

# 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

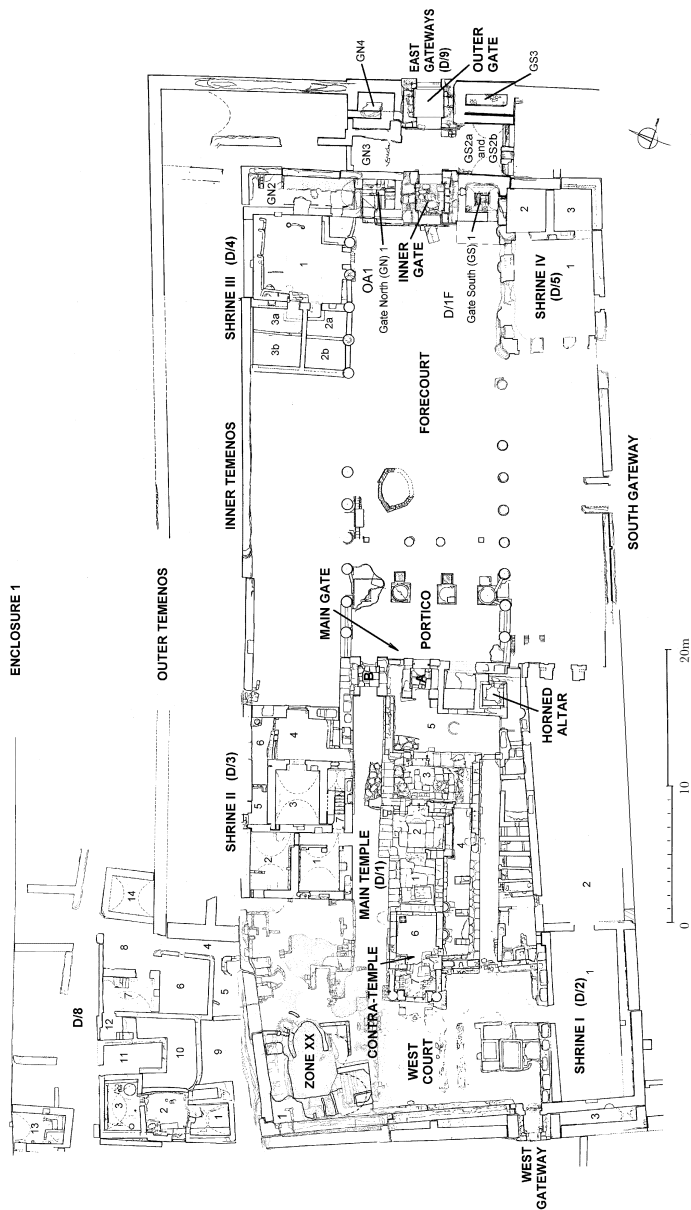
The miniature wooden codices, the texts upon which are discussed here by Klaas Worp, were discovered in 2002 during the course of excavations within the Temple of Tutu at Ismant el-Kharab, ancient Kellis, in Egypt's Dakhleh Oasis. These excavations are conducted by the writer on behalf of the Dakhleh Oasis Project.<sup>1)</sup> 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.<sup>2)</sup> It has been under investigation since 1986, and from 1991 the excavations within the Temple of Tutu have been conducted almost annually.<sup>3)</sup>

1) The excavations were funded by Monash University through grants awarded to the writer and Gillian E. Bowen.

2) Hope 2001 and 2002, 205-6. For a discussion of the latest dated documents from the site see de Jong & Worp 2001.

3) A large number of reports has been published on the excavations and some



This temple, the only one known to be dedicated to Tutu and his associated deities Neith and Tapshay,<sup>4)</sup> 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.



Plate 1. Decoration on the south side of Room 2

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.<sup>5)</sup> This sculpture had originally been gilded.

5) See Hope 1998.

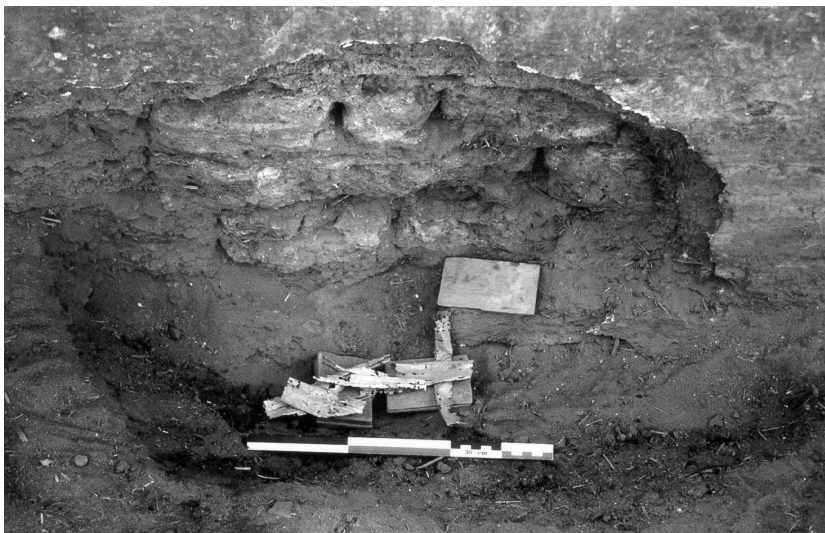


Plate 2. Wooden codices and papyrus documents found in Room 2

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

from this side of the wall. 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 graffito<sup>6)</sup> 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

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.<sup>7)</sup> 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.<sup>8)</sup> 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,<sup>9)</sup> 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.<sup>10)</sup>

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7) See Hope 2002, 188 and Pl. 10.

8) Bowen 2003, 173-4.

9) The evidence is discussed by this writer in Hope & Worp 1998, 206-7.

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<sup>11)</sup>

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.<sup>12)</sup> 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

11) I wish to thank C.A. Hope (Monash University, Melbourne) for his kind permission to publish these texts, and my colleague B.P. Muhs (Leiden) for correcting a draft version of my English text. I would also like to thank various colleagues at Leiden University, in particular I. Sluiter and F.A.J. Hoogendijk, for useful suggestions made during an oral presentation of the Homer paraphrase. Papyri will be cited according to the *Checklist of Editions of Greek, Latin, Demotic and Coptic Papyri, Ostraka and Tablets* (at <http://scriptorium.lib.duke.edu/papyrus/texts/clist.html>).

12) Cf. Kruger 2002, esp. 89 ff.: "Miniature codices". In the list of Greek and Roman wooden writing tablets kept in the British Museum as compiled by K. Painter (1966/7), there is hardly a parallel for this small format (all items listed there are substantially larger), but see no. 19 (p. 108), measuring ca. 6.7 × 6.1 cm. Unfortunately, Turner 1977 covers only papyrus and parchment codices and does not deal with the subject of codices consisting of wooden tablets; there are, however, lists of miniature papyrus codices on p. 22 ('Group 11', less than 10 cm broad) and of miniature parchment codices on pp. 29-30 ('Group XIV', less than 10 cm broad) that can be adduced for comparison with the dimensions of the codices presented in this paper.



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.).<sup>13</sup>) 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).



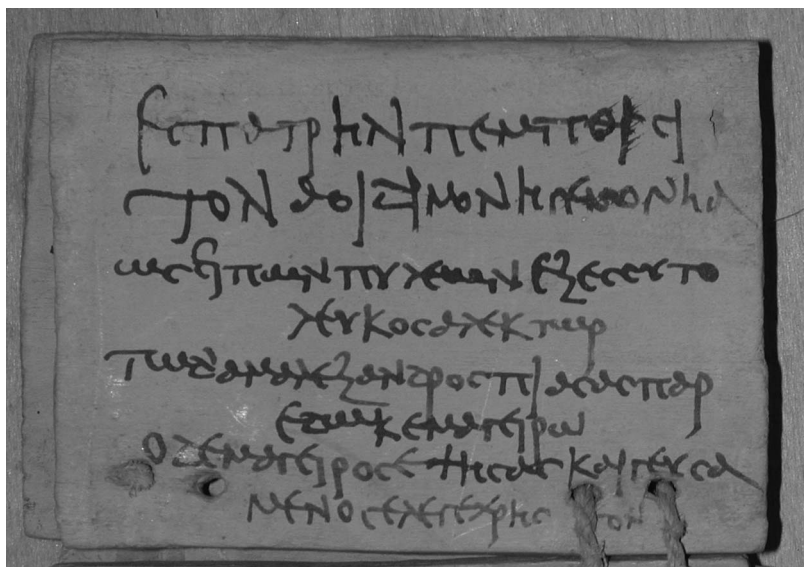


Plate 5. Hope, C.A., Worp, K.A. *Miniature Codices from Kellis*, 1: *Homer Parody*, Board II.b

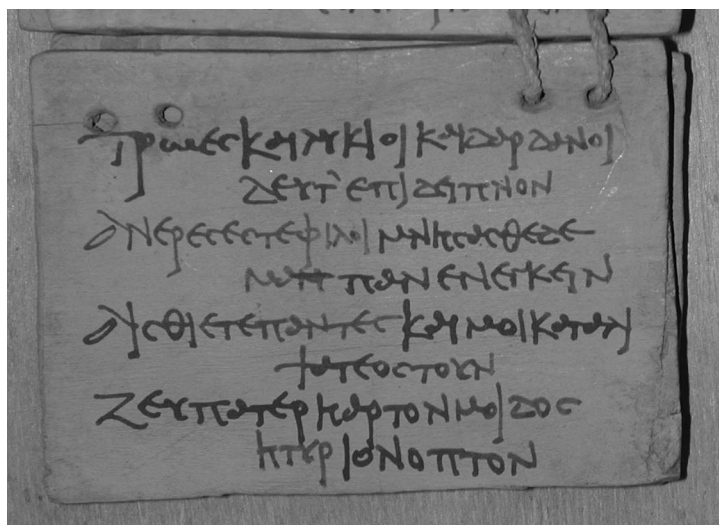


Plate 6. Hope, C.A., Worp, K.A. *Miniature Codices from Kellis*, 1: *Homer Parody*, Board III.a

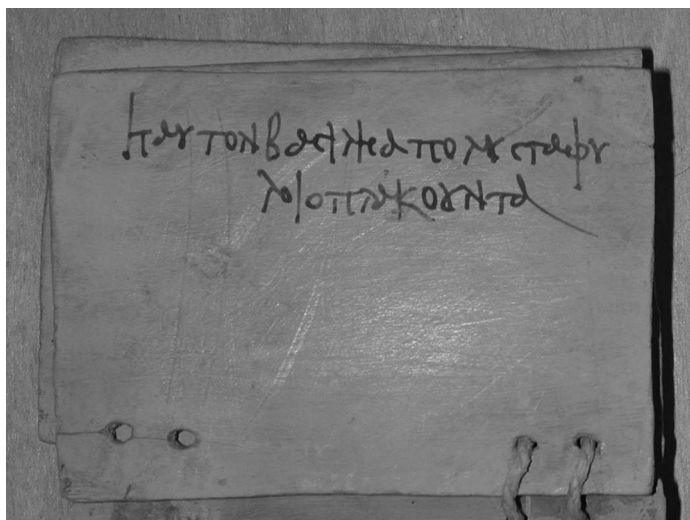


Plate 7. Hope, C.A., Worp, K.A. *Miniature Codices from Kellis*, 1: *Homer Parody*,  
Board III.b

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<sup>p</sup>. The hand suggests a decently trained scribe. It may appear that various hands are to be distinguished, as the hand of ll. 1-3 (board I.a) is leaning more to the right than that of ll. 4-7 (board II.a and the beginning of board II.b). The writing of l. 7 is definitely larger than that of ll. 8-15. The writing of ll. 8-15 appears to feature characteristics that distinguish them from ll. 1-3, resp. ll. 4-6 and l. 7. Furthermore, the author of ll. 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.<sup>14</sup>) 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 ὀκρίονεντι λίθων  
               μυλοειδέα πάμπαν  
       2   λαοφόρον θαλεροῖσι δ' ἄν-  
               έμβατον αἰζηοῖσιν  
       3   λειήνας ἐπέτασσε φιλίππ-  
               ος ἔχνεσι λαῶν·  
 II.a   4   καί μιν ὁμῶς νυξίν τε  
               καὶ ἥμασι πάντες ὁμαρτῇ  
       5   ἄτρομον ἔχνος ἔχον-  
               τες ἐπιστίβουσι πόδεσσι.  
       6   ἀλλὰ ἐπ' ἄλλας ἀνασσε  
               σὺν ἀρτέμεσιν τεκέεσσι

14) Cf. in latest instance Dickey 2003.

- II.b 7 ἐς πάτρην πεμπθίσι  
           τὸν ἀοίδιμον ἡγεμονῆα.  
 8 Ὡς εἰπὼν πυλέων ἐξέσσυτο  
           λευκὸς ἀλέκτωρ  
 9 τῷ δ' ἄμ' Ἀλέξανδρος πιάσας παρ-  
           έδωκε μαγείρῳ  
 10 ὁ δὲ μάγειρος ἐνήσας καὶ γευσά-  
           μενος ἔλεγε "Χρηστόν!  
 III.a 11 Τρῶες καὶ Λύκιοι καὶ Δάρδανοι,  
           δεῦτ' ἐπὶ δεῖπνον.  
 12 ἄνδρες ἔστε, φίλοι, μνήσασθε δὲ  
           μάμπαν ἐνεγκεῖν.  
 13 Αἰσθίετε πάντες καὶ μοι καταλί-  
           ψατε ὅστοῦν.  
 14 Ζεῦ πάτερ, ἢ ἄρτον μοι δὸς  
           ἢ τυρίον ὀπτὸν  
 III.b 15 ἢ αὐτὸν βασιλῆα πολυσταφύ-  
           λοιο πλακοῦντα."  
 VACAT (3.7 cm)

1 *l.* λίθῳ? See note *ad loc.* 2 δ' Tab. 3 The board presents spacing between the 'words' λεινν ἀσεπετας σε; -τ- in ἐπέτασσε ex corr. 4 *l.* ἀμαρτῇ 5 *l.* ἐπιστεῖβουσι 7 πεμπθίσι: first ι ex σ corr.; *l.* πεμφθεῖσι 9 δ' Tab. 10 χρησ- separated from -τον by hole 11 δευτ' Tab. 12 μάμπαν: first π ex ν corr. 13 *l.* ἐσθίετε, καταλείψατε 15 βασιλῆα: 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: ἐπέτασσε (main verb + subject) τὴν λαοφόρον (object) ἔχνεσι λαῶν, 'he spread the road for the footsteps of the soldiers/people'. The road (τὴν λαοφόρον) is further qualified as πάρος μυλοειδέα ἀμπαν θαλεροῖσι δ' ἀνέμβατον αἰζηοῖσιν, i.e. 'looking aforetime completely like a millstone, and inaccessible for the stout and sturdy people', while the subject of the main verb, ἐπέτασσε, is qualified by the word φιλίππιος = '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 ὀκριόεντι λίθων, in which the gen.pl.

λίθων should be changed most probably into λίθῳ, to be connected with the preceding adjective ὀκρίοντι; cf. the same phrasing λίθῳ ὀκρίοντι in Hom. *Il.* 8.327. This dative most probably goes with (τὴν λαοφόρον) πάρος μυλοειδέα, ‘(the road) before millstone-like through rocky stone’, rather than with λειήνας, ‘levelling (the road) with a rocky stone’.

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

The word combination θαλεροῖσι . . . αἰζηοῖσιν occurs in Hom. *Il.* 3.26, 11.414 (both nom.pl.) and 16.282 (acc.pl.). The adjective ἀνέμβατος 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 δέ linking the expression τὴν . . . μυλοειδέα . . . λαοφόρον and the adjective ἀνέμβατον 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. νύκτες/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 ἵχνος.

**6-7.** The interpretation of the verses

ἀλλὰ ἐπ’ ἄλλας ἄνασσε σὺν ἀρτέμεσιν τεκέεσσι  
ἐς πάτρην πεμφθεῖσι τὸν αἰοίδιμον ἡγεμονῆα

is problematical. The verb ἀνάσσω, ‘to rule’, normally governs the genitive or the dative. Therefore, it is not possible to accept τὸν αἰοίδιμον ἡγεμονῆα as the regular object of the 2.sg.imperat. ἄνασσε. This should be taken rather in an absolute sense as ‘rule!’ or ‘command!’. Furthermore, there is the question of the meaning of ἐπ’

ἄλλας, lacking a substantive. I speculated about assuming a writing error *επαλλας* for *ἐπαλλάξ*, ‘alternately’; that however, would create a metrical irregularity.

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 *ὁδοὺς* or *λαοφόρους* after *ἐπ’ ἄλλας*; and if that were done, one might perhaps take *ἐς πάτρην* as a kind of further explanation of *ἐπ’ ἄλλας ὁδοὺς* / *λαοφόρους* and take *τὸν αἰοίδιμον ἡγεμονῆα* as a further exegesis. In last resort, however, such an approach seems also problematical as it does not provide a completely coherent interpretation. If one changes *πάτρην* into *πάτρης*, combining this with *ἡγεμονῆα*, and if one drops the article *τὸν* before *αἰοίδιμον ἡγεμονῆα* (i.e., *σὺν . . . τεκέεσσι ἐς πάτρην πεμφθεῖσι τὸν αἰοίδιμον ἡγεμονῆα* should be understood as *σὺν . . . τεκέεσσι πεμφθεῖσι ἐς αἰοίδιμον ἡγεμονῆα πάτρης*), the syntax becomes far more clear and, moreover, the metrical irregularity in the fourth metre would disappear.<sup>15</sup> 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*.

For the word combination *σὺν ἀρτέμεσιν τεκέεσσι*, ‘together with your children who are safe and sound’, cf. Hom. *Od.* 13.43 *σὺν ἀρτεμέεσσι φίλοισιν*; A.R. 1.415 *σὺν ἀρτεμέεσσιν ἑταίροις*.

In itself, the adjective *αἰοίδιμος* is a Homeric *hapax*, occurring only in Hom. *Il.* 6.358. The *TLG* cites the word combination *αἰοίδιμον ἡγεμονῆα* only from Theodorus Metochites, *Carmina* 20.232 and the *Anthologia Graeca, Appendix: Epigrammata dedicatoria* 338, as a qualification of a certain Sabinianus.<sup>16</sup>

**8.** Cf. the well-known line in Hom. *Il.* 6.1: *ὥς εἰπὼν πυλέων ἐξέσσυτο φαίδιμος Ἴκτωρ*; of course, the metrical value of *λευκὸς ἀλέκτωρ* is equivalent to that of *φαίδιμος Ἴκτωρ*.

15) The scansion would become – – | – – | – ∪ ∪ | – ∪ ∪ | – ∪ ∪ | – x.

16) The acc.sg. *ἡγεμονῆα* is found with other late epic poets, e.g. in Oppian, *Cynegetica* 1.224 (*ἀγακλυτόν*), 2.48 (*μέγαν*); Nonnus, *Dionysiaca* 13.181 (*ὁμόπτολιν*), 17.397 (*προώνυμον*), 26.217 (*ὁμόστολον*), 26.284, 27.303 (*Βοιώτιον*); Musaeus, *Hero & Leander* 218 (*φαιεσφόρον*).



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 'ἄνασσε!' in l. 6 and the words ὥς εἰπὼν 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 χρῶ in cooking recipees on papyrus.<sup>17)</sup>

**11.** For the first part of the hexameter, Τρῶες 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 δεῦτ' ἐπὶ 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: ἄνδρες ἔστε, φίλοι, μνήσασθε δὲ θούριδος ἀλκῆς. 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 'III<sup>p</sup>', i.e. *P.Med.* II 74 and *P.Wisc.* I 30.8.

**13.** For the form καταλίψατε (*l.* καταλείψατε), cf. Gignac 1981, 291-2.

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

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

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, τυρῶ ὀπτῶ, in a receipt for μῦμα; cf. also *ibid.* 2.70.3 and 9.10.9 Kaibel: ὀπτᾶν τυροῦ . . . τόμον.

**15.** Should one read ἢ αὖ τὸν or ἢ 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 ἢ, cf. *LSJ* s.v. αὖ, IV).

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

- (1) a town in a region (Hom. *Il.* 2.507 [Ἄρνη in Boiotia] and 537 [Ἰστίαια on Euboea], 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 (*h.Hom.* 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, *Lithica Kerygmata* 5.4);
- (5) people (Heliodorus Trag., *Ἰαλικὰ Θάύματα* = 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 Πολυσταφύλοιο as the (fictitious) name of a country, e.g. ‘Grapeland’, that was ruled by a king (cf. βασιλῆα), 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) πολυσταφύλοιο as an adjective, (2) πολυσταφύλοιο 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 *πλακουντᾶ* should be connected with the accusative *βασιλῆα* = 'king', whether the first noun can be taken as meaning 'Cakeland' and whether *πολυσταφύλοιο πλακουντᾶ* 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 *πλακοῦντα* may also be taken as the acc.sg. of *πλακοῦς* = 'flat cake', standing within the context at one level with *ἄρτον* = 'bread' and *τυρίον* = 'cheese' as the object of *δός*, 'give'.<sup>18)</sup> In fact, this seems a most attractive approach. There is, however, the question whether the cake should be qualified as the *βασιλεὺς Πολυσταφύλοιο* = '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.<sup>19)</sup> In the latter case, it could have been labelled *αὐτὸν βασιλῆα*, 'the king itself', because the cake served as an after-dinner, the supreme moment of the whole meal, cf. Athenaeus, *Deipnosophistae* 3.127.<sup>20)</sup> The only conceivable objections against some elements of this interpretation are that (a) the adjective *πολυστάφυλος* is not encountered as a name, and that (b) this interpretation requires a certain amount of associative thinking.<sup>21)</sup>

### *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. *Οἰνοῦττα*: ἡ ἐν οἴνῳ πεφυρμένη μάζα· οἱ δὲ εἶδος πλακοῦντος, μετ' οἴνου καὶ μέλιτος γινόμενον.

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 *Πλακεντία* for the Italian town of Piacenza, famous for its honey cakes, cf. Joh. Lydus, *De Mensibus* 4.4.43-5; I owe this idea to my colleague J.-L. Fournet (Strasbourg), who brought it up (most hesitantly!) during an oral conversation.

- 1 Τὴν πάρος | ὀκριό | εντι λί | θφ μυλο | ειδέα | πάμπαν  
 - U U | - U U | - U U | - U U | - U U | - x
- 2 λαοφό | ρον θαλε | ροῖσι δ' ἄν | ἐμβατον | αἰζη | οἷσιν  
 - U U | - U U | - U U | - U U | - - | - x
- 3 λειή | νας ἐπέ | τασσε φι | λίπιος | ἵχνεσι | λαῶν·  
 - - | - U U | - U U | - U U | - U U | - x
- 4 καί μιν ὁ | μῶς νυξ | ἰν τε καὶ | ἥμασι | πάντες ἄμ | αρτῇ  
 - U U | - - | - U U | - U U | - U U | - x
- 5 ἄτρομον | ἵχνος ἔ | χοντες ἐ | πιστεῖ | βουσι πό | δεσσι.  
 - U U | - U U | - U U | - - | - U U | - x
- 6 ἀλλὰ ἐπ' | ἄλλας ἄ | νασσε σὺν | ἀρτέμε | σιν τεκέ | εσσι  
 - U U | - U U | - U U | - U U | - U U | - x
- 7 ἐς πᾶ | τρην πεμφ | θεῖσι τὸν | ἀοίδιμον | ἡγεμο | νῆα.  
 - - | - - | - U U | - U U | - U U | - x
- 8 Ὡς εἰ | πὼν πυλέ | ὦν ἐξ | ἐσσυτο | λευκὸς ἁ | λέκτωρ  
 - - | - U U | - - | - U U | - U U | - x
- 9 τῷδ' ἅμ' Ἀ | λέξαν | δρος πιά | σας παρε | δώκε μα | γείρω.  
 - U U | - - | - U U | - U U | - U U | - x
- 10 Ὁ δὲ μά | γειρος ἐ | ψήσας | καὶ γευ | σάμενος | ἔλεγε: |  
 Χρηστόν!  
 U U U | - U - | - - | - - | U U U | U U - | - x
- 11 Τρῶες | καὶ Λύκι | οι καὶ | Δάρδανοι | δεῦτ' ἐπὶ | δεῖπνον!  
 - - | - U U | - - | - U - | - U U | - x
- 12 ἀνέρες | ἔστε, φί | λοι, μνή | σασθε δὲ | μάμπαν ἐ | νεγκεῖν·  
 - U U | - U U | - - | - U U | - U U | - x
- 13 ἐσθίε | τε πᾶν | τες καὶ | μοι κατα | λείψατε | ὅστοῦν.  
 - U U | U - | - - | - U U | - U U | - x
- 14 Ζεῦ πάτερ, | ἡ ἄρ | τον μοι | δὸς ἡ | τυρίον | ὅπτον  
 - U U | - - | - - | U - | - U U | - x
- 15 ἡ αὖ | τὸν βασι | λῆα πο | λυσταφύ | λοιο πλα | κοῦντα!  
 - - | - U U | - U U | - U U | - U U | - x

### Comment

7. ἀοίδιμον with synizese?  
 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).<sup>22)</sup>

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,<sup>23)</sup> who, after a discussion of parodists like Hegemon, Archestratus, Euboeus of Paros, Hermogenes, two Philippi and a certain Cleonicus,<sup>24)</sup> 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, σ 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’.

α ο ε	λ α χ φ
λ φ α λ	λ ε τ η
φ β κ ε	φ ω χ γ
υ δ η	υ ζ χ ζ ου
δ χ φ η λ	δ ω ο ε
ε χ α ι ε	ε β τ
ς χ ι β λ	ς χ η ο υ
γ χ ι β λ	γ χ η α λ
γ τ η ο γ	κ δ θ χ ω α λ
θ χ ο ε	ι χ ρ η
ι χ α λ	ι β λ η η λ
ι β φ α λ	ι ε τ ζ ου
ι ε γ ε	ι ς η η λ
ι ς τ ο θ υ	ι η χ η λ γ η
ι η τ α λ	κ φ ο ε
κ τ γ λ	

Plate 8. Hope, C.A., Worp, K.A. *Miniature Codices from Kellis*, 2: *Fraction Tables*, Board I.b

χ ρ η	φ γ
λ η α	λ χ τ
φ α ο γ	φ χ ρ η γ
υ γ η υ	υ β α ζ ου
δ ρ η ζ	δ ω η
ε ρ κ ε λ	ε χ τ
ς ρ α υ	ς φ ζ ου
γ ο η λ	γ γ κ ε
θ ζ α υ	θ τ ο ζ γ θ
ι ζ β ο ι	ι τ η
ι β η β ε	ι β α τ γ γ
ι ε α λ γ α γ	ι ε α ι β λ
ι ς λ θ	ι ς α ι β λ
ι η α λ φ ι η ι η	ρ τ η λ γ η
κ α λ ι ε	κ ρ ο

Plate 9. Hope, C.A., Worp, K.A. *Miniature Codices from Kellis*, 2: *Fraction Tables*, Board II.a

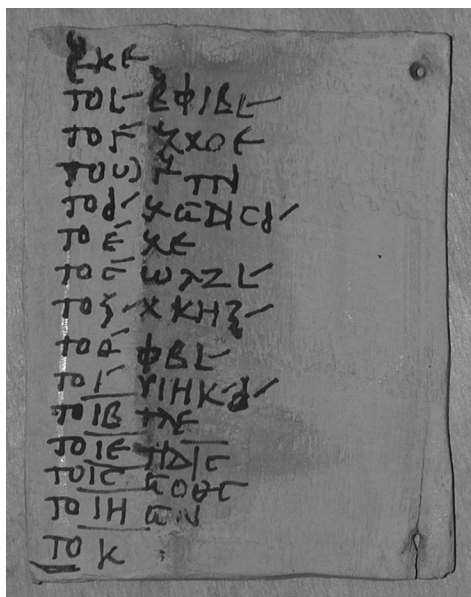


Plate 10. Hope, C.A., Worp, K.A. *Miniature Codices from Kellis, 2: Fraction Tables*, Board II.b

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 = *ΖΡΕ* 6 (1970), 142-3 (T.Oxford)
- 2) LDAB 2530 = *Pap.Lugd.Bat.* XXV 15 (T.Leiden)
- 3) LDAB 2642 = *P.Lit.Lond.* 253 + *ΖΡΕ* 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 + *ŽPE* 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 = *ŽPE* 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.Pap.* II.1 131 (T.Louvre MND 551.A,C)
- 29) *LDAB* 6534 = *Enchoria* 14 (1986), 2 (T.Würzb. 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.Bad.* IV 64 (T.Heidelberg)

- 35) *LDAB* 6747 = *MPER* XV 171 (T.Vindob.Barbara)  
 36) *LDAB* 8888 = *P.Harrauer* 3 (T.Wien 7)  
 37) *LDAB* 10582 = *Enchoria* 12 (1984), 1 (T.Würzb. K 1024)  
 38) *LDAB* 10583 = *SB* XX 15007 (T.Trier 1988.21)  
 39) *LDAB* 10584 = *CRIPPEL* 2 (1974), 270-1 (T.Louvre MND 551.D;  
 cf. *ŽPE* 56 (1984), 64-5)  
 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.).

For the subject of mathematics in the papyri see in particular Fowler 1999 [1987]; 1988; 1995. To the latter article one may add now the addenda given by W.M. Liesker and P.J. Sijpesteijn in *ŽPE* 113 (1996), 185-6 and the arithmetical texts appearing in *ŽPE* 122 (1998), 135-8; 135 (2001), 169-71 and 172-4; *Tyche* 17 (2002), 99-101; *Archiv* 40 (1994), 121-6; *PapCongr. XX* (Copenhagen 1994), 317-21; *BIFAO* 96 (1996), 171-6; *RCCM* 40 (1997), 95-107; *Mus.Helv.* 56 (1999), 26-32; *FS J. Blomquist* (Lund 2003), 54-70.

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':

Col. i

1		ξ οε		6075
2	L'	γ λζ L'	1/2	3037 1/2
3	γ	β κε	1/3	2025
4	β)	δ ν	2/3	4050
5	d/	α φιη L'd'	1/4	1518 1/2 1/4
6	ε	α σιε	1/5	1215
7	ζ	α ιβ L'	1/6	1012 1/2
8	η \	ψνθ γ κδ	1/8	759 1/3 1/24
9	θ	χοε	1/9	675
10	ι	χζ L'	1/10	607 1/2
11	ιβ	φς d'	1/12	506 1/4

12	$\overline{\iota\epsilon}$	$\upsilon\epsilon$	1/15	405
13	$\overline{\iota\varsigma}$	$\tau\omicron\theta\ \beta)\ \overline{\mu\eta}$	1/16	379 2/3 1/48
14	$\overline{\iota\eta}$	$\tau\lambda\zeta\ L'$	1/18	337 1/2
15	$\overline{\kappa}$	$\tau\gamma\ L'd'$	1/20	303 1/2 1/4
Col. ii				
16		$\mu\ \alpha\ \acute{\alpha}\phi$		11500
17	$L'$	$\acute{\epsilon}\ \psi\nu$	1/2	5750
18	$\acute{\gamma}$	$\acute{\gamma}\ \omega\lambda\gamma\ \acute{\gamma}$	1/3	3833 1/3
19	$\beta)$	$\zeta\ \chi\xi\varsigma\ \beta)$	2/3	7666 2/3
20	$\delta\ /$	$\beta\ \omega\omicron\epsilon$	1/4	2875
21	$\overline{\epsilon}$	$\beta\ \tau$	1/5	2300
22	$\overline{\varsigma}$	$\acute{\alpha}\ \gamma\ \iota\varsigma\ \beta)$	1/6	1916 2/3
23	$\eta\ \backslash$	$\acute{\alpha}\ \upsilon\lambda\zeta\ L'$	1/8	1437 1/2
24	$\overline{\theta}$	$\acute{\alpha}\ \sigma\omicron\zeta\ L'd'\ \lambda\overline{\varsigma}$	1/9	1237 1/2 1/4 1/36
25	$\overline{\iota}$	$\acute{\alpha}\ \rho\nu$	1/10	1150
26	$\overline{\iota\beta}$	$\gamma\alpha\nu\eta\ \varsigma$	1/12	958 1/6
27	$\overline{\iota\epsilon}$	$\psi\xi\varsigma\ \beta)$	1/15	766 2/3
28	$\overline{\iota\varsigma}$	$\psi\iota\eta\ L'd'$	1/16	718 1/2 1/4
29	$\overline{\iota\eta}$	$\chi\lambda\eta\ L'\ \gamma\ \overline{\iota\eta}$	1/18	638 1/2 1/3 1/18
30	$\overline{\kappa}$	$\phi\omicron\epsilon$	1/20	575

21:  $\beta'$  redrawn 25: the sign  $\acute{\alpha}$  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

1		$\chi\kappa\eta$		628
2	$L'$	$\tau\iota\delta$	1/2	314
3	$\acute{\gamma}$	$\sigma\theta\ \acute{\gamma}$	1/3	209 1/3
4	$\beta)$	$\upsilon\iota\eta\ \beta)$	2/3	418 2/3
5	$d'$	$\rho\nu\zeta$	1/4	157
6	$\epsilon'$	$\rho\kappa\epsilon\ L'\iota'$	1/5	125 1/2 1/10
7	$\acute{\varsigma}$	$\rho\delta\ \beta)$	1/6	104 2/3
8	$\eta\ \backslash$	$\sigma\eta\ L'$	1/8	78 1/2
9	$\overline{\theta}$	$\xi\theta\ \beta)\ \theta'$	1/9	69 2/3 1/9
10	$\overline{\iota}$	$\xi\beta\ \beta)\ \overline{\iota}\ \overline{\lambda}$	1/10	62 2/3 1/10 1/30
11	$\overline{\iota\beta}$	$\nu\beta\ \overline{\gamma}$	1/12	52 1/3
12	$\overline{\iota\epsilon}$	$\mu\alpha\ L'\ \overline{\gamma}\ \lambda'$	1/15	41 1/2 1/3 1/30
13	$\overline{\iota\varsigma}$	$\lambda\theta\ d'$	1/16	39 1/4
14	$\overline{\iota\eta}$	$\lambda\delta\ L'\ \overline{\gamma}\ \overline{\iota\eta}$	1/18	34 1/2 1/3 1/18
15	$\overline{\kappa}$	$\lambda\alpha\ \overline{\gamma}\ \overline{\iota\epsilon}$	1/20	31 1/3 1/15

Col. ii

16		$\Gamma^{\circ}\upsilon$		3400
17	L'	$\acute{\alpha} \psi$	1/2	1700
18	$\acute{\gamma}$	$\acute{\alpha} \rho\lambda\gamma \acute{\gamma}$	1/3	1133 1/3
19	$\beta)$	$\beta' \sigma\xi\varsigma \beta)$	2/3	2266 2/3
20	$\delta'$	$\omega\nu$	1/4	850
21	$\bar{\varepsilon}$	$\chi\pi$	1/5	680
22	$\bar{\varsigma}$	$\phi\xi\varsigma \beta)$	1/6	566 2/3
23	$\eta \setminus$	$\upsilon\kappa\varepsilon$	1/8	425
24	$\bar{\theta}$	$\tau\omicron\zeta \beta) \bar{\theta}$	1/9	377 2/3 1/9
25	$\bar{\iota}$	$\tau\mu$	1/10	340
26	$\iota\beta$	$\sigma\pi\gamma \acute{\gamma}$	1/12	283 1/3
27	$\bar{\iota}\varepsilon$	$\sigma\iota\beta L'$	1/15	212 1/2 (sic!)
28	$\bar{\iota}\varsigma$	$\sigma\iota\beta L'$	1/16	212 1/2
29	$\bar{\iota}\eta$	$\rho\pi\eta L' \overline{\gamma \iota\eta}$	1/18	188 1/2 1/3 1/18
30	$\bar{\kappa}$	$\rho\omicron$	1/20	170

24 The sign for 2/3 looks rather like an  $\eta$  (as a fraction = 1/8th). 26  $\pi$  in  $\sigma\pi\gamma$  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.

1		$\acute{\epsilon}\kappa\varepsilon$		5025
2	$\tau\omicron L'$	$\beta' \phi\iota\beta L'$	1/2	2512 1/2
3	$\tau\omicron \acute{\gamma}$	$\acute{\alpha} \chi\omicron\varepsilon$	1/3	1675
4	$\tau\omicron \beta)$	$\acute{\gamma} \tau\nu$	2/3	3350
5	$\tau\omicron d/$	$\acute{\alpha} \sigma\nu\varsigma d/$	1/4	1256 1/4
6	$\tau\omicron \varepsilon'$	$\acute{\alpha} \varepsilon$	1/5	1005
7	$\tau\omicron \varsigma'$	$\omega\lambda\zeta L'$	1/6	837 1/2
8	$\tau\omicron \zeta'$	$\chi\kappa\eta \zeta'$	1/7	628 1/7
9	$\tau\omicron \theta'$	$\phi\beta L'$	1/9	502.5
10	$\tau\omicron \iota'$	$\upsilon\iota\eta \iota' d'$	1/10	418 1/2 1/4
11	$\tau\omicron \iota\beta$	$\tau\lambda\varepsilon$	1/12	335

12	$\tau\acute{o} \overline{\iota\epsilon}$	$\tau\iota\delta \overline{\iota\zeta}$	1/15	314 1/16
13	$\tau\acute{o} \overline{\iota\varsigma}$	$\sigma\theta \varsigma$	1/16	279 1/6
14	$\tau\acute{o} \overline{\iota\eta}$	$\sigma\nu$	1/18	250
15	$\tau\acute{o} \overline{\kappa}$	vacat	1/20	

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 [=  $\psi\eta$ ] ( $7 \times 718 = 5026$ ; on the other hand,  $7 \times 628 \frac{1}{7} = 4397$ ), 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 =  $251.25 = \sigma\nu\alpha \text{ d}'$ ).

**10.** In this line is given the result of 5025:12 =  $418 \frac{1}{2} \frac{1}{4}$ ; the fraction of  $\frac{1}{2}$  ( $\overline{\text{L}}$ ) is written clumsily and actually looks like  $\text{K}'$  (=  $\frac{1}{20\text{th}}$ ).

**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  $\sigma\nu <\alpha \text{ d}'>$ .

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

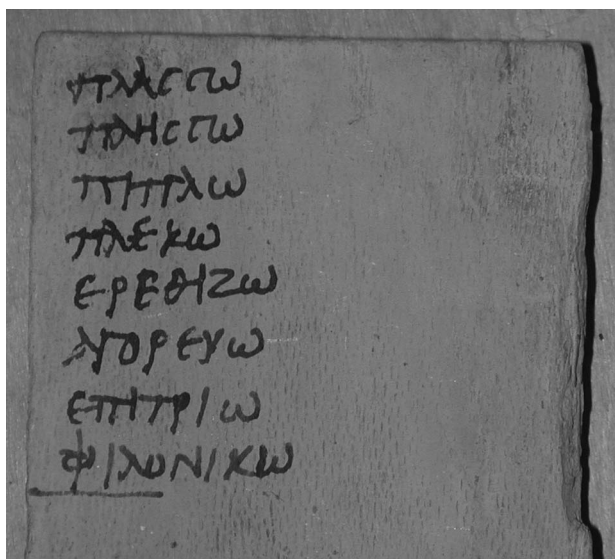


Plate 11. Hope, C.A., Worp, K.A. *Miniature Codices from Kellis, 3: A List of Greek Verbs*

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 | πλόσσω   |
| 2 | πλήσσω   |
| 3 | πίπλω    |
| 4 | πλέκω    |
| 5 | ἐρεθίζω  |
| 6 | ἀγορεύω  |
| 7 | ἐπιτρίω  |
| 8 | φιλονικῶ |
- 

### *Comments*

It is obvious that in ll. 1-4 the verbs start with the letter pi. 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.** πίπω (the second pi is shaped slightly irregularly) is a by-form of πίμπλημι.

**7.** There does not seem to be a verb ἐπιτρίω in Greek; was ἐπιτρί<β>ω intended?

**8.** There is a paragraphos drawn right from the edge of the board underneath the letters φιλο.

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 × H. 8.8 cm; verso blank; between the two columns of writing an irregularly sized inter-columnium 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	]ποῦμαι	
2	]πορθοῦμαι	traces
3	ε]πανορθῶ	traces
4	ε]ξετάζω	
5	]traces μ[	
6	]traces γομαι	
7	]..δομαι	
8	ε]λθησα	
9	]ελθη..ον	
10	]ἐκτιτρ[ώσκω	
11	]πλάσ[σω]	
12	]πλήσσω	
13	]πίπω	
14	]πλέκω	
15	]ερεθ[ίζω]	
16	]αγορεύω	
	Edge	

1. Or read ]ππουμαι? 9 Are the first two or three letters of this entry cancelled?

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

17	] $\lambda\theta$	39	
18	] $\overline{o\varsigma} \dot{\gamma}\dot{\alpha}\nu\beta$	76,	3952
19	] $\iota\gamma \dot{\delta}$	13 1/4	
20	] $\overline{\varphi\alpha}$	91	
21	] $\kappa\eta \dot{\delta} \dots$	28,	4000+
22	] $o\zeta$	77	
23	] $\overline{\xi\varsigma}$	66	
	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?)		
	Edge		

### 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  $(39 + 13 =) 52 \times 76$  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,  $(91 + 77 =) 168 \times 28$  makes 4704  $(= \dot{\delta} \psi \delta)$ , but the result of this multiplication is not given on the papyrus.

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