθῶς (43m3, 49m1); πόλεος pro πόλεως pro Θωμᾶ, Ζαδακάθον pro Ζαδακάθων, Γεωργίου pro Γεωργίου, κοσμοτάτη pro κοσμιωτάτη (43m4); Ζαδακάθον pro Ζαδακάθων (43m5, m6); πρώτη[ς] pro πρώτης, ἐπινεμέσεος pro ἐπινεμήσεως (47m2); Θεωδῶρον pro Θεοδῶρου (48m5); καθοσιωμένο pro καθοσιωμένω, [παραδέ]δοκα pro παραδέδωκα, σοματικῶς pro σοματικῶς, καθα]ροποιέσο pro καθαροποιήσω (50m2); πρίω pro πρίω, Ζαδακαθον pro Ζαδακαθων, γεοργ pro γεωργ, ὁμολόγεσα pro ὁμολόγησα, ἀκολούθος pro ἀκολουθῶς (59m2); [Θ]εῶδορον pro Θ[ε]ῶδορον (61m7); ἐπιτωσάμεν pro ἐπιτωσάμην (64m3); πρόσωπ[ον] pro πρόσωπον (65m3) πληροθ[ι] pro πληρωθ[ι], ἀποδίξεο[ς] pro ἀποδείξεως (70m3); Ἄρον[ος] (?) pro Ἄρωνος, ἀξιώσει pro ἀξιῶσει (81A); Ἰωάννην pro Ἰωάννην, ἀναγνωσθέντος pro ἀναγνωσθέντος (81Am6)
ο > ω	A, A-B	τῆ cῆ αἰδεσιμωτ() pro αἰδεσιμότητι (4, 5); [δ]ιωμολογηθεν pro [δ]ιομολογηθεν[ι] (21); [ο]ίωνδήπ[ο]τε pro οἰονδήποτε (40); λεγομεν[-] pro λεγομεν[, πλείωνο[ς] pro πλείονος (43); προσώδου pro προσόδου (52); ὁμολογήσαντες pro ὁμολογήσαντες (66); τινος pro τινος (73)
	B	ἐπομοσάμενοι pro ἐπομοσάμενοι (17); ἐξωμόσατο pro ἐξωμόσατο (30); [ἀντ]ιδόσεως pro ἀντιδόσεως (50 ⁹²)
	C	[Θ]εωδῶρ(?) or [Θ]εωδορος(?) pro Θεοδῶρ, αρχηδιακ-α/ω-νω pro ἀρχηδιακόνω, ὁμολο[γῶ] pro ὁμολο[γῶ], π[α]ρελ[θ]ῶ[ν]τ[ο]ς pro π[α]ρελ[θ]ῶ[ν]τ[ο]ς, τὸ pro τὸ, μελαλωπρε(πεστάτω) or μεγαλωπρε- pro μεγαλωπρε(πεστάτω), τὸ ἀξέμιω[ν] pro τὸ ἀξήμιον, ὀλιγογραμμάτου pro ὀλιγογραμμάτου (37)
	W, S	τὸ pro τὸ (18m2, m4); ἐξωμοσάμην pro ἐξωμοσάμην (18m2); θεοφιλέστ[α]τος pro θεοφιλέστ[α]τος, τὸν pro τὸν, εὐδοκιμώτατων pro εὐδοκιμώτατων (25m5); [σεβάς]μιων ὄρκων pro [σεβάς]μιων ὄρκων, ὠγδοηκοστού pro ὠγδοηκοστού (43m3); Βωέθου pro Βοήθου, τὸν pro τὸν (43m5); πρωτεύωντι pro πρωτεύοντι (50m3); [Θ]εῶδορον pro Θ[ε]ῶδορον (61m7); ἐξωμοσάμην pro ἐξωμοσάμην (76m2)

Table 10. Assimilation and unassimilation of nasals

	<i>Unassimilated</i>	<i>Assimilated</i>
ἔγγραφ- / ἔγγραφ-	1, 28, 50, 59, 61m3	1m2, m3, 2, 18, 22m3, 23, 29m1, m2, (30, 31?), 40, 41, 43, 53
ἐγγεν- / ἐγγεν-; ἐγγεργ- / ἐγγεργ-	23 ⁹³ , 25m4	
ἐνχειρ- / ἐγχειρ-	29, 50, 57	
ἐνκειμ- / ἐγκειμ-; ἐνκαλ- / ἐγκαλ-	29; 39	22m5
ἐνμέν- / ἐμμέν-	28m1, m2, 29m1, m2, 42m2	1m2, 43
ἔμπροσθεν / ἔμπροσθεν	17, 52	30

92. 50 85 comm.: “No other word seems to fit the traces. However, in ll. 113 and 135 the scribe could spell ἀντιδόσεως correctly.”

93. However, the writer of 23 assimilates, too, both correctly and hypercorrectly: ἔγγραφον ἐγχώρησεν pro ἐκχώρησεν.

ἐγγύ(η)- / ἐγγύ(η)-	17, 41	18m1,m5, 36
κύνεγγυε / κύνεγγυε	17	
κύμβιο- / κύμβιο-	17, 37m2,m3 42m3	31
κύμπαντα / κύμπαντα	17	18?, 53
κυγ[πε]ποίημαι	22m4	
κυνφερ-/ κυμφερ-; κυνφων-/κυμφων-	43	18, 29, 31, 43m3
κυγχωρ-/ κυγχωρ	63	

Table 11. Gemination and degemination

Consonant type	Gemination	Degemination
<i>Nasals</i>	ἐδεξάμμεν pro ἐδεξάμην (6); ἐγνεστ[ώσης pro ἐνεστώσης (22m3); τυχαγνούσης pro τυχανούσης (23), τυγχάνν[ει pro τυχάν[ει (?); ἔννατον pro ἔνατον (25 + sign, 66); πρόκριμμα pro πρόκριμα (39; 61); ἀναλαμβάν[ειν] pro ἀναλαμβάν[ειν], λαμβάνοντος pro λαμβάνοντος (39); δεκαέννα pro δεκαένα (49m3); ὑπολιμπανόμενα pro ὑπολιμπανόμενα, καταλιμπανόμενα pro καταλιμπανόμενα, τυγ[χάννον]τας pro τυχανόντων (55); [Δι]φίλλο[υ] pro [Δι]φίλο[υ] (67)	
<i>Sibilants</i>	τρι[α]κοῦσι[ο]στ[ο] (5); εἴκοσει pro εἴκοσι, ἐσσώτερα pro ἐσώτερα (17); εἴκοσιτέσσαρων, -α (18m2, 52); τετρακοσιοστοῦ pro τετρακοσιοστοῦ (37; 59); ἡμίσεος pro ἡμίσεος (37; 70) πα]ροῦσιν pro παροῦσιν (55) εἴκοσι pro εἴκοσι (57); πρ[ᾶ]σιν pro πρᾶσιν (58m3)	Γέσιον (12m2); ἐλάσω pro ἐλάσσω (28); κυπαρίσον pro κυπαρίσων (36)
<i>Dentals</i>	Τ[ρ]ίτης pro Τρίτης (23); τρίτον pro τρίτον (41)	πιτακίω[ν] pro πιτακίων (83)
<i>Liquids</i>	μάλλειστα pro μάλιστα (39); Καλλουταρία[ς] pro Καλουταρίας (59)	προρηθέντος pro προρηθέντος (23, 24); ἐπίρυτον pro ἐπίρρυτον (25 m4, 51, 66); ἄλ<λ>ο; ἄλ<λ>ήλων (36); ἀντέλαξα pro ἀντήλαξα (50m2); ἐλείποντος pro ἐλλείποντος (60)

Table 12. Orthographic variants in P. Petra IV 39

Spellings in P. Petra IV 39	Scribe's turns 1: introduction 2–3: middle introductions 4: arbitrator's decision	Theodoros' turns 1: based on written text 2–4: presented orally Signature: autograph	Stephanos' turns 1: based on written text 2–4: presented orally Signature: autograph
<i>ι > ει,</i> <i>ει > ι</i>	1: ἐπαρχεῖ[ας] pro ἐπαρχί[ας], κοπροδοχίου pro κοπροδοχείου, κει[νηθείσης] pro κιν[ηθείσης], τρει[ῶν] pro τρι[ῶν]	1: κοπροδοχίου pro κοπροδοχείου; κεινουμένων pro κινουμένων	1: ὑμεῖν pro ὑμῖν, [ἐρ]μενία[ν] pro [ἐρ]μηνία[ν], ὑμεῖ[ν] pro ἡμῖ[ν] (?), μάλλειστα pro μάλιστα, ἐπαρῖν pro ἐπαρεῖν, ἐρίπια pro ἐρείπια, ἐριπ[ό]μεγος pro ἐρειπ[ο]μενος, ἀφανεισμὸν pro ἀφανισμὸν, μίωσιν pro μείωσιν
	4: κοπροδοχίον pro κοπροδοχείον, κοπροδοχίω, ἐπερίας pro ἐπηρείας, προεπερίας pro προεπηρείας	2: ὄφιλεν pro ὄφειλεν, ὑ[μ]εῖ[ν] pro ὑ[μ]ί[ν], ὑγιγὸν pro ὑγιεινὸν, ἐφίδαται pro ἐπέιδετε, γίτ[ο]ν[ε]ς pro γείτονες, ἐριπωθέντων pro ἐρειπωθέντων κοπροδοχίον pro κοπροδοχείον, ἐ[πι]μελείας pro ἐπιμελείας, ὄφιλεν pro ὄφειλεν, ἔκτειν pro ἔκτειν, ἐ[πι]ράθη pro [ἐ]πειράθη, ἐπὶ pro ἐπεῖ, κοπροδοχίων pro κοπροδοχείον, ὑμεῖν pro ὑμῖν, ἐφίδαται pro ἐπέιδετε,	2: κοπροδοχί- pro κοπροδοχεί- always, ὑμεῖν pro ὑμῖν bis, ἡσφ[α]λεικάμεθα pro ἡσφ[α]λιικάμεθα, ἐπιδὴ pro ἐπειδὴ bis, χρῆσεις pro χρῆσις, ἐπι[ρά]θεν pro ἐπει[ρά]θην 3: ἐπέριαν pro ἐπήρειαν, χρίας pro χρείας, [ῶ]φιλεν pro [ῶ]φειλεν, χρίαν pro χρείαν, κεινηθέντα pro κινήθέντα

		<p>ὀφίλω pro ὀφείλω, κοπροδοχίου pro κοπροδοχείου</p> <p>3: κεινήσαντ[ο]ς pro κινήσαντ[ο]ς</p> <p>4: [κο]προδοχίου pro [κο]προδοχείου, ὄφιλεν pro ὄφειλεν, ἐπιδὴ pro ἐπειδὴ</p>	<p>4: ἀπέδιξεν pro ἀπέδειξεν, νομίζιγ pro νομίζειν, πολλάκις pro πολλὰκις, ἐπιμῖναι pro ἐπιμείναι, ὑμεῖν pro ὑμῖν tris, υἱοῦ pro υἱοῦ, πάλειν pro πάλιν tris</p>
		Sign: ἐφιορκεία pro ἐπιορκία, μεσιτία pro μεσιτεία	Sign: μεσιτία pro μεσιτεία
		1: ἐθιςμ[έ]νως pro εἰθιςμ[έ]νως	1: ἀγενικ[εῖ]γ pro ἀνενεγκεῖν
η~ε	1: Γρε[γ]ορία[c] pro Γρη[γ]ορία[c], πατήρα pro πατέρα, δηφενσίονος pro δηφηνσίονος, πατήρ[α] pro πατέρ[α]	1: ἐνετήθη pro ἐνετέθη, δηφε[ν]σίονα pro δηφηνσίονα, κξιμελίων pro κειμηλίων, δηφεν[σί]ονος pro δηφην[σί]ονος, [δ]εφε[ν]σίονος pro [δ]ηφην[σί]ονος	1: ἀνοέτως pro ἀνοήτως, π[α]τήρα pro π[α]τέρα, ἤγεκεν pro ἔνεκεν, Χήρηβος pro Χέρεβος
	4: θημηλί[ο]ς pro θεμελί[ο]ς, στηγάζειν pro στεγάζειν, ἐπέρθη pro ἐπήρθη, ἐπερία pro ἐπείρθη, κατηλήμφθη pro κατελήφθη, ἔνεκεν	2: ἤθελ[ον] pro ἔθελ[ον], ὑποθήσεω pro ὑποθέσεω, [ὑ]ποθή[σεω] pro [ὑ]ποθέ[σεω], ἦδε pro ἦδη, μήνοντος pro μένοντος, θεμη[λί]ων pro θεμε[λί]ων, ἀληθής pro ἀληθές, ἀποστηρεῖσθαι pro ἀποστερεῖσθαι, θημηλίου pro θεμελίου	2: δηφενσίωνι pro δηφηνσίονι, ἐτοί[μα]στο pro ἡτοί[μα]στο, [γ]ενήσθα[ι] pro [γ]ενέσθα[ι], θημηλι pro θεμελι, φανηρόν pro φανερόν, στηγάσαι pro στεγάζαι bis, γένεσθαι pro γένεσθαι bis, βούλησθαι pro βούλεσθαι, ἐρμηγείαν pro ἐρμενεῖαν
		4: παρεγένητο pro παρεγένετο	3: ἐπέριαν pro ἐπείριαν, ἔτηρόν pro ἕτερόν, φανηροθ[ῆ] pro φανερωθ[ῆ]
		Sign: συντιθήμενο[c] pro συντιθέμενο[c]	Sign: συντιθήμενος pro συντιθέμενος
οι~υ~ι~η	4: δυμεροτρίτα pro διμεροτρίτα, δύμ[οι]ρον pro δίμ[οι]ρον, μεσότυχεν pro μεσότοιχον (?)	2: ὑμῶν pro ἡμῶν	1: ὑμέ[ι]ν pro ἡμῖ[ν] (?), δυπλή pro διπλή
			2: ὑμῶν pro ἡμῶν ? 4: ἡμᾶς pro ὑμᾶς
αι~ε~(η)		1: ἐπερένησεν pro ἐπεραίνησεν	1: πράσαιων pro πράσεων, (ὑπόκειμαι pro ὑπόκειμαι)
		2: ἐφίδαται pro ἐπείδετε, ἐφίδαται pro ἐπείδετε 3: παρούσαι pro παρούση	2: περεωθῆνα[ι] pro περαιωθῆνα[ι] 4: οἶδαται pro οἶδατε
α~ο~ε ~η		1: [δ]ηφονσίονος pro [δ]ηφηνσίονος	2: δοδεμέ[νων] pro δεδεμέ[νων]
		2: πληροφορήσεται pro πληροφορησεται, δοδ[ομέν]αις pro δεδ[ομέν]αις	
ο~ου~ω	4: τοῦ pro τῷ (gen pro dat)		
ο~ω	1: [αὐτοκράτ]ωρ[ο]ς pro [αὐτοκράτ]ορ[ο]ς, πρίωρα pro πρίωρα, Καυρον pro Καύρων (?), ὄνιακὸν pro ὄνιακὸν	1: [κα]θὸς pro [κα]θὸς, ἔσοθεν pro ἔσοθεν, ὄδε pro ὄδε	1: πρῶτ[ον] pro πρῶτ[ον], κολῦσαι pro κολῦσαι, λέγον pro λέγων, γείτον pro γείτων, ἐγὼ pro ἐγὼ, ἀγογὸν pro ἀγωγὸν
	3: λέγον pro λέγων		

	4: ὄδε pro ὄδε, ὄρ[ic]θῆναι pro ὄρ[ic]θῆναι, ἔξοθεν pro ἔξοθεν, κολῦσαι pro κολῦσαι, κολύειν pro κολύειν, λέγο[v] pro λέγω[v], Ζαδακάθο[v] pro Ζαδακάθο[v], πρῶτον pro πρῶτον	2: διάδικως pro διάδικος, ἀγνωῶ pro ἀγνωῶ, πέρο pro πέρω, λέγον pro λέγων, ὄφιλεν pro ὄφειλεν, κοπροδοχίων pro κοπροδοχεῖον 4: ὄφιλεν pro ὄφειλεν Sign: ἡμίσεος pro ἡμίσεως	2: οἰκοδόμου pro οἰκοδόμου, παρέχωμεν pro παρέχομεν (?), γείτωνες pro γείτονες, [πλ]εωνάσαι pro [πλ]εονάσαι 3: [δι]καιοθῆ[v]αι pro [δι]καιοθῆ[v]αι, φανηροθ[ῆ] pro φανερωθ[ῆ] 4: λέγον pro λέγων, ὠμολογηθεῖς pro ὠμολογηθεῖς, δηφενσίωνά pro δηφηνσίονά
Gemination/ degemination	4: λαμβάννοντος pro λαμβάνοντος	Sign: ἀπαλαγή pro ἀπαλλαγῆ, Θωμάλου pro Θωμάλλου	1: μάλλειστα pro μάλιστα 4: πρόκριμμα pro πρόκριμα bis, εἴκοσσι pro εἴκοσι, ἀναλαμβάν[ειν] pro ἀναλαμβάν[ειν], ὑπολαμβάννει pro ὑπολαμβάνειν