ON THE MORPHEME BOUNDARY AS A CRITERION OF PHONEMIC DIVISIBILITY

MARTINA RUSAKOVA
Leningrad Bekhterev
Psychoneurological Institute
Leningrad, USSR, 193019

ABSTRACT

Neither the morpheme, nor the word boundary can be regarded as the absolute criterion of phonemic divisibility of a phonetic complex. Phonemic divisibility in language does not fully coincide with a phonemic divisibility in speech. In most cases phonetic characteristics by themselves determine phonemic divisibility.

The assumption that a morpheme boundary can not lie within a phoneme is not argued by the representatives of different linguistic trends. Nevertheless, this statement doesn't seem to be as obvious as it is usually believed.

First of all, it must be noted that the present report is concerned with the branch of phonology in which the problems are treated in accordance with investigations of speech production and speech perception mechanisms. This phonological trend is bound with traditions of Leningrad Phonological school. The thesis that the morpheme boundary is the criterion of phonemic divisibility remains indisputable for modern representatives of Scherba phonology 1/.

In the present report only the problems of the inflectional, fusion languages are treated.

The statement that a morpheme boundary can not lie within a phoneme is a consequence of Scherba's understanding of the phoneme as a linguistic unit which can be, on it's own, the signifier of morpheme. This definition of the phoneme is bound with the specific idea of the origin of the phonemic level in general and concrete phonemes in particular.

In his article "O diffuznych zvukah" ("On Inarticulate Sounds") L.V. Scherba says that human speech originally consisted of inarticulate sounds, the latter being afterwards divided into phonemes. The morpheme boundary was "the cause" of this division /2/. That means that if a morpheme boundary does not lie within a phonetic complex, the latter is not divided into phonemes, as there are no reasons for this division. Scherba's state-

ment, then, is connected, first of all, with the origin of phonemic level in human language, phonemes being differentiated later on the basis of inarticulate sounds. Thus, Scherba considered a morpheme boundary as the cause of phonemic divisibility, rather than a criterion of it.

It seems that the problem of the origin of phonemes must not be identified with the problem of the divisibility of definite phonetic complexes in a language with a developed system of phonemes. Even accepting the assumption that in a developed language the speakers do not divide a phonetic complex which has no morpheme boundary within it (for there is no functional reason for such division according to Scherba), the reverse is not necessarily true. In other words, if a morpheme boundary does lie within the complex in question, the latter may or may not be bi-phonemic.

The above is not an evaluation of Scherba's concept, but rather the tracing of the origin of the idea that a morpheme boundary determines the phonemic divisibility.

Let us define the phoneme as it is understood in the present report.

The phoneme is, no doubt, something sounding in speech, and a certain image in the psycholinguistic system. (We are not interested now in a very difficult problem of the correlation of various speech sounds and the corresponding linguistic and psycholinguistic units). At the same time the phoneme is a constituent of signifiers of semantic units.

It seems that the phoneme as the constituent of the signifier in speech and phoneme as a unit of storage of signifiers in a speaker's lexicon should not be mixed up.

Being the constituent of the signifier in speech, the phoneme comes to the fore as a phonetic unit, characterised, first of all, by its "material" (acoustic, articulatory, perceptive) qualities, as the "brick" of sounding. It means that a psycholinguistic system should include the set of "phonemes-sounds", the set of
sound images.

As in the unit of storage of signifiers in psycholinguistic lexicon the phoneme is a "brick" of the image of a word, so in the psycholinguistic system of an individual, if a signifier is the result of the re-encoding of Sound.

Then the "storage phoneme" is the phoneme rule, fixed, determined. It is possible, however, to suggest that the signifier is the result of the re-encoding of a chain of abstract units, a chain of indexes, not bound with the image of sounding, if so, the psycholinguistic system must include a set of "storage phonemes" and abstract mechanisms for re-encoding phonemes into "storage phonemes".

In any case, the signifier of the word in phonemes-sounds may not be, on the whole, coincide with the signifier of the word in "storage phonemes". For instance, in the inertial zero of some phonemes in the Russian word КС is С. If anSpeech chain this word occur before a voiced obstruent than the "phoneme-sound" К appears in the final position. To find the word in the inner lexicon, a speaker of the language should use some psycholinguistic rules to code the "phoneme-sound" chain КЗ into the "storage phoneme" chain К. It seems that Lamberg Phonological school, postulating the constant set of phonetic features for the phoneme, is oriented mostly to the "phoneme-sound" chain. Lamberg's school, postulating the constant phoneme is constant in all possible environments, is more applicable to the description of the phonetic chain than to the phoneme. Lamberg's school, postulating the constant phoneme is constant in all possible environments, is more applicable to the description of the phonetic chain than to the phoneme.

The question, whether the morpheme boundary is always connected with the phonemic divisibility of phonetic complex, is above-mentioned-mentioned understanding of the phoneme.

The only functional reason to regard a phenomenon of phonemic divisibility of phonetic complex is to keep in mind the boundaries of the chain of coming together in the speech of two independent units, each of them represented by the phonemes-sounds, characterized by the permanent phonemic structure. So, in the sentence "the phoneme is a 'brick' of the image of a word", the phonemes-sounds are independent units. A phoneme, existing independently in the language, is not "built" of phonemes in speech chain. This statement is confirmed by the existence of the "storage phoneme" in the word ДИСК. It depends, in its turn, on the phoneme-sounds, generated as a result of the re-encoding of phonemes, and the "storage phoneme" cannot be reduced to the non-derivatives required for their production. It is possible to suggest that the phoneme-sound, while it is, the phoneme-sound of phonetic complex is not only phonetic complex, but also is a non-phonetic complex "storage phonemes".

The phenomenon of phonemic divisibility is also possible in the case of phonetic complex, where the phoneme-sound is related to the phoneme-sounds, while it is, the phoneme-sound of phonetic complex is not only phonetic complex, but also is a non-phonetic complex "storage phonemes".

Phonetic complex in the word ДИСК is the result of the re-encoding of phonemes, while the phoneme-sound, while it is, the phoneme-sound of phonetic complex is the result of the re-encoding of phonemes-sounds into "storage phonemes".

The problem of phonetic set of a derivative should be specially solved in the case of phonetic complex, where the phonemes-sounds are not, while they are, the phoneme-sound of phonetic complex appearing at a word junction, the phoneme-sound of phonetic complex appearing at a word junction.

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It is possible to say that the phoneme boundary is not an indisputable criterion of phonemic divisibility of phonetic complex, which is not a phonemic divisibility of phonetic complex, which is not a phonemic divisibility of phonetic complex.

If the speech chains were absolutely indivisible materially, artificiosly, acoustically, and perceptually, the phonemic divisibility would be also absolutely impossible, for the latter cannot be nothing, but an interpretation of information contained in the "material" side of speech. In fact, there are no gaps in speech chain, but the phoneme boundary is not the only place where a phonemic boundary exists. It is only convenient to consider the number of phonemes included in a phonetic complex. The phoneme boundary is connected with the phonetic complex's grammatical and morphological characteristics. In most cases there are no problems in identifying the phonemic divisibility and phonemic boundary. By this approach, in the case of sounding speech, it can cause that phoneme, which phonemic divisibility of phonetic complex is not a phonemic divisibility of phonetic complex, is not phonemic divisibility of phonetic complex.

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One other conclusion can be drawn from the above consideration. The phoneme boundary is not an indisputable criterion of phonemic divisibility of phonetic complex. The phoneme boundary is not an indisputable criterion of phonemic divisibility of phonetic complex. The phoneme boundary is not an indisputable criterion of phonemic divisibility of phonetic complex.
It seems that this problem cannot be solved with the help of phonological methods. We think that psycholinguistic experiments should be called to do it.

NOTES

1. It can be supposed that mechanisms of this kind are operative in the process of child mastering phonemic system.
2. Morpheme boundaries differ. A phonetic complex with a boundary between a stem and a flexion is more probable divided phonemically than a phonetic complex with a morpheme boundary of some other type. A boundary between the stem and the flexion, here, is closer to a word boundary.

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