A PHONETIC REALIZATION OF THE PAST MORPHEME IN ENGLISH

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The importance of spoken language as basic material for linguistic study needs no longer to be emphasized. It is also well known that in the phonetic continuum of spoken language words are pronounced more or less linked to each other and that the final sound or sounds of any word may be altered by the initial sound of the following word. This phenomenon was perfectly well known by Sanskrit grammarians but has not always been taken into account in modern studies. Another fact we have to consider is that communication is the aim of linguistic activity. Consequently the reaction of listeners will be of the greatest importance in the discrimination of linguistic categories and the perception of the acoustic speech-signal has become one of the main points of interest in phonetic studies. In morphology we group into one morpheme not only phonemically identical but also phonemically different segments, provided they occur in different environments or if they do occur in the same environment they are free variants of each other. According to these criteria the past morpheme in English is said to have three allomorphs [-ad], [-d], [-t] which are phonologically conditioned by the following distributional pattern: [-d] after roots ending in [-t, -d]; [-d] after roots ending in a voiced sound, except, [-d]; and [-t] after roots ending in $[-p, -k, -f, -\delta, -\check{c}, -\check{s}]$.

If speech means connected speech and we cannot take words in isolation, the environment of any final sound of a word is not only the preceding sound or sounds but the initial sounds of the following word as well.

Thus if a past tense of a verb has either of the two allomorphs [-t, -d] occuring after a plosive, a three consonant cluster will be produced in speech whenever the following word begins with another plosive. It is well known that in a two consonant cluster we do not prononce both fully; we have implosion of the first consonant and the release of the second one; and that in a three consonant cluster there is the implosion of the first consonant, then a lengthening and finally the release of the third one. Thus a prosodic feature, length, has been substituted for the medial consonant. In our case, the medial consonant [-t, -d] happened to be the morpheme of past tense. Consequently in this particular environment, namely, after roots ending with a plosive, except [-t, -d], and followed by a word beginning with a plosive, the phonetic realization of the past morpheme in English is the prosodic feature of length.

There is still another fact to consider. In those three consonant clusters it can also

happen that, in very rapid speech, the medial consonant is not pronounced at all. In which case there would be no difference between the present and past tenses and we would have neutralization of the past morpheme. So the next thing to do is to find out what actually happens in current standard speech.

We made a list of pairs of sentences: one containing a past tense of the kind seen above (They walked twenty miles, The cats looked tame) alternated with the corresponding present forms. In the sentences, we tried to avoid any contextual guidance for the identification of tense, and in addition we gave the list to five different persons and asked them to cross out those sentences where they felt there was some indication of time in the context. And we selected the twenty pairs of sentences that had not been crossed out by any of the individuals.

Then we had these sentences recorded by a native English speaker unaware of what was involved in the experiment. In order to get a more lax pronunciation we gave him the sentences mixed with some other irrelevant material, and later on we re-recorded them again separately.

We took then two groups of native English listeners and made two different listening tests. We had the twenty pairs of sentences read to one of the groups; to the other group we played the recorded sentences. In both cases we asked the listeners to identify the present or past tense of the utterance. The evaluation of the results proved that in 12 sentences in the first group (read sentences) and in 9 in the second group (recorded sentences), the prosodic element present in the utterance had served as a signal of past tense, and that in the other cases (the opposition present) past tense had been neutralized in spoken language.

The grammatical implications of a prosodic feature being used as a morpheme have already been discussed by me in another paper of somewhat wider scope, here we are only concerned with the morphophonemic status of the element.

And the number of cases in which the prosodic feature of length was used as an effective means of signaling past tense in the communicative process entitles us to take it as an allomorph of the past morpheme in the particular environment we have described above.