

## THE PHONEMIC INTERPRETATION OF THE OLD ENGLISH DIPHTHONGS

Before the question of the phonemic interpretation of the OE diphthongs comes the question of the phonetic interpretation of the digraphs traditionally regarded as representing "short diphthongs". It is notorious that some scholars are no longer able to accept a distinction of long and short diphthongs parallel to that of the simple vowels in Old English. The subject was debated at our last conference held at Paris. This debate confirmed my impression that the various assailants of the traditional view can in no way be considered as allies; they appear to have a common foe, but in fact differ far more among each other than some of them differ from the traditionalists.

First there is the view that the OE digraphs *eo* and *ea*, where hitherto held to represent "short diphthongs", actually indicated a short vowel followed by a consonant which was velarised or accompanied by rounding or at least had some quality which the second element of the diphthong would have had according to the traditional view. This opinion of A. Reszkiewicz is rather attractive, but we can safely leave the decision to comparative phoneticians. What needs to be stressed here is, that no question of phonemics is involved. If it is true (as it may well be) that the difference between *bearne* and *baerne* lay in the first post-nuclear consonant rather than in the vocalic nucleus, whereas the difference between *reade* and *raede* lay (as nobody wishes to dispute) in the vocalic nucleus, then phonemically the position was this: whereas the long diphthongs were rendered phonetically by diphthongs, there was in the case of the short diphthongs an automatic displacement of the second element into the following consonant. In other words, the phonemic opposition "long diphthong"/"short diphthong" was represented phonetically by the difference between a normal diphthong and a normal short vowel followed by velarised consonant. There could be no question of setting up an independent series of velarised consonants. Hence, even if the new view is accepted, it will make no fundamental difference to the account given in our historical grammars. Automatic variations, whether of

quality or (as here) of position, can be disregarded from the standpoint of historical phonology (so far as the language in question is concerned) when they leave no trace in non-automatic relations at a later period. But nobody claims that any such traces were left.

At the same time, the phonemic position remaining what it was always supposed to be, no external graphic influences are required to explain the spellings. Despite the phonetic difference, we should expect just the graphies that we have. This is what makes both the traditional and the new view difficult either to prove or to disprove. But we can rest assured that the decision would cause no revolution.

Of quite a different kind is the view that some of the digraphs held to represent short diphthongs were not significant at all of a phonemic difference, as compared with some simple graphs. For instance according to the little work of Barrett and Stockwell *ae* and *ea* represented allophones of a single phoneme. They are therefore at pains to explain away such spellings as *baern-* in contrast to *bearn*. The attempt cannot be taken seriously by anyone with an elementary knowledge of OE phonology and MS tradition.

It must be stressed at this point that the establishment of a contrast between *ae* and *ea* by no means depends on finding contexts in which the difference between these two vowels serves by itself to distinguish two otherwise identical utterances. It does not even matter whether there are two words thus minimally distinguished. The word-pair *baernan bearnum* would serve just as well as the word-pair *baern bearn*, once granted that the distinction in termination has nothing whatsoever to do with the difference in stem-vowel. Providing that a difference is not *automatically* induced by the environment, it has phonemic validity whether or not we are in the lucky position of being able to cite, for the benefit of the uninitiated, two words which show just this difference and no other. This is a point which some otherwise very competent phonemicists, among them Cantineau, failed to grasp. It is only fair to add that Barrett and Stockwell, who commit almost every conceivable error, do not commit this particular error.

Since the case for a phonemic distinction between *e* and *eo* is even stronger, it is superfluous to discuss whether the OE digraphs in general were significant. The only plausible deviation from the traditional view turns on a matter of phonetics, which, as it happens, would not affect the phonemic interpretation. For the purpose of the present communication we can therefore start with the assumption that the traditional view is correct, so far as it goes.

But the traditional view is entirely neutral in respect of one question: is *eo* a single phoneme or a sequence of the two phonemes *e/o*?

And correspondingly for the other diphthongs. It is characteristic of modern phonemics that such questions are raised at all; whereas the question of distinctive function, or better of non-automaticity, was perfectly familiar to nineteenth-century scholars who simply used a different language to speak about it.

Now the tendency today is to split up any strikingly non-homogeneous sounds such as diphthongs and affricates into sequences of two phonemes, whenever it is possible to identify the successive parts of such sounds with two phones occurring independently. Thus in the now favoured system for English in America, "feet" is given the phonemic analysis /fiyt/. Hockett, in his recent *Manual of Phonology*, attributes logical inconsistency to those who, having analysed the vowel of "fight" into two phonemes (*a* plus *i* or *y*), refuse to give a corresponding biphonemic analysis of the vowel in "feet".

The charge of inconsistency can easily be answered; English /iy/ fails to fulfil several criteria for biphonematicity which /ai/ fulfils. It is possible to regard the diphthongisation of /iy/(i:) as an automatic by-product of length, whereas such an interpretation is obviously impossible where we have two parallel diphthongs /ai/ /au/ with the same first element. Of course this criterion is not by itself decisive; but then neither is any other. The idea that consistency demands that one should take *all* the English phonetic diphthongs as biphonemic or monophonemic once one has taken a *single one* of them to be biphonemic or monophonemic, respectively, is the sort of idea that leads to unnecessarily wide disagreement between different linguists. It is based on the notion that the fewer the criteria the better. But the fewer the criteria, the more likely that the criteria of one linguist will not even overlap with those of another. This would be all very well if it led to each school of linguists giving its grounds for rejecting certain criteria used by others. But this is unfortunately not the case. Hockett contents himself with saying that linguists who treat /iy/ and /ay/ differently are inconsistent; he does not pause to enquire whether they may not have been using some differentiator criterion. Trager, in a recent review of an admittedly very poor European work, simply declares that the author's system is misleading and repeats his own system for the hundredth time, as though this settled the matter. The attitude of the so-called glossematists in Denmark is very similar. Finally there is the example of Roman Jakobson, who claims to have found *the* analysis of phonological units by way of abandoning half the criteria accepted by others. Again, no reason is given why these criteria should be invalid.

Let us take one criterion which is rather rarely used, and apply

it to the case of the Old English diphthongs: namely the criterion of relevant transposition. The majority of OE phoneme-sequences can be transposed to produce sequences which also occur; though normally it is only in medial position that either can occur: -sn- -ns-, -rd- -dr- and so on. Other phoneme-sequences cannot be transposed; hence there is of course no question of making the impossibility of transposition a *sufficient* criterion for regarding a sequence of phones as making a single phoneme. But this does not mean that it is not a criterion at all. When there is no overpowering reason for taking a phonic complex as a sequence it must be taken into consideration. There is no question of regarding /mb/ as a single phoneme, since it may be spread over two syllables; also, it is parallel to /nd/ which can be transposed. But in some African languages in which *mb* cannot be spread over two syllables, the additional fact that the sequence *bm* does not occur, is a criterion for regarding the complex as a single phoneme. The same applies to Old English *eo*, *ea* etc.

The justification of this criterion follows from general phonemic principles. When a sequence cannot be transposed to produce another sequence in opposition, the order of the phones has no distinctive function. But a functionless order is not, in the fullest phonemic sense, an order at all. But again, every distinct phoneme must have a distinct order. Hence two successive phones incapable of transposition have as such no *prima facie* claim to be separate phonemes.

If any linguist does not feel intuitively that the impossibility of transposition gives a unit a more closely-knit character, he may perhaps be helped by the example of another unit, the word. It is characteristic of the parts of a word, as opposed to whole words, that transposition is not possible. Indeed the glossematists attempt to define the word in this way. This of course will not do; there are many other factors that contribute to the unity of the word.

One may add that it is not impossible that the non-transposability of the groups /st/ /sp/ /sk/ in early Germanic may have contributed to their treatment as single units for the purpose of reduplication and alliteration. Other groups such as /sn/ were transposable in medial position.

However before the diphthongs can be regarded in any sense as unit-phonemes there are of course other tests to be passed. First, the test of distribution. Here minor differences are outweighed by the complete parallelism between the neutralisations of long and short with the so-called simple vowels and the diphthongs; e.g. the restriction to long in stressed final position, the restriction either to short or to

long, according to the period, before certain consonant-clusters, and so on.

The test of interior structure, on the other hand, works out differently for different periods and dialects. The simplest case is that of Late West Saxon. Here the character "round-front" is in complementary distribution to the character "diphthongal", since the only front-rounded vowel /y/ belongs to the high series and the only diphthongs /eo/ and /ea/ to the middle and low series. In other words the diphthongs fill the gap left by the absence of partners to y in the lower series. The system is thus representable as a square formed by nine vowels. The subsequent change of *eo* to *ö* was thus a phonetic change which left the vowel in the same phonemic position vis-à-vis *e* and *o*.

The situation is rather different in those dialects which possess both *eo* and *ö*, and also in those in which *io* is opposed to *ie*. Here there is a better reason for treating the diphthongs as biphonemic. I do not think that, in such cases, it is wise to make a definite decision.

It should be added that, if anyone wishes to insist that the situation is also not quite determinate even in the most favourable instance, if he says that *eo* can in no circumstances be regarded as a simple phoneme in quite the same sense as *e* or *o* — his point may be allowed, but only if he is prepared to insist at the same time that a phoneme with two notably different variants does not constitute a simple unit in quite the same sense as a phoneme without notably different variants. There can be no reason to pay more attention to the fact that a phone is not homogeneous *syntagmatically* (i.e. that it is divisible into qualitatively distinct *parts*) than to the fact that it is not homogeneous *paradigmatically* (i.e. that it varies according to environment). It is to miss the whole point of phonemic theory to allow structural relations to dominate over merely phonetic considerations in the latter case, and yet to remain hidebound by phonetics in the former case. Phonetics should be allowed just the same degree of relevance in the one case as the other. In particular, that degree of resemblance between phones in complementary distribution which renders them suspect, all other things equal, of being members of the same phoneme, answers to that degree of resemblance between phones in juxtaposition which renders them suspect, all other things equal, of being parts of the same phoneme.

There is little time to say anything either about the relevance of the phonemic interpretation of the diphthongs to the historical phonology of the OE dialects or about parallel systems in other languages. As regards the former, I can only hint that the relatively rare dis-

sociation of the unrounding of *ö* from the unrounding of *y* (characteristic of the OE dialect area as opposed to Middle English and continental areas) may hang together with this question. As for parallels to the perhaps suspiciously symmetrical vowel-system I attribute to late West-Saxon, the only parallel commonly cited is, I believe, the system of Estonian (questions of quantity, of course, apart). However this rarity of parallels is probably just due to the fact that linguists have failed to generalise the principle of complementary distribution beyond the most elementary case of complementary simple phones. Owing to the gross asymmetry of the vocal organs, it is of course difficult for a language to build up a system which is at the same time (i) relatively rich, (ii) symmetrical along both the horizontal and the vertical axes, and (iii) made of phonetically uniform material. Almost all languages, therefore, fail to fulfil one of these three ideals. The third of them suffers a minimal violation when the system is filled out with diphthongs. It is easy to think of another language which uses this device to reach precisely the same system — a square of nine vowels — as late West Saxon. I refer to modern Rumanian. Here also there are two diphthongs, but they fill, not the two lower pigeonholes of the central series as in West-Saxon, but rather the two outer pigeonholes of the lower series.

C. E. Bazell