

## HT 94

HT 94 is a “page shaped” clay tablet written in the Linear A script and found in the Hagia Triada archive in the southern part of central Crete, near Phaistos. It is written on both sides of the tablet and consists of not less than six lists under separate heading each. Four lists on obverse consist of ideograms and phonetic signs used as ideograms followed by numerals and signs for fractions, and two lists on reverse consist of words written phonetically all followed by numeral “one”. On the other hand, the first list on obverse and both lists on reverse are lists of men represented by their collective designations on obverse and by their names on reverse, but three remaining lists on obverse are lists of agricultural commodities. The first list on obverse and the first list on reverse are totalled being followed by the Minoan word *ku-ro* (“total”) and a numeral. The overall structure of this text is shown in the table 1 where headings appear in the upper register, the lists in the middle register, and the totals in the lower register<sup>1</sup>.

<i>ka-pa</i>	<i>sa-ra</i> <sub>2</sub>	*318-*306 11 [ ] 11		<i>ki-ro</i>	*86
VIR 62	*303 5	*303 DD	*303 J	<i>tu-ma</i> 1	<i>ra-[ri]-de-me-te</i> 1
*86 20	NI 3H	NI DD	NI D	<i>pa-ta-ne</i> 1	*21f- <i>tu-[ne]</i> 1
TI+A 7	[VIN] 2			<i>de-di</i> 1	
VIR+*313b 18				<i>ke-ki-ru</i> 1	
TA 4				<i>sa-ru</i> 1	
<i>ku-ro</i> 110				<i>ku-ro</i> 5	

TABLE 1 (HT 94)

Since various lists of this text are connected with other Linear A tablets or their parts, I already dealt elsewhere with some of them separately<sup>2</sup>. The present paper offers an overall interpretation of this remarkable tablet.

Let us begin with the headings. The first heading *ka-pa* is a Cretan place-name, since this word is attested in the Linear B archive from Knossos in this form (E 71) and as an ethnic *ka-pa-jo* (B 5752) in the context parallel to several other Cretan toponyms<sup>3</sup>. However, the functioning of this word in two scripts is

<sup>1</sup> Lists 3 and 4 are shown according to *GORILA* 5, p. 73 (*corrigenda*).

<sup>2</sup> A. Uchitel, «Records of Conscription, Taxation and Monthly Rations in Linear A Archives», *Minos* 29-30, 1994-95, pp. 80-82, 84-85; «Local Differences in Arrangements of Ration Lists on Minoan Crete», *Archives and Archival Traditions. Concepts of Record-Keeping in the Ancient World* (ed. M. Brosius), Oxford 2003, p. 143, 145-146, 149-150.

<sup>3</sup> Especially B 5752, which belongs to a set of nine texts (B 808, 814, 815, 816, 985, 5752, 7035, 7043, 8006), all of them lists of men designated *po-ku-ta* (in full writing or abbreviated as *po*) conscripted from various places appearing as ethnic: *da-wi-jo*, *e-ki-si-jo*, *do-ti-jo*. See J. K. McArthur, *Place Names in the Knossos Tablets (Minos suppl. 9)*, Salamanca 1993.

very different. Linear B *ka-pa* is a very obscure place-name, whereas the Linear A *ka-pa* seems to be one of the most important places in the Minoan principality of Phaistos –Hagia Triada (HT 6, 8, 94a, 102, 105, 140). Especially interesting its appearance on three tablets: HT 6, 102, and 120 where *ka-pa* is consistently opposed to *da-qe-ra* in the headings. The structure of these texts is shown on table 2. On HT 6 the numerals refer to figs (*NI*), and on HT 102 and 120 they refer to grain (*GRA*). Both commodities are recorded against phonetically written words, which probably serve as collective designations of groups of people. At least one of these lists (HT 120) consists of place-names, since the city of Phaistos (*pa-i-to*) is found there, and another word (*da-me*) can be also identified as a place-name.<sup>4</sup>

HT 6		HT 102	HT 120
<i>ka-pa</i>	<i>da-qe-ra</i>	<i>ka-pa</i>	<i>da-qe-ra</i>
<i>da-ta-ro</i> TE NI 15	<i>qe-pi-ta</i> 22JE	<i>sa-ra</i> <sub>2</sub> GRA 976	<i>da-me</i> GRA+L <sup>2</sup> K 74
<i>pi-ta-ja</i> 24	NI 15J	*56- <i>ni</i> GRA+PA 33[	GRA+PA 62JA
JA+RU DD	<i>wa-du-ni-mi</i> 3H	VIR GRA+PA 33	<i>da-u</i> -*49 I GRA+PA 20
<i>ma</i> -*321 10	<i>ra-ti-se</i> 1	<i>di-ri-na</i> 10	<i>ki-re-ta-na</i> GRA+B 60
<i>o-ra</i> <sub>2</sub> - <i>di-ne</i> 2	<i>ma-ri</i> -[ <i>re</i> ]- <i>i</i> 3	<i>ma</i> -*78 3	GRA+PA 48
<i>ka-pa-qe</i> 5JE	<i>du-da-ma</i> 66	WI 10	<i>pa-i-to</i> 3D
	<i>da-ki</i> 3E	<i>i-ka</i> 5	
	<i>sa-ma</i> 35		
	*56- <i>ni-na</i> 17J		
		<i>ku-ro</i> 1060[+10]	

TABLE 2 (*ka-pa* and *da-qe-ra*)

Therefore, it can be tentatively assumed that this pair of headings (*ka-pa* and *da-qe-ra*) represents some very general rubrics of classification, something similar to the “hither” and “farther” provinces in the Mycenaean Pylos. Following the Anatolian hypothesis of M. Finkelberg<sup>5</sup> *ka-pa* can be compared with the common Anatolian *ha-pa*- “river”, and *da-qe-ra* –with the H. Luwian *taskwira/i*- “earth”, standing for two parts of the local Minoan principality called respectively “river-(side)”<sup>6</sup> and “(dry)-earth”. At the present level of

<sup>4</sup> See A. Uchitel and M. Finkelberg, «Some Possible Identifications in the Headings of the Linear A Archives», *Studi micenei ed egeo-anatolici* 36, 1995, pp. 30-31. G. M. Facchetti proposed to identify Minoan toponyms on a basis of a different criteria, namely the fixed word-order (in «Comparable Name-Lists in Linear A», *Kadmos* 35, 1996, pp. 100-104). However, this rule is valid for Mycenaean Pylos only, but it is enough to compare KN E 749 and Og 833 to realise that no fixed order of toponyms existed on Mycenaean Crete. The Linear B Theban Fq series also consist of words written in fixed order, but they are certainly not place-names. See V. L. Aravantinos, L. Godart, A. Sacconi, *Thèbes. Fouilles de la Cadmée*, vol. I, *Les tablettes en Linéaire B de la Odos Pelopidou (édition et commentaire)*, Pisa 2001.

<sup>5</sup> M. Finkelberg, «Minoan Inscriptions on Libation Vessels», *Minos* 25-26, 1990-91, pp. 43-85.

<sup>6</sup> For a ‘river land’ in Hieroglyphic Luwian see A. Morpurgo Davies and J. D. Hawkins, «The Late Hieroglyphic Luwian Corpus: Some New Lexical Recognitions», *Hethitica* 8 (*Acta Anatolica E. Laroche oblata*, ed. R. Lebrun), 1987, pp. 270-272.

understanding of the Minoan language, however, this is a mere speculation.

The second heading *sa-ra<sub>2</sub>* is of course one of the most common headings at Hagia Triada (HT 11b, 18, 28a,b, 30, 32, 33, 34, 90, 94a, 99a, 100, 101, 105, 114a, 121, 125a, 130). Combined as a subheading with a verbal form *a-du* on HT 99a it appears in the same position as a syllabic sign *TE* on HT 92 and 133, standing probably for some collective designation of personnel.<sup>7</sup> It is related to *ka-pa* in a complicated way. On the one hand *sa-ra<sub>2</sub>* is found under the heading *ka-pa* on HT 102 where it is recorded against enormous quantity of 976 large measures of grain (see TABLE 2), on the other hand, *sa-ra<sub>2</sub>* is opposed to *ka-pa* on TH 94a and HT 105. However, as we have seen, men are listed under *ka-pa*, and agricultural commodities are listed under *sa-ra<sub>2</sub>* on TH 94a (see TABLE 1), but two nearly equal groups of men appear under both these headings on HT 105:

HT 105	<i>ka-pa</i>	[ ]	VIR 234
	<i>sa-ra<sub>2</sub></i>		VIR 235

If Phaistos was associated with *da-qe-ra* and *sa-ra<sub>2</sub>* with *ka-pa*, it is possible that *sa-ra<sub>2</sub>* stands for Hagia Triada itself being an ethnic derived from the common Anatolian adverb *sa-ra/i* – “up” referring to the personnel under direct control of the central palatial administration.

The third heading is a combination of two ideograms \*318 and \*306 followed by a numeral 11. \*318 is a picture of a table-like object. \*306 is a very schematic picture of a human being and it is attested ten times at Hagia Triada (HT 4, 9a, b, 94a, 115b.3.4, 119, 122a, b, Wc 3017), ten times at Khania (KH 2, 4, 6, 11.3.6, 19, 21, 47, 84, 87), and once at Arkhanes (ARKH 3b). The context most similar to HT 94a is attested at Khania on KH 4, 11, and 19:

KH 4	<i>a-du-re-[za ]</i>		
	*306 4	*303 B	
KH 11	<i>a-du-re-za</i>	*303 K SU 3	*303+E KL <sup>2</sup> VIN A
	*306 4	*303 B	
KH 19	[ ]	*306.VIR+*	*307 13 *302+TA B

As on HT 94a numbered human beings designated as \*306 with or without additional ideograms are recorded against agricultural commodities (\*303 and \*302). The most instructive text for the clarification of the meaning of \*306 is a clay sealing HT Wc 3017 where this ideogram follows sequence of syllabic signs *qa-ku-re DI*. Almost identical sequence *qe-ku-re DI* is found also on HT 20 in conjunction with the picture of the loom. Syllabic sign *DI* is frequently found in lists of personnel (HT 3, 69, 85b, 97, 111, 122b) standing probably as an abbreviation for occupational qualification of textile workers. It seems, therefore, that \*306 appears on Wc 3017 for the gender indication.

*GORILA* editors follow the traditional assumption that there is no difference between signs for men and women in Linear A. The Linear A sign \*100/\*102 is a picture of a man in a short skirt combining distinctive features of two Linear B

<sup>7</sup> See A. Uchitel and M. Finkelberg, «Some Possible Identifications ...» (note 4), pp. 33-34.

signs: a schematic picture of a man (VIR) and a picture of a woman in a long skirt (MULier). However, whatever the relationship between these signs in two scripts, the very lack of distinction between signs for men and women is absolutely incredible, being completely unparalleled in any comparable logographic-phonetic script. It seems that \*306, which has no acknowledged Linear B equivalent fills the gap being a Linear A sign for woman.

Only a numeral 11 survived of the fourth heading, its meaningful part being broken, and it is unknown whether it was written ideographically or phonetically. However, if the second (*sa-ra*<sub>2</sub>), third (\*318-\*306 11), and fourth ([ ] 11) headings reflect the sex and age composition of the personnel, they should be interpreted as men qualified as *sa-ra*<sub>2</sub>, 11 women qualified as \*318, and 11 children. The ratio of women to children on the Linear B Pylian series Aa and Ab is also 1:1.

The fifth heading *ki-ro* means “deficit” being the opposite of the Minoan word for total *ku-ro*.<sup>8</sup> This interpretation was contested on the basis of HT 1 where this word is found as an item in the list, but it is simply a misspelling for a name *ki-da-ro* there.<sup>9</sup> The true meaning of this word can be easily elucidated from the HT 30 where pairs of identical agricultural commodities appear under the headings *sa-ra*<sub>2</sub> and *ki-ro* (see TABLE 6), and from HT 123 where *ki-ro* is consistently opposed to *ku-ro* (total). On HT 94b personal names followed by numeral one appear under this heading standing probably for missing members of the personnel accounted for under the first heading (*ka-pa*). This form of record finds its exact parallel in HT 88, and two very similar lists are found under the headings *ki-ki-ra-ja* (HT 85b) and *ma-ka-ri-te ki-ro u-mi-na-si* (HT 117). *Ki-ki-ra-ja* is probably a reduplicated form of *ki-ro*<sup>10</sup>, and *ma-ka-ri-te ki-ro u-mi-na-si* probably include some explanation for the absence of the workers.<sup>11</sup> Three of these lists (HT 88, 94, and 117) are totalled (see TABLE 3).

HT 85	HT 88	HT 94b	HT 117
<i>ki-ki-ra-ja</i>	<i>ki-ro</i>	<i>ki-ro</i>	<i>ma-ka-ri-te ki-ro u-mi-na-si</i>
<i>ki-re-ta</i> <sub>2</sub> 1	<i>ku</i> -*56-*56 1	<i>tu-ma</i> 1	<i>u-su</i> 1
<i>qe-ka</i> 1	<i>ka</i> -*65 1	<i>pa-ta-ne</i> 1	<i>mi-tu</i> 1
PA 1	<i>ku</i> -*56- <i>nu</i> 1	<i>de-di</i> 1	<i>ku-ra-mu</i> 1
<i>te-tu</i> 1	<i>pa-ja-re</i> 1	<i>ke-ki-ru</i> 1	<i>ma-ru</i> 1
KA 1	<i>sa-ma-ro</i> 1	<i>sa-ru</i> 1	<i>ku</i> -*56- <i>nu</i> 1
DI 1	<i>da-ta-re</i> 1		<i>tu</i> -*65- <i>ma</i> 1
<i>me-za</i> 1			<i>u-di-mi</i> 1
<i>re-di-se</i> 1			<i>mi-ru-ta-ra-re</i> 1
<i>wa-du-ni-mi</i> 1			<i>te-ja-re</i> 1
<i>ma-di</i> 1			<i>na-da-re</i> 1

<sup>8</sup> See D. Schuerr, «Linear A KI.KI.RA.JA», *Kadmos* 15, 1976, pp. 31-39.

<sup>9</sup> See A. Uchitel and M. Finkelberg, «Some Possible Identifications ...» *cit.*, p. 31, note 2.

<sup>10</sup> D. Schuerr, *ibidem*.

<sup>11</sup> For the possible interpretation of this expression see A. Uchitel, «Records of Conscription, Taxation and Monthly Rations ...» *cit.*, p. 81.

HT 85	HT 88	HT 94b	HT 117
<i>qa-*310-i 1</i>			
	<i>ku-ro 6</i>	<i>ku-ro 5</i>	<i>ku-ro 10</i>

TABLE 3 (ki-ro)

The sixth and the last heading \*86 is a picture of a ship. It is found also on HT 94a in the list of personnel under the first heading (*ka-pa*) standing probably for a group of 20 sailors, and it appears in the same context also on HT 27a (see TABLE 4). As a heading this ideogram introduces two words written phonetically and followed by numeral one. The location of this short list after the list of missing workers under the heading *ki-ro* probably means that two of the 20 sailors were also missing.

Let us turn now to the analysis of the lists themselves. The first list consists of two variants of the ideogram for men (VIR and VIR+\*313b), the above-mentioned picture of a ship (\*86), a syllabic sign *TA* and a ligature *TI+A* where the sign *A* is written above the sign *TI*. Very similar lists are found also on four other Hagia Triada tablets (HT 27a, 89, 100, and 127). The presence of various variants of the ideogram VIR helps to identify all of them as lists men (see TABLE 4).

HT 27a		HT 89	HT 94a	HT 100	HT 127
<i>ti-ni-ta</i> *307	<i>]ki-</i> *310	<i>a-sa-ra</i> <sub>2</sub> *307	<i>ka-pa</i>	[ ]	[ ]
VIR 90	<i>ku-</i> *305 [ ]	*305 23	VIR 62	VIR+KA 58	*307 156
*86 51	<i>sa-ra-di</i> 5	*65+*317+QE 22	*86 20	*304+PA [4]	KU 82
RE 20	VIR 42	<i>ma-i-mi</i> 24	<i>TI+A</i> 7	<i>TI+A</i> 12	VIR+*313c 24
<i>i-mi-sa-ra</i> 43		VIR+*313a 13	VIR+*313b 18	<i>KI</i> 2	<i>KI+MU</i> 15
<i>]QE</i> 21		<i>ta-ra</i> 5	<i>TA</i> 4	*305 5	<i>TI+A</i> 11
<i>ki-da</i> [ ]				VIR+*313a 16	[ ] 4
	<i>ku-ro</i> 355	<i>ku-ro</i> 87	<i>ku-ro</i> 110	<i>ku-ro</i> 97	<i>ku-ro</i> 292

TABLE 4 (lists of personnel)

Especially interesting is the pictorial complement \*313, which is a picture of some agricultural tool (probably a pickaxe) held by a human figure used as a main sign. This tool is held in three alternative positions: on the shoulder (\*313a), in front (\*313b), and downwards (\*313c), representing probably different stages of the compulsory work schedule (during the work, on march, on leave). Outside Hagia Triada one of these variants (VIR+\*313b) is attested also at Khania:

KH 7a: <i>e-na-si</i>	VIR+*313b 10	*303+D J
<i>i-ja-pa-me ta-ta</i>		
<i>qa-ti-ki</i>	VIR+*313b 4	*303+D B
<i>se-</i> *305		
<i>ku-</i> [ ]- <i>ko-e</i>	VIR+[*313b] 18	*303+D 1EJL <sup>2</sup>

At least one of the words in the headings (*ta-ta*) can be tentatively analysed as 3<sup>rd</sup> pl. preterite of the Anatolian verb *ta-* “to stand”. An expression “they

stood” is almost an exact parallel to Sumerian technical term *gub-ba* – “stationed”, which referred to the conscripts already assigned to work, as opposed to those on leave, called *tus-a* – “seated”.<sup>12</sup>

Next three lists on obverse are lists of ideograms, which represent agricultural commodities. Two of them are present in all three lists: \*303 and *NI*, and the third broken ideogram is present only in the first list. \*303 has no acknowledged Linear B equivalent, but most probably it stands for barley,<sup>13</sup> and *NI* of course is a well known Linear A/B sign for figs, which is used in both scripts with the same ideographic and phonetic values. The third ideogram is easily restored as a sign for wine (*VIN*) on the basis of a comparison with six similar lists found on HT 27a, 30 (twice), 89, 99a, and 100 (see TABLE 5). An identical combination of barley, figs, and wine is found there in the same order with or without several additional commodities. Four of these lists (HT 30, 94a, 99, 100) appear also under the same heading *sa-ra*<sub>2</sub>, and in four other cases (HT 27a, 89, 94a, 100) these lists follow lists of personnel (see TABLES 4 and 5).

HT 27a	HT 30 <i>sa-ra</i> <sub>2</sub>	<i>ki-ro</i>	HT 89	HT 94a <i>sa-ra</i> <sub>2</sub>	HT 99a <i>a-du sa-ra</i> <sub>2</sub>	HT 100 <i>sa-ra</i> <sub>2</sub>
*303 9JEB	*303 [ ]	*303 8	*303 2JE	*303 5	*303 4	*303 5E
<i>NI</i> 10B	<i>NI</i> 7D	<i>NI</i> DD	<i>NI</i> 2E	<i>NI</i> 3H	<i>NI</i> 4	<i>NI</i> 2DD
<i>VIN</i> 7	<i>VIN</i> 8J	<i>VIN</i> J	<i>VIN</i> 6[	[ <i>VIN</i> ] 2	<i>VIN</i> 1H	<i>VIN</i> 2J
	*302+ <i>TA</i> DD	*302+ <i>TA</i> D			GRA+ <i>QE</i> [ ]	*302+ <i>RO</i> 2H
	BOS 1	BOS 1[			*302+ <i>NE</i> JE	*302+ <i>MI</i> 3
	*510 D					
	<i>sa-ra-ra</i> J					

TABLE 5 (*barley, figs, and wine*)

Absence of wine in two following lists on the obverse of HT 94 (see TABLE 1) is conspicuous, confirming our assumption that these are rations for women and children. One can notice also that though the number of recipients is identical in both cases (11), an amount of figs in the last list is exactly twice less than in the second.

Finally, two lists on the reverse of HT 94 are supposed to be lists of personal names. This interpretation is, however, problematic for at least one word - \*21*f-tu-ne*, which appears in headings of two Hagia Triada texts HT 87 and 117. Both texts are lists of phonetically written words followed by numeral “one” very similar to the reverse of HT 94. HT 87 consists of two such list under a headings: (1) \*21*f-tu-ne ma-ka-ri-te*, and (2) *a-ra*-[\*65], and HT 117 comprises of three

<sup>12</sup> See K. Maekawa, «New Texts on the Collective Labour Service of the *Erin*-People of Ur III Girsu», *Acta Sumerologica* 10, 1988, p. 64.

<sup>13</sup> R. Palmer proposed to interpret it as emmer wheat, see R. Palmer, «Linear A Commodities: A Comparison of Resources», *Politeia, Society and State in the Aegean Bronze Age (Aegeum 12)*, ed. R. Laffineur and W. D. Niemeier, Liège 1995, vol. 1, pp. 133-156. For the criticism of this theory see A. Uchitel, «Local Differences in Arrangements of Ration Lists ...» (note 2), p. 143, note 6.

such lists under three headings: (1) *ma-ka-ri-te ki-ro u-mi-na-si*, (2) *sa-ta*, and (3) *\*21<sup>f</sup>-tu-ne*.

<p>HT 87    <u><i>*21<sup>f</sup>-tu-ne ma-ka-ri-te</i></u>  <i>pi-ta-ke-si</i> 1  <i>ja-re-mi</i> 1  <i>di-ki-se</i> 1  <i>qe-su-pu<sub>2</sub></i> 1  <i>ku-ru-ku</i> 1  <u><i>a-ra-[*65]</i></u>  <i>a-tu</i> 1</p>	<p>HT 117 <u><i>ma-ka-ri-te ki-ro u-mi-na-si</i></u>  <i>u-su</i> 1  <i>mi-tu</i> 1  <i>ku-ra-mu</i> 1  <i>ma-ru</i> 1  <i>ku-*56-nu</i> 1  <i>tu-*65-ma</i> 1  <i>u-di-mi</i> 1  <i>mi-ru-ta-ra-re</i> 1  <i>te-ja-re</i> 1  <i>na-da-re</i> 1  <i>ku-ro</i> 10  <u><i>sa-ta</i></u>  <i>ku-ku-da-ra</i> 1  <i>ko-sa-i-ti</i> 1  <i>da-mi-nu</i> 1  <i>da-ne-ku-ti</i> 1  <i>ki-da-ro</i> 1  <u><i>*21<sup>f</sup>-tu-ne</i></u>  <i>ku-re-*65</i> 1  <i>di-ki-se</i> 1</p>
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Thus, the first heading of HT 87 combines two words found in the first and the third headings of HT 117. Since the first heading of HT 117 contains a word *ki-ro* (deficit), it probably introduces a list of missing persons (see TABLE 3). In this case the word *ma-ka-ri-te* explains the reason for their absence.<sup>14</sup> If this assumption is correct, entire HT 87 is a list of missing persons, since its second heading *a-ra-\*65* should be conceivably identified as a Minoan equivalent of the Anatolian *arawa-* “free, released from service”.<sup>15</sup> All this, however, does not reveal the true meaning of the word *\*21<sup>f</sup>-tu-ne*, except for a realisation that it is hardly personal name, but rather a more general qualification of some group of personnel.

### *Conclusions.*

HT 95 is a rare combination of ration list with a roster of present and absent workers. Both in the ancient Near East and in the Linear B such texts were usually treated as separate documents. The gradation of personnel in descending

<sup>14</sup> For its possible identification see A. Uchitel, «Records of Conscription, Taxation and Monthly Rations ...» (note 1), p. 81.

<sup>15</sup> *Ibidem*, pp. 80-81.

order for the purpose of rationing on sex and age basis is on the contrary most common feature in the ancient Near East, but it is otherwise unattested in the Linear scripts of the Aegean.

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