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Notes on Diaereme^[*] Aleš Bičan

Dedicated to the memory of Adolf Erhart

1. There are two passages that particularly stuck my mind when reading Adolf Erhart's excellent linguistic primer *Základy jazykovědy*¹. The first was his classification of the grammatical category of case, and the other was his classification of phonological units. Others have already commented on the former, and I would like to make some notes on the second classification.

On pp. 38-9 Erhart gives the following table which represents a division of phonological units (translated to English):

segmental phonemes	segmental prosodemes
suprasegmental phonemes	suprasegmental prosodemes

Some comments are due to understand the classification.

- i. Erhart follows a commonly accepted division of phonological units into segmental and suprasegmental ones. The segmental units are such units that are linearly grouped within an utterance, one after another. The suprasegmental units are superimposed on these units in such a sense that they form additional blocks and are placed upon one or a group of segmental units. Such are typically accent and/or intonation while the most typical segmental units are of course phonemes. Let it be noted that Erhart's use of the term *phoneme* corresponds to the practice of American descriptivists who spoke of segmental and suprasegmental phonemes; in the European tradition the term *phoneme* is usually restricted to segmental phonemes only.
- ii. Erhart further divides phonological units according to a criterion whether they form a system or not. The first units are phonemes; the units that do not form a system are called *prosodemes*. This criterion derives from Erhart's com-

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mendable recognition of the difference between paradigmatic and syntagmatic relations. Although he, unfortunately, speaks about a contrast in both cases, it is better to distinguish between an opposition, being a relation between units on the paradigmatic axis, and a contrast, being a corresponding relation between units on the syntagmatic axis². Now, phonemes are such units between which we can postulate an opposition, and hence they form a paradigmatic system. On the other hand, we can postulate only a contrast between prosodemes, as they do not enter in any paradigmatic relation with other units, and they do not form any system in this respect.

Once I have made clear what criteria underlie Erhart's division, let us examine which units are which. I have already hinted that segmental phonemes are "classical" phonemes like vowels and consonants. One versatile with American descriptivists' division of phonemes will easily guess that intonation (or better tones) belongs among suprasegmental phonemes. One should perhaps rather speak about *tonemes* to underline their phonological status. Then, what Erhart regards as a suprasegmental prosodeme is *accent*. It is because of the fact that accent is either present or absent on a syllable; the accented syllable contrasts with unaccented syllables within a significant unit (a language unit having a meaning; usually a word).

Having come so far, Erhart poses a question whether there exists a segmental prosodeme that would correspond to accent, the latter being the suprasegmental prosodeme. At this stage he introduces a unit called *diaereme* (in Czech *dierém*) as a phonological means for signaling boundaries between sentences, words etc. The segmental nature of the diaereme, says Erhart, derives from the fact that it can be realized by a pause or by an independent sound—the so-called glottal stop. Now, this is a very interesting point in Erhart's theory that I would like to comment upon.

2. Despite the peculiarity of the term *diaereme*, the concept behind it is not unfamiliar to linguists. It is meant to account, more or less, for the same things as the concept American descriptivists called *juncture*. Since they were against using grammatical criteria for a phonemic analysis, they regarded junctures as a special kind of phonemes. The concept was used, for instance, by Henry Kučera in his phonological description of Czech³. However, recent phonetic (acoustic) research on the junctural phenomena showed that juncture (in particular what was called *internal open juncture*) as a phoneme is rather a "dead horse" because the differences that had previously been explained as resulting from different types of junction of phonemes (famous *night-rate* vs. *nitrate*) were rather "differences in grouping phonemes into syllables and/or manifestations of higher level requirement different from simple syllable-to-syllable transitions"⁴.

Yet it need not mean that diaereme, if properly defined, cannot be a useful phonological concept. Phonology of American (Bloomfieldian) linguists was always practically oriented and their junctures, like their phonemes, were meant to correspond directly

to actual sound features. Once these features were discovered to result from other factors, their junctures are probably no longer necessary. But we can retain diaereme as a phonological construct, as a model that can account for various phonetic and phonological features that signal the boundaries of significant units.

Such was no doubt Erhart's intention. As far as I know he did not use it in any actual description of a language but his views have been adopted by his student Ondřej Šefčík who has actively used the concept of diaereme in his works. In one of his articles devoted to accent he spends some space on diaereme in Czech⁵. However, there are certain points in the presentation that I do not agree with; I will return to them in the third section of this paper.

First I feel necessary to reconsider the definition of diaereme. To begin with, I do not quite agree with the distinction between segmental and suprasegmental units and/or features. It is true that tones (tonemes) and accent are superimposed on segmental phonemes but languages can have features, normally viewed as pertaining to segmental phonemes, that are, as it were, also superimposed on phonemes. Let us imagine a language where a syllable contains either fully nasalized phonemes (i.e. a combination of a nasal and a nasalized vowel) or fully non-nasalized ones (i.e. a combination of an oral consonant and a non-nasalized vowel). Suppose that only one such nasalized syllable would occur within a word. It should be clear that the function of this syllable would be the same as the function of accent, which also occurs in one instance only within a word. Though this is an artificial example, something similar can be found in some Indo-Aryan languages where aspiration is specifically distributed within words (so-called Grassmann's law): occurrence of aspiration signals the presence of a morpheme and occurrence of another aspiration in line signals the presence of another morpheme. This is given by the fact that only one aspirated sound can occur within a morpheme.

From the functional phonological point of view, i.e. from a point of view that considers various functions of the phonic substance, the distinction between segmental and suprasegmental may not be very useful as long as it refers to a phonetic, not functional, division of sound features. Jan W. F. Mulder⁷ therefore suggested introduction of a so-called para-phonotactic level as a level that accompanies the phonotactic level (the latter pertaining to constituency of phonemes on the syntagmatic axis). Para-phonotactics accounts for most suprasegmental features but is certainly not limited to them. Once defined as features corresponding to phonological form, but not determining the identity of phonological entities (Mulder's definition), para-phonotactic features can successfully account for a number of features like accent or tones or nasalization in the aforementioned example. But these are not the only para-phonotactic features—sequential order of phonemes within a phonemic chain is also a para-phonotactic feature.

The primary function of accent is often described as culminative. This means that it marks the peak of prominence of certain significant units (usually words). In an ideal situation one can say that the number of such peaks equals the number of words within

an utterance. Apart from this, there are certain features that are capable of indicating the number of words more precisely. There is probably no better way to point to existence of a word in an utterance than to show its boundaries. Such features are said to have a deliminative function

Now, diaereme can be viewed as a phonological, precisely a para-phonotactic entity which would shelter and account for a large body of phonological features with a deliminative function. In many respects this corresponds to the diaereme as conceived by Erhart but his diaereme was defined in such a manner as to be bound to be of the segmental nature only. It is now a para-phonotactic unit that can be manifested by a segmental and/or suprasegmental unit.

Those familiar with the theory of juncture will know that there are several types of junctures recognized, from internal (open) juncture, external (open) juncture and terminal (open) juncture to close juncture (smooth transition from one sound to another). Though these may have phonetic justification, from the functional phonological point of view it is doubtful whether they should be distinguished. Diaereme is meant to be a boundary-signaling phonological unit contrasting with sequences of phonemes with no boundary and hence may be viewed as a cover term for all open junctures as contrasted with close juncture (sc. the absence of marked boundary).

3. I will now turn to some of the possible manifestations of diaereme. In the article "K (ne)pohyblivosti přízvuku (typologická poznámka)" (see note 5) Šefčík writes that diaereme, as a prosodeme defined by Erhart, can be generally realized (1) as a pause, (2) as the glottal stop, (3) as certain *sandhi* realizations (usually found, but not limited to Indo-Aryan languages), (4) as accent if fixed on a certain syllable, and (5) as a special realization of phonological components.

Although I do not intend to comment on all of these possible realizations or give many and extensive details (the latter would require a longer and more devoted exposure than this article can offer), I would like to make some points concerning some of the possible realizations of diaereme.

a The most obvious realization of diaereme is of course a pause. However, not every interruption of speech can be functional. Although speakers, if making pauses at all because speech is usually connected, place pauses across grammatical boundaries (usually word-boundaries), they can make a pause in the middle of a word, if they need to take a breath. Such pauses are nevertheless highly disturbing, since the listener expects the pause to be at a grammatical boundary. So although pauses can be erratic in speech, we can still regard a pause as the most obvious realization of diaereme if it is meant to signal some kind of grammatical boundary. A linguist should be able to tell out a randomly placed pause from a functional one.

b It is not uncommon that in many languages a pause is used as a boundary-signal only at the very beginning and very end of a sentence. Yet there may be other phonic features that would signal boundaries of the constituting significant units of the sentence.

Though users do not usually know it about their language, linguists trained in phonetics are cognizant of certain sounds that can be found in a speech chain but are not distinctive. Such is the glottal stop that usually occurs before a word-initial vowel in Czech and other languages. Unlike in those languages (such as Arabic) where the occurrence of this sound can distinguish words, the glottal stop in Czech does not have this power. Yet it does not mean that it need not be functional. Since it occurs at the beginning of words with an initial vowel, its occurrence can mark the place where a new word is started. For that reason it may be regarded as a (segmental) realization of diaereme (already mentioned by Erhart) in Czech.

But the situation is not that simple. In Czech (note that every time I speak about Czech I mean standard Czech and orthoepic pronunciation) the glottal stop can also occur in the middle of what is usually viewed as one word. Consider these examples (the phonetic transcription has been simplified; ⁹ stands for the glottal stop):

doopravdy [do⁹opravdi] 'really' neustále [ne⁹usta:le] 'continuosly'

To dub it in words, the glottal stop can also occur at junction of two vowels within a word. The condition is, however, that there must be a morpheme boundary. It does not occur in borrowed words like *chaos*; if it does, such pronunciation is not perceived as quire correct.

These examples prove that the glottal stop does not mark the beginning of a word. If it occurs, it marks a morpheme boundary; a boundary between words is usually a morpheme boundary, too. The problem is in the definition of the word. This is one of the most fundamental problems of linguistics. The traditional definition of the word as the minimum syntactically free form is not quite adequate even in syntax. What should we regard as a word? Should its boundaries be phonologically definable?

As to a possible phonological analysis of those Czech words, we can take two directions. Either we say that the occurrence of the glottal stop signals, not the beginning of a word, but a morpheme boundary. Then the traditionally upheld view that the glottal stop signals the beginning of a word cannot be maintained.

However, we can take another direction. The words like *doopravdy* can be regarded as two phonological words. Though this solution may appear as counter-intuitive, it is not in principle so unthinkable. First of all and once again, what is a word? Consider these examples ("stands for stress):

neobyčejný ["ne°običejni:] 'unordinary, extraordinary' ne obyčejný [ne"običejni:] 'not ordinary' pod oknem either ["podoknem] or ["pot°oknem] 'under a window' podokenní ["podokeňi:] adj. 'being under a window'

nejostřejší either ["nejostřejši:] or ["nejostřejši:] 'sharpest' (ostřejší 'sharper', nej-the superlative prefix)

What is the difference between *neobyčejný* and *ne obyčejný*? It is obviously the position of accent; otherwise the two utterances are identical. However, the presence of accent on the first syllable in *neobyčejný* does not necessarily imply that it is one word. Cf. *pod oknem* which is generally regarded as a two-word utterance (this will be discussed below). And if this utterance is built up of two words, so is *nejostřejší*, especially if pronounced as ["nej'ostřejši:]. And how much is *podokenní* phonologically different from *pod oknem* if the latter is pronounced as ["podoknem]?

These are crucial questions that require a minute analysis and consideration. At this point I would only like to say that segments that behave grammatically as one unit can behave phonologically as two units (neobyčejný, nejostřejší). And vice versa: segments behaving grammatically as two units may behave phonologically as one (pod oknem). Consider also the fact that e.g. in an English word orthodoxy there are two instances of accent and the same accentual pattern as underlying or under lying (Sophie, sc. something is under Sophie who in a horizontal position); the syllable pattern is Accented-Unaccented-Unaccented is all three cases. Grammatically, orthodoxy does not consist of two morphemes (like underlying) or words (like under lying) but if it is true that accent in English occurs one per a word or morpheme, then orthodoxy behaves as a two-word or two-morpheme segment⁸.

But to return to the possibility of diaereme being realized by a segmental sound: We can still maintain that diaereme is realized by the glottal stop in Czech but we should specify which units are delimitated by diaeremes—whether words or morphemes or something else. Also, the glottal stop need not be the only sound with this function (i.e. with a deliminative but not a distinctive function). We can easily imagine other sounds. For instance, in a language where sounds like [h], [v] or [w] (or in principle any other sound) cannot positively be shown to realize phonemes, yet would occur, like the glottal stop in Czech, before word-initial vowels, then these sounds may be regarded as realizations of diaereme. In fact, the occurrence of so-called prothetic sounds is not an uncommon phenomenon.

c The situation envisaged in the last paragraph should not be confused with limited distribution of certain phonemes. For example, if the phonological analysis shows that, for example, the sound [h] is a manifestation of a phoneme /h/ and the distribution of the phoneme is limited to, say, the word-initial position, then it has a deliminative function (in addition to a distinctive function every phoneme has). Since its phonemic status has been proven, it cannot be a manifestation of diaereme, but like diaereme it has a deliminative function. However, we should be cautious here. We have to realize that saying that a phoneme occurs exclusively in the word-initial position presupposes we have registered boundaries of words, which might be sometimes a quite difficult task.

d It is well-known that the word-final position is a position of neutralization of the opposition between voiced and voiceless phonemes in Czech (phonetically speaking, only voiceless obstruents can occur at the end of a word before a pause). The same neutralization is found in Russian or German; other languages can have their own specific word-final neutralizations. What is the factor causing this neutralization? It is obviously the word-final position. The end of a word, its termination, which is signaled by a pause, is therefore phonologically relevant (functional). Phonology, viewed as functional phonetics, should deal with it, and it is diaereme that can account for it. The word-final position is then the position before diaereme and the word-initial position is the one after diaereme. The difference between the distinctive features 'voiced' and 'voiceless' is canceled before diaereme in Czech (and German and Russian).

e Another phonological means for signaling a grammatical boundary may be accent fixed on a certain syllable in a word. Czech is an oft-cited example having a fixed accent which fulfills this function. Because of this, Šefčík (op. cit.) regards accent as a realization of diaereme in Czech. This point needs to be examined.

It is generally asserted that any Czech word is always accented on the first syllable. Here I hasten to add that the word should be at least dissyllabic for accent to be functional—in monosyllabic isolated words a syllable, no matter if phonetically stressed or not, cannot be contrasted to any other syllable within the word. Also, it should be mentioned that here accent is viewed and defined as a certain prominence given to a syllable and only one syllable within an accentual unit. Accent is thus distinguished from stress, which may be one of possible manifestations of accent (melodic pitch, duration etc. are other possible manifestations).

There are a number of words in Czech that are not accented; these are certain prepositions and clitics (both of them tend to be monosyllabic, hence out of question). However, the rule that a plurisyllabic word is accented on the first syllable holds unconditionally only when the word is in isolation (terminated by pauses). Though normally unaccented, certain prepositions acquire accent when combined with a noun. Consider these examples:

pod [pot] 'under'
okem ["okem] 'eye', instrumental
pod okem ["podokem] 'under an eye'

From the common-sense view of the word, we can easily see that the word *okem* is not accented at all in the third example. I have already hinted that this may be quite a problem. What is a word and how is it defined? The problem is usually undone by introducing a concept of the phonetic or phonological word which is defined as a segment containing one and only one accent (*orthodoxy* would then be two phonological words). We can then say that accent falls regularly upon the first syllable of a phonological word. However, this statement is tricky because it may be circular—we have just defined the phonological word as a segment containing one and only one accent!

Let us now return to the example ["podokem]. I can think of two possible analyses. We can either regard it as a single, phonologically unanalyzable entity (say, a phonological word) or as two entities. One of the arguments for the second analysis is the fact that once we regard it as two words, sc. once we place diaereme between [pod] and [okem], we can register neutralization of the opposition between voiced and voiceless phonemes. Viewed from the perspective of the speaker, we can say that when he wants to say 'under an eye' and use standard Czech, he will always pronounce either ["podokem] (or ["pot?okem] to which I will return presently). The orthoepic pronunciation does not give him any other option. Except for ["pot?okem] which is another argument for the suggested analysis⁹. I said that the glottal stop might be regarded as a realization of diaereme because its occurrence (almost) always marks the beginning of a word. The utterance ["pot?okem] is therefore phonetically marked as being composed of two words. The same neutralization process takes place before diaereme. This means that pod okem ought to be phonologically interpreted as /#"poT#okem#/ (T is an archiphoneme corresponding to the neutralization between 'voiced' /d/ and 'voiceless' /t/; # stands for diaereme). The archiphoneme /T/ would be realized either as [t] if the immediate diaereme is realized by the glottal stop or as [d] if it is not. There is no other choice.

This analysis shows that we can no longer claim that accent in Czech is a realization of diaereme. Not every pre-word diaereme would be realized by accent on the adjacent syllable, since /okem/ is not. For Czech, it is better to operate with two para-phonotactic units: accent and diaereme. Accent has primarily a culminative function but happens to have a deliminative function by virtue of being fixed on a certain syllable. This deliminative function is more or less potential, since we have to know how to syllabify to set the precise boundary.

However, the degree of interconnectedness of accent and diaereme is so high in Czech that they almost merge in one unit. This is due to accent being fixed on a certain syllable. Yet there can be languages where accent is a realization of diaereme if its occurrence is connected with the placement of diaereme. This would be the situation in Czech if every initial syllable in plurisyllabic words were accented after diaereme. The diaereme would then be realized by a suprasegmental unit, which is a proof that diaereme need not be a purely segmental unit as Erhart defined it. It is better to speak of para-phonotactic units to avoid this contradiction.

Let me return to the first suggested solution, that is, to the one which regards ["podoknem] as phonologically unanalyzable. The argument for it is such that there is in fact no phonic feature which would mark the boundary. That there is neutralization can be found out only after we say there is a boundary. That one can say instead ["potokem] says nothing about the form ["podokem].

The form ["podokem] may be something that has been, to the best of my knowledge, little considered and discussed: a case of the syntagmatic counterpart of neutralization.

Neutralization is the inoperability of a certain opposition, and an opposition is a paradigmatic relation. We can think of a process which accounts for the inoperability of a contrast (the reader should remember that this is the syntagmatic counterpart of the paradigmatic opposition). So if there is a contrast (i.e. a functional syntagmatic difference) between the diaereme and phonemes when *pod okem* is pronounced as ["pot'okem] (phonologically /#poT#okem#/), the contrast is neutralized when pronounced as ["podokem]. There may no longer be any operative difference between the diaereme and the phonemes.

The same situation may be envisaged for an English pair of utterances like *an aim* and *a name*. These utterances can be either pronounced alike as [ənɛɪm], or the first as [ən-ɛɪm] and the second as [ə-nɛɪm]¹⁰. Phonologically, there is, firstly, diaereme in the latter case whose position distinguishes *an aim* from *a name*, and secondly, a contrast between the diaereme and neighboring phonemes. If the difference between the utterances is not maintained and both are pronounced as [ənɛɪm], phonologically /#ənɛɪm#/, the contrast which was postulated for /#ən#ɛɪm#/ and /#ə#nɛɪm#/ may perhaps be regarded as neutralized, since there would be no functional phonological difference between *an aim* and *a name* even though the difference is clearly grammatical.

f A note should be made on distinctiveness of diaereme. Diaereme, like accent, is not and cannot be distinctive. This possibility is ruled out by their definitions. To be distinctive means to be opposed to something else (in Erhart's words: to form a paradigmatic system), which diaereme is not. It is not distinctive even in an oft-cited Czech pair (an aim vs. a name may be a parallel English example):

spala [spala] 'she slept' spal a [spal⁹a] 'he slept and'

If we ignore artificiality of these examples (they would hardly occur in similar utterances or isolated to be mutually confusable), we can say that what distinguishes [spala] from [spal⁹a] is the occurrence of the glottal stop in the latter. If we say that the glottal stop is a marker of the word-boundary, hence a realization of diaereme, we can interpret these utterances as being phonologically /#spala#/ and /#spal#a#/. It is obvious that the utterances have different phonological structures and are thus not mutually compatible and commutable (to be commutable means to be in opposition and in turn to be distinctive). Also, in the given position, i.e. in the position at the end of one word and at the beginning of another, the diaereme is not commutable with anything else, simply because it is the only unit to occur there.

Yet it cannot be denied that the two utterances are different. The difference is of course caused by the diaereme but not because it would, by itself, distinguish these utterances but because it is differently distributed. This is to say that what distinguishes utterances spala and spal a is the position of diaereme: in spala it is placed after the second a/a, in spal after a/a.

The same is true about non-distinctiveness of accent: once defined as a unit not entering into paradigmatic relations, it cannot be opposed to anything and hence cannot be distinctive. The difference between e.g. English *import* (noun, accented on the first syllable) and *import* (verb, accented on the second syllable) is not underlain by an opposition between accented and unaccented syllables, the difference lies in the position of accent. It cannot be said that the first accented syllable of *import* (n.) is opposed to the unaccented first syllable of *import* (v.), because in the latter the second syllable is accented whereas it is not in the former. That the two words are nevertheless different is given by a distinctive opposition between an accentual pattern Accented-Unaccented (*IMport*) and an accentual pattern Unaccented-Accented (*imPORT*).

In languages with a fixed accent, the specific accentual pattern (e.g. if it falls upon the first syllable of a word) is not opposed to any other pattern and hence not even the position of accent can be distinctive here. Such is the situation in Czech, though the position of accent may be distinctive here in a marginal case. But it is not in the oft-cited cases (see e.g. Kučera *op. cit.*, p. 53) like the following:

ta jemná dáma [ta"jemna:"da:ma] 'that fine lady' tajemná dáma ["tajemna:"da:ma] 'a mysterious lady'

Here the difference is in the position of diaereme, not accent, since accent can still be said to occur on the first syllable of certain segments notwithstanding the fact that the segments may consist of more than one word (cf. pod okem ["pot?okem]).

I have had in mind another pair of words. Let us return to the difference between <code>neobyčejný</code> ["neobičejni:] 'unordinary' and <code>ne obyčejný</code> [ne "običejni:] 'not ordinary'. If they are phonologically interpreted as <code>/#"ne#običejni#/</code> and <code>/#ne#"običejni#/</code>, that is, if the glottal stop is regarded as a boundary-signal in Czech, then the difference between them lies in the position of accent. This analysis upheld, we cannot say that accent is completely fixed in Czech. This would be another proof that accent and diaereme are two para-phonotactic units in Czech.

CONCLUSION

In the above paragraphs I tried to comment on diaereme, a phonological unit that Adolf Erhart defined as a segmental prosodeme and that marks grammatical boundaries. The distinction between segmental and suprasegmental is not quite fitting in phonology and even less in case of diaereme, since it can be realized both by a suprasegmental unit (accent under certain circumstances) and a segmental unit (usually the glottal stop). It is advisable to introduce so-called para-phonotactics as a level corresponding to the phonotactic level. In turn, diaereme is to be defined as a PARA-PHONOTACTIC UNIT WITH A DELIMINATIVE FUNCTION (accent is a para-phonotactic unit with a culminative function and, for that matter, a phoneme is a phonotactic unit with a distinctive function).

Diaereme can be realized in many ways, ranging from a pause, a segmental sound, a phonological process (such as neutralization) to suprasegmental features of syllable-

prominence which normally realize so-called accent if the latter is fixed on a certain position and the position is derivable from the position of diaereme. Such might be the situation in Czech, since the syllable-prominence (stress) is generally said to occur on the first syllable. However, this is rather simplified, since distribution of Czech stress is much more peculiar and though it occurs on the first syllable of a word, not every word which beginning is phonologically marked by diaereme is stressed on the first syllable (as utterances like ["pot?oknem], /#poT#oknem#/, "under the window" and ["ne?običejni:], /#ne#običejni#/ "unordinary" prove). In Czech ACCENT OR STRESS IS NOT A REALIZATION OF DIAEREME, though it is capable of marking a certain type of boundary.

Although it is ruled out by the very definition of diaereme as a unit not entering into paradigmatic relations, which is a condition for distinctiveness, many people still think that diaereme can distinguish between words. This can only be true if it is correctly meant as that THE POSITION OF DIAEREME CAN BE DISTINCTIVE AND CAN DISTINGUISH BETWEEN WORDS as can be is nicely seen on the English pair an aim /#ən#ɛɪm#/ and a name /#ə#nɛɪm#/ where both items are built of the same phonemes and only the position of diaereme (i.e. a word-boundary) is different.

Appendix: Origin of the term dierém

Erhart used the term *dierém* for a phonological unit he viewed as a segmental prosodeme without specifying the origin of the term. Although it is not mentioned in the book, the term must be borrowed from the Moscow School. It seems to be introduced for the first time in an article "О разграничительных сигналах в языке" ['On boundary-signals in language'] by M. B. Панов [M. V. Panov] (*Bonpocy языкознания* [Voprosy jazykoznanija] 10, 1961); the author speaks here about диэрема [dierema]. Though the article is not mentioned in his book, Erhart must have adopted it to Czech therefrom, and coined the form dierém on the analogy with foném etc. (dieréma would also be possible but the –éma suffix, if used in e.g. Travaux du Cercle Linguistique de Prague IV (1931)¹¹, was soon replaced by –ém).

Panov did not mention what stem/word underlies the term dierema but there can be little doubt that the word is related to Greek words διαιρεσις [diairesis] "division" and διαιρέω [diairéo] "divide, separate". Though the suffix -ema was meant to reflect other -ema terms in linguistics (like фонема, тонема or хронема [fonema, tonema or chronema] mentioned by Panov himself, op. cit., p. 6, n. 8) and hence standing for something like "a systematic unit signaling divisions/boundaries", there is nevertheless a Greek word διαιρημα [diairēma] meaning either "part divided, division" or "logical division" 12 .

Now as to the English variant of the term: The word as such is not current in English usage, and Russian *dierema* seems to be substituted by *juncture* in translations. The only

mention I have been able to find is in Eli Fischer-Jørgensen's *Trends in Phonological Theory* (Copenhagen, 1975). When discussing Soviet contributions to phonology, the author briefly overviews the aforementioned article by Panov and uses a plural form *diaeremes* (p. 362). In fact, little is said about the article except for the term and functions diaeremes are meant to convey.

Curiously enough, the index to *Trends* gives the form *dieremes* (p. 458). Although one of the forms is clearly a misprint, because they refer to one another, the variation between *diaereme* and *diereme* need not be *per se* unfounded. The English word *diaeresis* (sometimes spelled even *diæresis*), borrowed from Greek $\delta\iota\alpha\iota\rho\varepsilon\sigma\iota\varsigma$ via Latin *diæresis*, has a variant spelling *dieresis*, which is more common in North America. Hence *diereme* is thinkable, too, but the spelling *diaereme* has been used here mostly for aesthetic (or esthetic?) reasons.

NOTES

- ¹ Adolf Erhart, Základy jazykovědy, Praha, 1990, 2nd edition.
- ² The thought behind the difference between the opposition and contrast is naturally not new. The terms, however, were used for the first time, as far as I know, in Roman Jakobson's "On the Correct Presentation of Phonemic Problems", published in *Symposium* 5, 1951. It was reprinted in the author's *Selected Writings* I (The Hague, 1961) under the title "For the Correct Presentation of Phonemic Problems"
- ³ Henry Kučera, *The Phonology of Czech*, 'S-Gravenhage, 1961. For certain reasons he uses the term *disjuncture* instead.
- ⁴ J. E. Hoard, "Juncture and syllable structure of English", *Phonetica* 15, 1966, pp. 104-5, cited by Ernst Pulgram in *Syllable, Word, Nexus, Cursus*, The Hague Paris, 1970, p. 111.
- ⁵ Ondřej Šefčík, "K (ne)pohyblivosti přízvuku (typologická poznámka)", *Čeština univerzália a specifika* 4, Praha, 2002. Also published in Linguistica ONLINE http://www.phil.muni.cz/linguistica/ at this address:
- http://www.phil.muni.cz/linguistica/art/sefcik/sef-002.pdf.
- ⁶ The example taken from André Martinet, *Phonology as Functional Phonetics*, London, 1949, p. 11.
- ⁷ See for instance Jan W. F. Mulder, *Foundations of Axiomatic Linguistics*, Berlin New York, 1989, pp. 449-51.
- ⁸ Cf. André Martinet, *Éléments de linguistique générale*, Paris, 1961, 3rd edition, section 3.35. Note that stress, as one of the manifestations of accent, can be primary or secondary. Accent is either present or not, but there is no hierarchy.
- ⁹ Let it be noted that under certain circumstances [pot"okem] is possible, too, but not if *pod okem* is pronounced isolated and without any special emphasis.
- ¹⁰ The transcription is rather simplified. The dash is to indicate that there is a difference between the utterances. However, the difference is not due to presence of a special allophone of juncture

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(namely internal open juncture) but due to special word-initial and word-final allophones at the

either side of boundary (see Pulgram, *op. cit.*, p. 113).

11 In "Projet de terminologie phonologique standardisée", for example p. 311.

12 Taken from *A Greek-English Lexicon* (compiled by H. G. Liddell and R. Scott, revised and augmented by H. S. Jones, Oxford, 1940).