## THE RELATIVE CHRONOLOGY OF THE SLOVENE PROGRESSIVE STRESS SHIFT

## Ronald F. Feldstein

1.0 The chronological position of the Slovene progressive stress shift (e.g. bko > okb, bbga > boga) has given rise to a variety of interpretations. The establishment of such relative chronologies is significant not merely for the chronological information alone, but also for the far-reaching implications about the nature of the prosodic system at each chronological stage.

Let us analyze three approaches which illustrate the fundamental divergences in treatments of this question, as found in Ramovš (1950), Jaksche (1965), and Stankiewicz (1966). The traditional view, as presented by Ramovš and others, sets up the following chronological sequence of events (50:21):

- 1. Old (long) acute stress changes from long rising to short rising, merging prosodically with the short neo-acute (e.g.  $br\acute{a}trz > br\grave{a}trz kr\acute{a}va > kr\grave{a}va$ , equivalent to  $v\grave{o}la$  as short-rising).
- 2. Jer-loss and lengthening of short-falling in newly closed syllables (e.g.  $b\ddot{o}g \gg b\dot{o}g$ , but  $b\dot{o}b\gg b\dot{o}b$ ).
- 3. Progressive stress shift from non-rising stressed syllables (e.g.  $b\ddot{o}ga > bog\hat{a}$ ,  $zl\hat{a}to > zlat\hat{o}$

According to this scheme it is clear why there is a stress shift in  $b\bar{o}ga > boga$ , but not in such cases as  $kr\bar{a}va$  or  $v\bar{o}la$ . The latter two examples are assumed to have had short-rising pitch, while the progressive stress shift specified that only non-rising vowels, both long and short, experienced the forward movement of ictus with a concomitant lengthening of the new stressed vowel. This pitch difference also explains why it is that the short-falling vowel of  $b\bar{o}gx$  lengthens but the short-rising one of  $b\bar{o}bx$  does not, during the period of ier-fall.

2.0 Jaksche's 1965 treatment of this situation contains an essential modification in comparison with that of Ramovš: pitch oppositions on short vowels are regarded as theoretically impossible, in accord

with Kurylowicz's view (1962:32). This has led to a very different chronology than that of Ramovš, as follows (Jaksche 1965:37-40):

- 1. Loss of final jers and  $b \delta g z > b \delta g$ , due to compensatory lengthening of a short <u>stressed</u> vowel before a weak jer. The unstressed o of  $bob^2 z$  is not lengthened, which requires the assumption that there was no neo-acute retraction here prior to jer-fall.<sup>2</sup>
- 2. Progressive stress shift from non-rising stressed syllables to the following syllable. E.g.  $b \partial ga > bog\hat{a}$ ,  $zl\hat{a}to > zlat\hat{o}$ .
- 3. Shortening of the old acute. The new short vowels are stressed, but without pitch.

The essential question to be raised concerns how such cases as krava and vola avoid the progressive stress shift, according to Jaksche's system. The old acute supposedly shortens only after the progressive shift and, consequently, after jer-fall (Jaksche 1965:36). Therefore, words such as krava did not experience the progressive shift since they had long rising first-syllable stress at the time of the shift, in contrast to either long or short falling as in boga, zlato. (Of course Jaksche regards boga as a case simply of short stress, rather than short-falling.) This chronological assumption seems to be faulty, since we know that old acute shortened, in contrast to neo-acute, which did not; this means that final jers must still have been present at the time of the old acute shortening, so that krāl-à would change to krāl, but brátrz > brătr. If one were to follow this chronology of Jaksche, the forms krāl and brātr would coexist after jer-fall-each with long rising stress in their root-vowel-which would mean that there would have to have been two different rising pitches in order for only bratr, but not kral to later shorten. Surely it is more probable that the stress difference before jer-fall played the decisive role in the shortening of the old acute, which assumes only a single rising pitch in the phonological system. A further problem with Jaksche's chronology is the fact that he portrays a common South Slavic process-shortening of the old acute-as coming after a more specifically Slovene process-that of the progressive stress shift. Such a sequence is not impossible, but would require special motivation for its acceptance.

Jaksche seems to have needed the above chronology in order to exempt *krava* and *bratra*, gen. sg., from the circumflex progressive stress shift, since he assumes that once the acute vowels shorten, they no longer have rising pitch, and thus would be subject to the

progressive shift if not for the chronological assumption that the old acute shortening followed the progressive shift.

As to short neo-acute vowels in diasyllabic words such as vola, or nom. pl. sela, one may ask how Jaksche explains the absence of progressive shift in view of his denial of short rising. The only answer provided is the apparently ad hoc indication that "special reasons of a morphological nature" account for this fact (Jaksche 1965:38).

Summing up the comparison of the Ramovš and Jaksche chronologies, we can see that Ramovš presents the old acute shortening as the first of the three events under discussion, while Jaksche presents this shortening as the very last of the three.

- 3.0 Now let us examine the even more recent chronological interpretation of the same events, as found in the work of Stankiewicz (1966), who establishes the following chronological scheme:
- 1. In Late Common Slavic the old acute loses both its marked rising pitch as well as its long quantity, changing to short non-rising. This interpretation does not deny the existence of short-vowel rising pitch in such short neo-acute cases as vola, sola, although Stankiewicz attributes their rise to morphological factors (1966:30-1).
- 2. Jer-loss and lengthening of "initial non-rising vowels o, e, z, b" (1966:32).
- 3. Progressive shift of stress in such cases as bogā, zlatô (1966: 33).

The main stumbling block to an acceptance of this chronological scheme is the explanation of how the old acute disyllables such as krava, bratra, etc., avoid the progressive stress shift, which affects non-rising stressed syllables. In other words, cases such as vòla, sèla have short rising pitch and, as such, are not subject to the forward stress shift. But how do words such as krava stay unaffected? Stankiewicz's answer is that the progressive shift affects only those initial non-rising stressed syllables which contain either a long or a so-called "inherently short" vowel (equivalent to short o, e, z, b). Thus, Stankiewicz recognizes three classes of non-rising initial stressed vowels for this period, as follows:

- 1. Long non-rising with tense vowel. E.g.  $m\bar{e}so$ , stress paradigm c in Stang (1957).
- 2. Short non-rising with lax vowel, called inherently short, E.g. b'oga, 'oko, stress paradigm c in Stang (1957).

3. Short non-rising with tense vowel, derived from shortened old acute. E.g. krava, ryba, stress paradigm a in Stang (1957).

The essence of Stankiewicz's rule of progressive shift is that non-rising stress gets shifted when it falls on a vowel which is either long and tense (meso) or short and lax (oko), but not when the non-rising vowel in question is short and tense at the same time (krava). However, since neither shortness nor tenseness themselves block this shift, it would seem that the non-rising character of the vowel in meso, oko was the main factor in the realization of the progressive shift. Therefore, this chronology appears to commit an error in attributing a short non-rising stress to such cases as krava, ryba, etc. If these cases can be considered as short-rising at the moment of the progressive shift—as are the short neo-acute vòla and sèla—then they will be naturally excluded from the stress shift rule.

Another problem for Stankiewicz's system concerns the lengthening of vowels in newly closed syllables such as  $b\bar{o}g$ . If this affected initially stressed non-rising shorts, why then was a form such as  $br\bar{a}tr$  not relengthened, since Stankiewicz considers that such an old acute would have lost its rising pitch and length before the time of final jer-loss. The answer given is that only the lax (inherently short) vowels o, e, h, h, were lengthened. It seems improbable that under the exact same environmental conditions (i.e. non-rising closed syllables) there would be a lengthening of  $\underline{lax}$  vowels (e.g. e, o), but not of tense (e.g. a), i.e.  $b\bar{o}g$  lengthens to  $b\bar{o}g$ , while  $br\bar{a}tr$  stays unchanged. The solution here should be a recognition of a short-rising pitch in the old acute accentual paradigm at the time of jer-fall, which would exempt forms such as bratr h rak h etc. from lengthening, due to their rising pitch.

Thus, we have seen that the two more recent treatments of early Slovene prosody have a common trait of not recognizing certain cases of rising short vowels which have been traditionally recognized as such, as represented in the work of Ramovš. While Jaksche goes so far as to totally deny such an entity in the Common Slavic or Early Slovene systems, Stankiewicz only rejects the rising pitch on old acute vowels after their shortening. However, these approaches both lose a great deal of descriptive economy and naturalness when dealing with the progressive stress shift of Slovene. In this sense, one could say that the essential aspects of Ramovš' traditional chronology have not been superseded by the two recent treatments we have examined above.

Let us observe that a possible motivation for Stankiewicz to have excluded rising pitch from old acute shortened vowels may be found in the fact that pitch on these vowels had lost its distinctive, phonemic status. Thus, short rising (e.g. krava) was distinctively opposed to long circumflex and long neo-acute (e.g. zlato, straža) on the basis of long vs. short quantity; at the same time it was opposed to both short falling  $(\partial ko)$  and short neo-acute  $(v\partial la)$  on the basis of tense vs. lax vowel quality. However, this phonemic fact does not mean that the redundant rising pitch of words such as krava played no role in phonological and prosodic change. On the contrary, this rising pitch was most likely the primary factor which exempted such cases as krava from the progressive stress shift and conditioned an absence of pre-jer lengthening in cases such as bratr, rak, as contrasted to bog. Furthermore, short-vowel pitch oppositions were still phonemically distinctive in such cases as lax vowel  $v\partial la$  vs. boga.

The loss of jers in disyllables which were formerly opposed on the basis of short-vowel pitch (e.g. bob vs. bog z) threatened to create a rather rare prosodic opposition of short-vowel pitch on monosyllables of the type  $b \delta b$  vs.  $b \delta g$ , a distinction typologically known to occur in only one or two Slovene dialects of all the Slavic languages (Isačenko 1939:23). The general South Slavic solution was to avoid such a monosyllabic short-vowel pitch opposition by generalizing quantity for the short-falling monosyllabic vowel. From the perspective of Slovene evolution, this positional loss of shortvowel pitch can be causally linked to the subsequent progressive stress shift, with its concomitant lengthening of the newly stressed syllable (okô, bogà, zlatô), since the stress shift eliminated all the remaining manifestations of short-falling (\*). Thus, the short-vowel pitch opposition in Slovene was lost in two stages; first, in monosyllables as a result of the lengthening of newly closed short-falling syllables, and, secondly, in all the remaining cases of short-falling pitch, which shifted their stress to the following syllable. Ramovš, who speaks of such cases as brat, konj maintaining the "short-rising" pitch until the fifteenth century, is hugging the phonetic ground too closely; on a functional level all stressed shorts lacked relevant pitch from the moment of the completion of the progressive stress shift and lengthening of newly stressed vowels, dated by Ramovš himself as a tenth-century phenomenon.

Nevertheless, there is no basis for denying that up to and including the moment of the progressive stress shift, pitch existed on short vowels, derived from both the old acute and short neo-acute. In writing about the development of the Serbo-Croatian prosodic system, Ivić (1965:136-7) stated that there are two important traces of the short-vowel pitch opposition, indicating a former short-rising pitch on both original old acute (e.g. kraj) as well as short neo-acute (e.g. koža). The Slovene lengthening of non-rising vowels in newly closed syllables, as well as the progressive shift of stress could be

RELATIVE CHRONOLOGY

97

viewed as yet more evidence in favor of the existence of short-vowel pitch in Early Slovene, although, curiously, the progressive stress shift proves not only the existence of short-vowel pitch up to the moment of its occurrence, but also its elimination, as a result of this very same shift and its concomitant vowel lengthening.

Indiana University

## REFERENCES

- Isačenko, A. V. 1939. Narečje vasi Sele na Rožu. Razprave Znanstvenega društva v Ljubljani, 16. Filološko-lingvistični odsek, 4. Ljubljana: Učiteljska Tiskarna.
- Ivić, Pavle. 1965. "Glavne linije razvoja prozodijskog sistema u srpskohrvatskom jeziku." Studia z filologii polskiej i slowiahskiej 5.129-144.
- Jakobson, Roman. 1963. "Opyt fonologičeskogo podxoda k istoričeskim voprosam slavjanskoj akcentologii." American Contributions to the Fifth International Congress of Slavists. The Hague: Mouton.
- Jakobson, Roman and Morris Halle. 1969. "Tenseness and Laxness." Supplement to Preliminaries to Speech Analysis, 8th printing. Cambridge: M.I.T. Press.
- Jaksche, Harald. 1965. Slavische Akzentuation II. Slovenisch. Wiesbaden: Otto Harrassowitz.
- Kortlandt, F. H. H. 1976. "The Slovene Neo-Circumflex." The Slavonic and East European Review 54.1.1-10.
- Kurylowicz, Jerzy. 1962. "O nekotoryx fikcijax sravnitel'nogo jazykoznanija." Voprosy jazykoznanija 1.31-36.
- Ramovš, Fran. 1950. "Relativna kronologija slovenskih akcentskih pojavov." Slavistična revija 3.16-23.
- Stang, C. S. 1957. "Slavonic Accentuation." Skrifter utgitt av Det Norske Videnskaps-Akademi i Oslo I. Hist.-Fil. Klasse 3. Oslo: Aschehoug and Co.

Stankiewicz, Edward. 1966. "The Common Slavic Prosodic Pattern and Its Evolution in Slovenian." International Journal of Slavic Linguistics and Poetics 10.29-38.

## NOTES

- 1. The same chronological scheme as found in Ramovš (1950) has recently been put forth by Kortlandt (1976:8). Ramovš was not alone in assuming short-rising pitch after the shortening of the old acute; similar assumptions can be found in lvič (1965:136-7). Jakobson (1963:165) also assumes the short rising nature of both shortened old acute and short neo-acute, as evidenced by his assertion that only as a result of the tense-lax distinction "the merger of shortened old acute vowels with neo-acute shorts was avoided."
- 2. If this were so, it would mean that neo-acute retraction and jer-fall had to be simultaneous, since retraction from a jer-vowel obviously cannot occur after the loss of the vowel in question.
- 3. As stated by Jakobson and Halle (1969:58), "the lax vowel, notwithstanding its opener articulation, displays a shorter duration than the corresponding tense vowel."