Emmett L. Bennett, jr.

## LINEAR B SEMATOGRAPHIC SIGNS

There are many more things to be said about the sematographic signs of Linear $B$, and particularly about the ideograms, than I can discuss. In fact I limit myself to the discussion of the problems of interpretation of only a very few signs, and to the problems of transcription of only a few classes. I will concludc with some general remarks on the creation of new ideographic signs in Linear $B$, and with some general and familiar remarks on the principles we ought to follow in transcribing them.

I wish to arrange my discussion according to formal classification of the sematographic signs rather than by the more important structural or semantic classification. First I will take those among the compound signs which we may call monograms, particularly the syllabic monograms. The type is familiar in *127 KAPO, * $156 \mathrm{TURO}_{2}$, and the rest. There is perhaps nothing remarkable about them in general. Although there are some among them with transparent meaning, use, and origin, there are others whose origin is obscure, whose meaning is debated, and which may have less than valid claims to be counted among the syllabic monograms. I ought to discuss all for which a monogrammatic transcription or interpretation has been suggested, but I will eventually consider only two.

For the ideal treatment of the syllabic monograms we have at least one example in each major body of texts. At Pylos there is ${ }^{*} 156 \operatorname{TURO}_{2}$, which on Un 718 is formed of the syllables of the word which precedes it, $t u-\mathrm{rO}_{2}$, and plainly functions as an ideographic representation of that word. At Knossos there is *135 MERI on Gg 702, which is formed of the signs of the word me-ri which appears on Gg 705 in a thoroughly comparable context, and clearly functions as the ideographic representation of that word. At Mycenae there in $* 128 ~ К А \mathcal{N} A K O$, on Ge 608, which is formed of the three signs of the word $k a-n a-k o$ which appears
in comparable contexts in Ge 602, 603, 604, 605. The particular value of these instances is the demonstration they provide of the freedom with which any scribe writing Linear B will compose a new monogram to serve as an ideogram, wherever he finds it convenient or advantageous. Because Americans, when they write checks, always write Dollars both spelled out and also as $\$$ (an ideogram), I assume without question that $T U R O_{2}, M E R I$, and $K A \mathcal{N} A K O$ are ideographic monograms, and properly repeat the word which precedes or replaces them. Of these three monograms at least we can say that, though they may be frequent or habitual in the text written by a single scribe, we can probably not say that they are conventional and handed on as part of the conventional repertory of sematographic signs in Linear B. What is conventional about them, what guarantees that a scribe who has not seen them before will interpret them correctly, is the principle of formation of sematographic signs for an expression by a monogram of its constituent signs, and in the case of a word a monogram of the syllables with which it is normally written. This is not a new observation, but I wish to emphasize it. One of the facts which illustrates the unconventional nature of such monograms is the formation of the sign * 133 AREPA, whose constituent syllables appear, not too clearly, in PY Un 718 as $a$-re-ro immediately before its appearance. In Un 718 and in Wr 1437 the signs are arranged from below upwards. But in the other instances, in Fr 1198, Un 6, and Un 853 they are (or seem to be) arranged from above downwards. There is thus no standard order, but they may be arranged on each occasion in an aesthetically pleasing design. Even a single scribe will follow two orders of arrangement. In Un 718 the scribe wrote $A R E P A$ going upwards, and $T U R O_{2}$ coming downwards.

Here I may say a word on our transcription of these signs. We would quibble too much if we gave $A R E P O$ going up a different number from $A R E P O$ going down. Unless, that is, we found that they represented different things. We may sometimes be uncertain of how to transcribe a monogram, and we may with no hesitation continue to use an entirely arbitrary transcription. We may feel confident in writing $K A P O$ for $* 127$, and DIPTE for *247, although so far we haven't very good evidence outside, or even inside, the lexicon that these are words identify-
ing the ideogram's meaning. The original convention for the transcription of such monograms puts an ampersand ( $\&$ ) between the syllables. This scheme was followed in Browning's transcription of the Knossos tablets and in MT II. But it was abandoned in $K T I$ for a system which did not distinguish between the monograms and such signs as, e. g., Bos $+S I$, sus $+K A$. More recently, however, the distinction has again been made by eliminating all connecting signs in the transcription of the syllabic monograms.

The groups of monograms I might discuss are several. First are those of whose syllabic origins I have no doubt, * 127 KAPO , * 128 KANAKO, * 135 MERI, * 156 TURO $_{2}$, * 247 DIPTE. Of these I must set aside $К A P O$ and DIPTE, since I may have some doubt of what they really represent. Second are those whose structure is the same, except that they are monograms of groups of ideograms rather than of the syllables of a word. These are now, however, to be transcribed simply as juxtapositions of ideograms, not as compound ideograms. These are, at Knossos * 135 MERI written above * 209 (in form, one of the vas series, but in function surely a measure, and worth a different transcription); at Pylos * 141 AUR written above $* 215$. The former transcriptions in which the two numerical or literal transcriptions were joined by a + are now abandoned. Third are those about which we cannot tell whether they are syllabic monograms, or modified ideograms of the type of Bos $+S I$, such as $* Q I T A$ or $* T A Q I$ and ovis $+T A$, or $* R A^{*} 22$ or $* 22 R A$ or? (*150). The fourth is the interesting group, those which have sometimes been considered as syllabic monograms, although their origins are obscure. Of this group I want to discuss only $* 145$ Lana here and $* 146$ near the end of this paper.

The accepted conventional transcription of $* 145$ is Lana. I do not propose transcribing it otherwise, and I will resist attempts to transcribe it otherwise, whatever doubts I maintain about its interpretation. But I should like to examine it to see if it might be considered formally a syllabic monogram, because one transcription which has been proposed and sometimes used assumes that it is one. Except for some of its most careless instances this sign seems obviously to be a monogram, made up of two well-known signs, $m a$ and -. Sometimes the second well-known sign looks like $r e$ and sometimes like ro. Since it is easier to make the form
of $r e$ degenerate into the form of ro than vice versa, the monogram ought to be originally and essentially either $* R E M A$ or $* M A R E$ and we might count the apparent $* R O M A$ and $* M A R O$ as more careless, though prophetic, examples. And unless we can find another explanation, that origin is probably to be assumed. In favor of that origin is the fact that the larger element is regularly made by each scribe who writes the sign at all to resemble the sign $m a$ as he draws it. The sign $m a$ and the sign lana seem never to follow different models within the writing of a single scribe. There are two facts which do not do much to suggest that lana is a monogram. There is no instance we can find of its replacing in the same or similar text any word formed of its constituent signs, whatever they may be. In one important respect, lana behaves like an ordinary ideogram rather than like a monogram. It is known from three of the Linear B sites, and seems to have identical significance everywhere. It is therefore conventional, and part of the standard repertory of ideograms. In that case the alternation in the form of the upper ro or re might come from ignorance of, or indifference to, its monographic origin. That speculation might be confirmed or denied if only we were to find the notion of lana expressed in a word in some one of the texts we have. The common use of lana at Pylos, Knossos, and Mycenae and the imprecision of its upper element suggests to me that it was very early in the history of Linear B a monogram (either syllatic or a qualified ideogram), which was used sufficiently often to be adopted as a normal, stereotyped part of the ideographic repertory, with only a formal relationship maintained thereafter with the form of $m a$. I should therefore be suprised to find that the word for lana sounded anything like $* M A R E$ or * ROMA.

The fact which should have discouraged the conjecture that LANA is in origin a monogram whose actual composition is unrecognized or ignored, but which has instead encouraged that conjecture, is the existence of the monogram Lc46 in Linear A. This monogram is composed of two elements, L55, which closely resembles Linear B ru, and L95 which is rather less a match of Linear B ma. It is tempting to guess that lana is a direct borrowing of Lc46 from Linear A, that in Linear A it was formed as a monogram, thereafter used as a conventional ideogram, and that its function,
significance, and form were taken over unchanged into Linear B, where, however, perhaps because of some linguistic difference the connection between its elements and its verbal expression become obscure, with the natural result that it was no longer recognized as a monogram of the syllables which would form its name.

The existence of monograms in Linear A seems obvious, for there is a long catalogue of the so-called composite signs, many of which are made up of signs found in normal sign-groups. I rather doubt, however, that there is any instance in which we know both a Linear A monogram and its composite signs as a word or sign-group. This is now a significant difference between Linear A and Linear B, though I may earnestly hope that the next few tablets of Linear A will provide us with some examples. It would help the theory of the Linear A origin of lana considerably if we could demonstrate the connection between Lc46 and lana, since this seems to be the only possible case of a monogram common to the two scripts. But we cannot even be sure, it seems to me, that it is an ideogram in the two tablets in which the monogram Lc46 appears, and it is even less clear that it might represent, as an ideogram, the same commodity that lana does. In neither text, HT 12 or HT 24 , does it directly precede a number. This may be the fault of bad preservation and lacunae. In neither text does its context clearly parallel the context of any occurrence of lana in Linear B texts.

While it is not inconceivable that Lana and Lc46 do represent the same thing, and that they are historically related, I think they do not and that their resemblance is fortuitous. If they are to be connected, the account of their relationship, from $A$ to $B, B$ to $A$, or from a common source, is much more complicated than that of L95 and ma, for example. It involves, for me at least, unacceptable assumptions in the comparison of the languages or dialects of the two systems, assumptions about the phonetic and perhaps ideographic values of signs in the two systems, and the whole matter of the syntactical rules of the two systems. To take over Lc46 into lana, it seems to me, would imply at least that Linear A and Linear B were used for different languages or dialects, or probably that the phonetic values of L55 and L95 were not the same as those of $m a$ and $r u$. Further, although in Linear A there are distinct signs exactly resembling Linear Bro and re and ru,
there would have been nothing in the word which Lana normally represented to remind one of the syllable $r u$. That is, the external shape of the sign and its significance must have been carried over without any carry-over of its verbal realization. But these consequences are not much appreciated by those who decipher Linear A. We will do better in supposing that lana and Lc46 are unrelated in significance and just happen to have an insignificant formal similarity.

That is about all I feel compelled to say about syllabic monograms at present, although I will come back to mention the possible claim of $* 146$ to be considered as one. I will go on to the class of ideograms which we might call monograms in form, but are more readily understood as normal ideograms formally modified by the addition (in ligature of a monogrammed form) of a syllabic sign.

The most frequent class of compound sign among the ideograms of Linear $B$ is that in which a phonetic sign is added to an ideogram. As with the monograms of syllables, the arrangement of the elements is not systematic or prescribed, but will vary with the shapes used, and will be guided by aesthetic principles. The added syllables will be added above, to the side, below, or within, and there is no need for our transcriptions to vary from the arbitrary order of ideogram plus modifier. Within this group of signs composed of ideogram plus syllabic sign, I would recognize two classes, not formal classes, but structural or semantic classes. I would not claim to be able to assign every ideogram to its class, but there are enough safe examples to illustrate the classification. The first class is that in which the added phonetic sign acts as a complement. (I am afraid that at some time I may have carelessly used a different term for this «complement». At any rate others have meant what I mean by complement but have called it a determinative, in one or another language). A complement is in effect tautologous; it repeats the whole or some part of what the ideogram has expressed, most often by means of a verbal expression, as if I were to write $\$$ (Dollars). A determinative does not necessarily repeat any part of what the ideogram has expressed; rather it removes an inherent ambiguity, as if I were to write Pound (avoirdupois). In the first class then fall signs compounded with complements, and in the second class all those in which the
added syllable will identify the species intended while the ideogram has identified the genus, as if I were to write $\$$ (Australian). Here I would call the syllable a qualifier rather than a determinative or complement. The distinction is not really necessary, and even if we could make that distinction for all the ideograms we find, we should not transcribe them differently, however necessary or possible this practice may be in Cuneiform or Egyptian studies.

I offer familiar examples. Of the qualifying type there is $* 159+K U$ tela $+K U$ and $* 159+Z O$ tela $+Z O$, in which we may surely recognize the $K U$ and $Z O$ species (whatever they are) of tela (whatever that is). On the other hand, of the complementary type we have, I suppose, *209 and *209+A, where I suppose that $A$ represents the name, as $* 209$ represents the shape of an amphora. Or there is a better example in $* 212+U$, in which by a combination of PY $\operatorname{Tn} 996$ (with written $u$-do-ro and the simple ideogram *212) and KN Gg 774, 775, 776 (where the same ideogram appears combined with $U$ ) we see that $U$ represents $u$-do-ro or the name of $* 212$.

At this point we may refer to Linear A, in which each of these types seems to be represented, even if I could recognize no Linear A example of a syllabic monogram. The complementary type is obvious in HT 31, where above a series of pot-shaped ideograms, Lc 63-67, their names may be written out, or in HT 39, where in the sign Lc43 we find the composition of a potshaped sign with the familiar sign L52, which we guess serves as the same sort of complement as does the $U$ in $* 212+U$. For the other class there is the striking parallel of Lc41 and Lc42, which might correspond element for element with tela $+K U$ and tela $+Z 0$. Nevertheless there is no other instance in which a Linear A compound sign corresponds to a Linear B compound ideogram. In time we will find more.

There are several compound ideographic signs, either complemented or qualified, for which we have no simple or comparable example to show us the ideographic element in isolation. For these there have sometimes been, and will regularly be, used transcriptions which do not specifically include the syllabic element, as in $* 152$, for instance. By a better rule, however, the syllabic element would be transcribed.

What I would like to emphasize at the end of the discussion
of these signs is the freedom with which Linear B scribes could add complementary syllables to ideograms which might in other circumstances have appeared without them, the probable freedom with which they created new compound signs for new particular kinds by the addition of a syllabic sign, and finally that (except for the surely ancient convention which we transcribe as ovis ${ }^{f}$ and ovis ${ }^{\mathrm{m}}$ ) complements and qualifications seem both regularly and exclusively to be indicated by syllabic signs. I note that the first two freedoms are equally characteristic of Linear A, and that the apparent restriction apparently does not apply to Linear A.

Now that I have treated the compound signs, I am left with the simple ideograms, and with the phonetic signs used as ideograms. There is nothing that is not obvious to say about ideographic syllables. There are obvious instances in which these syllables must be recognized as the abbreviations of words which we find spelled out in the same or related texts. In this we can recognize that the scribe's freedom to abbreviate is the same as his freedom to make monograms. There are obvious instances in which the same syllable must represent two different things and two different words in two different texts; sometimes we even find both words spelled out. We can therefore be sure that in many instances the use of a particular syllable for a given item is not a general convention of the Linear B script, but is a special application of a general rule that abbreviations may be made to act as ideograms. In some cases, however, particularly when a syllable is used in the same sort of context both at Pylos and at Knossos, e. g., DA and $T A$ in the A texts, we may see a widespread conventional use, which, we must suppose, will not prevent the appearance of these signs with other values in other contexts. In the cases of $Q I$ and ovis, however, and their like, we have, I think, no way of telling whether a particular isolated $Q I$ should be interpreted as $Q I$ or ovis, just as *QITA might be read for ovis $+T A$. This uncertainty extends to the other animals, bos, sus, and cap, of course, and it perhaps should be recognized in other signs as well, if we remember the former transcription of $\mathcal{N I}$ as ${ }^{\text {FIGS. }}$

On the practical side there is one matter in which our system of transcription has been uncertain, where the original and good method has been forgotten. In the conventions recommended in 1954, the signs which serve as adjuncts, which have often enough
the same functions as the phonetic signs added to ideograms, were to be written in lower-case italics, and separated from, or rather joined to, their ideograms by a period or stop. As with the added elements of compound ideograms we might think of classifying their use and giving a different form of transcription to a complement, or to a qualifier, if we could unfailingly identify their use. As it is, the italic lower-case form is excellent, and sufficient to distinguish adjuncts from the phonetic signs of signgroups, and the period is not really necessary. The problems with such signs come in fragmentary texts in which one can only guess whether an isolated syllabic sign is a part of a word, or an adjunct to an ideogram, or is used as a full-fledged ideographic sign.

At this point I should repeat that it is easy for the scribe to create a new ideographic use for a phonetic sign, either as a principal ideographic sign, or as an adjunct. That is too obvious to dwell on, and examples are not necessary. There are some very puzzling cases, however, among which I find PY Un 219 as difficult as any. Here we find many syllabic ideograms, and no clues to a fuller spelling of any of them, no clues such as a regular ideogram might provide. But even here, if some context could be detected in which this set of syllables might begin a set of words semantically related, such as a group of ordinal numerals, or the names of the days of a week, eventually their meaning might be established. And it is here that what I wish to emphasize appears. In the use of syllabic signs as ideograms, as adjuncts to ideograms, and as parts of compound ideograms we have several examples of their use as the abbreviation of a word normally spelled out, taking regularly the first sign of the word. This is so obvious and normal that we have forgotten whether the practice of abbreviation was one of the spelling rules we adopted as hypothesis in the first place, or whether it was observed as a consequence of the decipherment and interpretation of the texts. We regularly search the lexicon for possible expansions of these «abbreviations». In either case we may continue to be confident that the principle of abbreviation by isolating the first syllable of a syllabic spelling is consistent with the facts we have. Therefore I would point out here that there isn't really enough material in Linear A, but there doesn't seem to be any way of demonstrating that sort
of abbreviation in Linear A. The best possibilities are among the composite signs which serve as ideograms like Lc5, or Lc41, Lc42, Lc43. But until we have a text in which the qualifying element of one of these composite signs is found spelled out, I think it will remain doubtful whether there is in Linear A the same sort of abbreviation as there is in Linear B. I should like to compare the practices of abbreviation followed in the contemporary scripts of the Near East. It seems to me that in a system like the Egyptian this sort of abbreviation by the first sign would be far inferior to abbreviation by the principal sign, the one which determinatives and complements precede and follow. To find the origin of this sort of abbreviation, I think, we must find the system which normally writes ordinary texts exclusively, or almost exclusively, with phonograms. Linear $B$ was one of the first in the Aegean to do this, and I think the primacy of Linear A in this respect is not yet demonstrated. I wish it were.

This leads me back for a moment to the syllabic monograms. When such a monogram is composed of the two signs of a known two-sign word, or the three of a three-sign word we have no difficulty in recognizing the formation of a monogram. But when we do not know any word corresponding to the elements of the monogram, as in $* M A R E$ or $* R O M A$, should we have any particular doubts that it is indeed a monogram? Some words will be too long for pleasing monograms; could a monogram be at the same time an abbreviation? This is the sort of suggestion which has been made for DIPTE, for example. $* P T E D I$ is neither found as a word nor does it remind us of a word; DIPTE, however, does remind of a word, although without an additional syllable or two it corresponds neither to any word actually found or predictable from the Lexicon. I think we must leave open the possibility of monographic abbreviations, in the hopes of finding the demonstration of one fairly soon. We must at the same time consider as very unlikely any suggestion of a monographic abbreviation which does not contain the first syllables. Practically this means that we should not hesitate to transcribe a compound sign as a monogram just because we cannot recognize the word it represents.

It is pleasing to see that there are continuing efforts to find improved interpretations of the ordinary ideograms, and that generally the evidence is treated carefully. I will therefore not
try here to discuss any new interpretations and I will certainly offer none myself. I will discuss only one problem of transcription, that of the pot-shaped signs in the Ta and Tn series. The problems of transcription are not new. They are confounded by the conflicting claims of a universal and vernacular language, the conflicting claims of an accurate, interpretative, and intelligible transcription and a precise arbitrary one, and made worse by a variety of personal habits and preferences. The individual solutions, or many of them, which you and I and others have proposed and used, and the types of solution which I have advocated and the different types which others have vigorously defended are familiar to you.

The pot-shaped signs of the Ta and Tn series seemed to offer the opportunity of a new and better type of transcription, which we had hoped to introduce as an innovation in the forthcoming edition of the Pylos Tablets Transcribed. There were two ways to approximate knowledge of what those pot-shaped signs in the Ta set actually represented. One was simply the recognition of a picture; a tripod was a tripod, a pot a pot, a jug a jug; but what was *220 a picture of? The other was to discover from the accompanying text some original name, or some descriptive phrase which would make specific what a small outline drawing could sometimes leave only as a general notion. Here a tripod was $t i-r i-p o$ and $t i-r i-p o-d e$, and a pot was $d i-p a$ and $d i-p a-e$ in varieties marked as ti-ri-o-we and qe-to-ro-we. Of course, not every sign was so easy to identify, nor did every sign have an appropriate word in its context. In the case of the ideograms of the Ta series most could be given a fairly precise interpretation by one or the other method. You will remember, however, that at various times several different transcriptions had been suggested or used in publications. Many of these were inconsistent with presently acceptable practice because of the decision to use Latinate or abbreviated Latinate transcriptions. But in fact this only made the competition greater between Ciceronian Latin and the varieties of debased Latin or, worst of all, artificial Latin. It introduced quarrels even within Ciceronian Latin about elegant usages, and about expressions consonant with the dignity of a newly classical science, and there were eventually insoluble problems about naming an object equally unknown to us and to any Latin-speaker
whatsoever, to say nothing of Cicero. In short, the problem of how to transcribe the vessels of the Ta series brought to a head the problem of whether the use of a transcription necessarily involves a claim that it accurately identifies what the sign represents, or whether there are just two things needed: first, an arbitrary transcription accepted as a convention, and second, a general awareness that all transcriptions are indeed conventional. And it was precisely because for once our knowledge of the significance of an ideogram was greater than our ability to discover the appropriate Latin vocabulary that the problem become acute. For most of the ideograms the precise interpretation is a goal rather than a possibility. For most ideograms we are content if there is some discrepancy between the interpretation we favor and the nearest Latin transcription. Every transcription will seem to some scholars to be not only arbitrary but also ill-chosen, and to be bad Latin, and to misrepresent the meaning of the sign as it is shown by his particular interpretation of the texts in which it occurs. But for the signs of the Ta set an expedient was available in the names written out in the text, which, at least in $m y$ interpretation, correspond to the ideograms, even though I would pretend to understand one of them at most, and that not very well. Thus for the three-footed, tripod-like, ideogram there was the word ti-ri-po. All that was necessary was to assume that this word might have been quoted by a mediocre Latin author, and, presto, it becomes itself a Latin word, which we may abbreviate.

There is in such a scheme a considerable possibility that the word we have chosen does not in fact represent the sign. This should not be counted as a fatal defect, in fact it is fairly likely that in one instance we would necessarily choose the wrong word, if in $\operatorname{Tn} 996.1$ the actual substantive is lost, and we would take what is only a qualifier as if it were the substantive.

Our purpose in proposing such transcriptions wherever we could was to eliminate some of the less productive debate about the interpretation and transcription of the signs, by attaching to them in an arbitrary fashion what seem to have been the actual names for the ideograms. We cannot often eliminate such dispute, however, and for most signs we must either continue arbitrary, but by now long-standing, transcriptions or adopt arbitrary new ones. About these transcriptions of long-familiar patterns there is
no point in a prolonged discussion; and one sample may be sufficient.

It has been argued that the ideogram *146 represents some textile or object made of textiles, or else an animal hide, or some product of leather. It has been argued also that it is a monogram composed of the signs pte and we, and therefore it has been transcribed as *PTEWE (rarely, if ever, *WEPTE). It has been argued that it is a compound sign composed by adding a qualifying we to an ideogram, either known or otherwise unknown, or else identical in shape to pte. I find no account of its meaning persuasive. I am sure it is not a monogram of pte and we. I think it may be in origin an otherwise unattested ideogram qualified by a $+W E$. Nevertheless, I think that its composition is undemonstrable, and I would prefer to transcribe it by an unqualified arbitrary name.

On the other hand, I think I ought to say that I don't have any except an old instinctive reason for my doubt that $* 146$ is a fabric or garment, while I do have reportable reasons for censuring a transcription as if it were a monogram *PTEWE, and for refusing the proposed identification with hide or leather goods. Signs resembling $* 146$ occur both at Knossos and at Pylos, in some variety of form. There may even be some which ought not be identified as *146 at all, but should rather be recognized as distinct ideograms. But let us admit all of them. The common elements are the two parallel vertical strokes, a bottom horizontal stroke, and a roughly V-shaped upper element, enclosing a single $w e$-shaped element. Aside from this there are various modifications or additional strokes in some examples. If we compare the other frame with the sign pte, we should find a difference, which I count as a very significant difference. In pte the sides and base are simply rectangular, just like the sides and base of $* 146$. But the upper element varies in pte from the rounded complex curve of the monogram DIPTE at Knossos, and in fact of all the examples of pte at Knossos, through various reductions to a simple V-shaped element in some hands, or a V-shaped element plus an additional horizontal stroke in other hands at Pylos. Even with this variation the resemblance of pte and the frame of $* 146$ might seem close enough, until we remember that the form of the base of the sign lana resembles in each hand in which it
occurs the shape of the sign $m a$, as that hand draws it, although in the whole corpus there is a very wide variety of forms. Now I don't find at Knossos any single hand which writes both a pte and a ${ }^{*} 146$, so that although there is a great predominance at Knossos of pte which do not look like the frame of * 146, one cannot say anything definite. But at Pylos An 35 has both pte and *146, one line apart, and they look very much alike. But at Pylos Un 443 has both pte and *146 in the same line, and they are plainly visible and plainly written and plainly unlike. The scribe of Un 443, at least, could hardly have equated the two, or seen any necessary relationship between them. Therefore I believe that no scribe was aware of a relationship between pte and *146, and I think the transcription *PTEWE was ill-advised.

As far as the argument that $* 146$ represents a product of hide depends on its relationship to pte, then, it must fall. But it can still be argued that either the whole sign or the form into which a $+W E$ is inserted looks like a hide, conventionally represented. How could this suggestion be countered, unless by pointing out that a whole series of signs, *152-154 and *164-168; have also seemed rather hide-like, with, I must admit, greater verisimilitude? That frame in an unprejudiced view has very few individual characteristics, and it doesn't look like anything in particular. Its shape, then, is perhaps related only very distantly or not at all to the shape of what it represents, its significance is conventional, and we can recover it only by the right interpretation of the right texts. May they soon be found.

The choice between transcription as a monogram or as a qualified ideogram is usually more difficult than it is in the case of * 146. I think it is particularly difficult in the case of ovis $+T A$, for example. But in practice we will probably get into no difficulty if only we remember that the transcription we have chosen inevitably depends on a preconceived theory about how the sign ought to be interpreted. The best example to remember is that of the two sign-groups $k o-w a$ and $k o-w o$, and the once persuasive theory that the first sign was an ideogram, qualified in two different ways by the two second signs, and to remember as well that the objects represented were correctly identified, whether they were transcribed on a faulty or a correct theory. I will conclude with the hope that however nonsensible they may seem
now or later, the standard transcriptions which are used in the latest publicaticns of the texts from Knossos, Pylos, Mycenae, Thebes, and elsewhere and which are recommended by these Mycenaean colloquia, will find acceptance, and be employed to the exclusion of earlier or substitute transcriptions. There is the single refuge from a multiplicity of transcriptions or from ridiculous transcriptions, one to which I have almost been driven more than once, and that is to abandon the use of literal transcriptions altogether in favor of the simple numerical transcription. It seems to me that scholars may be more willing to use arbitrarily selected standard transcriptions if they remember that the task of Adam in naming the animals was one thing, and that he might be pardoned for naming (or is it misnaming?) the starfish, or the hedgehog, or the butterfly; and if they remember the task of Linnaeus, in which by the interpretation of structure he showed that the starfish was not a fish, the hedgehog not a hog, and the butterfly neither butter nor a fly, and that this task was another thing entirely. Adam completed his task, but Linnaeus' successors never will. Let us accept the transcriptions the editors more or less blindly give, and continue without cease the task of interpretation and re-interpretation.

## DISGUSSION

## Prof. Georgiev acted as Chairman.

Prof. Bennett introduced his report on «Linear B sematographic symbols», and asked the participants whether they would find it advantageous to transcribe every ideogram by means of a triliteral or quadriliteral abbreviation of a Latin (or, in some cases, Mycenaean) word, chosen more or less arbitrarily; numerical symbols should be given up completely.

Chadwigk.-The transcription of ideograms is inevitably extremely difficult. There are a number of quite simple problems, and it is easy to say that when you have a figure of a man, all you need is a word that means «man», and this will serve as the transcription. But when we find an object which we cannot certainly identify, there the question arises, and whatever transcription we use is in some sense conventional. If we agree to use lana
to represent * 146, the sign for «wool», then this does not mean that the value of this sign is in all respects equal to that of the Latin word lana, but by using this we imply that this gives us a fairly good approximation to the value. Now, when we come to the more difficult ones, for instance, the ideograms of the $* 200$ series, or some of the extremely obscure things like that appearing as legt on Bennett's list (*169), which I think he intends to expand as lectus, but which might even be lectica, it is very dangerous to prejudge the issue by giving them names which may turn out to be completely false if and when we obtain the real value of these signs. Therefore I feel the use of the numerical system has a great deal to commend it. But in cutting it down to series of letters, I feel we should be in the same condition as when we travel by air and we find that our baggage is labelled $L O \mathcal{N}$ for London and $M A D$ for Madrid, but we discover to our horror that New York has become $\mathcal{J F K}$. Here we are in very much the same situation. Being used to Latin transcriptions, we find it striking that the ideogram *225, which represents a bath, is transcribed by Rew, that is to say, by means of its abbreviated Mycenaean name re-wo-te-re-jo. I do think that it is exceedingly difficult to find Latin names for Mycenaean vessels, but I object to the principle that where we have a Mycenaean name we should abbreviate it as the transcription of an ideogram.

Lejeune.-L'usage adopté pour la notation des idéogrammes est un mélange de translitération conventionnelle, disons latinoïde, et (pour les idéogrammes dont la valeur est inconnue ou très douteuse) la numérotation. Quand on regarde une édition de documents mycéniens, il est un peu gênant d'avoir des chiffres de trois valeurs différentes: traduction des indications numériques mycéniennes, numéros conventionnels d'idéogrammes et numéros conventionnels de syllabogrammes. Je comprends donc qu'on ait une certaine répugnance à un usage trop libéral des chiffres dans la présentation des textes, parce que cela peut, dans certains cas malencontreux, les rendre assez peu parlants et assez peu lisibles. Mais ils ont l'avantage d'être des symboles à l'état pur: «idéogramme *145», «idéogramme *213», dans notre esprit, ne préjugent absolument en rien de la nature de ce qui est ainsi symbolisé. Il serait très difficile de prendre un groupe de lettres (par exemple, legt, que nous sommes obligés de lire lectus ou lectica) pour de purs symboles: en fait, ces lettres orientent, malgré tout, vers des interprétations ou des commencements d'interprétations qui risquent assez souvent d'être fausses (par exemple, je n'ai jamais cru personnellement que l'idéogramme que l'on propose de transcrire lect, représente vraiment des «lits»). De plus, il y a les transcriptions purement descriptives, comme c'est le cas de $* 189+K E$ noté $\operatorname{QUAD}($ rangulus $)+K E$, qui ne décrit
plus la denrée ou l'objet, mais le dessin que les scribes mycéniens en ont fait. $I l$ est vrai que tout système de transcription sera arbitraire, mais il me semble que l'ancien système (avec ses inconvénients, c'est-à-dire le mélange de transcriptions latines abrégées et de chiffres là où la valeur de l'idéogramme est obscure) avait des avantages que j'ai signalés tout à l'heure. Pour la désignation des vases, il est incontestable qu'on ne peut certainement pas trouver de bons noms latins qui correspondent à des variétés de vases grecs du IIème millénaire que les Romains n'avaient plus. Ou bien on applique des mots latins très grossièrement, ou bien on se résout à appeler vas tout contenant, en y ajoutant des signes distinctifs (exposants 1, 2, 3, 4 ou $a, b, c, d$ ).

Morpurgo Davies.-I would just like to say that the transcription of ideograms has some advantages over their notation by means of numerals. First of all, sometimes the transcriptions are more explanatory than a numeral is. The second and perhaps the most important advantage is that transcriptions are easy to memorize, while numerals are not. Now, if we have only three letters or four, such an abbreviated form of transcription will prove as difficult to memorize as numerals, and therefore I would like to suggest that these three letters should be followed (in some typographical way) by the letters which indicate what the complete word is.

Olivier.-Le nouveau système proposé est certainement complexe et arbitraire. Il nous a semblé, à Bennett et à moi-même, qu'un système mélangeant absolument tout avait l'avantage de ne pas être pris au sérieux intellectuellement, d'être complètement arbitraire. Donc, ou on le prend comme un tout, ou on le rejette comme un tout et, en ce cas, on met des numéros partout. Je ne vois pas d'autre solution pour le moment. On ne peut pas continuer comme on a fait jusqu'ici, où chacun avait son système dans son ${ }^{\text {p }}$ petit coin, adhérant ou n'adhérant pas aux conventions de Wingspread et Cambridge. Les lettres proposées sont conventionnelles: lect ne veut pas dire «lit», c'est seulement un moyen mnémotechnique, plus facile à mémoriser que si nous avions mis xwz, par exemple.

Bennett.-Such abbreviations as Pia (for * 219), pij (for * 200), pok (for ${ }^{*} 208$ ), pot (for $* 123$ ) are a help in my attempt to make all of these transcriptions as arbitrary as possible. On the list we could expand in parenthesi those abbreviations, as an indication of what we intend to transcribe by that. Graphic explanations like $\operatorname{QUAD}($ rangulus ) do contribute to the arbitrariness we are aiming at, no matter how certain one is of the real meaning of the drawing. This system is of course a complex one, because we
have chosen the arbitrary transcriptions among those proposed by different scholars and meetings at different times. But the beginner and the non-mycenologist should not worry about those historical layers at all: they should take the letters as given arbitrary transcriptions.

A committee, consisting of Prof. Bennett, Dr Killen, Dr Olivier, Prof. Ruijgh and Miss Sacconi, was set up in order to discuss the whole question of the transcription of ideograms and to report to the Colloquium (see pp. xiv-xv, xvi, xix-xxir).

