The text of the celebrated Pylos tablet An 1 reads as follows:

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.1 e-re-ta, pe-re-u-ro-na-de, i-jo-te
. }2\mathrm{ ro-o-wa VIR }
. }3\mathrm{ ri-jo VIR 5
.4 po-ra-pi VIR 4
. }5\mathrm{ te-ta-ta-ne VIR }
.6 a-po-ne-we VIR 7[
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As the heading (on line 1) indicates, the record deals with rowers (e-re-ta) going to Pleuron (pe-re-u-ro-na-de i-jo-te). In the body of the tablet, on 1l. 2-6, a total of 30 (or possibly 31 ) MEN are booked against a series of place-names: 8 against ro-o-wa, 5 against $r i$-jo, 4 against $p o-r a-p i, 6$ against $t e-t a-r a-n e$ and $7(+$ ?) against $a$-po-ne-we. The numeral in the $a$-po-ne-we entry is not certainly complete: if it were 7 , the total number of men listed on the tablet would be a neat multiple of ten (30); but the arrangement of the surviving unit strokes would also allow a restoration of 8 , in which case the total would be 31 .

Is it possible to establish anything of the circumstances that have led to the compilation of this record? I believe that it may be possible to do so, with the help, first, of a record from a comparable society in the ancient Near East and, second, of further records within the An series itself.

In his recent study The Rural Community in Ancient Ugarit ${ }^{1}$, Michael Heltzer has discussed various types of taxes which the villages of the kingdom of Ugarit were required to contribute to the centre. These included military and naval service. As evidence for the latter, Heltzer quotes the record CTC, 79 (UT, 83), the text and translation of which reads as follows.

[^0]| 1) | $s b[u$ anyt] | «Cre[w of the ship] (or «ships») |
| :---: | :---: | :---: |
| 2) | $c^{c} d n[]$ | (of) ${ }^{c} d n[]$ (personal name) |
| 3) | $T b q[y m \times b n s m]$ | [People of T Tbq, [x men] |
| 4) | $M^{c} q[b y m]$ | [People of] $M^{c} q[b . .$. |
| 5) |  | 19 [men] |
| 6) |  | $G r \times$ [men] |
|  | sbu any[t] | Crew (of the shi[p] (or «ships») |
| 8) | $b n$ Ktan | (of) $b n$ Ktan |
| 9) |  | Gr 1[9men] |
| 10) | sbu any[t] | Crew of the shi[p] (or «ships») |
| 11) | $b n ~ A b d h[r]$ | (of) $b n A b d b[r]$ |
| 12) | Pdym | People of (the village) Pdy |
| 13) | bmš bnsm | five men |
| 14) | Snrym | People of (the village) $S_{n r}$ |
| 15) | $t s^{c}$ bns $[m]$ | nine me[n] |
| 16) | Gbclym | People of (the village) $G b^{c} l$ |
| 17) | $a r b^{c} b[n \bar{s} m]$ | four m[en] |
| 18) | Tbqy[m $\times$ bnšm] | People of (the village) $T b q$ [ x men].» |

Heltzer comments on this record as follows ${ }^{2}$ : 'As we see, the text mentions three ships, or three squads of ships under the direction of ${ }^{c} d n, B n K \underline{t a n}$, and $A b d b r$. The crews of these ships were conscripted from the villages $T b q, \dot{G} r, M^{c} q b, S n r, G b^{c} l$, and $P d(y)$. Members of the crews are always mentioned as $b n s m$ and on this occasion it corresponds to the Akkadian term mâre ${ }^{-\mathrm{M}}$ al $X$ «sons of the village (or city) X», i.e., the citizens of this certain community. Thus, we can determine that on certain occasions, or possibly even on a regular basis, people of certain villages were conscripted for service in the fleet of Ugarit.'

The similarity between this Ugarit record and An 1 is striking. Both deal with naval activity; and in both varying numbers of men are booked against various places. Is it possible, therefore, the thought comes to mind, that they also reflect similar realities, and that the Pylian record, like its counterpart at Ugarit, is a record of conscription for naval service: naval service, that is, which is supplied by the inhabitants of certain localities as part of the dues that they owe to the centre?

[^1]It is difficult to doubt that we do have some records in the Pylos An series which reflect liability to contribute naval service. An 724, for instance, which is headed ro-o-wa e-re-ta a-pe-o-te: 'Ro-o-wa (PN): rowers absent' contains on ll. 3-4 the words ki-ti-ta o-pe-ro-ta e-re-e; and although many of the details of this record still remain obscure, there can be little question that this particular phrase is to be interpreted as /ktitan ophèlonta ereen/, 'a land holder who owes service as a rower' and refers to a land-holder who is liable to offer his services as a rower, most likely in respect of his holding. Records of individuals who have failed to fulfil their conscription duties are also present in the Ugarit documents; later in his study ${ }^{3}$, Heltzer quotes and discusses PRU, VI, 77 (RS. 19.32), which refers to six soldiers who have failed to appear for (obligatory) military service. Lines 8-10 of this record read as follows:
8) napbar $6 \leq s a b \bar{u}^{\mathrm{M}}$
8) Together 6 warriors (soldiers)
9) la-li-ku sa $\quad i l-k i$
10) ${ }^{\text {al }} A p-s u-n i-y a-m a$
9) who went not to their (conscription) duty,
10) Apsunites.»

Moreover, if An 724 deals with obligations of 'land-holders' to provide their services as rowers, it is difficult to believe that the same does not hold good for a further record in the An series, 610, the full text of which reads as follows:

| An 610.1 |  | e-re-ta [ ] vacat [ |  |
| :---: | :---: | :---: | :---: |
| . 2 | le, ki-ti- | ta VIR 46 [ |  |
| . 3 | me-Jta-ki-ti-ta | VIR 19 [ |  |
| . 4 | ]wa, ki-ti-ta | VIR 36 [ |  |
| . 5 | me-ta-ki-ti-ta | VIR 3 |  |
| . 6 | e-wi-ri-po | VIR 9 po-si-ke-te-re | VIR |
| . 7 | a-ke-re-wa | VIR 25 wo-qe-we | VIR |
| . 8 | ri-jo | VIR 24 wi-nu-ri-jo[ | VIR |
| . 9 | te-ta-ra-ne | VIR 31 me-ta-ki[ - ti-ta | VIR |
| . 10 | a-po-ne-we | VIR 37 me-ta[ | VIR |
| . 11 | ma-ra-ne-nu-we | VIR 40 po-ti-ja-ke-e | VIR, $6[$ |
| . 12 | ]-ku-si-jo | VIR 8 za-e-to-ro | VIR 3 |
| . 13 | da-mi-ni-jo | VIR 40 e-ke-ra ${ }_{2}$-wo-no | VIR 40[ |
| . 14 | we-da-ne-wo VIR 20 | ko-ni-jo 126 me-ta-ki-ti-ta | VIR 26 |
| . 15 | po-ku-ta | VIR 10 we-re-ka-ra, te-qa-ta-qe | VIR 20 |
| .16-20 |  | vacant [ |  |

[^2]The underlying pattern of this record has been well elucidated by J. Chadwick in Documents². He writes as follows 4: 'Despite the initial lacuna the pattern of this tablet is clear. The men listed belong to various coastal towns and are sometimes further specified by classifications: ki-ti-ta 'settlers' (whatever the special value of the term), me-ta-ki-ti-ta 'new settlers', po-si-ke-te-re, 'immigrants', $p o-k u-t a$ (meaning obscure). Entries so introduced refer to the last place named. There is also a category of men introduced by a man's name in the genitive: e-ke-ra ${ }_{2}$-wo-no, we-da-ne-wo. Both of these men are clearly important personages elsewhere on the tablets ... This leaves a few terms obscure: wo-qe-we PN?, ko-ni-jo PN or ethnic? (the omission of maN is due to erasure and re-writing in a cramped space); we-re-ka-ra-<ta>, if rightly restored, and te-qa-ta may be occupational terms.'

Of particular importance here is Chadwick's elucidation of the pattern of the first section of the tablet (ll. 2-3). In a number of entries in this part of the tablet we find references to me-ta-ki-ti$t a$; and, as Chadwick demonstrates, these are to be understood as being at the last place-name mentioned on the tablet. Thus ll. 2-3 record both $k i-t i-t a$ and $m e-t a-k i-t i-t a$ at the place ]e, mentioned before $k i-t i-t a$ on 1. 2; lines 4-5 record both $k i-t i-t a$ and me-ta-ki$t i-t a$ at the place ]wa (almost certainly ro-o-wa: see further below), mentioned before $k i-t i-t a$ on 1. 4; 1. 9 deals with me-ta-ki-ti-ta at te-ta-ra-ne, mentioned before VIR in the previous entry on the same line; and 1.10 lists me-ta-ki-ti-ta at a-po-ne-we, mentioned before VIR in the previous entry on that line. In both the latter cases, the analogy of ll. 2-3, 3-4 makes it clear that the MEN in the first section of each line are in fact $k i-t i-t a$, even though this is not explicitly stated on the record.

There are a number of points in common between An 610 and the previous record we have considered, An 724. Both deal with rowers (e-re-ta); both contain references to $k i-t i-t a$ and to the places ro-o-wa, a-ke-re-wa, ri-jo, and wo-qe-we (if the last is a placename); and with the reference to $e-k e-r a_{2}-w o-n o$ (gen.) on 610.13 we may compare the reference to $e-k e-r a_{2}-w o-n e$ (dat. ? nom. ??) on 724.5. Given these resemblances, it is attractive to conclude

[^3]that 610 has a similar purpose to 724 , and likewise records the liability of certain land-holders ( $k i-t i-t a$, me-ta-ki-ti-ta) to offer their services as rowers ( $e$-re-ta), again probably in respect of their land-holdings. Indeed, it is tempting to wonder whether the rowers who are stated to be 'absent' from ro-o-wa, \&c on 724 may not be some of the same $k i-t i-t a$ and $m e-t a-k i-t i-t a$ who are listed as at ro-o-wa, \&c on 610 , and whom the heading of that record, with its reference to e-re-ta, strongly suggests may likewise have been rowers.

If the purpose of 610 is to record land-holders at the places mentioned on the record who owe service as rowers, it will in turn be attractive to see An 1, the tablet we began with, as a record of similar service. It is difficult to doubt that there is a close connexion between these two records. Both are certainly in the same scribal hand (these are the only two records which Bennett and Olivier assign to Stylus S1 of Hand 1's); both deal with rowers; and four of the five place-names on An 1 almost certainly also occur on An 610, in an identical order:

An 1

| .2 | ro-o-wa | .4 | ?ro-o-]wa |
| :--- | :--- | ---: | :--- |
| .3 | ri-jo | .8 | ri-jo |
| .4 | po-ra-pi |  |  |
| .5 | te-ta-ra-ne | .9 | te-ta-ra-ne |
| .6 | a-po-ne-we | .10 | a-po-ne-we |

Moreover, it may well be that the resemblances between the two records do not end here. If we compare the numbers of MEN booked against the various locations on An 1 with the numbers of $k i-t i-t a$ and $m e-t a-k i-t i-t a$ listed as at the same locations on An 610, it becomes apparent that there may be a significant relationship between the figures. As we have noted, the place-name at the beginning of An 610.4 is attractively restored as ro-o-]wa: a restoration made even more attractive by the fact that ro-o-wa is entered before ri-jo, po-ra-pi, te-ta-ra-ne and a-po-ne-we on An 1, just as ?ro-o-]wa is entered before ri-jo, te-ta-ra-ne and $a$-po-ne-we

[^4]on An 610. If ro-o-wa is correctly restored here, 610 will provide us with evidence for 39 men ( 36 ki -ti-ta and 3 me -ta-ki-ti-ta) at this location. The figure in the ro-o-wa entry on An 1 is VIr 8. 39 divided by 8 is 5 to the nearest whole number. It is possible, therefore, the thought comes to mind, that the rowers who are listed at each of the places on An 1 represent one-fifth of the rowers who are listed in connexion with the same places on An 610 (which is perhaps a list of all the rowers who are available for service in each of these various localities)? ${ }^{6}$.

So far as we can establish them, the figures for the remaining areas on An 1 appear to be consistent with this hypothesis. As will be recalled, the following is the full text of the record:

| .1 | e-re-ta,, pe-re-u-ro-na-de, i-jo-te |  |
| :--- | :--- | :--- |
| .2 | ro-o-wa | VIR 8 |
| .3 | ri-jo | VIR 5 |
| .4 | po-ra-pi | VIR 4 |
| .5 | te-ta-ra-ne | VIR 6 |
| .6 | a-po-ne-we | VIR $7[$ |
| $.7-8 \quad$ vacant |  |  |

If our hypothesis were correct, we should expect the ri-jo figure on An 610 to be approximately five times the $r$ i-jo figure on An 1 . The latter is 5 ; and the entry on 610 which contains $r i-j o$ reads as follows:

$$
.8 \text { ri-jo VIR } 24 \text { wi-nu-ri-jo[ VIR }
$$

The precise status of wi-nu-ri-jo[ remains uncertain, but it is most likely a place-name or an ethnic. While we cannot finally exclude the possibility that it relates to a sub-group of persons at ri-jo, the most natural assumption, given the pattern of entries elsewhere on the record, is that it refers to a separate grouping, in a different locality. If this is the case, the number of MEN at ri-jo on An 1 will again be one fifth of the number of men at the same locality on An 610 to the nearest whole number: 5:24. Unfortunately, we cannot establish the total number of men recorded on 610 as at te-ta-ra-ne and a-po-ne-we; but such figures as survive are again in keeping with our hypothesis. There are 31 (ki-ti-ta) vir

[^5]and an unknown number of $m e-t a-k i-t i-t a$ in the $t e-t a-r a-n e$ entry on An 610 (1. 9). Provided that the me-ta-ki-ti-ta figure did not exceed one, the total number of VIR recorded will be consistent with the view that the te-ta-ra-ne figure on An 1 (VIr 6) is onefifth of the An 610 figure to the nearest whole number. There is a similar situation with the two $a$-po-ne-we figures. An 610.10 records 37 ( $k i-t i-t a$ ) VIR and an unknown number of $m e-t a-k i-t i-t a$ at a-po-ne-we; An 1 records 7 [vir there. If the 7 [ were complete, this would be too low a figure to represent one fifth of the minimum of 38 ki-ti-ta plus me-ta-ki-ti-ta on 610. As we have seen, however, we could also restore 8 , which would be consistent with the surviving $k i-t i-t a$ figure of 37 on 610 plus up to 5 me-ta-ki-ti-ta.

Alternatively, if $7[$ is complete, the relationship between this and the $k i-t i-t a$ plus $m e-t a-k i-t i-t a$ figure on $\operatorname{An} 610[38(+$ ? ) $]$ could be comparable to that found in similar circumstances elsewhere, where there is a rough proportionality between two sets of taxation or other figures, but where the detailed relationship is evidently a more complicated one, and it is not possible to obtain all the figures in one set of taxes, etc. simply by multiplying or dividing the figures in the second set by a standard amount. One example of this is provided by PY Cn 608 and Vn 20. The figures on these two records can be tabulated as follows:

| PLACE | Cn 608 (sus $+S I)$ | Vn $20(w o-n o)$ |
| :--- | :---: | :---: |
| pi- ${ }^{*} 82$ | 3 | 50 |
| me-ta-pa | 3 | 50 |
| pe-to-no | 6 | 100 |
| pa-ki-ja-na | 2 | 35 |
| a-pu | 2 | 35 |
| a-ke-re-wa | 2 | 30 |
| e-ra-to | 3 | 50 |
| ka-ra-do-ro | 2 | 40 |
| ri-jo | 2 | 20 |

Here, although the figures on the two records evidently stand to each other in the rough proportion of $3: 50$ (or $1: 16^{2 / 3}$ ), it is not possible in all cases to arrive at the figure on Cn 608 by dividing the figure on the corresponding entry on Vn 20 by $16^{2 / 3}$, and then rounding up or down to the nearest whole number. In
the last entry in the list a Vn 20 figure of 20 corresponds to a Cn 608 figure of 2 ; whereas $20 \div 16^{2} / 3$ to the nearest whole number is 1 , and not 2 .

To sum up, then: the numerical relationship between An 610 and An 1 can be set out in tabular form as follows:

| e-re-ta |  |  |
| :--- | :---: | :---: |
| pLACE | An 610 | An 1 |
| ro-o-wa | 39 | 8 |
| ri-jo | $24^{\star}$ | 5 |
| te-ta-ra-ne | $32(+?)$ | 6 |
| $a-p o-n e-w e$ | $38(+?)$ | $7[(8 ?)$ |

* Assumes that wi-nu-ri-jo on 610.8 does not refer to a sub-group at $r i-j o$.

Although certainty is impossible, this evidence (combined with the other evidence we have noted earlier for a close connexion between the two tablets) is well consistent with the view that An 1 is in effect a taxation record: that the numbers of rowers shown as provided by the various villages listed on the tablet have been calculated on the basis of each village's standard 'rateable value': a 'rateable value' which is also reflected on An 610, which may, as we have suggested, show the total number of rowers who were available for service in each of the villages in question. It would come as no surprise to find evidence at Pylos for this method of recruiting rowers (perhaps as the crew of a single ship). Apart from the analogies for the practice at Ugarit, the use of standard relationships between places in calculating contributions, entitlements to distributions, \&c. is a widespread phenomenon on the records. (We have already noted one example of it earlier: that provided by Cn 608 and Vn 20). As with the recruitment records at Ugarit, we have no means of telling whether, if An 1 is a recruitment record, it reflects a special levy for a particular occasion only, or a much more routine recruitment. What does seem likely, however, is that the palace has organised the levy on the same basis as its normal taxation activity. Thus if An 1 reflects an 'emergency' at Pylos, it
is likely that the 'emergency' was one to which the palace reacted in the same way as it did to normal, peace-time situations: by establishing each district's liability to contribute, on the basis of its standard 'rateable value'.

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[^0]:    1 Wiesbaden 1976.

[^1]:    ${ }^{2}$ Op. cit., pp. 22f.

[^2]:    3 Ibidem, pp. $59 f$.

[^3]:    4 M. Ventris, J. Chadwick, Documents in Mycenaean Greek², Cambridge 1973 (= Docs. ${ }^{2}$ ), p. 431.

[^4]:    5 E. L. Bennett, J.-P. Olivier, The Pylos Tablets Transcribed II, Rome 1976, p. 11.

[^5]:    6 Docs. ${ }^{2}$, p. 186.

