MINIATURE CODICES FROM KELLIS

BY

COLIN A. HOPE AND K.A. WORP

ABSTRACT

This article contains a first edition of two wooden mini-codices found during Australian excavations at Ismant el-Kharab (ancient Kellis) in the Dakhleh Oasis (Egypt). The first codex contains fifteen Greek hexameters belonging to an anonymous and unknown parody of Homer; the second codex contains three Greek division tables. Both texts date from the fourth century CE and apparently come from a local school.

I. THE DISCOVERY

BY

COLIN A. HOPE

The miniature wooden codices, the texts upon which are discussed here by Klaas Worp, were discovered in 2002 during the course of excavations within the Temple of Tutu at Ismant el-Kharab, ancient Kellis, in Egypt’s Dakhleh Oasis. These excavations are conducted by the writer on behalf of the Dakhleh Oasis Project.1) This brief note provides some details of the discovery that might be of relevance in terms of the assessment of the texts.

Ismant el-Kharab lies in the south centre of Dakhleh Oasis and comprises a settlement with associated cemeteries that was occupied, on present evidence, from the late Ptolemaic Period until the end of the fourth century.2) It has been under investigation since 1986, and from 1991 the excavations within the Temple of Tutu have been conducted almost annually.3)

1) The excavations were funded by Monash University through grants awarded to the writer and Gillian E. Bowen.
3) A large number of reports has been published on the excavations and some

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Figure 1. Plan of the Temple of Tutu at Ismant el-Kharab, ancient Kellis
This temple, the only one known to be dedicated to Tutu and his associated deities Neith and Tapshay, lies on the western edge of the site within a large temenos and is associated with four smaller shrines (Figure 1).

The present structure appears to have been erected either at the end of the first century or early in the second century CE and to have been in use as a cult centre until at least the early to mid-fourth century. An early component of this complex was the large two-roomed shrine on the south of the Main Temple, now termed Shrine I (Area D/2), and it was in the outer room (2) of this structure that the codices were discovered. This shrine is an exceptional structure within Egyptian religious architecture as its inner room (1) is elaborately decorated in a combination of classical motifs and pharaonic religious iconography. The latter has enabled the identification of the shrine as a Birth House (mammisi).

The examination of Room 2 commenced in 2001 when a two-metre section in front of the doorway into Room 1 from Room 2 was selected for investigation to determine whether Room 2, like its neighbour, was decorated and to locate its southern wall. A deposit of wind-blown sand 0.9-1.2 m deep overlay mud-brick collapse, the majority from walls. Only one section of vaulting bricks was found and this preserved painted plaster with a motif known from the eastern and western extremities of the ceiling of Room 1. This seemed to indicate that Room 2 originally possessed a decorated vaulted ceiling also with classical motifs. A few fragments of plaster decorated in pharaonic style were found that apparently derive from the upper part of the door jambs. The western walls are decorated with a classical panel motif upon a red ground; at the centres of the panels are squares from the corners of which extend stylised floral sprays. The decoration is preserved most clearly on the south (Plate 1).

of the abundant textual material has been published in the pages of this journal. For the most recent discussions see Hope 2002; 2003; and the annual contributions in The Bulletin of the Australian Centre for Egyptology, published by Macquarie University, Sydney.

4) For this god and the temple see Kaper 1997 and 2003.
The southern wall of Room 2 was located at a distance of 2.0 m from the southern door jamb; the northern wall is 1.8 m from the northern door jamb. This makes the room just over a metre wider than Room 1, being 6.13 m in width. At the western end of the southern wall an original doorway 0.875 m wide has been bricked up; its reveals preserve a green-painted plaster enabling this feature to be identified as part of the earlier decorative phase within the Inner Temenos. A doorway of similar size, 0.88 m in width, also bricked in, is located in the northern wall 1.35 m east of the western wall; this originally communicated with the area south of the Main Temple.

In 2002, excavations in Room 2 continued. The western end of Room 2 was cleared to floor level in its northern half. The rubble collapse consisted of standard-size mud bricks; no vaulting bricks were found or other kinds of roofing material. It was concluded from this that the room had, in fact, been open to the sky in the manner of a court, contra to the implication of the discovery of vaulting bricks in this area during the previous season. Also among the collapse in the south-western corner of the room were various fragments of a plaster bust of a goddess, similar to earlier finds around the Main Temple. 5) This sculpture had originally been gilded.

In the same context another fragmentary plaster sculpture was found, preserving a pair of legs with an enveloping garment in classical style. Numerous fragments of plaster wall decoration were among the collapse. Beneath the collapse, at approximately 1.75 m depth, several layers of earth floors could be distinguished, the uppermost of which contained much stable material. Within this, a group of papyrus documents inscribed in Greek was found along with the two miniature wooden codices, one of four leaves and one of three leaves, with their string binding in situ, and one single wooden board, all inscribed in Greek (Plate 2) and which Klaas Worp discusses herein. These were found together against the northern part of the western wall within a small pit.

Amongst the bricks from the collapsed walls, large segments of decoration could be retrieved, which had originally been above the main wall zone. North of the doorway upon the western wall, the classical decoration was surmounted by a painting of a series of personages, above which was a painting of a horse, probably with a horseman, but not much of this element has survived. To the left of the doorway were figures of Egyptian gods in pharaonic style, but the excavations have not exposed all of the relevant fragments.
There are numerous graffiti on the north wall of this room, some copying decoration in the room and others of boats; Kaper 1999. The doorway itself, the entrance into the *mammisi*, was again decorated with the same classical panels and the decoration continued above with pharaonic imagery. Several scenes of gods in pharaonic style may be reconstructed here, covering the upper jambs and lintel. The cavetto cornice above the door was painted with a winged solar disc. Above the cornice was a painting of the principal god of the temple, Tutu, in the form of a sphinx set upon a pedestal facing right. Inside the pedestal were images of the seven demons that were associated with the god. To the left of this central image was a large human figure dressed in military boots, who seems to represent a deity. To the right of Tutu was the aforementioned horseman. The scene also incorporates full-size figures of a man and woman who are possibly either donors to the temple or commemorated dead. The upper part of the western wall seems to have been painted at a later date than the panel scheme below with possibly two registers of figures centring on Tutu, possibly within the second or third century.

From what has been presented above it will be clear that the find context of the codices and associated papyrus documents may not, in itself, indicate where they were last used as the papyrus was likely deposited by wind and the codices dropped in their find spot. The iconography on the west wall of Room 2 of Shrine I indicates that it was a formal entrance into the inner room and thus religious in its primary function into the third century at least. As the complex as a whole seems to have been maintained until the early fourth century as the focus of cult activity then it is likely that this was the case for Shrine I also. The damage to the earth floors and wall decoration of Room 2 and the stable deposits found therein show that before abandonment of the area the room had been used for animals. Such was also the fate of Room 1, where similar deposits were found plus evidence of squatters’ activity and a graffiti6) written in Sahidic Coptic on one wall that indicated two gooseherds with the names George and Kyris had spent the night there. On the floor of Room 1 was straw, either fuel for a fire or bedding, traces of a hearth and part of a woven fibre covering for the back.

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6) There are numerous graffiti on the north wall of this room, some copying decoration in the room and others of boats; Kaper 1999.
of an animal.\textsuperscript{7) It is inherently unlikely that those responsible for the reuse would have been literate and that the codices were of interest to them.}

This usage conforms to a pattern found throughout the temple and which can be ascribed to the mid to late fourth century, when rubbish accumulated and was deliberately dumped in various places, the main entrance into the inner temenos was blocked and various secular activities took place within. This must be coincident with the demise of the worship of Tutu, at least on a major scale and within the temple, and the dominance of Christianity in various forms at Kellis, a phenomenon that had been increasing since the late third century.\textsuperscript{8) While the evidence from the temple mostly implies domestic activity subsequent to the cultic, at least in one section the finds might indicate a secular activity of interest in relation to the codices from Shrine I. From a fourth century re-use of Shrine III (Area D/4, see Figure 1) came various pens, ostraka and fragments from inscribed boards that point to it functioning as a scriptorium,\textsuperscript{9) possibly coincident with the end of the temple as a place of worship. Amongst the texts were two identified as school exercises. The nature of the texts upon the codices and isolated board published here points to Shrine III as a possible place of origin for these items. Writing upon wooden boards of various sizes was especially popular in ancient Kellis as is shown by the number of finds from both the Main Temple area and the houses in the residential sector of Area A in the centre of the site east of the temple, most of fourth century date, and there is evidence for their manufacture in House 2 of Area A.\textsuperscript{10)}

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\textsuperscript{7) See Hope 2002, 188 and Pl. 10.}
\textsuperscript{8) Bowen 2003, 173-4.}
\textsuperscript{9) The evidence is discussed by this writer in Hope & Worp 1998, 206-7.}
\textsuperscript{10) See discussion by this writer in Bagnall 1997, 9-11, and for later finds the references cited in note 2.}
II. A PARODY OF HOMER, ARITHMETICAL EXERCISES AND A LIST OF GREEK VERBS

BY

K.A. WORP

During his excavations at Kellis, described above by C.A. Hope, there were found, inter alia, two wooden miniature codices, almost literally comparable with modern pocket books. For the subject of wooden tablets in Kellis cf. the introduction to P.Kellis I 60-2; for a discussion of wooden boards from Egypt in general, see Brashear & Hoogendijk 1990; a catalogue of known texts is printed there on pp. 33 ff., while additional information is given now by G. Azzarallo in P.Harrauer, p. 24. Moreover, one should also consult, of course, the Leuven Database of Ancient Books website (http://ldab.arts.kuleuven.ac.be/ldabsearch.html), searching under ‘material’ for ‘wood’.

1. A Parody of Homer

The Kellis object registration # D/2/46 (Room 2 of Shrine I in a pit north of the door; SCA # 2662) covers a ‘pocket’ or ‘mini’ codex with the following general dimensions: H. 8 × W. 5.5 × Th. 0.4-0.5
cm (the dimensions of individual boards may deviate by approx. 1 mm). The codex consists of four wooden boards, numbered below as I, II, III, IV, the sides of each board being indicated by ‘a’ and ‘b’. One side (‘a’) of board I and both sides of board IV are empty, or at least they do not carry writing that is now recognizable (see below). At the spine of the codex each board contains four holes with a diameter of 3 mm, the outer holes being placed at approx. 0.8 cm off the top and bottom edges of each individual board. Within each pair of holes the distance between the outer and the inner hole is approx. 0.4-0.5 cm. The distance between each pair of holes is approx. 4.7 cm. In the first board there is an extra hole at 1 cm off the side opposite the spine of the codex, but this does not seem to have any specific purpose, unless it was used for holding a piece of string with which the book could be tied up (cf. *Pap. Lugd. Bat. XXV* 16 descr.).

There are no markers on the spine of each board in order to indicate the board’s position within the whole set. Likewise, there are no leather patches or similar arrangements for separating the boards from each other (cf. Worp & Rijksbaron 1997, 18).

A piece of string has been preserved, drawn through the holes at the spine for keeping the individual boards together. It is drawn from the front to the back of the codex through the uppermost hole, coming back through the hole just below it. Originally, a presumably similar arrangement was made at the bottom of the code, the other end of the string going from front to back through the lowermost hole and coming back through the hole just above it. Then both ends of the string were tied together at the front side of the codex.

The outer side of board I, and possibly also that of board IV, contains traces of erased writing. Erasing appears to have been effected by the application of a layer of gesso. At the bottom of board IV there are some ink traces now appearing where the gesso has worn off. Two dashes form together a wide-angled ‘V’.

The text is written obliquely over each board in ‘landscape’ fashion. Above the first line on each board there is a margin of approx.

13) I owe this idea (and reference) to the kindness of my colleague F.A.J. Hoogendijk (Leiden).

Plate 5. Hope, C.A., Worp, K.A. Miniature Codices from Kellis, 1: Homer Parody, Board II.b

Plate 6. Hope, C.A., Worp, K.A. Miniature Codices from Kellis, 1: Homer Parody, Board III.a
1 cm. The boards were gessoed before carrying new writing; only on board I.b part of the gesso has worn off, but this has not seriously impaired the legibility of the text. The text appears to have been written in hexameters, each hexameter being divided over two lines of writing. Below, I number only the hexameter lines as intended, rather than numbering the individual lines written on each board; the lay-out of the printed text represents the lay-out of the individual boards, hence boards I.b and II.a contain each six lines of text resulting in three hexameters, boards II.b and III.a each contain eight lines of text resulting in four hexameters. After two lines of text on board III.b producing one full hexameter, the text suddenly stops, though there is space enough to add further text: is this the end of the (short) story? Whatever the answer to this question, the mini codex presents to us a piece of Greek poetry consisting of fifteen hexameters. This is not to say that one is dealing with a continuous piece of poetry; especially the connection between the content of ll. 1-7 and that of ll. 8-15 in particular is not obvious; for this see below, l. 8 n.
As far as palaeography is concerned, I have no doubt that the handwriting should be dated to the middle of the fourth century, i.e. between 325-375. The handwriting suggests a decently trained scribe. It may appear that various hands are to be distinguished, as the handwriting of lines 1-3 (board I.a) is leaning more to the right than that of lines 4-7 (board II.a and the beginning of board II.b). The writing of line 7 is definitely larger than that of lines 8-15. The writing of lines 8-15 appears to feature characteristics that distinguish them from lines 1-3, resp. lines 4-6 and 7. Furthermore, the author of lines 1-3 seems to have applied some spacing between individual words, though he is not always correct in applying these spaces (cf. the critical apparatus ad l. 3). In the end, however, one may assume that one single scribe wrote the whole text, pausing at l. 4, resp. l. 8. Within this context it is conceivable that a pause in the handwriting also marks a break in the scribe’s thoughts.

The use of a Latin word (cf. l. 12, μάππα; see note ad loc.) within a Greek context may be taken as an extra argument that these lines have a ‘late’ origin. The rise of Latin in the Greek-speaking East context is usually connected with the language policies introduced by the emperor Diocletian and his colleagues. It is possible (though not necessary) to regard the text as the author’s own original, written ca. 325-375 CE. If, after all, this is not directly the case, one may be dealing with a copy of a text which itself may have been composed in fact one or two generations earlier.

I.a (outer side of codex): erased writing.

I.b 1 Τὴν πάρος ἄκρωντος λίθων
μυλοειδεά πάμπαν
2 λοισυρόθος θαλαροῦσι δ’ ἀν-
 ἐμαυτον αἰτησιν
3 λειῆς ἐπέσασε φελίππι-
 ος ἱεσίη λαῶν

II.a 4 καὶ μὴν ὅμως νυξίν τε
καὶ ἱμασὶ πάντες όμαρτη
5 ἀποτομὸν ἱζνος ἱζνο-
τες ἐπιστίβουσι πόδεσιν
6 ἄλλα ἐπ’ ἄλλας ἁνάσας
σύν ἀρτέμιςι τεκέσσι

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II.b 7 ες πατρην πεμθησι
τον αιδημον ηγεμονη.
8 'Ως ειπων πουλεων εξεσσετο
λευκος αλεκτωρ
9 τω δ' αμι 'Αλεξανδρος πιςας παρ-
εδωκε μαγειρη
10 ο δε μαχειρος ευηθας και γευσα-
μενος ελεγε 'Χρηστων!

III.a 11 Τρωες και Λωκιοι και Δαρδανοι,
δευτ' επι δειπνoi.
12 ανερες έποτε, φιλοι, μνησωσι δε
μαππαν ηνεκεν.
13 Αισθητε παντες και μοι καταλι-
ψατε ωστων.
14 Ζευ πατερ, ή όρτον μοι δος
και τυριον οπατ

III.b 15 η αυτων βασιληα πολυσταφυ-
λων πλακομελα.
VACAT (3.7 cm)

1 l. λιθο? See note ad loc. 2 δ' Tab. 3 The board presents spacing
between the 'words' λειτην ασπετασ σε; - in επετασσε ex corr. 4
l. άμαρτη 5 l. επιστειβωσι 7 πεμθησι: first ι ex σ corr.; ι. πεμθησι
9 δ' Tab. 10 χρησ- separated from -των by hole 11 δευτ' Tab. 12
μαππαν: first ι ex ν corr. 13 l. εισθητε, καταλεψατε 15 βασιλε: η
ex ι corr.?

IV.a: blank
IV.b (outer side of codex): erased writing.

Commentary

1-3. It is obvious that, because the original text cannot be properly
constructed, it cannot be kept unchanged. The main elements of
the full clause are: επετασσε (main verb + subject) την λαοφόργα
(object) ἤγεσει λαοίν, 'he spread the road for the footsteps of the
soldiers/people'. The road (την λαοφόργα) is further qualified as
παρος μυλοειδεα πάμπαν θαλεροις δ' ανέμβατον οιζηοισιν, i.e. 'looking
aforetime completely like a millstone, and inaccessible for the
stout and sturdy people', while the subject of the main verb, επετασσε,
is qualified by the word φιλίπτυος = 'horse loving'. This may be
taken both as an adjective and as a personal name (cf. Plb. 5.20.1.2).
This leaves us with the words ορκωντι λιθον, in which the gen.pl.
λίθων should be changed most probably into λίθος, to be connected with the preceding adjective ὀρυκτῶν; cf. the same phrasing λίθων ὀρυκτῶν in Hom. Il. 8.327. This dative most probably goes with (τὴν) λαοφόρρῃ πάρος μυλοειδέα, ‘(the road) before millstone-like through rocky stone’, rather than with λεινᾶς, ‘levelling (the road) with a rocky stone’.

Various sources (Nonnus; Apollonius Sophista) feature the Homeric expression βαλὼν μυλοειδέα πέτρῳ (Il. 7.270); the accusative form of the adjective μυλοειδής does not occur in the TLG, but that seems coincidence.

The word combination θαλαρόσι... αἰγρῶσιν occurs in Hom. Il. 3.26, 11.414 (both nom.pl.) and 16.282 (acc.pl.). The adjective ἄνήμβατος does not occur in Homer, but the TLG features, as far as poetry is concerned, attestations in later epic poets like Nonnus, Quintus Smyrnaeus and Oppianus; one may compare also various epigrams in the Anthologia Graeca.

The use of the particle δὲ linking the expression τὴν... μυλοειδέα... λαοφόρρῳ and the adjective ἄνήμβατον may surprise, but nevertheless it seems acceptable in an apposition, cf. LSJ s.v., II.2.a.; Denniston 1959, 163.

4. The dicolon has occurred before as a nom. or acc.pl. νύκτῃς/νύκτας τε καὶ ἡματα (or, for metrical reasons, ἡμαρ) in Hom. Il. 5.490, 18.340, 22.432, 24.73, Od. 2.345, 10.28, etc., but not yet in a dative plural.

5. Homer uses the adjective ἄτρομος in combination with the nouns μένος and θυμός; a search in the TLG did not produce any other instance of the phrasing ἄτρομον ἔχος.

6-7. The interpretation of the verses

ἀλλὰ ἐπ’ ἄλλας ἀνάσσε σὺν ἄρτημεσιν τεκέσσει
ἐξ πάτρην πεμφθείς τὸν ἀοίδημον ἡγεμονήα

is problematical. The verb ἀνάσσε, ‘to rule’, normally governs the genitive or the dative. Therefore, it is not possible to accept τὸν ἀοίδημον ἡγεμονήα as the regular object of the 2.sg.imperat. ἀνάσσε. This should be taken rather in an absolute sense as ‘rule!’ or ‘command!’ Furthermore, there is the question of the meaning of ἐπ’
The scansion would become – – | – – | – ∪ ∪ | – ∪ ∪ | – ∪ ∪ | – ×.

On the other hand, as my colleague I. Sluiter suggests (in a personal communication), here may lurk a reference to the preceding concept of ‘road’, hence one might think of supplying words like ὀδὸς or λαοφόρους after ἐπ’ ἄλλας; and if that were done, one might perhaps take ἐς πάτην as a kind of further explanation of ἐπ’ ἄλλας ὀδὸς / λαοφόρους and take τὸν ἁπλῶν ἡγεμονήα as a further epexegesis. In last resort, however, such an approach seems also problematical as it does not provide a completely coherent interpretation. If one changes πάτην into πάτρης, combining this with ἡγεμονήα, and if one drops the article τὸν before ἁπλῶν ἡγεμονήα should be understood as σὺν ... τεκέεσσι τεμφετεις τὸν ἁπλῶν ἡγεμονήα πάτρης, the syntax becomes far more clear and, moreover, the metrical irregularity in the fourth metre would disappear. It is, however, questionable whether such hard-handed policies towards a new fragment of poetry are justified. On balance, the interpretation of the passage remains, therefore, a matter of non liquet.


In itself, the adjective ἁπλῶν is a Homeric hapax, occurring only in Hom. Il. 6.358. The TLG cites the word combination ἁπλῶν ἡγεμονήα only from Theodorus Metochites, Carmina 20.232 and the Anthologia Graeca, Appendix: Epigrammata dedicatoria 338, as a qualification of a certain Sabinianus.

8. Cf. the well-known line in Hom. Il. 6.1: ὁς εἰπὼν πολέων ἔξεσσυνο φαίδμος Ἑκτωρ; of course, the metrical value of λευκός ἀλέκτωρ is equivalent to that of φαίδμος Ἑκτωρ.

15) The scansion would become – – | – – | – ∪ ∪ | – ∪ ∪ | – ∪ ∪ | – ×.
16) The acc.sg. ἡγεμονήα is found with other late epic poets, e.g. in Oppian, Cynegideis 1.224 (ἀρχευκτικά), 2.48 (μέγαν); Nonnus, Dionysius 13.181 (ὑμόστολον), 17.397 (προάγμα), 26.217 (ὑμόστολον), 26.284; 27.303 (Βοιάτον); Musaeus, Hero & Leander 218 (φαεσφόρον).
As the content of the preceding ll. 1-7 may be summarized as ‘on the road’, while the topic of ll. 8 ff. is the preparation and consumption of the cock, it seems conceivable that at this point the author of this poem starts something completely new and that a break has to be applied between ll. 7 and 8. On the other hand, one might argue that there is a direct link between the command ‘άνασσε!’ in l. 6 and the words ὥς τιπών in l. 8.

10. For the use of the word χρηστός ‘pleasant to taste, nice’, cf. Thphr. Char. 2.10; compare also the use of the verb χρῆ in cooking recipes on papyrus.

11. For the first part of the hexameter, Τρῆς καὶ Λύκιοι καὶ Δάρδανοι, cf. the same phrasing in Hom. Il. 8.173, 11.286, 13.150, 15.425, 15.486, 17.184. The metrical error in the fourth metron is easily explained if one realizes that in Homer the word Δάρδανοι is always followed by a word starting with a vowel, hence ‘metrical correction’ turns the long syllable -νοι into a short one.

There is no parallel for the phrase δεὶ τι ’έκτι δεῖπνον.

12. The hexameter presented here finds its parallel in Hom. Il. 6.112, 8.174, 11.287, 11.487, 11.734, 16.270, 17.185: ανέρες ἔστε, φίλοι, μανήσασθε δὲ θωρίδος ἀλκής. It is interesting that the origin of the word μάππα is Latin. Its occurrence here seems to be the earliest attestation in Greek (P.Berl.Sarisch. 21.15, yielding another attestation, is assigned to the V/VI cent.); the ‘diminutive’ form μάππιον, however, is found in two documentary texts, dated both ‘IIIp’, i.e. P.Med. II 74 and P.Wisc. I 30.8.


14. Very close to the beginning of this line is Hom. Il. 5.421, 5.762: Ζεῦ πάτερ, ἥ ρα τί μοι.

Instead of τυρίων ὁπῶν one finds in Homer only κρέας ὁπῶν (Od. 16.442). In Greek literature in general, a parallel for the phenomenon of ‘baked/broiled/grilled/roasted/toasted cheese’ is given by

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17) Bilabel 1920; id., Philologus 80 (1925), 340 (edition of another fragment); Seider 1970, 101, no. 36; cf. in general Hoogendijk 1997, with further literature.
Athenaeus, *Deipnosophistae* 14.82.9 Kaibel, τυρῷ ὑπὲρ, in a receipt for μύμα; cf. also *ibid.* 2.70.3 and 9.10.9 Kaibel: ὑπὲρ τυρῷ . . . τὸμον.

15. Should one read ἤ αὐτὸ τὸν or ἤ αὐτὸν? On balance I have adopted the latter solution, though I am not certain that the first approach is here in fact not viable (αὖ = ‘on the contrary’ is attested with preceding ἤ, cf. *LSJ* s.v. αὖ, IV).

According to the *TLG*, the adjective πολυσταφύλιος = ‘rich in grapes’ (cf. Detorakes 1982, 151) is used as a qualification of:

(1) a town in a region (Hom. *Il.* 2.507 [‘Ἀρνη in Boiotia] and 537 [‘Ιστίνα on Euboia], cf. also various scholia and commentators of these two passages like Aelius Herodianus Gramm., Aristonicus Gramm., Eudoxus Astron., Strabo Geogr., Posidonius Phil., Stephanus Byzant. and Eustathius);

(2) a high-rugged coast (Sophocles, *Antigone* 1131-2);

(3) the god Dionysos (*ibid.* 26.11; cf. perhaps also Hesiodus, fr. 70.6 M.-W.);

(4) vines (Hecataeus Hist., fr. 1a.1.F. fragm. 15.5 Jacoby = Athenaeus, *Epitome* 2.1.15 Kaibel; Orphica, *Liithica Kerygmata* 5.4);

(5) people (Heliodorus Trag., *Ταξικὰ Θαύματα* = fr. 472. 5 = Ioh. Stob., *AP* 4.36.8.6; Theodorus Stud., *Μεγάλη κατήχησις*, Cat. 104, p. 760.12 = *Sermones Catecheseos Magnae*, Cat. 86, p. 39.15);

(6) the autumn (Quintus Smyrn., *Posthomerica* 2.602); and, finally,

(7) a veil (Nonnus, *Dionysiaca* 16.112).

Neither a substantivized use of the adjective nor its use as a personal name is attested. For that reason it is not an obvious choice (though in itself the thought is not inconceivable, of course), to reckon here with (1) a substantivized form Πολυσταφύλιον as the (fictitious) name of a country, e.g. ‘Grapeland’, that was ruled by a king (cf. βασιλιάδα), or (2) a personal name Πολυστάφυλος = ‘Grape-rich’.

Given its best known use, I originally assumed more or less automatically that for that reason one should take (1) πολυσταφύλιον as an adjective, (2) πολυσταφύλιον and the following word as a gen.sg. and (3) derive the latter word from the noun πλακουντᾶς, ‘cake baker’, gen. πλακουντᾶ. This approach raises, of course, immediately
the question whether the genitive πλακοφιτα should be connected with the accusative βασιλῆς = 'king', whether the first noun can be taken as meaning 'Cakeland' and whether πολυσταφίλος πλακοφιτα is to be translated as 'of Cakeland rich in grapes'. On balance, however, the translation 'Cakeland' simply cannot be accepted.

On the other hand, the form πλακοφιτα may also be taken as the acc.sg. of πλακοφος = 'flat cake', standing within the context at one level with ἄρτον = 'bread' and τυρίον = 'cheese' as the object of δος, 'give'. In fact, this seems a most attractive approach. There is, however, the question whether the cake should be qualified as the βασιλεύς Πολυσταφίλος = 'the king of Grapeland', or whether the cake should rather be regarded as 'the son of Grape-rich', a father-son relationship being expressed by the genitive. In the latter case, it could have been labelled αὐτὸς βασιλῆς, 'the king itself', because the cake served as an after-dinner, the supreme moment of the whole meal, cf. Athenaeus, Deipnosophistae 3.127. The only conceivable objections against some elements of this interpretation are that (a) the adjective πολυσταφίλος is not encountered as a name, and that (b) this interpretation requires a certain amount of associative thinking.

Metrical analysis

A metrical analysis of the text presents, after incorporating various textual normalizations and corrections proposed in the critical apparatus, the following picture:

18) I owe this suggestion (in a personal communication) to my colleagues I. Sluiter and F.A.J. Hoogendijk (Leiden).
19) Suggested by I. Sluiter.
20) My colleague F.A.J. Hoogendijk informs me that Athenaeus (Deipnosophistae 16.642 f.; cf. Loeb ed. vol. VI p. 469) refers indeed to after-dinner cakes, served in combination with date wine. Hence, it seems an indeed attractive thought that the cake, after immersing it into wine and turning it as it were into its offspring, arrives at the supreme moment as the king himself of the whole dinner. Compare also the Suda s.v. Εώντας: η εν οίνῳ πειρουμένη μέλα: αι δὲ εἶδος πλακοφιτας, μετ’ οίνου καὶ μέλης γνώμενων.
21) On balance it seems unlikely that one finds here in this codex (found in the Western desert of Egypt!) an intended reminiscence to the Greek name Πλακοφιτα for the Italian town of Piacenza, famous for its honey cakes, cf. Joh.Lydus, De Mensibus 4.4.43-3; I owe this idea to my colleague J.-L. Fournet (Strasbourg), who brought it up (most hesitantly!) during an oral conversation.
MINIATURE CODICES FROM KELLIS

1. Τήν πάροι | ὀρκιό | εντι λί | θῷ μολο | εἰδέα | πάμπαν
   - U U | - U U | - U U | - U U | - U U | - x

2. λαοῦδ | ρον θαλε | ροίσι δ’ ἀν | ἐμβατον | αἰτή | οἰσιν
   - U U | - U U | - U U | - U U | - U U | - - | - x

3. λειθ | νας ἐπ’ | τασσε φι | λίππιος | ἱχνεσι | λεαών·
   - | - | - U U | - U U | - U U | - U U | - x

4. καί μιν ὃ | μῶς νυξ | ἰν τε καὶ | ἱμματι | πάντες ἀμ | αρτή
   - U U | - - | - U U | - U U | - U U | - U U | - x

5. ἄτρομον | ἔγκος ἔ | χοντες ἔ | πιστεῖ | βουσὶ πό | δεσσι.
   - U U | - U U | - U U | - - | - U U | - - | - x

6. ἀλλά ἐπ’ | ἀλλας ἄ | νασσα σῶν | ἀρτέμε | σιν τεκὲ | ἐσσι
   - U U | - U U | - U U | - U U | - U U | - x

7. ες πά | τρην πεμφ | θείσι τὸν | ἁόιδημον | ἧμμο | νήμα.
   - - | - - | - U U | - U U | - U U | - x

8. Ὠς εὶ | πὼν πτικέ | ἐν ἐξ | ἐσπυτο | λευκός ἄ | λέκτωρ
   - - | - U U | - - | - U U | - U U | - x

9. τὸ ὁμ’ ἄ | ἁδζεαν | δρος πιά | σος παρε | δῶκε μα | γείφρ.
   - U U | - U U | - U U | - U U | - U U | - x

10. ὤ δὲ μὰ | γειρος ἔ | ψῆσας | καὶ γευ | σάμενος | ἐλεγε: | Χρηστόν.
    U U | U U | - U | - - | - - | - U U | - U | - x

Comment

7. ἀοίδημον with synizesis?

10. Seven metra, 1st, 2nd, 5th, and 6th irregular!

11. 4th metron irregular!

13. 2nd metron irregular!

14. 4th metron irregular!
Translation

‘After smoothing the road that was aforetime millstone-like through rocky stone and inaccessible for the stout and sturdy people he, the horse loving (or: Philippios?), spread it for the footsteps of the soldiers (or: of the people). And days and nights alike all trample upon it with their feet, having a fearless foot. But rule—with your children, sent—safe and sound—to the fatherland, (to) the renowned commander (or: guide).’

After having spoken these words the white cock dashed out of the gate. But Alexander immediately grabbed it and gave it to a cook. And the cook, after having boiled and tasted it, said: “It’s nice! Trojans, Lycians and Dardanoi, come here for the meal! Be men, friends, but do not forget to bring a napkin with you. All of you must eat and leave me the bone. Father Zeus, give me bread, or a toasted cheese, or the king himself: cake of Grape-rich!”

General appraisal

Despite its problems of interpretation, it is obvious that this text contains a parody of Homer. Within this context it may suffice to quote S. Douglas Olson and Alexander Sens, who, after a discussion of parodists like Hegemon, Archestratus, Euboeus of Paros, Hermogenes, two Philippi and a certain Cleonicus, state (pp. 11-2):

Of the other remains of epic parody, two short fragments of an undated poem by Hipparchus (otherwise unknown and omitted by Brandt) entitled the Egyptian Iliad are of interest here primarily for their gastronomic content. (...) Although the title suggests that the poem was a parody of the Iliad and some of the diction is in fact drawn from Homer, there is no extended adaptation of any particular epic verse. (...) Epic parody continued to be composed in the later Hellenistic and Roman Periods. (...) Particularly important examples of the genre in the Hellenistic period include the Battle of the Frogs and the Mice and papyrus fragments of the War of the Mice and the Weasel, recently published by Schibli (ZPE 53 [1983] 1-25). Other, similar poems doubtlessly existed but have perished completely.

22) Cf. Schol. in Oppianum, Cynegetica 1.224.
23) From their 1999 study. I am grateful to my colleague I.J.F. de Jong (Amsterdam) for making this study available to me.
24) See Olson & Sens 1999, 7-11.
A similar complaint is voiced by A. Lesky (1971, 111): “... macht es Schwierigkeiten, daß wir von der übrigen parodistischen Dichtung der Griechen so wenig wissen”. These statements are very relevant for defining the literary setting of our text. There is nothing in our text that appears in the collections of texts published by P. Brandt (1885), J.U. Powell (1925), E. Heitsch (1961-4), and H. Lloyd-Jones & P.J. Parsons (1983). Finally, a search in the electronic TLG for phrasings in a known author matching with our text also did not produce anything relevant. We have, therefore, to judge these lines on their own merits.

In general, we have little knowledge about Graeco-Egyptian poets living in the Great Oasis in the Western Desert of Egypt. For one of the few known names, see Derda & Janiszewski 2002, 51-70. This Soterichus composed epic poetry at the time of the emperor Diocletian (Suda, s 877), i.e. relatively close to the date our text was written. It is, however, probably too far-fetched to believe that our text is a product of his pen, originating in his youth.

More reasonable seems the assumption that one is dealing in this text with a ‘poetical’ product of an anonymous youngster who visited the local village school at Kellis, or (slightly less likely, perhaps?) that it was an equally anonymous local school teacher who produced this paraphrase. Obviously, the abilities of our poetaster to produce a metrically sound Greek hexameter were limited, and in some cases there are irregularities or even serious errors (l. 10 produces a telling illustration of this contention). At the same time I follow D. Feissel (Paris) in wondering (in a private communication) whether elements of the ‘Pater noster’ were taken over into the story sketched in ll. 8 ff. Within this context one should not only note l. 14: ‘Father Zeus, give us bread’, but note also l. 10 where the word χρηστόν may have been used intentionally as a reminder of Χριστόν.

2. Five Fraction Tables

The Kellis object registration # D/2/45 (Room 2 of Shrine I in a pit north of the door; SCA # 2661) covers another ‘pocket’ or ‘mini’ codex consisting of three wooden boards. Its general dimensions are: H. 8.2 × W. 6.4 × Th. 0.3 cm (the width and height of individual boards may vary by 1 mm). The boards are numbered below as I, II and III, the sides of each board as ‘a’ and ‘b’.

There are two holes at the spine of the codex, one at 0.5 cm below the top edge and one at 0.5 cm above the bottom; their distance to the spine is 0.4 cm; the diameter of the holes measures 2-3 mm. The original piece of string keeping the boards together has not been preserved. There are no markings on the spine of the individual boards indicating their place within the whole set and there are no leather patches or similar devices for keeping the individual boards separated. The boards were gessoed before carrying (new) writing. The inscribed boards feature margins of approx. 0.5 cm to the left of the text.

As far as the subject of ‘mathematics on wooden tablets’, is concerned, see esp.

1) *LDAB* 2418 = *ZPE* 6 (1970), 142-3 (T.Oxford)
2) *LDAB* 2530 = *Pap.Lugd.Bat.* XXV 15 (T.Leiden)
3) *LDAB* 2642 = *P.Lit.Lond.* 253 + *ZPE* 86 (1991), 231-2
4) LDAB 2746 = Rev. Arch. (1973), 245-53 (T. Louvre AF 1196.2; see also SB XX 14647, commentary)
5) LDAB 4464 = SB XXIV 16038
6) LDAB 5333 = SB III 7013 + ΖΠΕ 50 (1983), 103-5 (T. Mich.)
7) LDAB 5587 = T. Varie 33-42 (T. Louvre MNE 912)
8) LDAB 5592 = Rev. Arch. 8.2 (1852), 461-70
9) LDAB 5660 = P. Kellis I 90
10) LDAB 5737 = T. Varie 23-32 (T. Louvre MNE 911)
11) LDAB 5786 = E. Ziebarth, Aus der antiken Schule, II (Bonn 1913; Kleine Texte, no. 65), no. 48 (P. Berol. 14000, pp. 2, 17; partial publication in SB III 6215-8)
12) LDAB 5865 = SB XVIII 13578 (T. Würzburg K 1013)
13) LDAB 5879 = Ancient Egypt 1 (1914), 52-4;
14) LDAB 6063 = SB XX 14647-52 (T. Louvre AF 1196; cf. W. Brashear in REG 97 (1984), 214-7)
15) LDAB 6064 = SB XX 1463 (T. Louvre AF 1197)
16) LDAB 6065 = Mélanges E. Bernand (1991), 148-53 (T. Louvre MND 552.C)
17) LDAB 6130 = SB XX 15190 (T. Michigan 29974)
18) LDAB 6146 = ΖΠΕ 15 (1974), 173-8 (T. Louvre AF 1197)
19) LDAB 6201 = SB XXIV 16031 (T. Michigan 764)
20) LDAB 6261 = P. Michael. 62 (T. Michaelides)
21) LDAB 6308 = T. Varie 71-8 (T. Pierpont Morgan Lib.)
22) LDAB 6312 = T. Varie 22 (T. Ashmolean inv. 1982, 1119)
23) LDAB 6339 = T. Varie 43-50 (T. Louvre MNE 913)
24) LDAB 6340 = T. Varie 52-4, 57, 59-60, 68-9 (T. Louvre MNE 914)
25) LDAB 6346 = T. Varie 16-7 (P. Vat. Gr. 60)
26) LDAB 6407 = SB XVI 12386 (T. Moen 602)
27) LDAB 6452 = SB XVI 12538 (T. Moen 601)
28) LDAB 6487 = Misc. Pop. II 1 131 (T. Louvre MND 551.A.C)
29) LDAB 6534 = Enchoria 14 (1986), 2 (T. Würzburg K 1015)
30) LDAB 6553 = E. Ziebarth, Aus der antiken Schule, II (Bonn 1913; Kleine Texte, no. 65), no. 51 (P. Berol. 16717)
31) LDAB 6579 = MPER XV 154 (T. Moen 4)
32) LDAB 6597 = T. Varie 4, 5 (P. Vat. Gr. 53)
33) LDAB 6599 = T. Varie 7 (P. Vat. Gr. 55A)
34) LDAB 6663 = P. Bud. IV 64 (T. Heidelberg)
MINIATURE CODICES FROM KELLIS

35) LDAB 6747 = MPER XV 171 (T.Vindob.Barbara)
36) LDAB 8888 = P.Harrauer 3 (T.Wien 7)
38) LDAB 10583 = SB XX 15007 (T.Trier 1988.21)
40) LDAB 10611 = SB III 6219 (P.Berol. 10506)

and Brashear & Hoogendijk 1990, n. 24, for a corpus (apparently still unpublished) of Milanese and Cairene wooden tablets, to be published by C. Gallazzi; in here should appear, i.a., T.Cairo JE 51274, 51278+51279 and T.Cairo SR 1006 (Kopt.Mus.).


Board I.a: outer side of the codex; from underneath the gesso layer remains of an earlier, now illegible text are visible. It would seem that a ‘k’-shaped letter has been incised into the wood with a pointed instrument. A less prominent ‘L’-shaped character appears after the ‘k’. The significance of these characters is uncertain.

I.b: table of fractions of ‘6075’, resp. of ‘11500’:

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<td>αστε</td>
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<td>φζ</td>
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252 COLIN A. HOPE AND K.A. WORP

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Col. ii

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21: \( \beta \) redrew 25: the sign \( \alpha \) looks rather like a \( \chi \).

II.a: table of fractions of ‘628’, resp. of ‘3400’. Ll. 25-7 feature traces of the application of a sponge to the surface of the board.

Col. i

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<td>17</td>
<td>λψ</td>
<td>1/2</td>
<td>1700</td>
</tr>
<tr>
<td>18</td>
<td>ρλγ</td>
<td>1/3</td>
<td>1133</td>
</tr>
<tr>
<td>19</td>
<td>βζ</td>
<td>2/3</td>
<td>2266</td>
</tr>
<tr>
<td>20</td>
<td>ην</td>
<td>1/4</td>
<td>850</td>
</tr>
<tr>
<td>21</td>
<td>χπ</td>
<td>1/5</td>
<td>680</td>
</tr>
<tr>
<td>22</td>
<td>ψζ</td>
<td>1/6</td>
<td>566</td>
</tr>
<tr>
<td>23</td>
<td>ικ</td>
<td>1/8</td>
<td>425</td>
</tr>
<tr>
<td>24</td>
<td>τζ</td>
<td>1/9</td>
<td>377</td>
</tr>
<tr>
<td>25</td>
<td>τμ</td>
<td>1/10</td>
<td>340</td>
</tr>
<tr>
<td>26</td>
<td>σπγ</td>
<td>1/12</td>
<td>283</td>
</tr>
<tr>
<td>27</td>
<td>σμβ</td>
<td>1/15</td>
<td>212</td>
</tr>
<tr>
<td>28</td>
<td>σμβ</td>
<td>1/16</td>
<td>212</td>
</tr>
<tr>
<td>29</td>
<td>ρη</td>
<td>1/18</td>
<td>188</td>
</tr>
<tr>
<td>30</td>
<td>πο</td>
<td>1/20</td>
<td>170</td>
</tr>
</tbody>
</table>

24. The sign for 2/3 looks rather like an η (as a fraction = 1/8th). 26 π in σπγ redrawn.

**Comment**

In l. 27 the fraction of 15th of 3400 presents an error, as 3400:15 should be 226 2/3; the scribe has given here erroneously the same result as in l. 28 (3400:16 = 212 1/2).

II.b: the board is inscribed with a single column containing a table of fractions of ‘5025’: the part of each line containing the result of the division by various fractions features traces of the application of a sponge, before the new text was written down.

<table>
<thead>
<tr>
<th>No.</th>
<th>Sign</th>
<th>Fraction</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Εκε</td>
<td>1/2</td>
<td>5025</td>
</tr>
<tr>
<td>2</td>
<td>το λ’</td>
<td>1/2</td>
<td>2512</td>
</tr>
<tr>
<td>3</td>
<td>το γ</td>
<td>1/3</td>
<td>1675</td>
</tr>
<tr>
<td>4</td>
<td>το β</td>
<td>2/3</td>
<td>3350</td>
</tr>
<tr>
<td>5</td>
<td>το δ/</td>
<td>1/4</td>
<td>1256</td>
</tr>
<tr>
<td>6</td>
<td>το ε’</td>
<td>1/5</td>
<td>1005</td>
</tr>
<tr>
<td>7</td>
<td>το ζ’</td>
<td>1/6</td>
<td>837</td>
</tr>
<tr>
<td>8</td>
<td>το ζ’</td>
<td>1/7</td>
<td>628</td>
</tr>
<tr>
<td>9</td>
<td>το β’</td>
<td>1/9</td>
<td>502.5</td>
</tr>
<tr>
<td>10</td>
<td>το ι’</td>
<td>1/10</td>
<td>418</td>
</tr>
<tr>
<td>11</td>
<td>το ι’</td>
<td>1/12</td>
<td>335</td>
</tr>
</tbody>
</table>
5 v ex corr. 10 d redrawn 15 underneath this line is a short paragraphos extending from the left hand edge of the board to the right.

**Comment**

In the second column the writer made several mistakes, viz. in l. 8, when calculating 5025:7, the result should be slightly less than 718 \( = 7 \times 718 = 5026; \) on the other hand, 7 \( \times 628 \) 1/7 = 4397, resp. in l. 9, when calculating 5025:9, the result given as that of 5025:9 is in fact the result of 5025:10, and while skipping the result of the division 5025:9 the scribe goes on with inserting the results of the following divisions at the wrong place. Consequently, in l. 15 the result of the division 5025:20 is left open (5025:20 = 251.25 = \( \sigma \nu \alpha \delta ^{\prime} \)).

10. In this line is given the result of 5025:12 = 418 1/2 1/4; the fraction of 1/2 (\( \iota \) \( \lambda \) ) is written clumsily and actually looks like \( \kappa \) (= 1/20th).

11. The result given is that of 5025:15.

12. The result given is that of 5025:16.

13. The result given is that of 5025:18.

14. The result given is that of 5025:20 = 251.25; hence, the amount should actually have been given as \( \sigma \nu < \alpha \delta ^{\prime} > \).

III.a: uninscribed

III.b: uninscribed (outer side of the codex)

3. **A List of Greek Verbs**

Kellis object registration # D/2/44 (Room 2 of Shrine I in a pit north of the door; SCA # 2660) covers a single wooden board measuring W. 5.3 x H. 10.2 x Th. 0.6 cm. There are no holes drilled through the wood, so probably it was always meant to be used as a single item. The board contains a list of Greek verbs written by a fairly well-trained hand in a single column in the left hand upper corner of the board. There is an upper margin of ca. 0.5

cm. Underneath line 8 there is a margin of 5.5 cm. After the individual lines there is a space of 3.3-2.7 cm. The back of the board is blank.

1. πλάσσω
2. πλήσσω
3. πίπλω
4. πλέκω
5. ἐρεθίζω
6. ἄγορευω
7. ἐπιτρίω
8. φιλονικώ

*Comments*

It is obvious that in ll. 1-4 the verbs start with the letter πι. For the other lines, however, there does not seem to be any system in
the choice of the verbs (two starting with epsilon, one with alpha and one with phi).

3. \( \pi\beta\lambda\omega \) (the second pi is shaped slightly irregularly) is a by-form of \( \pi\mu\pi\lambda\mu\mu \).

7. There does not seem to be a verb \( \epsilon\pi\tau\rho\iota\omega \) in Greek; was \( \epsilon\pi\tau\rho\iota\beta>\omega \) intended?

8. There is a paragraphos drawn right from the edge of the board underneath the letters \( \phi\lambda\omega \).

At the same time as the discovery of the above mentioned wooden board a similar list of words on a papyrus fragment was found. This is Kellis object inventory \# D/2, found in Room 2 of Shrine I, in a pit north of the door (SCA \# 2659, frame \# 3, lower half, right hand side). Remarkably enough, it features many of the same verbs as written on the wooden board (cf. ll. 11-6 below with ll. 1-6 of the board). The papyrus (W. 11.4 \( \times \) H. 8.8 cm; verso blank; between the two columns of writing an irregularly sized intercolumnium of at least 5 cm; photo not available) features an untrained scribe. Was the papyrus text written by a pupil, whereas the wooden board (more durable material) served the needs of a school teacher?

Col. i

1. \( \sigma\delta\omega\mu\iota\iota \)
2. \( \sigma\rho\rho\theta\delta\mu\iota\iota \) traces
3. \( \epsilon\pi\alpha\nu\omega\rho\theta\delta\iota\) traces
4. \( \epsilon\iota\xi\epsilon\tau\alpha\zeta\omega \)
5. [traces \( \mu\iota\)]
6. [traces \( \gamma\nu\mu\sigma\iota\)]
7. [ ].[.].\( \delta\omega\mu\iota\iota \)
8. \( \epsilon\lambda\theta\sigma\rho\varsigma \)
9. \( \epsilon\lambda\theta\sigma\rho\varsigma\omega\nu \)
10. [\( \epsilon\kappa\tau\iota\rho\tau\varsigma\kappa\sigma\kappa\o\iota \)]
11. [\( \pi\lambda\iota\sigma\varsigma\iota\varsigma \)]
12. [\( \pi\lambda\iota\sigma\varsigma\iota\varsigma \)]
13. \( \pi\pi\lambda\omega \)
14. \( \pi\lambda\kappa\chi\iota\varsigma \)
15. [\( \epsilon\rho\theta\theta\iota\xi\varsigma\o\iota \)]
16. [\( \epsilon\sigma\rho\tau\rho\iota\varsigma\o\iota \)]

Edge

1. Or read \( \pi\rho\omega\mu\omega\iota\iota \)?
2. Are the first two or three letters of this entry cancelled?
MINIATURE CODICES FROM KELLIS

Col. ii (at 180 degrees angle vs. col. 1): mathematical calculations made by a pupil?

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>17</td>
<td>λθ</td>
<td>39</td>
</tr>
<tr>
<td>18</td>
<td>αζ γνβ</td>
<td>76, 3952</td>
</tr>
<tr>
<td>19</td>
<td>γ δ</td>
<td>13 1/4</td>
</tr>
<tr>
<td>20</td>
<td>φα</td>
<td>91</td>
</tr>
<tr>
<td>21</td>
<td>κη θ...</td>
<td>28, 4000+</td>
</tr>
<tr>
<td>22</td>
<td>αζ</td>
<td>77</td>
</tr>
<tr>
<td>23</td>
<td>ζζ</td>
<td>66</td>
</tr>
</tbody>
</table>

3.3 cm of blank space

24 Traces of three or four letters (perhaps offsets from the other column when the papyrus was folded with the ink of the column still wet?)

Comment

It is unclear how the numerals are to be related to each other, and the role of the paragraphos between various lines is equally unclear. In the case of ll. 17-9 it may be noted that (39 + 13 =) 52 × 76 makes indeed 3952, but within the given conditions that is only coincidence, as in such a calculation the .25 would have been neglected. In ll. 20-2, according to the same procedure, (91 + 77 =) 168 × 28 makes 4704 (= δ ψδ), but the result of this multiplication is not given on the papyrus.

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