

THE TWO PROVINCES OF PYLOS

Since the section on the geography and place names of the Pylos tablets in *Documents* (pp. 141-145) was written, a number of studies have been published dealing directly or incidentally with this subject¹. Our rapidly increasing understanding of the material situation reflected in the Pylos tablets makes it necessary to reconsider some of the fundamental assumptions. It is also now possible to use evidence of a different kind, the extensive archaeological researches of W. A. McDonald and R. Hope Simpson², which have revealed in detail the distribution of Mycenaean sites in the South-Western Peloponnese.

It was natural, and, I hope, excusable that in the first flush of enthusiasm we tended to identify many Mycenaean names at Pylos with similar classical ones; for the recognition of familiar Cretan names on the Knossos tablets was both a starting point and a proof of the decipherment. No one will impugn the equation of *Pu-ro* with Πύλος; but almost all the others have been attacked with more or less success. It has become clear that we must draw a sharp distinction between identifying a name with a classical form, and identifying the geographical site meant with the classical town. I should find it hard to believe that *Re-u-ko-to-ro* represented anything but Λεῦκτρον; but that is no reason to equate it with any of the classical towns bearing that name. Similarly the great debate whether *Pi*.*82 is Φειά or Πισα has an air of unreality so long as there is

¹ I note especially: L. R. Palmer, 'Military Arrangements for the Defence of Pylos', *Minos* IV (1956) pp. 120-145; H. Mühlestein, *Die oka-Tafeln von Pylos*, Basel 1956; E. Risch, 'L'interprétation de la série des tablettes caractérisées par le mot *o-ka*', *Athenaeum* XLVI (1958) pp. 334-359; M. Doria, *Le iscrizioni della classe Cn di Pilo*, Trieste 1958.

² *Illustrated London News* 30 April 1960, pp. 740-741, and *Amer. Journal of Archaeol.* LXV (1961) pp. 221-260. I am much indebted to both the authors for discussing this problem with me and allowing me to use the facts they have assembled by their field work.

no better evidence for placing the Pylian frontier on or beyond the Alpheios. Homer's topographical detail is clearly to be treated with suspicion; and the spectacle of the same names being repeated over and over again is only too familiar to all students of geography.

It is for this reason that I feel unable to accept the conclusions put forward by G. Pugliese Carratelli in his article "Sull'estensione del regno miceneo di Pilo"³. There is really no reason to equate *Ro-u-so* with *Λουσοί* in Arcadia; and the name does not mean 'baths'; it is clearly pre-Hellenic. But it is wrong in principle to begin from the identification of Mycenaean spellings with classical names. All possible geographical information should be wrung from the tablets before an attempt is made to locate any of the names on a map. This is of course a desperately difficult undertaking; our records are far too scanty and imprecise to yield wholly satisfactory results. But I believe that some progress can now be made in this direction, and the present study is offered more as an example of the methods to be applied than a cogent demonstration of the facts. The results must therefore be treated as tentative and liable to revision in the light of new discoveries, whether of sites or of tablets, and possibly even of more thorough and penetrating analysis of the existing texts. I fear, however, that here we may already have reached the point where further study will produce only diminishing returns.

Few identifications launched in *Documents* have been so keenly attacked as our attempt to identify the frontier between the two Provinces of Pylos. I should like to attempt a defence, on the ground that we have now much clearer evidence in favour of this suggestion, which was originally based upon a consideration of the geography of the Messenian peninsula as viewed from the site of the Palace of Pylos. But before turning to this problem it is necessary to consider how much we can regard as established and verifiable fact in the geographical location of the Pylian kingdom.

We suggested that the combination of the names *U-ru-pi-ja-jo* and *O-ru-ma-si-ja-jo* in An519.11-12 was some guarantee that we

³ *Studi Classici e Orientali* VII (1958) pp. 32-60.

had here the Mycenaean spellings of the geographically close classical names Ὀλυμπία and Ἐρύμανθος. A rigorous interpretation of the spelling rules would easily exclude both these identifications; but it is uncertain how far the strict rules which can be applied to Greek words of Indo-European origin can be extended to the class of pre-Hellenic loan-words, which includes most of the place names. I propose therefore to study the sixteen principal towns without any preconceptions about their geographical location; then the clues leading to classical names can be followed up to present a theoretical reconstruction of the Pylian kingdom.

It is generally agreed that the kingdom is divided into two provinces, known as *De-we-ro-ai-ko-ra-i-ja* and *Pe-ra₃-ko-ra-i-ja* with variant spellings of the latter. The view is also generally accepted that the first elements of these compounds are related to Greek δεῦρο and πέρον respectively⁴. The evidence of On300 also enables us to establish with a fair degree of certainty that the Nine Towns several times listed together lie within the Hither (*De-we-ro-*) Province, and the Seven Towns, forming the latter part of the list on Jn829, lie in the Further (*Pe-ra₃-*) Province.

We are fortunate in having a rough measure of the productive capacity of these sixteen towns in the series of *Ma-* assessments⁵. Although the produce there recorded is largely unidentified, the close agreements between the proportionate amounts in each case suggest that these figures reflect the real size or productive importance of the towns concerned. There are some minor discrepancies between this list and the Sixteen as enumerated on Jn829. Ma126 seems to be a supplementary note, not belonging to the main series. *Ro-u-so* (Ma365) replaces *E-ra-to* in the standard list of the Nine, but in Jn829.10 I read *Ro-[u]-so* occupying the same place; they are probably alternative names referring to the same or overlapping areas, like Washington and the District of Columbia. *A-si-ja-ti-ja* appears to be replaced by *A-[]-ta₂* (Ma397 + 1048), whatever the correct reading and transcription. *Za-ma-e-wi-ja* (Ma393) is perhaps to be taken together with *E-sa-re-wi-ja* (Ma330), with which it is

⁴ W. A. McDonald, *Minos* VI (1960) pp. 149-155.

⁵ M. Lejeune, *Mémoires de philologie mycénienne* I, pp. 65-91.

coupled in Vn493.3. *A-te-re-wi-ja* (Ma335) may then have replaced *E-re-i*; it stands next to *E-sa-re-wi-ja* on An830.

The relative productiveness of the two groups may be conveniently measured in terms of the first commodity (*146), since the rest are proportional.

<i>Pi</i> *82	28	<i>Ti-mi-to A-ke-e</i>	24
<i>Me-ta-pa</i>	28	<i>Ra-wa-ra-ta₂</i>	70
<i>Pe-to-no</i>	33	<i>Sa-ma-ra</i>	24
<i>Pa-ki-ja-pi</i>	22	<i>A-[]-ta₂</i>	24
<i>A-pu₂-we</i>	23	<i>E-ra-te-re-we</i>	46
<i>A-ke-re-wa</i>	23	<i>Za-ma-e-wi-ja</i>	28
<i>Ro-u-so</i>	17	<i>(E-sa-re-wi-ja)</i>	42
<i>Ka-ra-do-ro</i>	18	<i>A-te-re-wi-ja (E-re-i?)</i>	23
<i>Ri-jo</i>	17		
	209		281

From this it is evident that the general productive capacity of the Further Province is considerably in excess of that of the Hither Province.

We also possess some figures for the production of the commodity SA for the whole of each of the two provinces (Ng319, Ng332). This commodity is still not identified with complete certainty, but the evidence of Nn228 that it represents λίνον 'flax' is not contradicted by any fact, and receives a surprising confirmation from a correlation which will be demonstrated below.

The figures for flax in the Hither Province are: 1239, not contributed 457, making a total assessment of 1696 units. The corresponding figures for the Further Province are mutilated, but the amount received is a minimum of 200 and a maximum of 800, plus some tens and units which are completely lost. If we allow for a figure 'not contributed' on a similar scale to the Hither Province, the total assessment for the Further Province will lie between about 300 and 1150 units. Thus at the highest estimate the productive capacity in terms of flax for the Further Province is less than 70% of that of the Hither Province. These figures receive some support from the (unhappily incomplete) returns of flax from each locality (*Na-*

series). In these the Nine Towns of the Hither Province are represented by four: *Pi**82, *Pa-ki-ja-na*, *Ka-ra-do-ro* and *Ri-jo*. Only one of the Seven appears: *Ti-mi-to A-ke-e*.

The growing of flax requires a fertile, well-watered soil. The chief areas of Greece where it is now grown are Messenia and parts of Macedonia. But further analysis of the present distribution shows a distinction between production of flax for fibre and for seed. The production of linen fibre is notably concentrated in Messenia and the adjacent areas. The figures (in okes) given in the Agricultural Bulletin for 1956⁶ are as follows:

Messenia	220,000
Triphylia	8,000
Eleia	40,140
	<hr/>
	268,140

This is more than half the total for the whole of Greece (457,345). The explanation of this fact is that the retting of the flax requires a plentiful water-supply, and the West Coast is easily the wettest part of Greece. The most suitable areas are in fact those in the area surrounding the Bay of Navarino and the seaward end of the Messenian plain, if we exclude Elis.

It is therefore appropriate at this point to consider the evidence for placing certain of the names on the coast. The rowers in AnI are likely to be drawn from coastal towns; but only *Ri-jo* of the Sixteen Towns is here mentioned. An724 equally deals with rowers; this adds *A-ke-re-wa* to the list. The chief source of information is the group of tablets characterised by the word *o-ka*⁷. The first of this series (An657) explicitly defines the areas where the contingents are disposed as *o-pi-a₂-ra*, which is generally accepted as meaning the sea-coast (*opihala*= ἔφολα). Thus any place so designated on them may be accepted as coastal; this allows us to list

⁶ Γεωργικὸν Δελτίον, Γεωργικὴ παραγωγή τῆς Ἑλλάδος 1955 καὶ 1956, Athens, 1958; I am much indebted to Mr. P. Topping and Mr. R. Hope Simpson for providing me with a copy of this volume.

⁷ See the references in note 1.

among the Nine: *A-ke-re-wa* (An656.11, 18) and *Ka-ra-do-ro* (An661.5); among the Seven: *Ti-mi-to A-ke-e* (An661.10). To sum up, three towns in the Hither Province are certainly coastal; it is therefore significant that four of the Nine Towns are known to be producers of flax: *Pi-*82* (Na322), *Pa-ki-ja-na* (Na561), *Ka-ra-do-ro* (Na543) and *Ri-jo* (Na252), and two of these belong to the coastal group. Among the Seven only one is known to produce flax, *Ti-mi-to A-ke-e* (Na361), and this is precisely the one town in the Further Province known to be coastal. This strongly suggests that the Further Province has a much shorter coastline than the Hither Province.

We may hope for further enlightenment from the analysis of the tablets dealing with sheep and goats (*Cn-* series), since the places associated with large numbers of these animals are presumably in or close to the more mountainous areas. The mere addition of totals is of course a risky procedure, since the records are incomplete, and the same animals may be counted twice on different tablets. The following abstract shows the total figures for those of the Sixteen Towns listed in this series.

HITHER PROVINCE	SHEEP	GOATS
<i>Pi-*82</i>	2781	210
<i>Me-ta-pa</i>	5	30
<i>A-ke-re-wa</i>	258	1
<i>Ro-u-so</i>	1096	496
	—	—
	4140	737
FURTHER PROVINCE	SHEEP	GOATS
<i>Ti-mi-to A-ke-e</i>	200	56
<i>Pu-ro- Ra-wa-ra-ti-jo</i>	70	190
<i>A-si-ja-ti-ja</i>	632	92
<i>E-ra-te-re-wa-pi</i>	31	—
	—	—
	933	338

Inaccurate as these figures are, they give the impression that sheep and goats were both considerably more numerous in the Hither

Province; and *Pi*.*82 in particular seems to have been an important sheep-raising area. I include *Pu-ro Ra-wa-ra-ti-jo* as equivalent to *Ra-wa-ra-ti-ja* among the Seven Towns, for I am unable to see the force of Doria's contention that it means the mountainous district near Pylos, even granting his etymologising of the name⁸. It seems to me clearly to distinguish from the capital Pylos, which makes no contribution on the assessment lists, another town of the same name.

Included in the totals are two tablets, Cn4 and Cn595, which bear the heading *ta-to-mo o-pe-ro*. These enumerate relatively small numbers of sheep assigned to various localities, while another place name stands at the head of the list. The fact that in Cn595 this is a form in *-pi* (*E-ra-te-re-wa-pi*) suggests that this may be an ablative, indicating the place of origin⁹. Hence Cn595 would appear to record the presence at the places named, including *Me-ta-pa*, one of the Nine, of sheep originating from *E-ra-te-re-wa*, one of the Seven. There is no theoretical limit to the distance sheep might be transported or driven; but we may provisionally assume that these two towns are located sufficiently close for the journey to be a reasonable one. It would, for instance, be unlikely, though possible, for sheep reared on the East side of the Messenian Gulf to be sent to a town in the region of the Alpheios.

On the badly damaged text An830 we have at the end a list of cow-herds (*go-u-ko-ro*); those of *Ra-wa-ra-ti-ja* are enumerated next to those of *Pi*.*82. This may be fortuitous, but on the other hand it may be an indication that the names which stand high on the list of the Nine are located somewhere near the border with the Further Province.

A similar link can be traced indirectly between *Pi*.*82 and the Further Province. On Cn131, Cn643 and Cn719 *Pi*.*82 is associated with *Ma-ro-pi*; but Cn40 links *Ma-ro-pi* with *A-te-re-wi-ja*. It was

⁸ *Loc. cit.*, p. 8.

⁹ C. Gallavotti, *Documenti e Struttura* p. 130; M. D. Petruševski, *Zhiva Antika* V (1955) p. 398; P. Ilievski, *Zhiva Antika* VI (1956) pp. 330-331; J. Chadwick, *Minos* V (1957) pp. 110-111; E. Risch, *Museum Helveticum* XVI (1959) p. 220. Contra: A. Morpurgo, *Atti della Accademia Nazionale dei Lincei, Rendiconti* XV (1960) p. 36.

shown above that *A-te-re-wi-ja* probably belongs to the Further Province and may replace *E-re-i* in the Seven. An830 places *A-te-re-wi-ja* next to *E-sa-re-wi-ja*, admittedly with a blank line intervening; *E-sa-re-wi-ja* is certainly in the Further Province, being coupled with *Za-ma-e-wi-ja* in Vn493.3. *A-te-re-wi-ja* is also associated with *Me-ta-pa* (Aa779), which stands next to *Pi-*82* in the list of the Nine Towns.

I hesitate to make much use of Jo438 to establish geographical proximity. It is a list of contributions of GOLD, made by named individuals, local officials and towns. I suspect that if we could identify all the persons, and the tablet were complete, we should find that here too we had an enumeration of leading towns; the number of entries, however, is 29, so that, if each person represents a separate town, we have many more than the sixteen towns of the other lists. It is certain that its writer was not following the standard order of Jn829; none the less, although he mixes up the two provinces, he may have been influenced by geographical considerations. The following towns are named in lines 24-28:

Ti-mi-ti-ja ko-re-te
I-te-re-wa
*Pi-*82*
E-ra-te-re-wa-o ko-re-te
A-ke-re-wa ko-re-te

Ti-mi-ti-ja is clearly the same as *Ti-mi-to A-ke-e* (cf. the ethnic *Te-mi-ti-jo* Ac1278), and with *E-ra-te-re-wa* belongs to the Seven. *I-te-re-wa* reappears only on Sn64.5, where we learn that Klymenos the *mo-ro-qa* was its *ko-re-te*. This important official is almost certainly the same as the commander of an *o-ka* on An654.1, who has troops from *Me-ta-pa* at his disposal. It is therefore likely to be in the Hither Province. *Pi-*82* and *A-ke-re-wa* are among the Nine Towns. On the whole it seems unsafe to draw any conclusions from this list.

We have, however, some much firmer evidence on the point at which the two provinces join. The standard list of Sixteen Towns in Jn829 sets *Ri-jo*, the last of the Nine, next to *Ti-mi-to A-ke-e*, the first of the Seven. This might be regarded as mere administrative

convenience, were it not confirmed by the association on An661 of *Ka-ra-do-ro*, last but one of the Nine, with *Ti-mi-to A-ke-e*.

Analysis of the *o-ka* series shows that this is a list of troop dispositions around the coast-line to guard against, or more likely provide early warning of, an enemy landing. If, therefore, the series is complete, it should cover the whole coastline under the control of Pylos. Unfortunately there is no way of determining whether we have all the tablets, but the fact that no fragments have been found which appear to belong to this set makes it probable that it is complete. The order of the tablets is also uncertain. An657 is clearly the first, since it is headed by an introductory line. An656 probably precedes 661, because this gives the order *A-ke-re-wa, Ka-ra-do-ro, Ti-mi-to A-ke-e*, in agreement (allowing for omissions) with Jn829. An654 presumably stands before 656, since it mentions *Me-ta-pi-jo*; but whether 519 intervenes between 654 and 656 or between 657 and 654 I see no way of deciding. *Ko-ro-ku-ra-i-jo* appear to be restricted to the last two tablets¹⁰; *U-ru-pi-ja-jo* to 519 and 654. If, as suggested in *Documents* (p. 187), *Ro-o-wa* is in the vicinity of the Palace, we might expect the Metapians to be disposed nearer the beginning of the list; i.e. 654 would precede 519, because in the standard list *Me-ta-pa* is above *Pa-ki-ja-si*, which Tn316 shows to be near the Palace.

The towns on the coast-line are likely to be listed either in two directions starting from the nearest point on the coast; or in one direction from one frontier to the other¹¹. A striking fact about the place names of the first tablet (An657) is that they are infrequent in the rest of the records; *O-wi-to-no* is only known as the location of a group of eight slave women (Aa775, Ab277, cf. Ad685) and of *A-e-ri-qo-ta* (An218.5, cf. An657.12). [*Ku*]-*pa-ri-so* is a probable res-

¹⁰ We may therefore tentatively place in this area the other places associated with *Ko-ro-ku-ra-i-jo*, who are unlikely to be from Corcyra or Crocyleia: *Ne-wo-ki-to Wo-wi-ja* (An656.7), [*]*-*o-ri-jo* (An661.4), *Za-e-to-ro* (An661.6), *Wo-no-qe-wa* (Na396), *To-ro-wa-so* (Na405).

¹¹ The suggestion of Palmer (*Minos* IV [1956] p. 142) that the Nine and the Seven both start at the point furthest away from the boundary is refuted by the evidence not only of Jn829 but of An661, that the end of the Nine adjoins the beginning of the Seven.

toration in Na514. This suggests that the beginning of the list is a fairly isolated area, i.e. on one of the frontiers. Since it appears to be well separated from An661, which marks the transition from the Hither to the Further Province, this is presumably the point where the Hither Province joins foreign territory.

At this point, and only now, should we have recourse to our maps. We shall note that the series begins with a mention of *Ku-pa-ri-si-jo*, whom it is tempting to locate near (but not necessarily at) Kyparissia, Homeric *Κυπαρισσήεις*, and ends with the destination *Ne-do-wo-ta-de* = *Nedwonta-de*, which may be the river *Νέδων*, or, since it is mentioned as the location of sheep (Cn4.6), a place on that river. Neither of these identifications must be taken as established; but they make it worth exploring the possibility of fitting the rest of the lists to the pattern of Mycenaean settlement in that area.

We have already deduced that the Further Province has a short sea-coast and is agriculturally more productive than the Hither Province, apart from special crops like flax. These conditions would be met if we placed it in the Messenian plain, between Kalamata on the river Nedon and Rizomylo at the western end of that coast, and extending well inland to cover the rich agricultural land in the valley. Recent research has revealed the presence of Mycenaean tombs or settlements in this area, at Kalamata, Hellenika (near Thouria), Ayios Konstantinos (Karteroli), and above all Nichoria (Rizomylo) where trial excavation has shown the existence of important buildings. It would be tempting to equate this site with *Ti-mi-to A-ke-e*, the command post for the coast-line of the Further Province, and a flax producing area. This conclusion is in general agreement with the solutions of this problem already proposed, except that by limiting the province to the Nedon, the known Mycenaean sites on the mountainous east side of the Gulf are excluded¹². The exact frontier had better remain an open question, pending fresh evidence; but if the

¹² See R. Hope Simpson, *Annual of British School at Athens* LII (1957) pp. 231-259, who located in the Messenian Gulf the seven *πτολίεθρα* offered by Agamemnon to Achilles in *Iliad* ix 149ff. But the exact limits of the area are uncertain, and it must not be too readily assumed that Homer's political geography is contemporary with our tablets.

o-ka series is complete, it is impossible to understand the absence of another section or two covering the eastern side of the Gulf.

The frontier on the coast between the two provinces must lie between *Ti-mi-to A-ke-e* and *Ri-jo*. Strabo (VIII 360) gives 'Píov as an old name of 'Ασίνη (modern Koroni), and this fits well with the identification of *Ti-mi-to A-ke-e* with Rizomylo. At the same time we have some evidence, stated above, to show that on the land frontier *Ti-mi-to A-ke-e* was not far distant from *Pi-*82* and *Me-ta-pa*. I can see only one likely solution of this problem: that the list of Nine Towns begins with those in the area of the Palace, extending at least half way across the peninsula, and only after *Pa-ki-ja-na* (in the immediate vicinity of the Palace) does it include any coastal towns, which could then lie round the coasts of the peninsula. In fact the ground to the east of the Bay of Navarino is thickly covered with Mycenaean remains, and several sites are known round the coasts of the peninsula. But they are less frequent in the area north of the Palace, and only one site has been found between Kyparissia and Kanalos near Gargaliani. This is a new discovery at Langouvardos, just north of Marathopolis, and still leaves a large gap before Kyparissia. It would therefore be possible to place *O-wi-to-no* and *Ku-pa-ri-so* in the Kyparissia area, possibly connected with the sites known in the Dorion region, and the striking new discoveries of Marinatos at Mouriatada and Moira¹³.

The only likely alternative would be to locate *Pi-*82* in the Kyparissia-Dorion area, and explain its contact with the Further Province as through the pass which leads into the upper Messenian valley. Against this we must set the absence of *Pi-*82* or any of the Nine Towns before *A-ke-re-wa* from the coastal defence list. This is far more likely if they lie to the east of the Palace, away from the coast, though men might well be drawn from a big town there (*Me-ta-pa*) for use on the coast west of Pylos, since the distance would be small.

Under the influence of the Homeric references to border wars in the neighbourhood of the Alpheios it has become fashionable to

¹³ Nestor 5/II/60, p. 116.

push the Pylian frontier even further north; not only has *Pi*·*82 been identified with *Pheiai*, just north of Katakolo, but the suggestion has been made that *Ai-ko-ra-i-ja* should be identified with Ἀκρόρεια, the mountainous area of north-western Elis¹⁴. The archaeological evidence shows the existence of a well-defined group of Mycenaean sites in the Alpheios valley with a few outliers to the south of the river; but only scattered sites have so far been discovered in Triphylia, despite much field work, and it is possible that the whole area between the Alpheios and the Neda (to the north of Kyparissia) was a no-man's land, not strictly included in either the Elean or the Pylian kingdom. It must also not be forgotten that Nestor's cattle raids belong to an earlier period than the fall of Pylos; the northern frontier may have been deliberately drawn back to a more defensible line.

There seems therefore to be some reason to establish provisionally the northern frontier on the line of the river Neda; and it may be significant that, as pointed out by Palmer¹⁵, one of the local commanders in the northern area has the name *Nedwatas*. With this admittedly tentative reconstruction of the limits of the provinces of Pylos, we can now return to our starting point, the delimitation of the frontier between them.

The suggestion put forward in *Documents* (p. 144), that the second element of the compound bore a striking resemblance to the mountain name Αἰγαλέον, was dismissed by Palmer with the comment that the only point in favour of the identification was "that they have the first syllable in common"¹⁶. This seems to me a considerable commendation for an identification which, pace Palmer, was suggested by a consideration of the geography of Messenia; nor is it strictly accurate, since it omits the coincidence of -λ- in corresponding position to the —r/l— of the Mycenaean name. Palmer, however, was content to leave the name uninterpreted, while identifying it with Cape Akritas. W. A. McDonald accepted that iden-

¹⁴ G. Pugliese Carratelli, *loc. cit.* p. 45.

¹⁵ *Eranos*, LIV (1956) p. 5.

¹⁶ *Minos*, IV (1956) p. 143.

tification, but sought to provide it with a Greek interpretation in his article entitled "Deuro- and Peran-ankalaia"¹⁷.

The least ambiguous form of the name is *de-we-ro-ai-ko-ra-i-ja* (Ng319), for all are agreed that whatever the etymology and meaning of *de-we-ro-*, the word splits at this point, leaving *ai-ko-ra-* as the base of the second part. If we assume, as McDonald appears to do, that the base is really *a-ko-ra-*, we shall have to explain how it has come to be written *ai-ko-ra-* in Ng319 and *-(r)a₃-ko-ra-* in Ng332 and Wall4 (the repetition refutes any suggestion of error). Since *ra₃* is well known to represent syllables of the pattern *rai/lai*, and *ai* regularly corresponds in initial position to Greek αἰ-, it would be obvious that this element began with that diphthong, were it not for two further examples. *pe-ra-ko-ra-i-ja* (Ae398) presents the not unknown phenomenon of *ra₁ = ra₃*; cf. *ze-pu₂-ra₃* fem. plur. nom. Aa61, *ze-pu₂-ra-o* fem. plur. gen. Ad664. This is explained most simply in terms of the script's freedom to omit diphthongal *i*; indeed, its insertion with a separate sign (as in the termination *-ra-i-ja*) is, as M. Doria has shown¹⁸, almost certainly an indication of a non-diphthongal pronunciation. *pe-ra-a-ko-ra-i-jo* (On300.8), if the reading is sound, shows the scribe allowing the hiatus, but reluctant to use *ai* in the middle of a word; it is always initial, except as the beginning of the second member of a compound¹⁹. The first point which we can establish therefore is that the word begins with αἰ-, and this alone excludes McDonald's αγκ-.

McDonald presumably takes refuge in the suggestion that the sign *43 could also be used for plain α. Lejeune²⁰, starting from the theoretical principle that the syllabary could not originally have contained signs for diphthongs, regards *43 as a variant of *8 and *25 specialised to note initial *ai-*; but the evidence for *43 = *a* is, as he recognises, extremely weak, except precisely in the two cases where it stands at the beginning of the second member of a com-

¹⁷ *Minos* VI (1960) pp. 149-155.

¹⁸ *Athenaeum* XLVI (1958) pp. 389-394; his further point that these spellings represent only derivatives of stems in *-s* cannot be taken as proved.

¹⁹ See M. Lejeune, *Mémoires de philologie mycénienne* I p. 100.

²⁰ *Mémoires* I p. 104.

pound²¹. More apposite is the theory of Gallavotti²², that *43 represents *a* + any sonant. This relaxation in the rules naturally permits more identifications, but it automatically lessens their chance of being the right ones.

The only well established value of *43 is *ai*, and I believe therefore that *ai-ko-ra-* represents the name of some geographical feature which in Greek spelling would have begun *Αικ-*, *Αιγ-* or *Αιχ-*. It is hardly necessary to go on to discuss McDonald's assumption that the vowel of the second syllable *o* might represent classical Greek α since Ventris and I made the same assumption in proposing to identify the word with *Αιγαλέον*. But it is worth remarking that we considered this a pre-Hellenic name correctly preserved by Mycenaean, but corrupted by popular etymology in the classical form, under the influence of *αἶγα*, *αἰγιαλός*, etc. McDonald would presumably explain the alternation **ankolā* / *ἀγκάλη* as due to varying treatment of syllabic λ .

At this point we must revert to the first part of these compounds. McDonald would like to interpret *pe-ra-* as *πέραν* "if it can be reconciled with the orthographic situation". It is just possible in the case of *pe-ra-a-ko-ra-i-jo* (On300.8), if the two parts of the compound are treated as separate words; cf. *a-ne-mo-i-je-re-ja* KN Fp13.3²³ = *anemōn hierēiāi*. But it breaks down completely in the case of the other two spellings: *pe-ra-ko-ra-i-ja* Ae398, *pe-ra₃-ko-ra-i-ja* Ng332 and Wall4. Here we must recognise *πέρα* with its $\bar{\alpha}$ elided or absorbed into the initial sound of the second member. The alternative, that the first member is *περί* in apocopated form, seems to be excluded by the spelling *pe-ra-a-ko-ra-i-jo*.

The arguments in favour of *de-we-ro-* = *δεῦρο-* have been rehearsed elsewhere; all that needs to be added is that I have suggested other circumstances in which *we* is to be equated with Greek υ ²⁴. The alternative *δειφελο-* 'western' makes no difference to the

²¹ The other example is *85-to-ai-ta KN X 972, compared with *85-to-a₂-ta PY Cn314.2.

²² *Documenti e Struttura*, pp. 19-20.

²³ In Fp 1.10 a change in the size of the characters marks the break.

²⁴ *Athenaeum* XLVI (1958) p. 308.

meaning, provided that the Further Province lies to the east of Pylos.

The frontier must be some kind of natural boundary, such that towns can be described as lying on this or the far side of it. One thinks immediately of mountain-ranges (e.g. *Gallia Cis-, Transalpina*) or rivers (e.g. *Cisrhenani*). Palmer, however, insists that "along the western coast of Messenia... communications are for the most part by sea"; and he therefore regards a cape as more likely. Against this it may be urged that there is no natural obstacle to land communication along this coast. There is a narrow plain running all the way from the Alpheios to Kyparissia, now traversed by a railway. Further south the coast is not so flat, but offers no difficulties to the construction of roads. Moreover sea communications in antiquity were restricted to the summer months, and it is questionable whether a close control, such as the tablets indicate, could have been exercised by Pylos over the Further Province, if it was virtually cut off for six months of each year. McDonald in his article accepted Palmer's assertion of the importance of communication by sea, but later experience caused him to change his mind. He wrote to me on 2 June 1959:

"After a couple of days in caiques round Akritas, we are inclined to revise upward our estimate of the importance of land routes for regular and dependable communications."

We might also cite here the journey of Telemachus in *Odyssey* III. Homer at least seems to have thought it possible to travel overland by chariot from Pylos (wherever it was) to Sparta. But opponents can at need allege here an Ionian's ignorance of Peloponnesian geography.

The existence of roads can be deduced from the presence at Pylos of a considerable force of chariots; the tablets recording the chariots themselves have not come to light, but the wheels indexed in the *Sa-* series can hardly have been intended for farm-carts, including as they do silver- and bronze-bound pairs. The tablets giving totals record an aggregate of 94 serviceable pairs²⁵, and although

²⁵ Sa787: 30 + 12 + 32; Sa843 (joined): 20.

this number may be in excess of the number of chariots, if spares were regularly carried in stock, it still suggests a number of chariots approaching 50. Now two-wheeled chariots could not be driven at will across the Messenian countryside; even if they were normally transported by sea, a road several miles long must have linked the Palace with the port; and if a *route carrossable* could be built here, why not elsewhere?

I have already suggested²⁶ that the assignment of *e-qe-ta* to the coast-guard detachments of the *o-ka* tablets is to be explained by the fact that these officers possessed chariots, as the wheel tablets prove; and that their function was to provide rapid communication between the outlying forces and their headquarters at Pylos. Only one factor was missing to make this theory convincing: the archaeological proof of a Mycenaean road system in this area. Roads had been traced in the Argolid, but not in Messenia. By a strange irony McDonald himself has supplied the want. In his researches into Mycenaean sites conducted with R. Hope Simpson, he came across traces of an ancient road, possibly of Mycenaean date, running from the area of the Palace across the "saddle" between the hills of the Aigaleon range towards the Messenian plain. Further traces of a road have been noted near Petrokhori, between Ano Englianos and the sea.

The arguments for identifying *ai-ko-ra-* as a cape or sea-mark are thus weaker than had been supposed, and we are justified in looking again at the land-marks. The two provinces as reconstructed above are divided by a very prominent land-mark: the mountain range of Ayia Varvara, which shuts off the area north of the Palace from the Messenian valley. This is apparently the ancient Aigaleon, under which the earlier Pylos stood (Strabo VIII, 4, 2). For those living in the Palace this would have been the most conspicuous feature on the horizon, and a natural one to choose to distinguish the two chief areas of habitation, that around the Palace, together with the towns on the coast of the peninsula to the south, and that "across Aigaleon" in the wide valley stretching up northwards from the Messenian Gulf. Communications would have been

²⁶ *Decipherment of Linear B*, p. 106.

maintained by means of the road which runs south-east from the Palace to skirt the slopes of Aigaleon, and crosses a low wide pass to reach the sea near Rizomylo. The Further Province lay exactly on the far side of a mountain clearly visible from the Palace; in view of the similarity between the names it is not unreasonable to repeat the suggestion that it was the feature which formed the frontier, for even if there were no similarity there would still be good reason for placing the frontier on that line.

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