The development of the Slavic mid vowels in newly checked syllables in the Northwestern Ukrainian dialects

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One of the most pervasive linguistic features of Contemporary Standard Ukrainian, and one which serves to differentiate it from the other Eastern Slavic languages, is the raising of the two original Common Slavic mid vowels /e/ and /o/ to the high, front vowel /i/ in checked syllables.

It is generally believed that Common Slavic was characterized by open-syllable structure of the type CV (cf. Heillet 1954:19). The later change from this open syllable system to a checked one was significantly motivated by the loss of the two Common Slavic (CS) short or reduced high vowels /i/ and /u/, also known as jers. In the CS dialect which later formed the basis for Contemporary Standard Ukrainian (CSU), the mid vowels which found themselves in newly checked syllables as a result of the loss of the "weak" jers underwent a change often referred to as "ikavism". Thus, CS *noslu > CSU nis, CS *mostu > CSU mist. The precise nature of this change and the course of its development are still subject to discussion.

In this paper I will discuss two of the theories that have been proposed in the literature as possible explanations for this change. The southwestern Ukrainian dialects, which are interesting for their various manifestations of [-low] vowels in this environment, will be mentioned insofar as they are relevant to the development in the northwest. The northwestern dialects, which are characterized by diphthongs in these newly checked syllables, will be examined in more detail with regard to the predictions of the two theories under discussion. Evidence from Polish and other Slavic languages will be included for comparison. Finally, it will be shown that a synchronic problem can shed some light on the possible diachronic process.

The data can be represented by the following examples. The southwestern dialect data are:

**Lemkian:** ft'uk 'he ran away' ftékla 'she ran away'
    vyu 'ox' voua 'ox' gen.sg.

**Sjan:** l'ut 'ice' lędu 'ice' gen.sg.
    nys 'nose' nosu 'nose' gen.sg.
Hutsul: m'id m'édu 'honey' gen.sg.
z'ir zóru 'eyesight' gen.sg.

(Ukraine: A Concise Encyclopedia 1963:476-8)

Boikian: m'id m'édu 'honey' gen.sg.
n'is nósa 'nose' gen.sg.

(Černjak 1960:157)

The northwestern dialect data is represented by the following:

<table>
<thead>
<tr>
<th></th>
<th>Stressed</th>
<th>Unstressed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Voldava</td>
<td>núčč 'night'</td>
<td>ná nuč 'for a night'</td>
</tr>
<tr>
<td></td>
<td>pečč 'oven'</td>
<td>nápyč 'bake a lot'</td>
</tr>
<tr>
<td>Pidljašša</td>
<td>můost 'bridge'</td>
<td>mustká dim. gen.sg.</td>
</tr>
<tr>
<td></td>
<td>pečč 'oven'</td>
<td>záp'ík past m.sg. 'bake'</td>
</tr>
<tr>
<td>Polissja</td>
<td>můost 'bridge'</td>
<td>mostká dim. gen.sg.</td>
</tr>
<tr>
<td></td>
<td>pečč 'oven'</td>
<td>záp'ík past m.sg. 'bake'</td>
</tr>
</tbody>
</table>

(Kuraszkiewicz 1931:177-8, 1933:A46)

Traditionally, the motivation for ikavism has been attributed to the phenomenon of compensatory lengthening as a result of the loss of the "weak" jers (Saxmatov 1915:270-1; Trubetskoy 1924:229-300; Bulaxovs'kyj 1951:241-2). This compensatory lengthening is thought to have resulted in a general process of diphthongization which was subsequently followed by monophthongization in some of the dialects, including the standard dialect. Bulaxovs'kyj (1951:242) postulates the following historical development: *vo-zú > vóz > výoz > vůuz > výiz > výz > viz. (The phonetic character of the intermediate diphthongs is not described.) One difficulty with this view is the fact that the written sources available do not offer any evidence for postulating an intermediate process of diphthongization. However, linguists adhering to this view feel that the evidence of the northwestern dialects (cf. above), which do show diphthongization, makes it likely that the southwestern dialects also went through a stage of diphthongization. The various reflexes of the mid vowels in the southwestern dialects presented above, then, are taken to represent monophthongizations of underlying diphthongs at various stages of development, i.e., vůuz > vuz, výiz > viz, výoz > vyz.

The opposing view holds that the motivation for the change of the mid
vowels in newly checked syllables is vowel assimilation. The southwestern dialects are considered to have assimilation of mid vowels to following high vowels. Since the jers were high vowels, Kurylo (1923:7-17) argues that ikavism can be motivated by vowel assimilation, i.e., vuvũ > vuzu > vuz. She believes that assimilation of mid vowels to following high vowels had its origin in the southwestern dialects from where it spread northward and supposedly there these monophthongs then diphthongized under the influence of the strong expiratory stress. In addition, since there are several northern dialects in which the quality of the mid vowel in unaccented newly checked syllables does not differ from the mid vowel in the open syllable (cf. the evidence of the Polissja dialect above), Hancov (1923:19) and Kurylo were led to conclude that the quantitative change in the mid vowels was a northern innovation conditioned by stress.

Let us take, for example, the two northern dialects of Pidljašša and Polissja and examine the effects of the northern stress and how the two theories propose to deal with it. The Pidljašša dialect has most, whereas the Polissja dialect differs in the unstressed syllable: mostka.

The assimilation theory would account for the Pidljašša example in the following way: CS *mostu, *mostuka by assimilation gives mustu, mustuka, by jer drop must, mostka and by diphthongization under stress most, mostka. Note, however, that there is no way that this theory can account for the unassimilated vowel in Polissjan mostka, if it claims that assimilation was shared by all of the dialects under consideration.

The compensatory lengthening theory can be exemplified by Kuraszkiewicz's proposal (1933:447), formulated precisely in answer to the possibilities raised by Hancov and Kurylo. Kuraszkiewicz postulates that jer loss resulted in compensatory lengthening of the mid vowel in the preceding syllable. The lengthened vowel is then said to have undergone "sonant formation" (o > ů, e > ê), further diphthongization followed by the development of the strong northern expiratory stress and subsequent monophthongization of the unstressed vowel. The development in the Pidljašša type dialects is proposed to have been the following:

\[
\begin{array}{ccc}
\text{Jer loss} & \text{most} & \text{most ka} \\
\end{array}
\]
Sonant formation

Diphthongization

Northern stress

Monophthongization

\[ \begin{align*}
\text{Sonant formation} & \quad \text{most} \quad \text{mostka} \\
\text{Diphthongization} & \quad \text{mùost} \quad \text{muòstka} \\
\text{Northern stress} & \quad \text{mùost} \quad \text{muòstka} \\
\text{Monophthongization} & \quad \text{mùost} \quad \text{mustka}
\end{align*} \]

The divergent development of the Polissja dialect is explained as the result of a difference in the relative chronology. It is claimed that since the Polissjan dialect is located to the north of the Pidljaššan, it is not unlikely that the northern stress affected it at an earlier time than the more southern Pidljašša dialect. Kuraszkiewicz postulates the following diachronic process for the Polissjan dialect:

\[ \begin{align*}
\text{Jer loss} & \quad \text{most} \quad \text{mostka} \\
\text{Sonant formation} & \quad \text{mùost} \quad \text{muòstka} \\
\text{Northern stress} & \quad \text{mùost} \quad \text{muòstka} \\
\text{Monophthongization} & \quad \text{mùost} \quad \text{mostka} \\
\text{Diphthongization} & \quad \text{muòst} \quad \text{mostka}
\end{align*} \]

Kuraszkiewicz's proposal implies some significant phonetic difference between what he terms a "sonant" (i.e., \( \text{u}_o \)) and what he classifies as a diphthong (i.e., \( \text{u}_o \)). This difference, however, may be difficult to substantiate phonetically. It would be simpler to account for the difference between the two dialects as the result of a difference in the relative chronology of two rules, namely of diphthongization and shortening: Polissja may be assumed to have shortened the newly lengthened vowels in unstressed syllables before diphthongization, and Pidljašša, after diphthongization.

With regard to the southwestern dialects where there are no diphthongs, Kuraszkiewicz proposes that the northern stress did not penetrate that far south and that, therefore, diphthongs in all positions monophthongized. Note, however, that this proposal suffers from the disadvantage of having to postulate a diphthongization in the southwest for which there is no written or synchronic evidence.

It would seem, then, that the compensatory lengthening theory which tries to account for the different realizations of the mid vowels in the north and in the south by a chronological difference of two rules, and the
assimilation theory which assigns diphthongization to the north exclusively, are both difficult to substantiate. Neither theory considers the possibility that the changes which took place in the northwestern dialects may have been different from the development in the southwest.

A more acceptable interpretation can be found, at least for the northwestern dialects, if we consider their development separately from that of the southwestern dialects. The purpose of this paper is to do so and thereby to decide between the two possible alternative explanations of the northwestern dialect data: (a) diphthongization once was a general change and survived only in stressed environments; or (b) diphthongization is a secondary innovation, taking place only in strongly stressed environments.

A phenomenon similar to that of the northwestern Ukrainian dialects can be found in the West Slavic languages, namely, that of lengthening vowels before secondarily final obstruents. The case in Polish is especially interesting. The following alternations are found in Standard Literary Polish:

<table>
<thead>
<tr>
<th>Singular</th>
<th>Plural</th>
<th>gloss</th>
</tr>
</thead>
<tbody>
<tr>
<td>grup</td>
<td>groby</td>
<td>grave</td>
</tr>
<tr>
<td>m'ut</td>
<td>m'ody</td>
<td>honey</td>
</tr>
<tr>
<td>nuš</td>
<td>nože</td>
<td>knife</td>
</tr>
<tr>
<td>vus</td>
<td>vozy</td>
<td>cart</td>
</tr>
<tr>
<td>stuu</td>
<td>stouy</td>
<td>table</td>
</tr>
<tr>
<td>potop</td>
<td>potopy</td>
<td>flood</td>
</tr>
<tr>
<td>puot</td>
<td>puoty</td>
<td>fence</td>
</tr>
<tr>
<td>los</td>
<td>losy</td>
<td>fate</td>
</tr>
<tr>
<td>bok</td>
<td>boki</td>
<td>side</td>
</tr>
<tr>
<td>dom</td>
<td>domy</td>
<td>house</td>
</tr>
</tbody>
</table>

The rule accounting for these alternations is described in grammars of Polish as one which lengthens a vowel in a checked syllable (historically, all final consonants had been followed by a jer) before a voiced, non-nasal consonant or a glide.² That the rule operative here is a type of lengthening (i.e., o o (u)) and not just a raising is supported, among other considerations which will not be discussed here, by written sources,
which for a long time represented the vowel in the newly checked syllable as a geminate. Stieber dates the lengthening change to about 1000 A.D., the date usually cited also for the changes in the jers of West Slavic. Stieber writes:

In [polish] this compensatory lengthening occurred only before a word-final jer and only where the consonant preceding it was voiced (phonetically or both phonemically and phonetically)... It also occurred in two Slavic languages now or formerly bordering on [polish], but unconnected with each other; [ukrainian] and [upper sorbian]. In both the lengthening covered a wider scope than in [polish], occurring both before voiced and voiceless consonants, and before a final jer as well as a medial one...

(1973:296)

In the last quoted sentence, Stieber raises an interesting question. If both Upper Sorbian (to the west of Polish) and Ukrainian (to the east) have compensatory lengthening before all consonants in newly checked syllables, how is one to account for the fact that in Polish this lengthening is restricted to environments before a voiced obstruent? Are we to say that Polish is the innovating dialect? Or are we to assume that the changes are not related in the three areas?

The geographical distribution of this change seems to indicate a spread. If we take the synchronic situation in Polish to be representative of the diachronic, we are then led to say that Upper Sorbian and Ukrainian independently innovated in lengthening before a voiceless obstruent. Theoretically, such independent innovations would not be totally unmotivated, for in those Ukrainian dialects where there is final devoicing, a lengthening rule of the Polish type would be opaque (as it is in Polish) and this opacity could be said to motivate a generalization of the lengthening rule to voiceless environments. 5

On the other hand, assuming that the lengthening process in Polish actually represents a compensatory phenomenon (and not originally phonetic, non-phonemic lengthening before voiced segments as in English [bɔːd] vs. [bɔːt]), as it seems to be historically, the more general case would be lengthening in all checked syllables. This would entail the assumption that Polish originally had lengthening in all checked syllables with a mid vowel. The innovation would then be in Polish and would consist of shortening long vowels before obstruents that were not voiced.
Whatever the correct interpretation may be, Polish does provide evidence for a lengthening process. Similar lengthening phenomena can be cited from Slovene (cf. bog vs. boga, most vs. mosta, led vs. lêdu) and from Serbo-Croatian (bog vs. boga, most vs. mosta, led vs. lêdu, where ̂ indicates long falling and ́ short falling accent); cf. Vaillant 1950: 275. On the other hand there is no evidence in any of these languages for phonemic vowel assimilation. It is not unlikely that the northwestern Ukrainian dialects also underwent a lengthening process. It may therefore be postulated that the motivation for the change in the mid vowels of Ukrainian dialects can be found, at least historically, in compensatory lengthening. 

The other aspect of the lengthening theory holds that the compensatory lengthening led to diphthongization, which is still retained under stress in the northern dialects. It is also believed that the unstressed vowels in the northern dialects were once diphthongs which have since monophthongized. However, as has been stated earlier, while historically there was some evidence for a lengthening process, there is no written historical evidence in Ukrainian which would allow us to postulate diphthongs where they do not occur today.

It seems, however, that there is synchronic evidence arguing for intermediate diphthongal stages even in unstressed environments. In the northern dialect of the Voronezh region, we find the following alternations:

<table>
<thead>
<tr>
<th>I</th>
<th>Nom. sg.</th>
<th>Gen. sg.</th>
<th>gloss</th>
</tr>
</thead>
<tbody>
<tr>
<td>stvél</td>
<td>stóla</td>
<td>table</td>
<td></td>
</tr>
<tr>
<td>svél</td>
<td>sóli</td>
<td>salt</td>
<td></td>
</tr>
<tr>
<td>tvék</td>
<td>tóku</td>
<td>current (n.)</td>
<td></td>
</tr>
<tr>
<td>kvét</td>
<td>kóta</td>
<td>tomat</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>II</th>
<th>Gen. sg.</th>
<th>gloss</th>
</tr>
</thead>
<tbody>
<tr>
<td>ós'en'</td>
<td>ósen'i</td>
<td>autumn</td>
</tr>
<tr>
<td>jús'en'</td>
<td>júsen'i</td>
<td>ash tree</td>
</tr>
<tr>
<td>p'óč</td>
<td>póčy</td>
<td>oven</td>
</tr>
</tbody>
</table>

(Komisarova 1965:178-9)

The alternations are again in the mid vowels of open and checked syllables: ve ̂ and e (with palatalization of the preceding consonant) ́ e (with the preceding consonant not palatalized). Stress does not seem to play a role here; cf. ós'en' (unstressed) beside p'óč (stressed).
Let us first examine group I. Historically and in some synchronic descriptions, the /v/ of East Slavic is derived from an /u/. This is motivated by the fact that in Slavic /v/ does not behave entirely like an obstruent --although it undergoes devoicing, it does not condition it-- and it retains many sonorant characteristics. It is thus possible to describe this ve o alternation as an underlying alternation between ve and o. Group II provides more complicated evidence: there is an alternation between consonants which are palatalized before the following front vowel and those that are not. This occurrence of palatalized vs. nonpalatalized corresponds to checked and open syllables.

What is important in this respect is that in this dialect, as in most Ukrainian dialects, obstruents normally are not palatalized before /e/. Since historically obstruents were originally palatalized before all front vowels, the usual Ukrainian situation could be described as a result of a dispalatalization rule (C' C/e). Synchronically, it is possible to say that the palatalization rule of Ukrainian is simply C C'/i. Both analyses, however, face the same problem, namely the fact that in the above forms, palatalized obstruents occur before a front mid vowel with the added, rather odd, restriction that they occur only before an e which is in a checked syllable.

This difficulty can be resolved if, parallel to the ve o of group I, we assume an earlier ie e for group II. In this case we only need to assume that the diphthongization of the original e to ie in, as should be evident, both stressed and unstressed newly checked syllables took place before the dispalatalization before e and that the subsequent monophthongization of ie to e took place after the dispalatalization:

\[
\begin{array}{c|c}
\text{Diphthongization} & \text{ie} \\
\text{Dispalatalization} & - \\
\text{Monophthongization} & e \\
\end{array}
\]

This ordering will then correctly account for the attested forms, at least in a dynamic, historical analysis. (Synchronically, one might have some misgivings about the introduction of an "abstract" ie in the
intermediate representation. However, even here, the parallelism of the type ve o would seem to make such an analysis acceptable, especially since we are not dealing with an abstract form at the underlying level.)

This solution can then be extended to the problem of the diphthongs in all the northern dialects. It is thus very likely that the diphthongs found under stress in the northwestern Ukrainian dialects today do, in fact, represent the preservation of an older lengthening change which was followed by a general diphthongization and an innovation only under the new stress. (The situation in the southwest remains to be more closely studied.) There seems to be no evidence, historical or synchronic, in support of the alternative proposal that some type of vowel assimilation took place in the northern Ukrainian dialects.

The evidence given in this paper thus removes some of the difficulties concerning the diphthongization or lengthening hypothesis and indicates that this hypothesis is clearly preferable to the alternative assimilation hypothesis, at least for the northwestern Ukrainian dialects.

FOOTNOTES

* The preparation of this paper has benefited greatly from the helpful suggestions of Hans H. Hock.

1 Mid vowels resulting from the vocalization of strong jers (iu, i. e) do not undergo this change.

2 A third possibility, that of ikavism being the result of the Common Slavic neo-acute accent is discussed in detail in Carlton (1974).

3 Evidence for possibly assimilatory vowel reduction in the southwestern dialects may be found in Boikian: CSU tobī, B tubī; CSU obīd, B ubīd; and in the Sjan dialect: CSU nesī, S nisī; CSU berū, S birū. These seem to be cases of unstressed vowel reduction except that in these dialects it is limited to syllables before high vowels, and therefore has come to be interpreted as a type of assimilation. See Smal'-Stockij (1927), Hancov (1923), Kurylo (1928) and Pan'kevyč (1942).

4 See Stieber (1973) and Gladney (unpublished) for a representative explanation.

REFERENCES


