SOME REMARKS ON "JUNCTURE"
IN PHONOLOGICAL ANALYSIS

JOSEF VACHEK

Almost 40 years ago the well-known English phonetician Daniel Jones surprised the phonetic and linguistic world with his declaration that he could achieve "the classing of sounds into phonemes" on the basis of what was to be called later distributional grounds, i.e. without paying the slightest attention to the meaning of the texts serving as materials of this purely formal analysis. This declaration especially irritated those linguists who had been studying language as a functional system, serving primarily the communicative needs of the linguistic community. In our paper published in 1932 we believe to have demonstrated that Daniel Jones' claim cannot be justified. (Incidentally, in 1943 D. Jones' approach was also criticized by L. Hjelmslev who approved of the emphasis laid by the Prague group on the distinctive function of the phoneme.) We pointed out that if Jones' classing of sounds into phonemes were to be adequate one would have to consider at least the limits of words and morphemes within the examined contexts—and the positions of these limits are undoubtedly determined by grammatical factors, based on the facts of meaning. (The ignoring of such limits would make it impossible to solve the problem of the mono- or biphonemic value of affricate sounds in many languages.) It may be of interest that last year, in his Vienna lecture, W. Haas arrived at a conclusion analogous to ours. In answering the question of how much grammatical information is necessary for an adequate phonemic analysis he insists on the necessity of a certain minimum of grammatical prerequisites for this purpose, and as such minimum he specifies precisely the knowledge of the placement of word and morphemic limits.

While Jones' asemantic bias was due only to his approach of a practical transcriptionist of language, not to deeper considerations of linguistic theory, some 12 year later an outstanding linguistic current was to take up an approach analogous to his. This time, however, the approach was based on a thoroughly considered linguistic theory. This was the approach of the classical Yale group, especially of G. L. Trager and Bernard Bloch. Admittedly, the Yale people believed that all problems of phonemic interpretation could be solved on distributional basis alone, without any recourse to facts of meaning. Their aim, of course, was much higher than Jones's, and they well knew the pitfalls he had been unable to avoid. They were faced with the necessity of reducing the differences like ModE *nitrate—night rate*, ModCzech *počit* 'begin' — *podšit* 'sew under' to factors other than word or morphemic

limits, because an explanation in such terms would have implied an admission of some importance of the grammatical (and thus also semantic) factor in phonological analysis. Such an admission being ruled out in the Yale group as a matter of principle, the only course left was the postulation of a formal element existing in those positions in which the semantically orientated analysis ascertains the presence of word or morphemic limits. As is commonly known, such a postulated element indeed came to be established and termed "the juncture phoneme" (it first emerged, to our knowledge, in 1941; some other scholars have used different terms, such as "disjuncture" or, more recently, "transition").

The term has become fairly established, especially in American linguistics. It is now used more or less mechanically about the same sort of facts which Trubetzkoy, in the early 'thirties, used to call "Grenzsignale" (frontier signals), and there might be no objection to this use, if the term juncture were redefined with reference to factors of meaning with which it is obviously closely connected. One thing, however, can be regarded as certain: the qualification of junctures as phonemes will have to be dismissed. Admittedly, all allophones by which a certain phoneme becomes implemented should be mutually related, both physiologically and acoustically. Or, to put the thing in terms of Jakobson's and Halle's conception, if a phoneme constitutes a bundle of distinctive features, then the presence of all such features should be ascertainable in all variants by which that phoneme becomes implemented in concrete contexts. This conception of the phoneme has proved highly workable in most instances, but in cases of junctures it is bound to fail: an attempt to find the common features of all phonically so variegated signals of word and morphemic limits proves to be a hopeless task, An example will prove this.

The ModCzech phoneme [r] has two allophones, the syllabic and the non-syllabic one; their distribution is governed by rules also including the position of word limits. The syllabic [r̥], that is, is found if preceded, within the limits of the word, by a consonant and if not followed, again within those limits, by a vowel. An analyst ignoring word limits would have to establish two separate ModCz phonemes, /r̥/ and /r/, on the basis of oppositions like [bratr̥ asi] 'brother perhaps' — [bratra si] 'brother to him/her', [ta kr̥vavá smečka] 'this bloody gang' — [tak rvava: smečka] 'this fight-happy gang', etc. An orthodox distributionalist will, of course, postulate the presence of the so-called open juncture, and transcribe (1) [bratr#asi], (2) [bratra#si], (3) [ta#krvava:], (4) [tak#rvava:], etc. He will have, of course, to specify the distinctive features present in the implementations of /#/ in all the four sequences. This however, appears impossible, because /#/ in (1) is implemented by the syllabicity of /r̥/ preceding it, in (4), on the contrary, by the non-syllabicity of the [r] following it, and in (2) and (3) no specific phonic fact implementing /#/ can be ascertained, the implementation being the same as if no /#/ were present in the two sequences at all. Thus the "common denominator", giving the supposed juncture phoneme any phonological sense, clearly cannot be established.

In addition to this, the task would be even more hopeless if one were to interpret those numerous sequences in which the juncture has other implementations again, such as the presence of long consonantal quantity (as in ModCz pod domem 'under the house' [pod:omem]), or the articulatory détente between a stop and a sibilant (e.g., in ModCz pod sebou [pot-sebou] 'under oneself'), etc. etc.—The only possible solution one can think of would be the implementation of /#/ by a potential pause. But this solution is unacceptable again: such a pause can only be phonemically characterized by the absence of any distinctive features (or, by zero features, if one prefers that term). This, naturally, stands in striking contrast to all the distinctive features otherwise employed by the Harvardian theory.

On the other hand, this zero character of the supposed juncture phoneme is in full conformity with the classical Prague conception of Trubetzkoy's frontier signals. The fact that such a potential pause can never occur inside a morpheme but only between words (and, though less frequently, between morphemes constituting a word) repeatedly endorses the importance of the factor of meaning in phonological analysis, the factor whose disregard actually gave rise to the concept of "juncture phoneme". This concept is clearly as unjustified as the deliberate refusal to take into consideration in phonological analysis what is in fact the raison d'être of language, i.e. its communicative function, consisting in the reference by phonic means to extralingual reality, reference based on the existence of the meaning of words and morphemes.

DISCUSSION

Singh:

In searching for the acoustic correlates to *sandhi* I have found that almost 90% of the *sandhi* rules given in sanskrit grammars have almost one-to-one acoustic correlates. For example, the word compound gɪni:ʃ is a combination of two independant words gɪʏɪ + i:ʃ. By using electronic gates when the word gɪʏi:ʃ was truncated at the juncture it was found by using the psychophysical method of adjustment that two independently said words gɪʏɪ and i:ʃ were perceived by the listeners not different from the truncated words gɪʏɪ and i:ʃ.

Vachek:

I gladly admit the delimitative function of "junctures". But exactly this function is closely associated with meaning (grammatical or lexical); thus this latest conception is free from the drawbacks of the old one I criticized here. It should be added that it is especially the mechanical use of the term "juncture phoneme" by non- Yale scholars which is open to criticism, as such use is in no way consistent with the classical European, or the Harvardian, conceptions of phoneme and phonemics.