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### What's in a phonological syllable?

Universal constraints on the composition of syllables and the Slavonic data

It is customary to say, in Slavistics, that Russian has not altogether ordinary syllables like *ksizm* in *marksizm*, Polish - similarly inordinary syllables like *padę* in *padł* with its bookish pronunciation, and so on.

Consider, however, the following small poem in Polish:

*O panu Naziemskim*  
(On Mr. Naziemski)

|                          |                         |
|--------------------------|-------------------------|
| <i>Naziemski padł</i>    | (≈ Naziemski has fallen |
| <i>Na ziemski padół.</i> | On the vale of tears)   |

If the last word of the first line is pronounced in a bookish fashion, i.e. NOT as *pat* (or *pad* - before a resonant, as in Cracow or Poznań pronunciation), the two lines sound identical. In fact, one can reverse their order without thereby making any difference to the ear. Whoever does not believe this is well advised to read the whole out for an audience and ask them which line contains the personal name and which - the name of the "place of destination". The opinions would no doubt be split on the point, and the possible prevalence of the option saying that the first line begins with the name of the hero can only be due to the obviously more frequent pattern of sentences starting from "the subject".

What is particularly important from our present point of view is the fact that one cannot notice any difference between the two lines as regards the respective numbers of syllables. This is in a direct conflict with the commonly accepted claim that *padł* is monosyllabic and that *padół* is disyllabic. A similar conflict arises when we consider another distich:

|                                    |                                     |
|------------------------------------|-------------------------------------|
| <i>Jak to zawsze robić zwykł,</i>  | (As he had always used to act,      |
| <i>Cały wiersz na pamięć wykł.</i> | He has got the whole poem by rote.) |

provided we apply the bookish pronunciation of *zwykł*.

One way out of the dilemma is by declaring the words *padół*, *wykuł* monosyllabic. However, this would entail that *dół* and *kuł* are words deprived of any syllabicity; furthermore, the parity of reasoning would require to consider myriads of words like *maku*, *lasu*, *stodół*, etc., contrary to all available evidence, monosyllabic as well. No one would venture this kind of fanciful solution. But its rejection amounts simply to the acceptance of the only alternative view: that of disyllabicity of the Polish bookish Past tense forms ending in (graphic) *-ł* after a consonant and their pronunciation in *-uɥ*.

In this way a series of strange would-be syllables disappears from Polish, syllables like *duɥ*, *kuɥ* being most ordinary items displaying an elementary structure usually symbolized as CVC. A parallel misrepresented series follows suit, viz. the alleged syllables *ɥbem* (*ɥbem*) or *ɥza* (*ɥza*), where, in point of fact, nothing more complicated than *ɥu*, i.e. CV, crops up, as is shown by the auditory indiscernibility of *ɥbem uderzył* 'he hit with his head': *UB-m uderzył* 'I have struck UB' (= Polish communist secret police)<sup>1</sup> or *ɥza rzędcy* 'tear of an estate agent': *u zarządzcy* 'with the manager', provided the initial graphic *u* is pronounced with an epenthetic glide (a very widespread phenomenon).

On these grounds, the complicated "antimonotonic"<sup>1</sup> syllable structures with *ɥ* have been discarded by being split into two syllables in a sequence each where both syllabic segments represent extremely simple arrangements of sounds with a canonical vocalic nucleus, cf. *ɥu*, *bem*, *pa*, *duɥ*. Notice, however, that even if the analysis inserting the vowel *u* were questioned, monosyllabicity of *ɥbem* or *padł* would have nevertheless been rejected on the basis of the observation of equisyllabicity proper to the lines presented above: we would have only acknowledged the presence of sequences of syllables where one of the syllables were equal to or included *ɥ* as its nucleus (*ɥ-bem*, *pa-duɥ* etc.).

Under this kind of analysis, the picture of Polish syllables would be radically changed in another way: on the one hand, we would disallow a large number of strange syllables composed of many phonemes in an atypical order, but on the other hand, we would introduce numerous syllables with a simple or very simple phonemic sequence that would display, however, no less strange (judging by ordinary standards) features of the quality of their particular phonemic constituents, most notably, of their nuclei (or candidates for nuclei).

It is indeed this general view that I shall advocate here while extending the approach sketched out above to all kinds of words in whatever languages where glides or resonants or even spirants and obstruents (resp. affricates) seem to occupy an "improper" position in a syllable, a position similar to that of  $\dot{t}$  we have just discussed.

This does not mean, by the way, that I withhold my claim concerning the particular category of Polish words with  $\dot{t}$  to the effect that they contain the vowel *u*: I am ready to maintain that this claim is true and thus recognize that the syllables of the respective words present no special puzzles (although there is something puzzling in the words nonetheless: it is the non-standard placement of word stress in them). The strange syllables whose existence I envisage will appear in other kinds of words; but their appearance can be duly appreciated when one applies to the words that essential idea which has been tacitly assumed while dealing with the Polish words containing  $\dot{t}$  that we have examined.

The idea I have in mind is that of syllabicity as a phonological feature. This is to be understood as follows: syllabicity alone, i.e. the application or non-application of syllabicity to some otherwise identical phonemic material, can be semantically diacritical. A more detailed formulation would read: given a phonemic sequence  $\alpha\beta$  where one at least of the constituents is not what we may call "vowel par excellence", i.e. *a*, *o*, *e* or a similar non-high vowel (each of which is inherently syllabic), constituent  $\alpha$  or  $\beta$  which does not meet the condition just stated normally (barring some special cases to be discussed below) either supports or does not support syllabicity, the difference being by no means automatic (i.e. not induced combinatorially by the quality of the other constituent), and thus being functionally relevant; if, say,  $\beta$  is a "vowel par excellence", we get either  $\hat{\alpha}\beta$  or  $\alpha\hat{\beta}$ ; if neither  $\alpha$  nor  $\beta$  is a "vowel par excellence", we get either  $\hat{\alpha}\hat{\beta}$  or  $\hat{\alpha}\beta$  or  $\alpha\hat{\beta}$ ; and the differences between the sequences can all be utilized, as self-contained devices, for distinguishing meanings.

The well known Serbo-Croatian example *groce* 'little throat' (to which attention was called by Trubetzkoy 1939, Ch. IV, 5) may serve as a paradigm here. There appears to be no intrinsic necessity to form a syllable like *gro* out of the respective phonemic stuff. We can have a distinction *groce* : *groce*, i.e. an independent quantitative distinction of a trisyllabic vs. a disyllabic word, a distinction over and above any qualitative distinctions that might occur (*o* vs. *a*, *r* vs. *l*, etc.); moreover, the indicated quantitative distinction is prior to all the qualitative distinctions in the

following simple sense: syllabicity and the differences of numbers of syllables in sequences are always present (are obligatory), whereas no specified sound qualities (supporting syllabicity) are bound to occur at every place in a speech chain (although these or other qualities must of course crop up everywhere).

It is true that the practical predominance of, e.g., the pattern CV over QV is overwhelming. But we should not blink the fact that the predominance reduces to the matter of what, out of the existing phonological potentialities, has happened to be put to work rather than of the potentialities themselves, which we can be legitimately interested in as a separate and independent phenomenon.

The reality of these potentialities can be observed not only in more or less isolated cases such as the aforementioned Serbo-Croatian example or disyllabic words like *ktkt* 'frozen snow crust', *vtvt* 'leaf', *qvqv* 'narrow' in Koriale or the famous vowelless words in Bella Coola like *k'xřc*<sup>2</sup>, but also, unexpectedly enough, in certain items of such seemingly unproblematic languages as Polish where we can (although need not) distinguish things like *Zoli* 'Zola's', vs. *g Oli* 'from Ola'<sup>3</sup>.

Let us add two further examples of a similar kind.

As has been noticed by Perlin (1987), Polish permits us to differentiate the sequences *maś-sko* and *ma-ś-sko* where *ś-sko* is an allegro form of *wszystko* 'everything'; Perlin offers utterances corresponding to the following sentences: *masz skoordynować* 'you ought to coordinate', *ma wszystko ordynować* 'he ought to prescribe everything' (it is recommendable to read them with emphatic stress on the verb as, say, answers to the relevant yes/no-questions).

The other example comes from Russian. Imagine there is an organization *Narodnoe ob'edinenie vsesojuznoj voxry* 'people's association of the Gulag escorts of the Soviet Union' having the acronym NOV<sup>4</sup>; we can obtain the Genitive *noyve novve* (*novogo NOV<sup>4</sup>a*) 'of the new NOV<sup>4</sup>' with the stronger stress on the adjective where the trisyllabic *n'o-y-ve* would be kept distinct from the disyllabic *n'ovve*, as can be seen from the fact that the syntagm with the adjective coming second is fairly easily discernible.

Thus, it is a misrepresentation of facts when syllabicity is virtually identified with the vocalic character of sounds or when some special sounds get split into allegedly distinct phonemes, such as "non-syllabic *r*" and "syllabic *g*"<sup>14</sup>. Meanwhile, this unfortunate tendency is so strong that even as outspoken and prominent a defender of "phonological syllable" as Kuryłowicz (1948, 104) maintained that syllables are constituted by vowels and invented a special circumlocution for *pst* 'silence!' (a sequence "exercising the function of a syllable", but *n o t* a syllable!).

Our own view of syllabicity entails that where syllabicity is not inherently proper to a phoneme (the case of "vowels par excellence"), the phonological, i.e. diacritical, power of syllabicity lies in its capacity of meaningfully opposing to a non-nuclear phoneme a nucleus whose phonemic basis is identical with that phoneme, the opposition materializing in the distinction "a syllable vs. a sequence of (two) syllables" (with the same phonemic stuff).

Thus, for a syllabifiable, but not inherently syllabic, element to belong to a margin of a syllable amounts, from the viewpoint of the diacritical function, to being opposed to a possible nucleus with the same phonemic basis. The corollary of this (under the additional assumption that a non-inherently syllabic element has only the two options - either to belong to a margin or to form a nucleus) reads as follows: where no meaningful distinction (other than a substitution of another phoneme or a change concerning stress: stressing what is unstressed or destressing what is stressed) can materialize on a phoneme, the phoneme should be taken not to belong to a margin and, therefore, to be the nucleus of a separate syllable; such a nucleus (a) may be inherently syllabic (when there is non-nuclear counterpart of it in any environment) or (b) may have acquired its nuclear character by virtue of its special position in a given sequence, according to general rules (when there are elsewhere instances of sounds that are phonemically identifiable with the nucleus in question, but do belong to margins).

Let us elaborate on what has been said above by reverting to our Polish examples.

First, take the difference between *Zoli* and *g Oli*. We of course can syllabify *z* in *Zoli* and obtain something equal to *g oli* (which will be understood differently, viz. as 'z Oli'). We can also desyllabify *g* in *g Oli* and obtain *soli* (which may be understood differently, viz. as 'Zoli'). On the

other hand, we can neither syllabify *g* in *g Oli* nor desyllabify *z* in *Zoli*; the reason is obvious: positive and, so to speak, negative syllabicity applies to phonemes and not to the results of its application, i.e. to something that is already syllabic and to something that is already deprived of (positive) syllabicity, respectively.

Now, consider one of our controversial clusters, e.g. that in *fza*. Suppose we have here margin *ʷ* (as is often claimed<sup>5</sup>). Then we should expect (under the above assumption that margins are opposed to nuclei) that there is a possibility of syllabifying it, i.e. opposing *fza* to an auditorially discernible sound chain with the same material, but with more (two) syllables such that the nucleus of the first syllable corresponds to *f-* (without, however, being assigned stress, which is a feature in its own right). But this expectation proves to be wrong: if only we care not to alter the stress pattern, we are left with the same sound chain, exactly as when we try to syllabify *g* in *g Oli*.

This substantiates the claim I have made at the beginning to the effect that *fza* is a disyllabic word.

It is true that the putative first syllable in *fza* cannot be desyllabified, either (unlike *g* in *g Oli*). But the syllabic force of *f-* as a diacritical feature manifests itself in another way: *fza* can be opposed, e.g. to both *gza* 'gadfly (Gen.)' and *gza* (a possible distinct word), where what is at stake is the bare difference of the number of syllables and where it is the disyllabic item that matches *fza* better. In order to account for this match, we have to assume that there is, first, the abstract number of syllables (i.e. occurrences of the diacritical feature "syllabicity") in a sequence, and then, the optional filling of the respective places with these or other admissible phonemic bases, among others, such as *ʷ*, *g*, *gza* (before *za* and further items)<sup>6</sup>. (It may be useful, at this point, to recall the easily observable difference between *gle* and *g-le* in Polish *g'ogle* 'goggles' and (colloquial) *v'o-g-le* (*w ogóle*) 'in general':).

Additional evidence in favour of the syllabic nature of the controversial glides and consonants is supplied, first, by certain phenomena of parallelism between syllable sequences<sup>7</sup> (cf. *kr'onika s'ewrska* 'the chronicle of Sévres' with the clearly trisyllabic *kr'onika* and the distinctly dactylic character of both words, in its contradistinction to the easily sensible change from a dactyl to a trochee in *kr'onika pr'aska* 'the chronicle of Prag'), second, by

diachronical innovations which are in a way cognate to desyllabification (cf. Czech *jsem*  $\geq$  *sem* 'I am', dial. *lšice*  $\geq$  *šice* 'spoon' and a lot of others).

The kind of reasoning presented above can be applied to a very wide range of consonantal clusters in all languages where phonemic combinations are not limited to CV or CVC; the clusters will be resolved into parts belonging to different fairly simple syllables in a sequence. Typical examples of such clusters are combinations where a glide or a resonant precedes a spirant or an obstruent (affricate) before a vowel or follows them when they follow a vowel, cf. Czech *jsem*, Russian *lgat'*, Polish *spazm*. It is in such words that consistency forces us to recognize hosts of unstressed syllables with glide or resonant nuclei which are actually "unorthodox", unlike *uj* or *yu* discussed earlier.

Moreover, we have to extend this approach to all clusters where certain phonemes have already "consumed" syllabicity, even if these are spirants or obstruents: the proof is that they are unable to be turned into "more distinct" (but unstressed) syllabic nuclei, unlike *z* in *zoli*. We may point to *kg* in English *asks*, *tʂ* in German *Herbsts*, *kʂ*, *kʂ* in Polish *krztusi*, *akt* and many other examples of a similar kind.<sup>8</sup>

This unconventional but principled solution allows us to dispense with additional notions of "extrametrical elements of a syllable" or "quasi-syllable"<sup>9</sup>; no one has indicated any empirical consequences that could be left unaccounted for if one had no access to such notions.

This brings us directly to our main issue: just what are the precise limits imposed on sets of phonemes making up a syllable sequence with a given nucleus and with margins, limits which leave everything outside the sequence to another syllable enforcing the outer elements to become syllabic.

I submit that there are universal constraints on the sets; in other words, one inalienable aspect of the universal obligatory diacritical operation of syllabification applying to optionally selected<sup>10</sup> phonemic items is a universally valid scope of what can and what cannot be incorporated simultaneously into a single product of the operation.

However, before I make an attempt to characterize the scope, a note is necessary on the purported validity of my initial step of reasoning which

forms an important part of what I see as a justification for the general lines of my picture. The step consisted in an inference from an irresistible impression of equisyllabicity of two lines to the rejection of monosyllabicity of a constituent word.

Still, one may question the validity of the impression.

First, there are cases where such an impression proves, upon a closer scrutiny, to be erroneous. For example, one can easily be misled into thinking that the following lines are equisyllabic:

|                                            |                                                     |
|--------------------------------------------|-----------------------------------------------------|
| <i>Tanja prosila u mamy konfetku.</i>      | (T. asked her mummy for sweet.                      |
| <i>"Sun'-ka ty luźše palec v rozetku".</i> | "You'd better put your finger into<br>the socket.") |

Yet, one syllable appears to be missing at the place of *palec* (cf. the trisyllabic *u mamy*); and the actual version of the second line does indeed read differently: it contains *dva pal'ca* 'two fingers'.

Second, some instances of what are disyllabic sequences according to our criteria function as counterparts of single syllables in poetry. Consider the following part of a Polish song:

|                                             |                                         |
|---------------------------------------------|-----------------------------------------|
| <i>'Oto dz'is dzień krw'i i chw'a-a'y,</i>  | (This is the day of blood and<br>glory, |
| <i>'Oby dni'em wskrzesz'e-eni'a-a b'ył.</i> | May it be the day of resurrection.)     |

Here, *krwi* and *wskrze-* are counterparts of the single syllables *sze* and *dzień*, respectively, although they should be regarded, on our criteria, as disyllabic sequences. Therefore, the parity of reasoning seems to require either taking the impression of equisyllabicity at its face value and concluding that the claim of disyllabicity of the indicated parts has been refuted or abandoning the clue of equisyllabicity altogether and, consequently, trying to substantiate the earlier claim of disyllabicity of, say, *padł* in a different way, without a recourse to the clue, and, possibly, giving up that claim, too.

My answer is as follows.

Phonological syllables as bundles of diacritical elements must not be confounded with fragments taken to be equivalent to "prototypical" syllables in terms of their purely phonetic impact. That impact is, generally speaking, measured by the ability of such minimal fragments to carry a separate stress, that most prominent feature underlying rhythm; we might call such fragments "syllabic units of rhythm" or (rather misleadingly) "rhythmic syllables". Now, it is obvious that many phonemic sequences showing a fairly rich composition, cf. Russian *grafstv*, *ostr*, Polish *drgnąć*, *strmi-* in *Strmiska* (a personal name), have only one place where stress can fall, according to the patterns proper to the language concerned. It is then most natural that the sequences represent, for purposes of a rhythmical structure, the same value as the simplest syllables. This is why *krwi* in our example functions the way it does.<sup>11</sup>

It may be instructive, at this point, to recall that some rhythmical structures treat even sequences of most ordinary syllables on equal terms with such single syllables. Cygan (1971, 120) quotes samples of this kind from Tennyson (In Memoriam), cf.

And envying all that meet him here  
And howlest issuing out of night.

where *-vying* and *-ssuing* function as proxies for single unstressed syllables.

A special situation where similar phenomena can be observed is scansion. In scansion, it is imperative to have short sequences of equiponderant sound chains with one strong stress each; the preferred sequences consist of three or four such items, in a single line or in 2-4 lines. Now, it appears that pairs of uncontroversial syllables are easily turned into such items, cf. the usual way the name *Solidarność* has been scanned: *s'o-l'i-d'arność*, or the following slogan shouted during demonstrations in Poland:

|                                |                               |
|--------------------------------|-------------------------------|
| <i>Zn'a-j-dzi'e si'e p'aťa</i> | (A truncheon will be found    |
| <i>N'a g'e-n'e-r'aťa.</i>      | To take care of the general.) |

But this could, of course, in no way justify denying that there are two phonological syllables in the word *paťa* or, for that matter, in the word *padół* as forming part of the possible slogan: *J'a-n'ek p'adł n'a t'en p'adół*.

And it is exclusively to the question of phonological syllables that we have been addressing ourselves in this article.

As for the previously mentioned possibility of error in our impression of equisyllabicity of the lines adduced at the beginning, we can just say that no improvement on them is practicable, in spite of as careful critical examination of the lines as possible; the sequence *naziemski* is simply identical in both the lines, so one would have to concentrate on *padʃ* and *padót*; but any imaginable changes applied to these words could result in an obvious *n o n* equisyllabicity of the lines.

The method I have employed is that of observations of possible *i n - c o r r i g i b l e* *p h o n o l o g i c a l* equisyllabicity; and I shall insist that these observations have been conclusive with respect to the disyllabicity of both the words illustrated with *padʃ* and the words illustrated with *krwi*.

I shall now present, in a rather dogmatic way, with only some comments and justifying remarks, the announced hypothetical universal constraints on what can be selected for syllable margins. The constraints will be visualized in the form of schemata of maximal composition of syllables.

Let us first introduce the necessary symbols for the notation:

- $\square$  - nucleus, or the designated constituent, i.e. the one which supports syllabicity,
- $\{$  - constituent of head, i.e. of the margin preceding the nucleus,
- $\}$  - constituent of coda, i.e. of the margin following the nucleus (constituents in each slot in either margin (if a given slot is filled with a positive constituent, rather than with a  $\emptyset$ -element) do not support syllabicity);
- A - vowel par excellence,
- I - glide,
- L - resonant other than glide,
- L' - the same, but not *m* (or *m*-type item),
- M - *m*,
- S - spirant,
- P - obstruent or affricate
- alternative,
- $\perp$  - incompatibility (in a sequence).

The schemata couched in this notation are as follows:

$$\begin{array}{c}
 (1) \quad \begin{array}{c} \boxed{\bar{S}} \quad \boxed{\bar{P}} \quad \boxed{\bar{L}} \quad \boxed{\bar{I}} \\ \hline \boxed{\bar{P}} \quad \boxed{\bar{S}} \quad \boxed{\bar{L}} \\ \hline \boxed{\bar{S}} \quad \boxed{\bar{M}} \quad \boxed{\bar{L}} \\ \hline \boxed{\bar{S}} \quad \boxed{\bar{S}} \\ \hline \boxed{\bar{P}} \quad \boxed{\bar{P}} \end{array} \quad \boxed{\begin{array}{c} A \\ - \\ I \end{array}} \quad \begin{array}{c} \boxed{\bar{I}} \\ \hline \boxed{\bar{L}} \end{array} \quad | \quad \begin{array}{c} \boxed{\bar{S}} \quad \boxed{\bar{P}} \\ \hline \boxed{\bar{P}} \quad \boxed{\bar{S}} \\ \hline \boxed{\bar{L}} \end{array}
 \end{array}$$

Qualifications. 1. Condition on  $\boxed{\bar{P}} \boxed{\bar{P}}$ : non-identity.<sup>12</sup> 2. Syllables with reduced vowels may have a more restricted maximal composition.

Examples. Polish *strjum/fu/* ('of a triumph'); *gvjast* (*gwiazd* 'stars (Gen.)'; *zmle/ka/* ('of milk'; I assume there is an audible distinction of the type *zm<sup>l</sup>e-ka* vs. *zm<sup>l</sup>-e-ka*); *ssak* 'mammal'; *kto* 'who'.

$$(2) \quad \boxed{\bar{S}} \quad | \quad \boxed{\bar{S}} \quad \boxed{\bar{L}} \quad \boxed{\bar{L}} \quad \boxed{\bar{S}} \\
 \boxed{\bar{P}} \quad \quad \quad \boxed{\bar{P}} \quad | \quad \boxed{\bar{P}}$$

Qualification.  $\boxed{\bar{L}} \boxed{\bar{L}}$  is only possible when  $\boxed{\bar{L}}$  is stressed.

Examples. Slovak *št<sub>g</sub>n/gat'* 'jingle'; Czech *sm<sub>r</sub>rt* 'death' (with *m*, not with *g*!); *p<sub>g</sub>st* 'finger' (I assume such audible distinctions as *št<sub>g</sub>n- : št<sub>g</sub>-n-*, *s<sub>g</sub>m<sub>r</sub>t : s<sub>g</sub>m<sub>g</sub>-t*, *sp<sub>g</sub>st : s<sub>g</sub>-p<sub>g</sub>st : sp<sub>g</sub>st*).

$$(3) \quad \boxed{\bar{P}} \quad \boxed{\bar{S}} \quad \boxed{\bar{S}} \\
 \quad \quad \quad \boxed{\bar{P}}$$

Example: *pst*.

(4)



Example: Polish euphemism *sk* 'the son of the bitch'.

#### Comments.

1. Abstract nucleus is a slot which must be non-empty (a slot to be filled with a constituent which does not have an alternative Ø-element counterpart). But I do not take this to be definitional of nucleus, and its negation (optionality) to be definitional of marginal constituents.<sup>13</sup> The reason is that some nuclear constituents require non-empty margins (and this is a separate problem of the theory of the syllable which I am not discussing here). The relevant examples are furnished by short vowels in English or reduced vowels in Russian (described, among others, by Āurovič 1963). The basis of the identification of vowels (rather than other constituents) in the corresponding syllables as playing the part of a support for syllabicity is, ultimately, their greater affinity to indubitable vocalic nuclei in prototypical syllables where margins can be seen as optional.

2. A prominent feature of the schemata is that of asymmetry between heads (prenuclear margins) and codas. This is in sharp contrast to the concept of a "mirror image" relationship between the margins, cf., e.g., Cygan's (1971, 123) schema (C) (R) V (R) (C). On the other hand, the asymmetry may appear to be in harmony with the often assumed syntagmatic hierarchy (head (nucleus + coda, i.e. rhyme)), cf. e.g., Kuryłowicz (1948, 82 ff.).

3. Particular attention should be drawn to the fact (which is an embodiment of the asymmetry) that merely  $\square \begin{smallmatrix} \text{I} \\ \text{L} \end{smallmatrix}$  vs.  $\begin{smallmatrix} \text{I} \\ \text{L} \end{smallmatrix} \square$ , cf. Russian *vojn* 'wars (Gen.)': *vo-in* 'soldier', are discernible, as opposed to \* $\square \begin{smallmatrix} \text{I} \\ \text{L} \end{smallmatrix} \begin{smallmatrix} \text{P} \\ \text{P} \end{smallmatrix}$ , \* $\begin{smallmatrix} \text{I} \\ \text{L} \end{smallmatrix} \begin{smallmatrix} \text{S} \\ \text{S} \end{smallmatrix}$ , and so on: a sequence like  $\begin{smallmatrix} \text{I} \\ \text{L} \end{smallmatrix} \begin{smallmatrix} \text{P} \\ \text{P} \end{smallmatrix}$  following a vowel is indistinguishable from  $\begin{smallmatrix} \text{I} \\ \text{L} \end{smallmatrix} \begin{smallmatrix} \text{L} \\ \text{L} \end{smallmatrix} \begin{smallmatrix} \text{P} \\ \text{P} \end{smallmatrix}$ . Thus, according to our criteria it is only the interpretation  $\begin{smallmatrix} \text{I} \\ \text{L} \end{smallmatrix} \begin{smallmatrix} \text{L} \\ \text{L} \end{smallmatrix} \begin{smallmatrix} \text{P} \\ \text{P} \end{smallmatrix}$  (etc.) that is valid, contrary to the commonly accepted accounts, cf., e.g., Selkirk (1982). The situation can be exemplified with English *p'o-ɪnt* (*point*), *s'a-ʊnd* (*sound*), *p'a-ʊns* (*pounce*), etc., none of which have real discernible counterparts such that one of the mem

bers of the pairs would be divided into two syllables (say, *po + int*) while the other would carry the same phonemic material within the confines of a single syllable. Comparable examples are hard to find in Slavonic languages.

\* \* \*

Needless to say, the picture sketched out in this article is certain to require quite a few refinements. What I should particularly like to insist upon as worth considering in the basic scheme of reasoning I have followed.

#### N o t e s

- <sup>1</sup> "Weak monotonicity" of syllable heads and codas has been defined by Vennemann (1988, 9) as lack of rise and fall, respectively, of Consonantal Strength in them. In this article I follow, basically, Vennemann's terminological conventions.
- <sup>2</sup> I quote after Jakobson et al. (1979, 89); for Bella Coola, they draw upon Newman (1947, 132).
- <sup>3</sup> I discussed this example in Bogusławski (1985, 64).
- <sup>4</sup> For example, Martinet (1967, Ch. 3., 21) explicitly identifies vocalicity and syllabicity.
- <sup>5</sup> Such an interpretation is clearly authorized, for example, by what Sawicka (1987, 26) says about Polish.
- <sup>6</sup> This general approach is consonant, regardless of specific theoretical details, with the ideas of Kaye, Lowenstamm (1984) developed, for Slovak, by Kenstowicz, Rubach (1987).
- <sup>7</sup> Jakobson et al. (1979, 87) quote an interesting example from Majakovskij: *šél ja verchom, šél ja nizom, stroil most v socializm*, where *lizm* copies the trochee *nizom*.
- <sup>8</sup> If we try to syllabify the indicated sequences by force, we can only end up shifting syllabicity to the other consonant (*k, t*).

- 9 The notion of "quasi-syllable" appears in Vennemann (1988, 10).
- 10 This is not to deny that some universally admissible options, such as the possibility to attach an arbitrary phoneme to nucleus, may be constrained by factually prevailing conventionalized, language specific patterns, cf. the fairly varied use made of resonants in particular languages.
- 11 The tendency to equate syllabicity with susceptibility to being stressed is quite persistent; thus, Stieber (1969, 57) says that 14th century Czech poetry proves *r* in words like *krve* to be non-syllabic ("krve counted as one syllable"); but what he obviously has in mind is only its unstressed character: he compares it to contemporary *r* in *krve* (described by him as "sonantic", i.e. syllabic) which is stressed.
- 12 Thus, Polish *czy* should be represented as *č-čy*.
- 13 The feature is treated as definitional for nucleus by Vennemann (1988, 5).

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