

THE PROSODIC EVOLUTION OF WEST SLAVIC IN THE CONTEXT OF THE NEO-ACUTE STRESS

The two types of prosodic evolution of the Common Slavic neo-acute stress found in West Slavic are examined against the background of the evolution of the neo-acute in other Slavic areas, primarily the Southwest (Serbo-Slovene) and Northeast (East Slavic). After discussing the role of the Common Slavic short high vowels in the rise of the neo-acute stress, West Slavic data is examined. Although only quantity survives prosodically in West Slavic, in contrast to the SW and NE, there are two prosodic zones of West Slavic (Czech vs. Slovak and Polish) that can be compared with the prosodic systems of the SW and NE, respectively, depending on whether tone or stress placement is the basis of resolving the threatened merger of old acute and neo-acute. Slovak's transitional position in West Slavic prosody is indicated, followed by an examination of some morphological consequences of the West Slavic prosodic evolution.

1. The evolution of long-vowel prosody in West Slavic took a radical turn as a result of the so-called neo-acute stress. Our purpose is to examine the two major kinds of long-vowel evolution found in West Slavic with the goal of demonstrating their typological place within the Slavic languages. We shall point out the importance of West Slavic's prosodic evolution for an understanding of the nature of the transitionality from tonal opposition to distinctive stress placement that appears as one moves across the Slavic map in a SW-NE direction. Before presenting an interpretation of the West Slavic facts themselves (sec. 6-9), we shall examine the most essential developments that preceded the accompanied the events known under the general heading of the **neo-acute** (sec. 2-5).

2. The quantitative opposition between long and short monophthongs was distinctive in Late Common Slavic, and can be represented as follows: (Jakobson, 1963:3)

ī	ȳ	ĩ	ũ
ē	ǣ	ě	ǫ

In citing forms henceforth, we shall use Old Church Slavonic reflexes for simplicity (cf. Jakobson, 1963:3). The OCS equivalents of the above vowels are: (long) *i*, *y*, *ē*, *a*, and (short) *ь*, *ы*, *e*, *o*. One cannot be absolutely certain of what redundant properties accompanied the quantitative opposition in Late Common Slavic, but it is not difficult to agree with Stieber that any such qualitative differences were "very slight and, furthermore, unimportant from a phonological point of view" (Stieber, 1969:18). Jakobson indicates tense-lax (*naprjažennost'*-*nena-prjažennost'*) as the redundant feature accompanying the quantitative distinction (Jakobson, 1963:3). At a certain point in Late Common Slavic these redundant qualitative features became greater and eventually were able to take over as the distinctive difference between vowels when the originally quantitative opposition was lost in certain positions, such as the auslaut. For example, the *ā* vs. *o* opposition was at first based strictly on quantity, but then the rounding of the short vowel became more marked and no longer was felt to be simply a redundant feature of quantity, so that when *ā* actually shortened, the new short *a* did not become rounded, as it would have if the old system of Common Slavic quantity were still in effect, but entered into a new purely qualitative opposition to *o*. As an example, we may cite the case of desinence vowels that survive in Modern Russian: *sel-o* nom. sing. vs. *sel-a*, gen. sing. ('village').

Non-high vowels formed the quantitatively and qualitatively distinguished pairs *ē* vs. *e* and *ā* vs. *o*. However, the high vowel pairs are a much more complicated subject. While the long high vowels *ī* and *ȳ* present unified reflexes in Late Common Slavic, the short high vowels *ĩ* and *ũ* evolved into the insufficiently defined category known as *jers*. The term *jer* implies a stage in the history of these originally short high vowels when they either become lowered to non-high vowels called 'strong' jers) or retained a weakened high-vowel status ('weak' jers), prior to being eliminated. The weakened high vowel status of the weak jers is connected to a rule that originally called for the destressing of word-final short high vowels (Jakobson, 1963:10) and explains the frequent use of the term 'reduced vowel' as a substitute for 'jer' (Borkovskij and Kuznecov, 99). The desire to treat the etymologically short high vowels together, in spite of the fundamental differences between 'strong' (non-weakened but lowered) and 'weak' (destressed but

non-lowered) jers has caused authors to mistakenly apply the label 'reduced' to both species of jer. We accept the term 'jer' to refer to the etymological class of originally short high monophthongs, but the only type that merits the label 'reduced' is the 'weak' jer. As Shevelov notes, "there seems to be no evidence in favor of the view that jers in strong positions . . . ever passed through a stage of reduction" (Shevelov, 436).

An extremely important property of the new opposition of long high vowel vs. weak jer was the fact that formerly acute-stressed weak jer vowels could be pronounced as stressless. By a general phonological rule of Late Common Slavic, the loss of any such rising stress led to a reinterpretation of the penult as the ictus syllable, a phenomenon known as 'leftward spread' (Kiparsky, 834), e.g. *stol-ь* > *stól-ь*. This transferred acute stress is known as the *neo-acute*.

3. As we have indicated, the short high vowels differed from other categories in that their reflexes were dichotomous, known as strong (= non-high) and weak (= high and subsequently deleted). The loss of stressability is a major factor in the definition of the category of weak jers. By stressability we are referring to the marked, rising stress known as the acute, rather than the recessive circumflex, which only could occur in word-initial position and could not be eliminated when occurring on jer syllables, as could the acute stress, which was never found on an initial jer. In non-derived words, acute stressed jers could only occur in auslaut position (Jakobson, 1963:7), which means that they were necessarily weak in this case (e.g. *stol-ь*).

The short high vowels, or weak jers that occurred in the auslaut position of Late Common Slavic words were subject to a series of prosodic restrictions, involving tone, stress-placement, and quantity. Firstly, all auslaut syllables, including those in short high vowels, were deprived of the tonal opposition, since circumflex, or falling tone, was restricted to the first word syllable. The first syllable, therefore, was the only place where the acute (rising) and the circumflex (falling) could both potentially occur (e.g. *vórn-ь*, gen. pl. ('crow') vs. *vörn-ь*, nom. sing. ('raven')), and the auslaut was, consequently, always redundantly rising when stressed. Secondly, the loss of the acute stress on final jers, just mentioned, eliminates the paradigmatic opposition of *stressed* vs. *unstressed* in this position, thus removing distinctive stress placement from the prosodic inventory of auslaut jers. Finally, the shortening of all auslaut vowels (Meillet, 147-8) removes the quantitative opposition from the auslaut. This occurred at a time when qualitative differences had already become distinctive, so that they maintained the original quantitative oppositions qualitatively, e.g. as short *a* vs. *o*, *ě* vs. *e*, and *ь*, *ы* vs. *i*, *y*. Thus, in the history of Slavic, the auslaut has been subject

to the elimination of the prosodic features of tone, stress placement, and quantity. These losses of distinctive potential in auslaut jers must be viewed as an integral part of the background of the neo-acute, which arose as a result of prosodic non-distinctiveness in final position.

4. As has been suggested by Jakobson (Jakobson, 1963:10) the non-stressability of final short high vowels was at first an optional stylistic variant, coexisting with the more conservative stressing of these auslaut vowels. Subsequently, this loss of final stress became a general, obligatory rule for all Slavic speakers. It appears that the crucial role in the obligatory extension of this destressing rule was played by the further weakening of final short high vowels in the speech of those who no longer stressed them, culminating in their complete loss. This suggests that at the first instance of the novel rule destressing auslaut jers, there were the following two stylistic variants for 'table', nom. sing.:

1. older style: *stól-ǎ* 2. newer style: *stól-ǎ*

Subsequently, as if by a chain reaction, the older style yields to the newer, while the destressed final vowels (jers) of the newer style weaken even further, culminating in loss of the vowel, as follows:

1. older style: *stól-ǎ* 2. newer style: *stól*

The first innovation can be referred to as development of jers, since it is the first manifestation of weakness in the class of short high vowels. The second innovation represents jer-loss. It is proposed that the obligatory neo-acute is ushered in when the older style, as well as the newer has this retracted stress in words such as the above, which occurred by the time of jer-loss.

Thus, we should distinguish **jer-development** from **jer-loss**, due to the fact that after the development of stressless jers there was still an option to conservatively stress these vowels in the auslaut or to carry through the neo-acute rule and destress them. However, the ensuing spread of jer-loss left no such option and led to the obligatory neo-acute.

There are systematic conflicts that follow the institution of the neo-acute stress, which can be seen as a result of the loss of jers, which transformed the neo-acute from an optional stylistic variant into a general rule. Let us examine the specific facts that cause phonological conflicts in the prosodic system, mainly due to threatened mergers of formerly distinct prosodic entities. The following models show the three prosodic possibilities for a disyllabic noun ending in a jer-desinence.:

1. $CVC-\ddot{u} > CVC-\grave{a}$ (e.g. *dým* ǎ, nom. sing., 'smoke')
2. $CVC-\acute{u} > CVC-\grave{a}$ (e.g. *stól* ǎ, nom. sing., 'table'; *gólǎ* ǎ, gen. pl., 'head')
3. $CVC-\acute{u} > CVC-\grave{a}$ (e.g. *bŏg* ǎ, nom. sing., 'God')

In terms of stress paradigms, the first type represents the immobile acute paradigm (called 'a' in Stang, 1975), which we can refer to as the old or original acute. The second form is typical of the immobile oxytonic paradigm ('b'). However, the stress pattern of this form was subject to change as a result of the new stressless quality of short high vowels, discussed above. Since most desinences were not stressed short high vowels (i.e. jers), many oxytonic forms remained as such, and an accentual alternation was thus established within accentual paradigm *b*, e.g. *stól* ǎ, nom. sing., but *stólá*, gen. sing., etc. In other words, neo-acute alternates with oxytonic stress as a result.

Both the second and third examples are typical of forms that made up the alternating stress paradigm ('c'), which thus consisted of recessive circumflex stress (example 3) in alternation with oxytonesis (example 2). Since the oxytonic forms occurred with both short high vowel (jer) desinences and others as well, these forms split into neo-acute stressed forms with jer-desinences (e.g. *gólǎ* ǎ) and oxytonic stress together with non-jer desinences (e.g. *gólá*, nom. sing.). Thus, paradigm *c* acquires an alternation of three stress types, which, as we shall later see, proved an excessive prosodic complication, and led to a morphologically conditioned simplification of the *c* paradigm throughout West Slavic.

Within paradigms *b* and *c*, neo-acute and oxytonic stress were in complementary distribution. Within the originally oxytonic paradigmatic forms, a jer-desinence always implied neo-acute (e.g. *stól* ǎ), just as a non-jer-desinence implied oxytonesis (e.g. *stólá*). However, although these neo-acute forms were oxytonic on a deeper level, their surface manifestation was identical with that of the forms of the old acute paradigm. Since the old acute stress was always prosodically distinct from the forms originally found in paradigms *b* and *c* (i.e. oxytonic and mobile), the system sought ways of accommodating the neo-acute, which was ambiguous and could be described as standing on a border line between oxytonic and barytonic stress types.

Let us demonstrate this threat of merger in the position of maximum distinctiveness for the Common Slavic pitch accent, which is **word-initial on long vowels**. (I.e. since circumflex is always initial and old acute is always long in initial position, the only possible prosodic minimal pairs opposing acute to circumflex involve the opposition long initial acute vs. long initial circumflex.) Since no language system could

oppose three potential varieties of stress on long first-syllable vowels by means of a two-way tonal opposition, other features had to come into play or else mergers of some sort would reshape the prosodic system. The following examples can illustrate the situation:

1. *dýmъ* (old acute), 'smoke'
2. *sъdъ* (neo-acute), 'court'
3. *sъpъ* (circumflex), 'vulture'

Jer-loss has already been mentioned as the trigger that made systematic changes necessary in the prosodic systems, due to the subsequent rise of the obligatory neo-acute. At the same time, the loss of jers obliterated the front vs. back opposition between the two weak jers themselves, posing an additional threat of merger to the system (e.g. *mastъ* ('bridge') vs. *kostъ* ('bone')). The only potential solution to avoiding mergers of this type is to raise the formerly allophonic distinction **non-palatalized** vs. **palatalized** to the distinctive level within the consonants that preceded the final weak jers in question. (Cf. Modern Russian *mast*, *kost'*)

5. Two diametrically opposed Slavic geographical areas can be delineated with respect to their reaction to the two threatened kinds of merger that have been thus far indicated, which were:

1. neo-acute vs. old acute
2. front jers vs. back jers, including redundant properties in preceding consonants.

Since the only way to save the opposition of word-final front vs. back jers was through the transfer of their front and back qualities to the preceding consonants, an avoidance of merger number two implies the development of phonemic consonantal palatalization.

The time of jer-loss is the single most crucial factor in the question of which of the two possible mergers is avoided, and which is actually experienced in Slavic dialects of the SW and NE extremes, where one of the mergers always occurs, the other being avoided. Early jer-loss, as found in the SW (i.e. Serbo-Slovene) (Jakobson, 1929:56), occurred in a system whose consonants probably did not redundantly palatalize before front vowels, so that the loss of both front and back weak jers left no distinctive traces in preceding consonants (cf. Modern Serbo-Croatian *mast*, *kost*). Thus, the SW merges reflexes of front and back jers, both weak and strong. However, this area avoids the threatened merger of old acute and neo-acute stress types by shortening the redundantly long vowels under the old acute

(Jakobson, 1963:12). As a result of this shortening of old acute vowels, acute (whether old or neo-acute) continued to be a rising tone under ictus, in opposition to the non-rising circumflex stress. Thus, if we consider the opposition of three originally long vowels in initial position, we find the following system, after jer-loss:

	1. old acute	2. circumflex	3. neo-acute
long	—	+	+
rising	+	—	+

Pitch continues to play a key role in this system. The formerly oxytonic stressed forms now with neo-acute stress have been converted to barytonic acute, a development which suggests the later Štokavian stress shift, which made barytonic acutes out of oxytonic forms on an even wider scale, totally eliminating auslaut stress in words of two or more syllables (Ivić, 1958:102).

The NE extreme (i.e. East Slavic), where jer-loss occurred last in the Slavic world (Stieber, 1969:49), presents the opposite situation, compared to that just indicated for the SW. The relatively late retention of jers allowed time for the development of consonantal palatalization, which became fully distinctive when the jers were finally lost. Within the prosodic system, neither quantity nor difference of pitch under ictus survives as a distinctive feature. Only the differential placement of the ictus survives as a relevant prosodic feature. Let us note in this regard that of the three prosodic features under discussion, stress placement provides the minimum number of potential contrasts between words with a given number of syllables (Ivić, 1961/62). Since the prosodic resources of any given vowel in a stress placement system are small in comparison with the tonal and quantitative system found in the SW, we do not find in the NE a tendency to concentrate prosodic information in the first word syllable, as we do in Štokavian, for example. Furthermore, since NE prosody is based on stress placement, a retention of both barytonic and oxytonic varieties of stress paradigm is necessary.

Thus, if we compare the fate of the opposition **old acute** vs. **neo-acute** in the Slavic extremes of SW and NE, we find a continuation of tonal distinction with some lessening of distinctive stress placement in the SW, in contrast to a merger of all stressed syllables in a system of distinctive placement of stress (i.e. **stressed** vs. **unstressed**) in the NE.

6. Now let us turn to West Slavic in order to view its resolution of the threatened merger of acute and neo-acute in the light of the two extreme Slavic areas just discussed. Before analyzing the situation in

structural terms, let us review the basic reflexes.

The only distinctive prosodic feature of Common Slavic to survive in the modern West Slavic dialects is vowel quantity, with the minor exception of certain Kashubian dialects. Therefore, quantity was the only prosodic means of potentially preserving the major prosodic distinctions of Common Slavic. Since long initial syllables could be acute, neo-acute, and circumflex, the binary quantitative feature could not possibly preserve this three-way potential distinction in those West Slavic dialects limited prosodically to quantity. The SW stands in contrast to West Slavic here, since its system had the two binary prosodic features of pitch and quantity at its disposal. Thus, the early prosodic history of West Slavic is essentially a question of which two of the three prosodic types (acute, neo-acute, and circumflex) merge and which type remains distinct. Of course, the two newly arisen entities are then differentiated by quantity. In order to effectively compare all three stress types under similar conditions, we shall again concentrate on disyllables with long root vowels, since only the first syllable could carry the circumflex ictus, and initial acute ictus was invariably long.

In Czech, the neo-acute and acute merged as *long* in contrast to the shortened circumflex (Lehr-Splawinski, 1966:261). The second major West Slavic group, represented by Slovak and Polish, presents a long neo-acute in opposition to a merger of the old acute and circumflex, which generalized short vowels. In presenting modern reflexes of these facts, we should note that Czech and Slovak data still contain examples of the quantitative opposition, but Modern Polish presents only indirect information about the original quantity of the very early West Slavic period. Since one reliable guide for determining the original Polish quantity is by the ξ reflex for short, and the $\bar{\xi}$ reflex for long, we shall purposely restrict the root vowels in our examples to the originally long nasal vowels ξ and $\bar{\xi}$, which denasalized in Czechoslovak, but indicate the quantity in the three major West Slavic languages we are considering, as follows:

1. Czech has length in the neo-acute and old acute; shortness in the circumflex:

Neo-acute	Old Acute	Circumflex
<i>troud</i>	<i>houba</i>	<i>maso</i>
<i>soud</i>	<i>housle</i>	<i>luk</i>
<i>proud</i>	<i>máta</i>	<i>sup</i>
<i>kout</i>	<i>pouto</i>	<i>vaz</i>
<i>řád</i>	<i>kniha</i>	<i>řad</i>

2. Slovak and Polish have length in the neo-acute; shortness is found in their old acute and circumflex:

Neo-acute	Old Acute	Circumflex
<i>trúd, trǫd</i>	<i>huba, gǫba</i>	<i>māso, miǫso</i>
<i>súd, sǫd</i>	<i>husle, gǫsle</i>	<i>luk, lǫk</i>
<i>prúd, prǫd</i>	<i>māta, miǫta</i>	<i>sup, sǫp</i>
<i>kút, kǫt</i>	<i>pouto, pǫto</i>	<i>vāz, wiǫź</i>
<i>řád, rǫd</i>	<i>kniha, księga</i>	<i>rad, rzęd</i>

In addition to the merger of old and neo-acute length as long vowels, found in Czech, there is in all of West Slavic a functional prosodic identification of the neo-acute vowel with the first pretonic vowel, which serves to unify the root quantity of words belonging to stress paradigm *b*, formerly immobile oxytonic. This unification can be explained by the fact that the two vowels were in complementary distribution, as follows:

1. neo-acute forms had jer-desinences, e.g. *sód'ǫ* < *sod'ǫ*, nom. sing., 'court'
2. pretonic vowel, alternating with neo-acute in same paradigm, never with a jer-desinence, e.g. *sǫdá*, gen. sing.

Since length under the neo-acute survives as *long* in all of West Slavic (with subsequent general loss of quantity in certain areas, such as Modern Polish), as illustrated above, the very same length reflexes hold for original length in *pretonic* position, functionally equivalent to the neo-acute in quantitative terms, as in the following examples:

Czech	Slovak	Polish
<i>trouba</i>	<i>trúba</i>	<i>trąba</i>
<i>louka</i>	<i>lúka</i>	<i>łąka</i>
<i>mouka</i>	<i>múka</i>	<i>mąka</i>

This retention of pretonic length, as stated, maintained the prosodic unity of stress paradigm *b*. This development potentially could have led to a merger of the long-vowel oxytonic ~ neo-acute paradigm with the long-vowel circumflex mobile paradigm (i.e. paradigms *b* and *c*), since the distinction between these two paradigms lay at least partially in a differential stress placement, now absent in West Slavic. However, the former place-of-stress distinction (i.e. oxytonesis vs. barytonesis) was recoded as a quantitative one (e.g. *sǫp'ǫ* vs. *sǫd'ǫ* > *sǫp'ǫ* vs. *sǫd'ǫ*), and relocated to the first syllable in originally disyllabic words. The concentration of prosodic information onto the first syllable as well as the conversion of other prosodic features into quantity are

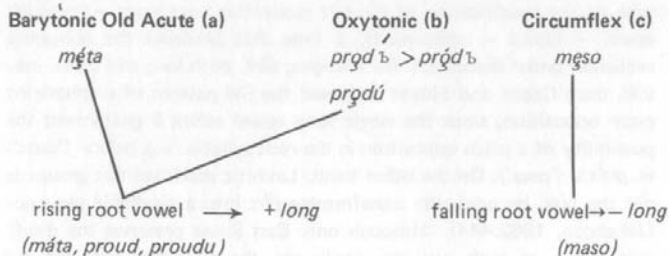
typical West Slavic developments, to which we may contrast the East Slavic absence of such an increase in the first syllable's functional load, and the SW (Serbo-Slovene) use of tone, along with quantity, as distinctive prosodic features.

The Czech merger of acute and neo-acute must be seen in terms of the feature that linked these two prosodic types in opposition to circumflex. This common property was rising pitch, which was present both in barytonic acute words (e.g. *měta*), i.e. the old acute, and oxytonic acute words (e.g. *prǫdъ*), i.e. with the neo-acute. In contrast to these acute types of words there were recessively stressed circumflex words, which lacked a rising syllable. The essence of the Czech resolution of the neo-acute merger was the use of marked quantity ([+ long]) as a direct replacement for marked pitch accent ([+ rising]). This direct reflection of pitch in the evolution of Czech prosody links Czech with the SW area of Slavic and indicates a relatively early jer-loss in comparison with other West Slavic areas located farther north (e.g. Polish) and farther east (e.g. Slovak).

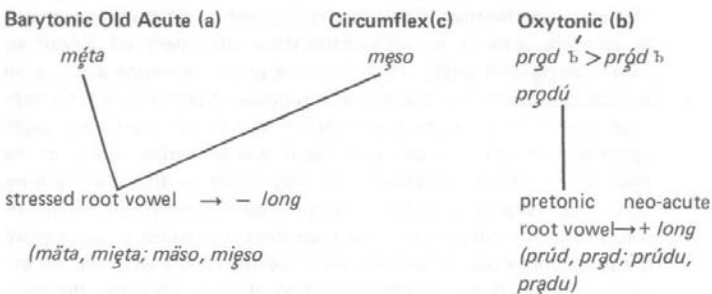
Slovak and Polish merge long vowels under the old acute and circumflex by shortening them, in opposition to the neo-acute lengths that remain long. It is clear that the old acute and circumflex forms also shared a prosodic property that comes to the fore in this instance, causing them to merge. This property, in contrast to the neo-acute oxytonic type, is barytonic stress placement. Thus, Slovak and Polish words continue to transmit information about the original barytonesis or oxytonesis of words, irrespective of the original tone, but now this information is completely supplied within the confines of the initial syllable by means of quantity, rather than by means of actual stress placement. The identification of neo-acute length and pretonic length as long vowels demonstrates that they both are functionally oxytonic, with and without a jer-desinence, respectively. (The very same identification of neo-acute and oxytonic forms in Czech can be explained by the fact that these forms shared both rising pitch as well as functional oxytonesis.)

We can summarize the essential difference between these two major West Slavic areas, as follows:

1. Czech



2. Slovak and Polish



The above facts may also be presented in tabular form, as follows:

	rising root vowel?	barytone?
1. old acute	+	+
2. { neo-acute ~ oxytone	+	-
3. circumflex	-	+

Notice that the first column indicates the pattern of merger for Czech, while the second column represents the merger in Slovak and Polish.

7. As we have stated, both Slovak and Polish reacted to the neo-acute on the basis of stress placement, in contrast to Czech, which applied the criterion of pitch to this evolution. However, it would be incorrect to assume the presence of a single prosodic isogloss dividing these territories. Just as Czech differed from Slovak and Polish on the basis of pitch accent at the time of the resolution of the neo-acute merger, it is likely that Czech and Slovak both still retained an indepen-

dent pitch opposition in contrast to Lekhitic (including Polish) at the time of the modification of the *tǎrt* group (i.e. consonant – non-high vowel – liquid – consonant), a time that precedes the neo-acute evolution under discussion. By changing *tǎrt*, both long and short, into *trāt*, both Czech and Slovak followed the SW pattern of emphasizing pitch opposition, since the single long vowel reflex *ā* guaranteed the possibility of a pitch opposition in the root syllable: e.g. *prǎxъ* ('dust') vs. *grǎxъ* ('peas'). On the other hand, Lekhitic modified *tǎrt* groups as did the NW, by originally transforming *tǎrt* into a disyllabic sequence (Jakobson, 1962:444). Although only East Slavic preserves the disyllabic group as such, we can easily see the similarity between the Lekhitic and East Slavic treatments in the fact that these areas present short-vowel reflexes in these groups, whether or not they have remained disyllabic to this day, e.g. Polish *proch*, *groch*, Russian *pórox*, *goróx*. The great significance of this disyllabic short-vowel development was its prosodic reliance on differential stress placement (cf. *pórox* vs. *goróx*) along with pitch, rather than the pitch opposition alone, as in the Czech, Slovak, and South Slavic reflexes of *tǎrt* groups. This indicates that in contrast to Czechoslovak and South Slavic, the pitch opposition of Lekhitic and East Slavic was becoming weaker at the time of the *tǎrt* modifications and that, consequently, other features were developing as potential substitutes for the pitch opposition. In addition to the differential stress placement that began to accompany the pitch opposition in *tǎrt* reflexes of Lekhitic and East Slavic, we can add the North Russian diphthongization of *o* > *ûo* under the rising pitch, "une manifestation de la tendance à substituer au rôle phonologique de la hauteur de la voix le rôle phonologique de la hauteur du son fondamental des voyelles" (Jakobson, 1929:75).

The different types of *tǎrt* evolution (i.e. monosyllabic and disyllabic), in combination with the two basic types of neo-acute resolution, permit the following chronological conclusions:

1. First the *tǎrt* groups are modified to *trāt* by languages that could still oppose pitch without accompanying redundant prosodic features, but to *trǎrot* and *torot* by Lekhitic and East Slavic, respectively, where pitch opposition was beginning to weaken and require the use of stress placement as an accompanying feature.
2. Next, there is the development of of weak jers, creating the neo-acute stress.
3. Following that, the loss of jers takes place, forcing a resolution of the threatened neo-acute merger as it progresses across the Slavic map, either on the basis of pitch opposition or stress placement. Czech resolves this merger still in possession of a pitch opposition, but by the

time the jer loss and obligatory neo-acute isoglosses reach Slovak, the pitch opposition was already abolished, leaving only **stressed** vs. **unstressed** in place of **acute** vs. **circumflex** vs. **unstressed**. Slovak is uniquely transitional in West Slavic in that it modified *tǎrt* on the basis of a pure tonal opposition, yet it lost distinctive pitch by the time of the loss of weak jers and resolved the neo-acute merger on the basis of stress placement. It is natural that both Lekhitic and East Slavic also resolve the neo-acute merger on the basis of stress placement rather than tone, since their earlier *tǎrt* evolution gave clear evidence of a weakened tonal opposition. In other words, the processes here are mono-directional, proceeding from weakening of tonal distinctions up to their total elimination.

This series of developments further emphasizes the transitional nature of West Slavic as a whole, with respect to the use of pitch or stress placement, since Slovak prosodically agreed with Czech at the time of *tǎrt* > *trāt*, but agreed with Polish by the time of the change **neo-acute length** > **long vowel**, **old acute length** > **short vowel**. The continuum obtaining for West Slavic can be thus represented:

	Pure tonal opposition in <i>tǎrt</i> reflex?	Tone during neo-acute resolution?
(SW (Serbo-Sloven)	yes	yes)
Czech	yes	yes
Slovak	yes	no
Polish	no	no
(NE (East Slavic)	no	no)

In this scheme, Czech fits the SW pattern and Lekhitic fits the NE pattern. Slovak's development suggests a certain similarity with Bulgarian, possibly due to the position of both Slovak and Bulgarian on the eastern-most border of *trāt* territory, creating an affinity with East Slavic in prosodic developments dating from the time of the neo-acute.

8. The West Slavic evolution of the three basic nominal accentual paradigms presents a merger of two of the three original prosodic patterns, resulting in the survival of two different prosodic paradigms in Czech, Slovak, and Polish. The phonological developments just discussed easily explain exactly which paradigms merge. In Czech, the old acute (*a*) and the neo-acute ~ oxytonic (*b*) paradigms merge as **long** in root vocalism, in opposition to the originally mobile circumflex (*c*) paradigm, which is characterized by shortness in the root. In Slovak and

Polish, the old acute and mobile paradigms (*a* and *c*) merge as short, in opposition to the long neo-acute ~ oxytonic.

Two very important morphologically conditioned developments must be indicated in characterizing these paradigms, as follows:

1. The original prosodic mobility of paradigm *c* (e.g. *řǫká řǫko*) is abolished by generalizing the reflex of circumflex recessive forms throughout the paradigm (Stang, 1957:40). This means that shortness prevails in this paradigm in spite of the phonologically expected length in the oxytonic forms, such as the nom. sing. of *a*-stems (e.g. Czech, Slovak *ruka*, Polish *řęka* ('arm, hand')).

2. The "long" paradigm of Czech presents a morphological shortening in the gen. plur. before a zero-desinence (originally a weak jer), which is the expected phonological evolution for circumflex stress (therefore, called 'neo-circumflex' in its occurrence within the barytonic acute paradigm *a*), e.g. *knihā*, nom. sing., *knih*, gen. plur. ('book'), *trouba*, nom. sing., *trub*, gen. plur. ('pipe'). The 'short' paradigm of Slovak and Polish presents a morphological **lengthening** in the gen. plur., also before a zero-desinence, as in the case of the Czech **shortening** e.g. Polish *řęka*, nom. sing., *řęk*, gen. plur.; Slovak *ruka*, *rúk* (Shevelov, 1956:536-7).

These facts lead to two general conclusions that summarize nominal paradigmatic evolution in West Slavic from the perspective of the morphological use of prosody:

1. Paradigm *a*, the old acute, is merged with some other paradigm in both groups of West Slavic. (Merger with *b* in Czech, with *c* in Slovak and Polish.)

2. The enlarged accentual paradigm containing the reflex of the old acute paradigm *a*, always undergoes a quantitative alternation before a zero-desinence in the gen. plur. Where the paradigm is basically **long**, the gen. plur. is delineated as **short** (Czech); where it is basically **short**, the gen. plur. stands out as **long** (Slovak and Polish).

The salient forms of these paradigms can be illustrated as follows:

A. Czech

Long Paradigm (< <i>a</i> and <i>b</i>)	Short Paradigm (< <i>c</i>)
nom. sing. <i>knihā, trouba</i>	<i>ruka</i>
gen. plur. <i>knih, trub</i>	<i>ruk</i>

B. Slovak and Polish

Long Paradigm (< <i>b</i>)	Short Paradigm (< <i>a</i> and <i>c</i>)
nom. sing. <i>trúba, trąba</i>	<i>knihā, księga; ruka, ręka</i>
gen. plur. <i>trúb, trąb</i>	<i>knih, ksiąg; rúk, rąk</i>

9. To summarize, we have shown that jer-loss triggers prosodic changes in all Slavic areas, connected to the two potential mergers of:

1. old and neo-acute varieties of stress
2. front and back reflexes of weak jers

Clear differences between the reactions to these mergers are represented in the extreme SW and NE areas of the Slavic world, correlated to early and late jer-loss, respectively. In addition, the West Slavic domain has been shown to contain representatives of each of these extreme Slavic areas, with respect to both relative time of jer-loss and tonal opposition at the time of the prosodic modifications connected with the neo-acute. As a result, we may conclude that the line separating Czech from Slovak and Polish has far-reaching implications for the general prosodic history of Slavic.

REFERENCES

- Borkovskij, V.I. and Kuznecov, P.S. 1965. *Istoriceskaja grammatika russkogo jazyka*, Moscow.
- Ivić, P., 1958. *Die serbokroatischen Dialekte, I*. The Hague.
- Ivić, P., 1961/62. 'Broj prozodijskih mogućnosti u reci kao karakteristika fonoloskih sistema slovenskih jezika.' in *Juznoslovenski Filolog*, 25.
- Jakobson, R. 1929. *Remarques sur l'évolution phonologique du russe*, Prague.
- Jakobson, R. 1962. *Selected Writings, Vol. 1*, The Hague
- Jakobson, R. 1963. 'Opyt fonologiceskogo podxoda k istoiceskim voprosam slavjanskoj akcentologii,' in *American Contributions to the Fifth International Congress of Slavists*, The Hague.
- Kiparsky, P. 1973. 'The Inflectional Accent in Indo-European,' in *Language*, Vol. 49, No. 4.
- Lehr-Splawiński, T., 1966. *Studia i szkice wybrane, Seria 2*, Warsaw.
- Meillet, A. 1965. *Le slave commun*, Paris.
- Shevelov, G. 1965. *A Prehistory of Slavic*, New York
- Stang, C., 1957 *Slavonic Accentuation*, Oslo
- Stieber, Z. 1969. *Zarys gramatyki porównawczej języków słowiańskich*, Warsaw.

Received January 1975

glossa 9:1 (1975)

NOTE

The form kníha, cited on pp. 70 and 76 as "Czech," is actually found with long root vocalism in Old Czech and certain modern dialects, rather than in Modern Standard Czech, where it is kniha. Current dialect kníha is cited in: Vydra, Bohumil. 1923. Popis a rozbor nářečí hornoblanického. Prague, pp. 38, 105.

R. F.