THE DEVELOPMENT OF THE HIDEGSÉG AND FERTŐHOMOK VOWEL SYSTEM

PETER HOUTZAGERS

1. Introduction

Hidegség and Fertőhomok (henceforth “Hi” and “Fe”) are two neighbouring villages near Sopron in the northwest of Hungary. They form part of a group of approximately 80 villages with a Croatian-speaking population in and around the Austrian-Hungarian border region. Apart from the dialects of Hi and Fe, all varieties of Croatian spoken in this area are generally considered Čakavian and Štokavian.¹

The Kajkavian dialect of Hi and Fe has been referred to relatively often in the literature on Serbo-Croatian dialectology. This is due to its unique position in two respects. Firstly, it is the only surviving Kajkavian dialect that was separated from its original surroundings as early as the sixteenth century. Secondly, there are historical data indicating that these surroundings were in the west part of Slavonia, which is east of the area where Kajkavian dialects are spoken nowadays.²

Since 1937 various dialectologists have investigated the dialect and expressed their opinion on it, in particular on its origin and on the question whether or not it can be considered Kajkavian. Several of them have argued that it lacks certain characteristics that all Kajkavian dialects are supposed to have in common, especially with regard to its accentuation and vowel system, and have tried to explain this in terms of marginality and/or dialect mixture. With regard to the vowel system, the main problems have been the establishment and the interpretation of the reflexes of Common Slavic long and short *ē/ē, *ě, *o and *i.³

In my opinion, the discussion was for a long period handicapped by a lack of material that was extensive and consistent enough to yield a clear picture of the correspondences between the vowels in the
present-day dialect and those in remote stages of the language, such as Common Slavic.

From 1985 onward, I have tried to do something about the lack of material by collecting and publishing my own data (see Houtzagers 1987, 1988 and 1991). As to the correspondences, part of this article will be devoted to presenting a picture of the vowel reflexes.

For the discussion about the origin of the Hi and Fe dialect and its place within or without Kajkavian this is, of course, not enough. The question will also have to be faced how the present-day system came about. It will be seen that this presents certain problems: the Hi and Fe dialect possesses, among other peculiarities, two asymmetries in the sense that vowels which originally merely showed a length opposition now have, in addition, different degrees of openness. In this article I shall propose a reconstruction of the vowel system from what is tentatively assumed to be Proto-Kajkavian until the present day.

2. Present-day situation

2.1 In stressed syllables the vowel inventories of the dialects of Hi and Fe are identical:

Diagram 1: stressed vowels

<table>
<thead>
<tr>
<th>i/i</th>
<th>u/u</th>
</tr>
</thead>
<tbody>
<tr>
<td>e/e</td>
<td>o/o</td>
</tr>
<tr>
<td>e/ë</td>
<td>ã/ã</td>
</tr>
</tbody>
</table>

In unstressed syllables the vowel inventories are different:

Diagram 2: unstressed vowels

<table>
<thead>
<tr>
<th>Hidegšć</th>
<th>Fertőhomok</th>
</tr>
</thead>
<tbody>
<tr>
<td>i</td>
<td>u</td>
</tr>
<tr>
<td>e</td>
<td>a</td>
</tr>
</tbody>
</table>

2.2 For a proper understanding of the examples given in this article it is necessary to give one piece of diachronic information beforehand. At some stage in the development of the dialect of Hi and Fe there has been a stress retraction from short final syllables. An originally long pretonic vowel is represented by a short vowel in the present-day dialect if it was high or low (i, u, a) and by a long vowel if it had a mid degree of openness (e, ë). Examples: živl ‘live’ LPm, pūhat ‘blow’, járem ‘yoke’, but bēlēt ‘whitewash’, sōsed ‘neighbour’. It has to be assumed that before the stress retraction pretonic long vowels had been shortened. This shortening caused the long pretonic high and low vowels to merge with their short counterparts. As we shall see below, the long mid vowels were at that stage realized as closing diphthongs ([ou], [ei]). Therefore they remained distinct from their formerly short counterparts, which were realized as opening diphthongs ([uo], [ie]). After the stress retraction, the difference in diphthongization was reinterpreted as a difference in length.

More examples will be given in §§ 4.2 and 4.5. The shortening and the stress retraction will be discussed in their chronological context in § 8.

2.3 In this subsection remarks will be made on the distribution and phonetic realization of the vowels.

(1) As a result of the stress retraction discussed in § 2.2 short vowels are rare in stressed final syllables of polysyllabic words. Some examples: kadē(n) ‘where’ (also with deviant reflex of ū), ondē ‘here’, ovdē ‘here’, along with more frequent dē(n), ōndē(n), ōvdē(n), the toponym Hēckūr ‘Hegykő’, such imperatives as donēs ‘bring’, cf. the infinitive dōnges.
(2) The degree of openness of both stressed and unstressed e shows a great deal of positional variation: it is more open in stressed than in unstressed syllables, in unstressed syllables it is more open in final than in medial position and in stressed syllables it is more open when it is long than when it is short. In addition to all this, there is a difference in the degree of openness of e between Hi and Fe: in each of the positions mentioned, the Hi allophone is more open than the Fe one. The maximal degree of openness of e is reached in the dialect of Hi in long stressed syllables, where it is not only very open but also retracted to a central low position: Hi ɛ is phonetically indistinguishable from Hungarian át. The minimal degree of openness of e is reached in Fe in unstressed non-final position, where the timbre varies between [s] and [e]. I have chosen the symbol ɛ to represent this vowel in both dialects and in all positions. This choice is necessarily arbitrary.

(3) Hi ă, ă and a are retracted and strongly rounded. The traditional notation in Serbo-Croatian dialectology for a vowel with this timbre is ă. In Fe these vowels are also retracted but much less rounded than in Hi. For reasons of typographical simplicity and in order to be able to treat Hi and Fe together as much as possible, I shall use the symbol a.

(4) The stressed long mid vowels, ɛ and ɔ, are almost always realized as closing diphthongs ([ie], [ou]). Their short counterparts are in general realized as opening diphthongs ([iɛ], [ou]).

(5) The distribution of ɔ is restricted. In Fe ɔ occurs only in the word вел ‘immediately’ and in stressed endings of the third person plural of i-presents, e.g. веле ‘they say’, лепе ‘they fly’. The functional load of the opposition ɛ ≠ ɔ is small: as a consequence of the stress retraction from short final syllables (see § 2.2), ɛ and ɔ are almost in complementary distribution. In Hi, ɔ is less rare because a and a were fronted before tautosyllabic j, e.g. зел ‘to go behind’ vs. зел ‘hare’, неж ‘don’t’ (negative imperative particle) vs. нежад ‘back’. In this position ɔ is not phonemically opposed to ă. The Fe forms with ɛ (вел, леп, etc.) also occur in Hi.

3. The Proto-Kajkavian vowel system

3.1 The Proto-Kajkavian starting-point adopted here is the system proposed by Vermeer (1983: 456). It is based on Ivić’s reconstruction (1968: 57-61), but contains a number of relevant modifications.

Diagram 3: Proto-Kajkavian starting point

<table>
<thead>
<tr>
<th>i/i</th>
<th>ü/ũ</th>
<th>u/ū</th>
</tr>
</thead>
<tbody>
<tr>
<td>e/ie</td>
<td>a</td>
<td>ɔ/uo [o/ũo]</td>
</tr>
<tr>
<td>e/ɛ</td>
<td>a/ã</td>
<td></td>
</tr>
</tbody>
</table>

3.2 The diagram below shows how diagram 3 must be interpreted in terms of reflexes of late Common Slavic vowels.

Diagram 4: Proto-Kajkavian system in terms of reflexes of CSL. vowels

<table>
<thead>
<tr>
<th><em>i</em>/į</th>
<th><em>u</em>/ũ</th>
<th><em>ř</em>/ř</th>
</tr>
</thead>
<tbody>
<tr>
<td>ė = <em>fi</em>ř = ř</td>
<td>postonic ā</td>
<td><em>o</em>/o</td>
</tr>
<tr>
<td><em>e</em>/ɛ</td>
<td><em>o</em>/o</td>
<td>ř/ř</td>
</tr>
<tr>
<td><em>u</em>/ũ</td>
<td><em>u</em>/ũ</td>
<td><em>u</em>/ũ</td>
</tr>
</tbody>
</table>

From diagram 3 and 4 it is clear that two developments which are generally considered characteristic for Kajkavian (see Ivić (1957: 403; 1968: 57), Lončarić (1982: 27), Vermeer (1983: 440)) had already taken place:

(1) Merger of *a and *ɛ.
(2) Merger of (long and short) *ř and *o. In the literature on Kajkavian, the traditional symbol for the outcome of this merger is ř. In Vermeer’s reconstruction, the result of the merger is u/ũ.

3.3 The grounds for regarding the system presented in diagram 3 as Proto-Kajkavian are discussed in detail by Vermeer (1979a, 1987 and especially 1983). In this section I shall highlight a number of its characteristics that are relevant for the present discussion.
(1) One of the changes that brought about the system shown in diagram 3 is the fronting of \( *u^*u \rightarrow \tilde{u}/\tilde{u} \), which by other authors, is treated as a local development (e.g. Ivčič 1968: 60 ff.). By regarding the fronting of \( *u^*u \) as an innovation which is not only common Kajkavian but shared with north Istrian Čakavian, parts of Slovene and Posavian Štokavian, Vermeer explains, among other things, the archaic distribution of traces of fronted \( *u^*u \) over a large area (1979b: 1983: 453, 470, fn. 17). Much the same can be said about the fronting of \( *o^*\tilde{d} \) (after diphthongization of \( *\tilde{d} \)), with two important differences: fronting of \( *o^*\tilde{d} \) was (a) nondistinctive and (b) restricted to Kajkavian (Vermeer 1983: 453).

(2) The main factor in the development of most Kajkavian dialects from the Proto-Kajkavian system is the pressure \( \tilde{u}/\tilde{u} \) was under to return to its former place (\( \tilde{u}/\tilde{u} \)). This pressure was due to the influence of neighbouring Čakavian and Neo-Štokavian dialects. The defronting of \( \tilde{u}/\tilde{u} \) resulted either in merger of \( \tilde{u}/\tilde{u} \) with \( u/\tilde{u} \) (in terms of diagram 3) or in lowering of \( u/\tilde{u} \). If \( u/\tilde{u} \) was lowered, its reflex either stayed distinct from the other elements of the system (sometimes optionally) or merged with the reflex of \( o/\tilde{u} \).

(3) An equally important feature of the Proto-Kajkavian system presented above is the diphthongal phonetic realization of \( ie \) and \( uo \). When in Serbo-Croatian and Slovene the originally low front vowel \( *\tilde{e}^*\tilde{e} \) was moving towards a position between \( *\tilde{e}^*\tilde{e} \) and \( *i^*i \), it must have been a diphthong, otherwise it would have merged with \( *\tilde{e}^*\tilde{e} \). It is reasonable to suppose that after the raising short \( *\tilde{e} \) monophthongized (in ijevka it turned into \( j + e \)) and \( *\tilde{e} \) stayed phonetically diphthongal. This corresponds to the present-day situation in a number of geographically non-contiguous areas (cf. Vermeer 1982: 101-102). 9

(4) Shortening of posttonic lengths is generally regarded as common Kajkavian (cf. Ivčič 1937: 184, Ivčič 1966: 376, 1982: 181). Therefore I shall assume that it took place before all post-Proto-Kajkavian developments discussed from § 5 onward.

3.4 According to diagram 4, the Proto-Kajkavian reflexes of CSL. \( *\tilde{a} \) and \( *(<\tilde{e}/k \text{ and } *\tilde{o}/\tilde{e}) \) are identical to those of CSL. \( *\tilde{e} \) and \( *\tilde{e} \), respectively. In the attested instances from Hi and Fe, however, the reflex of \( *\tilde{a} \) is not identical with the reflex of \( *\tilde{e} \) but with that of \( *\tilde{a} \). Examples: t\( \tilde{a} \)st 'father-in-law', l\( \tilde{a} \)š 'lie', d\( \tilde{a} \)n (with \( \tilde{a} < \tilde{a} \) before a nasal). 10

Hi and Fe are by no means exceptional in this respect: forms with \( *\tilde{a} = \tilde{a} \) are very frequent in Kajkavian. As a matter of fact, all the Kajkavian dialects described (or the OLA in Ivčič et al. 1981: 297-358) show examples of \( *\tilde{a} = \tilde{a} \). The development of \( *\tilde{a} \) in Kajkavian is not yet altogether clear and it is by no means excluded that there are positions in which \( \tilde{a} \) is the regular Proto-Kajkavian reflex of \( *\tilde{e}/\tilde{e} \) (cf. Ivčič 1966: 379, fn. 12; Vermeer 1983: 470, fn. 13). For the present I shall assume that in diagram 3 \( *\tilde{a} \) is represented by \( \tilde{a} \), whereas \( *\tilde{a} \) is represented by \( e \).

Like almost everywhere in Kajkavian, short strong \( *\tilde{a} \) preceded by \( v \) has become \( u \), e.g. v\( \tilde{a} \)žem 'Easter', v\( \tilde{a} \)ž\( \tilde{g} \)at 'light' (cf. Vermeer 1979a: 363-365, Ivčič et al. 1981: 299, 304, 311, 321, 327, 335, 341, 346).

3.5 Two elements of the Proto-Kajkavian system presented in diagram 3 are of lesser importance for the development of the Hi and Fe vowel system and will be disregarded in the remainder of the present article:

(1) The central mid vowel \( \tilde{a} \) in diagram 3, which reflects PSL posttonic \( *\tilde{a} \), must be assumed to have existed in Proto-Kajkavian, since it has a separate reflex in a number of dialects scattered all over the Kajkavian area (see Vermeer 1983: 444-448). The Hi and Fe systems show no trace whatsoever of a separate development of posttonic \( *\tilde{a} \). I shall arbitrarily assume that \( \tilde{a} \) merged with \( e \) immediately after the Proto-Kajkavian system and \( \tilde{a} \) as a separate vowel will be left out in all succeeding diagrams.

(2) Another change that can have taken place at any time between the system displayed in diagram 3 and the present-day vowel system and has had no consequences for the development of the other vowels is the loss of the length opposition between \( \tilde{a} \) and \( e \) and the development of the result into the sequence \( e / \tilde{a} \). Therefore in the following no attention will be paid to the treatment of \( \tilde{a} \) and \( e \).

4. Present-day situation in terms of reflexes of Proto-Kajkavian

4.1 In stressed syllables the Proto-Kajkavian vowels shown in diagram 3 are reflected as follows:

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10. According to diagram 4, the Proto-Kajkavian reflexes of CSL. \( *\tilde{a} \) and \( *(<\tilde{e}/k \text{ and } *\tilde{o}/\tilde{e}) \) are identical to those of CSL. \( *\tilde{e} \) and \( *\tilde{e} \), respectively. In the attested instances from Hi and Fe, however, the reflex of \( *\tilde{a} \) is not identical with the reflex of \( *\tilde{e} \) but with that of \( *\tilde{a} \). Examples: t\( \tilde{a} \)st 'father-in-law', l\( \tilde{a} \)š 'lie', d\( \tilde{a} \)n (with \( \tilde{a} < \tilde{a} \) before a nasal).
Short stressed

\[ i > ī, \text{ e.g. kīta 'branch'}; \]
\[ ū = u > ē, \text{ e.g. kūp 'heap'}; \]
\[ mūka 'trouble'; \]
\[ o > ō, \text{ e.g. mōgel 'could'}; \]
\[ č > đ, \text{ e.g. brēska 'peach'}; \]
\[ g > ĝ, \text{ e.g. tēško 'heavy'}; \]
\[ a > ā, \text{ e.g. krāva 'cow'}; \]

Long stressed

\[ i > ĭ, \text{ e.g. sūn 'son'}; \]
\[ ŭ = u > ē, \text{ e.g. kūč 'house'} \text{ Gpl}; \]
\[ ū = uo > ē, \text{ e.g. čōn 'boat'}; \]
\[ kūs 'bone'; \]
\[ ē = ie > ē, \text{ e.g. žēn 'woman'} \text{ Gpl}, \]
\[ bel 'white'; \]
\[ ā > ā, \text{ e.g. plūčadu 'they pay'}; \]

The diagram below illustrates the correspondences between Proto-
Kajkavian (diagram 3) and the present-day system of stressed vowels
(diagram 1).

Diagram 5: present-day stressed vowels in terms of reflexes of Proto-
Kajkavian

<table>
<thead>
<tr>
<th>short</th>
<th>long</th>
</tr>
</thead>
<tbody>
<tr>
<td>( i )</td>
<td>( ū = u )</td>
</tr>
<tr>
<td>( ė )</td>
<td>( o )</td>
</tr>
<tr>
<td>( e )</td>
<td>( a )</td>
</tr>
</tbody>
</table>

The symbol \((ē)\) refers to the restricted correspondence of Proto-
Kajkavian \( ė \) with present-day \( ė \) mentioned in § 2.3, remark (5). The rise of
this \( ē \) will be discussed in § 11.

4.2 The examples given in § 4.1 all contain stressed vowels that
were already stressed before the retraction from short final syllables (see
§ 2.2). In syllables that received the stress as a result of the retraction,
the correspondences between Proto-Kajkavian and the present-day dia-
lect are as shown in diagram 5, with one exception: originally long
pretonic vowels with a high or low degree of openness at the moment
of the retraction are now represented by a short vowel. Examples:

4.3 For a picture of the reflexes of Proto-Kajkavian vowels in un-
stressed syllables a distinction must be made
(a) between Fe and Hi;
(b) between posttonic and pretonic syllables.

4.4 Since posttonic lengths were shortened in Proto-Kajkavian (see
§ 3.3, remark (4)), for the correspondences in posttonic syllables only
the short vowels of diagram 3 have to be taken into account.

The correspondences in posttonic syllables are as follows:

**Fe posttonic**

\[ i > i, \text{ e.g. vrāzi 'devils'} \]
\[ u = ū > u, \text{ e.g. jābuka 'apple'}; \]
\[ mōžu 'husband' \text{ Dsg}; \]
\[ vřēmě 'time'; \]
\[ a > a, \text{ e.g. kūšat 'taste'}; \]

**Hi posttonic**

\[ i > ĭ, \text{ e.g. hititi 'throw'}; \]
\[ u = ū = o > u, \text{ e.g., jābuka 'apple'}; \]
\[ brātu Dsg, měsu 'meat'; \]
\[ e > ě, \text{ e.g. Hřeššině 'inhabit-
ant of Hi'}; \]
\[ a > a, \text{ e.g. bāba 'grandmother'}; \]
4.6 The following diagram illustrates the correspondences between Proto-Kajkavian (diagram 3, left part) and the present-day posttonic vowels.

Diagram 6: present-day posttonic vowels in terms of reflexes of Proto-Kajkavian

<table>
<thead>
<tr>
<th>Fe posttonic vowels</th>
<th>Hi posttonic vowels</th>
</tr>
</thead>
<tbody>
<tr>
<td>i</td>
<td>ũ = u</td>
</tr>
<tr>
<td>ě = e</td>
<td>o</td>
</tr>
<tr>
<td>a</td>
<td>e</td>
</tr>
<tr>
<td>i = i, e.g. kĩrît 'smoke';</td>
<td>i = i, e.g. kōsît 'mow';</td>
</tr>
<tr>
<td>ũ = u = o &gt; u, e.g. ŏbrăs</td>
<td>ũ = u = o &gt; u, e.g. kŏnju 'horse'</td>
</tr>
<tr>
<td>'table-cloth', źênu 'wife' Asg;</td>
<td>Dsg, źênu 'wife' Asg, sêlu</td>
</tr>
<tr>
<td>o &gt; o, e.g. gnêzdō 'nest';</td>
<td>'village';</td>
</tr>
<tr>
<td>ě = e &gt; ě, e.g. òběd 'mid-day meal', môje 'my' Nsg n;</td>
<td>ě = e &gt; ě, e.g. člôvek 'human being', dônsēs 'bring';</td>
</tr>
<tr>
<td>a &gt; a, e.g. pîtăt 'ask'.</td>
<td>a &gt; a, e.g. nôga 'foot'.</td>
</tr>
</tbody>
</table>

4.7 The correspondences in pretonic syllables are as follows:

<table>
<thead>
<tr>
<th>Fe pretonic</th>
<th>Hi pretonic</th>
</tr>
</thead>
<tbody>
<tr>
<td>i = i &gt; i, e.g. imōmo 'we have', zapisōno 'written down' n;</td>
<td>i = e = i = (e) &gt; i, e.g. imōmo 'we have', divićica 'little girl', ziskālu 'earn' LPhn;</td>
</tr>
<tr>
<td>ũ = u = ũ &gt; u, e.g. dušči 'it smells', suzā sé 'sheds tears', pustilī 'let' LPhpl m;</td>
<td>ũ = u = o = ũ = ũ &gt; u, e.g. uči 'he learns', duščči 'long', muččam 'power' Lsg, jũbŭlā 'love' LPh, susēda 'neighbour' Gsg;</td>
</tr>
</tbody>
</table>
| ě = e = (e) = (ie) > ě, e.g. divićica 'little girl', divětnaž 'nineteen'; | ě = ě > ě, e.g. pejič 'five' G;
| LPpl m, sosēđa, 'neighbour', a > a, e.g. zapiknut 'prick', jačiļa 'sing' LPh. | a = a > a, e.g. slanina 'lard', plačči 'pay' LPhpl m. |

The brackets indicate that I have no reliable examples where the vowel in question was originally pretonic and still is.

In § 4.2 one can find examples of originally pretonic vowels which became stressed by the retraction from short final syllables.

The correspondences between Proto-Kajkavian (diagram 3) and the present-day pretonic vowels are illustrated in the diagram below.

Diagram 7: present-day pretonic vowels in terms of reflexes of Proto-Kajkavian

<table>
<thead>
<tr>
<th>Fe pretonic vowels</th>
<th>Hi pretonic vowels</th>
</tr>
</thead>
<tbody>
<tr>
<td>i = i</td>
<td>ũ = u = ũ</td>
</tr>
<tr>
<td>ě = ě = ie = ě</td>
<td>o = uo = ũ</td>
</tr>
<tr>
<td>a = ā</td>
<td>e</td>
</tr>
</tbody>
</table>

4.8 Certain reflexes of a and ā are positionally conditioned:
1. Stressed original a and ā are reflected as ũ before a nasal, e.g. slōma 'straw', tēncat 'dance'.
2. In Hi, a and ā (whether or not stressed) are reflected as ě, ě and ě before tautosyllabic j, e.g. kēj 'what', zējč 'harc', mērkaj 'listen', cf. Fe kǎj, zǎjc, mērkaj. This phenomenon is frequently found in Kajkavian (e.g. Ivić et al. 1981: 311, 321, 335, 340, 346).

4.9 The present subsection will deal with the exceptions to the general picture of the correspondences given above. It contains no information that is indispensable for the understanding of the account of the development of the Hi and Fe vowel system, which will be continued in § 5.
Below those attested instances will be presented that do not agree with what one would expect on the basis of §§ 4.1-4.8. The vowels found in these forms are not regular reflexes but can in most cases be explained by analogical replacement, e.g. (1) and (4) below, or by borrowing from other varieties of Croatian, e.g. (3a)-(3d) below.

Proto-Kajkavian u/u ("♀♂♀♂, "♀♀♀")

(1) In Fe sometimes o (˚ Proto-Kajkavian u) is found in unstressed syllables instead of expected u. The instances found in the material are: mŏški ‘male’ (along with u), dogovnje ‘wares’, rokum ‘hand’ Lsg (along with u), vročimi ‘heat’ Lsg, Ložnā ÒEP, the PR3pl ending, e.g. pocēpaja ‘hack’ and the verbal suffix -no, e.g. cérknglo ‘die’. In all these forms the o can be explained by analogy to stressed ă in forms of the same paradigm or in related words: mŏš ‘man’, dŏg ‘deb’t, rŏka ‘hand’, vročē ‘hot’ Nsg n, lŏg ‘forest’, stressed PR3pl endings like budŏ, forms where -no is stressed, e.g. cérknóto ‘dead’ Nsg n.

For gŏlob ‘pigeon’ I have no attestations of forms where the vowel in question is stressed. It is reasonable to assume however, that the word either has or had such forms e.g. Gpl *gólub (with ā in terms of diagram 3; the Gpl has not been attested).

Unattested reflexes like the ones presented above do not occur in Hi, since the Hi dialect has no unstressed o. However, the material from Hi does contain a few similar instances in stressed syllables: tōčenji ‘hitting’ (verbal noun) Lsg; mŏc/mūč ‘be silent’ IMP, gōščē ‘more often’, cf. tōč ‘hit’ INF, mōč ‘silently, in secret’, gōstu ‘often’ ADV. I regard the nonattestation of these forms in Fe as accidental.

(2) Two words have stressed ā (˚ Proto-Kajkavian ā) instead of expected ē, in Fe as well as in Hi: nūgel ‘corner’, grūbēn ‘ruide’. The same phenomenon is found in the stressed Hi PR3pl ending -ā, e.g. sū ‘they are’, idā ‘they go’ (cf. Fe sō, idē). In trūba (˚ trūbā) ‘mouth, face’ (pejorative) Hi Fe we should expect ē. The root-vowel ā points to shortness at the moment of the stress retraction.11

Proto-Kajkavian ie/e < *ē*ē

(3) In a number of words i, ĭ or ĭ occurs instead of expected ė, ě or ġ (˚ Proto-Kajkavian ie/e). This happens more often in Hi than in Fe. The following instances were found in the material:12

(3a) Both Hi and Fe: the word cřıkfe ‘church’; the DLsŋ ending -i/į, e.g. ėzn ‘wife’ Dsg, ččl ‘village’ Lsg. the endings of the negated PR něšmīm, něšmī, etc. ‘I, you, etc. dare not’; the suffix of such verbs as čivít ‘live’, čivlā/čivlā LP i Fe, čivl LP m Hi, razuměmo ‘we understand’, ľetět ‘fly’, těršīt ‘suffer’ (relevant forms of last two verbs not attested in Fe).

(3b) Only Hi: the words ĭřp ‘beautiful’ (Fe lęp), břčat ‘run’ (Fe běkait) prčk ‘through, across’ (also prēk, prčk, Fe prēk, prčk, prēk), ubřsīt ‘hang up’ (Fe oběsīt).

(3c) Predominantly Hi: the suffix of the verb vědít ‘see’, LP věḏî Hi Fe (Fe also vědět, věďet), gōř ‘up’, dōř ‘down’ Hi Fe (Fe also gōře, dōłe).

(3d) Only Fe: sǐnōkoša ‘hay-field’, bĳi ‘he runs’ (also bějī, sǐkīra ‘axe’ (also sēkīra). Same forms in Hi but there i is the regular reflex of pretonic ě.

(3e) Predominantly Fe: before -j, e.g. Fe smjiat ‘laugh’ (less frequently: smějat; the reverse in Hi), sřjali ‘ripen’ LP pl Fe (cf. sřējadu PR3pl Hi), vějat Fe ‘shinnow’, (cf. vějat/vięjat Hi), sījali ‘sow’ LP pl Fe (cf. Hi sějali/sįjali).13 With original ė followed bi j, but alternating with other consonants: Fe źri, źri, źrg, źrgl ‘walnut’, Npl orfi, Gpl orfs (Hi orje, orę, urělin ‘walnut tree’ Asg). In Hi čůř ‘daughter’ Dsg (cf. Fe čěr) and Hi očiněši ‘the Lord’s Prayer’ Npl (cf. Fe očeněši) original pretonic ě is reflected as if it were a ě.

(4) In four words we find pretonic ě in Hi instead of expected ė (˚ Proto-Kajkavian ě): sřeđina ‘middle’, sřeđinski ‘middle’ Nsg m, dřevěni ‘wooden’ Nsg m, mĕhûr ‘bladder’. Probably the same explanation holds that was given under (1): analogy to related words with stressed ě: sře da ‘Wednesday’, dřěvú ‘wood’, *mĕh ‘sack, wineskin’ (not attested). (Same forms in Fe, but there ě is the regular reflex of unstressed ě).

Proto-Kajkavian ě < *ē

(5) In four words a is found instead of expected ě/e (˚ Proto-Kajkavian ě < *ē): lāgat ‘lie’, māša ‘mass’, kadě ‘where’ (along with more frequent dē), lāzno (e.g. měni je - ‘I have time’). The last word also has unexpected length. Instead of va in’ one would expect va (see §3.4, last paragraph). Fe has va along with va. When the preposition is stressed, both Hi and Fe have vā.
Miscellaneous

(6) The prefix rgs- instead of expected raz-, more often in Hi than in Fe: rëškën/raškën ‘lighten’ Hi, rašrit ‘spread’ Hi, rašrit/rgšrit Fe, Hi rëzdëjit ‘divide’, Fe razdëjit. Also Hi dër ‘approximately’ (cf. Fe dar), rëkš Hi ‘corn-stack’ (cf. rakš Fe). Fe has pëjat ‘lead’ along with more frequent pëjat (Hi pëjat).

(7) nàdéjë ‘Sunday’, násčë ‘pregnant’ Nsg f.

(8) sëstra ‘sister’ instead of expected *sëstra,14 Hi čëkat ‘wait’, instead of expected čëkat (latter form attested in Fe).

(9) Hi třëšjë (if the vowel reflects *e < *e one expects i).

(10) Fe tůváruš ‘friend’, along with tůváruš (Hi only tu-).

5. The rise of the Hi and Fe asymmetries

5.1 As was said in § 1, the most striking characteristic of the Hi and Fe stressed vowel system is the presence of two asymmetries in the sense that Proto-Kajkavian vowels which were merely opposed in length now have, in addition, different degrees of openness (see diagram 5):

(1) Proto-Kajkavian e stayed distinct from e and is reflected by a low vowel, whereas ē merged with ie (the long partner of e) and is now represented by a mid vowel;

(2) Proto-Kajkavian ũ merged with u and is reflected by a high vowel, whereas ũ stayed distinct from u, merged with uo and is represented by a mid vowel.

To my knowledge, asymmetries like the ones mentioned are not found in any other described Kajkavian dialect.15 However, from § 5.3 onward I shall try to show that the Hi and Fe system, including its asymmetries, can be derived in a plausible way from Proto-Kajkavian (diagram 3).

5.2 In posttonic syllables the asymmetries under discussion never arose since Proto-Kajkavian had no posttonic lengths. In pretonic syllables, vowel mergers have caused the asymmetries to disappear, with one exception: Proto-Kajkavian ũ ≠ ũ in the dialect of Fe (see diagram 7).

The changes discussed in §§ 5.3-5.6 apply to both stressed and unstressed vowels, on the understanding that the posttonic vowels were all short. In §§ 6-10 an account will be given of those developments that were specific for unstressed vowels.

5.3 I think that the asymmetries mentioned in § 5.1 are historically closely interrelated and developed immediately from the Proto-Kajkavian system. The reconstruction proposed here is based on the assumption that when ũ were defronted, ũ was lowered to ũ under the pressure of ũ, whereas u was not lowered and merged with ũ. The reason for this was that ũ had sufficient room to be lowered and at the same time stay distinct from its lower neighbour, which was phonetically a diphthong (uo), while u had no place to go. Lowering of u would have resulted in merger with o. It stayed where it was and merged with defronted ũ. As in all Kajkavian dialects where ũ ũ merged with ũ ũ, the tendency of ũ towards defronting must have been stronger than the tendency of u to stay distinct from ũ.

If the development described above is really what happened, it must be assumed that o/uo [o/uó] had already been defronted by the time ũ started to exert pressure on u, or at least enough to exert counter-pressure.

5.4 When ũ reached a mid degree of openness, a number of phonemic reinterpretations took place:

(1) The diphthongal character of uo became distinctive, since it was the only feature which distinguished it from former ũ.

(2) Former ũ replaced uo as the long partner of o.

(3) The front mid long vowel ie which, being phonetically a diphthong, was the natural front partner of uo and not of former ũ, became distinctively diphthongal. It was no longer phonologically the long counterpart of e, just as uo was no longer phonologically the long counterpart of o.

The following diagram is given for the sake of clarity only, since the development described next probably took place simultaneously with changes 1-3 above.
In the dialect under discussion the monophthongization resulted in merger with the long monophthongal central vowels ɛ and ɔ. This led to the following system:

**Diagram 10**

\[
\begin{array}{cccc}
\text{i/i} & \text{e/ɛ} & \text{e/-} & \text{a/ा} & \text{ɔ/ɔ} & \text{u/u} \\
\end{array}
\]

5.6 The next changes were subphonemic: in those positions where there was a distinction between long and short vowels (stressed and pretonic syllables), ɛ, ɔ, e and ʊ were diphthongized into [ei], [ou], [ie] and [uo], respectively.

The monophthongization of ɛ and ɔ and their development into closing diphthongs probably took place (or had at least started) before the migration. Both in the neighbouring Čakavian dialects and in the variety of Hungarian spoken in the area around Hi and Fe long mid monophthongs are realized as opening diphthongs (see Newkloksy 1978: 62, Imre 1971: 273). It is not likely that a development in exactly the opposite direction would have started in a speech community of only a few villages.17

6. Unstressed vowels: general remarks

§§ 6-10 will concentrate chiefly on the changes that took place in unstressed syllables. Some of the innovations discussed also affected the stressed vowels, but caused no vowel mergers or splits. There is no reason to suppose that up to the situation presented in diagram 10 the development of the unstressed vowels was different from that of their stressed counterparts. It is not excluded, however, that in posttonic syllables the first innovation described below (the raising of short ɛ, §7) took place well before that stage. For the subsequent changes this is highly unlikely.
Since diagram 10 provides a good starting-point for the account of the specific changes in unstressed syllables, I shall use it as such. The two following diagrams show which phenomena will have to be accounted for.

Diagram 11: present-day posttonic vowels in terms of reflexes of the short vowels in diagram 10

<table>
<thead>
<tr>
<th>Fe posttonic vowels</th>
<th>Hi posttonic vowels</th>
</tr>
</thead>
<tbody>
<tr>
<td>i</td>
<td>u</td>
</tr>
<tr>
<td>e = e</td>
<td>u = o</td>
</tr>
<tr>
<td>a</td>
<td>e = e</td>
</tr>
</tbody>
</table>

Diagram 12: present-day pretonic vowels in terms of reflexes of the vowels in diagram 10

<table>
<thead>
<tr>
<th>Fe pretonic vowels</th>
<th>Hi pretonic vowels</th>
</tr>
</thead>
<tbody>
<tr>
<td>i = i</td>
<td>u = u</td>
</tr>
<tr>
<td>e = e</td>
<td>o = o</td>
</tr>
<tr>
<td>a = a</td>
<td>e</td>
</tr>
</tbody>
</table>

Summarizing:
(1) The length opposition on pretonic vowels was lost;
(2) In Fe the low front vowels merged with the mid front ones and a triangular unstressed vowel system was obtained;
(3) In Hi posttonic syllables the same merger took place and in addition the mid back vowel merged with the high back one;
(4) In Hi pretonic syllables the mid vowels merged with the high vowels;
(5) In Hi, as a result of (3) and (4), e in terms of diagram 10 is reflected differently in posttonic than in pretonic syllables.

One other innovation is not visible from diagrams 11 and 12 but will also have to be discussed: the stress retraction from short final syllables.

In the remainder of this article I shall propose the following chronology:
- (§ 7) a development towards trianguularity which, in posttonic syllables, has immediate consequences for the number of vowels (from 6 to 5);
- (§ 8) shortening of pretonic lengths, rise of distinctive diphthongization (results: 4 monophthongs + 4 diphthongs in pretonic syllables);
- stress retraction;
- (§ 9) disappearance of diphthongization in pretonic syllables in Fe; results: 5 vowels in pretonic syllables;
- (§ 10) separate developments in Hi: restoration of the rectangular system and elimination of the mid level; results: 4 vowels in unstressed syllables.

7. Raising of short e

In diagram 10, the long vowels formed a triangle, whereas the short ones formed a rectangle:

Diagram 13 (= diagram 10 with long and short viewed separately)

<table>
<thead>
<tr>
<th>long</th>
<th>short</th>
</tr>
</thead>
<tbody>
<tr>
<td>i</td>
<td>u</td>
</tr>
<tr>
<td>e</td>
<td>o</td>
</tr>
<tr>
<td>a</td>
<td>e</td>
</tr>
</tbody>
</table>

The low front vowel e occupied a relatively vulnerable position: it had no long counterpart and formed one of the corners of the rectangle. I assume that since this situation had arisen (diagram 9), e and a had had the tendency respectively to be raised to a mid opening level and to be fronted towards a low central position.
After the diphthongizations described in § 5.6 it had become possible for e in stressed and pretonic syllables to be raised without merging with ę. It was raised and ę, ę, ę and ę now were distinctively diphthongal.

In posttonic syllables no dipthongizations had taken place and e merged with ę. The functional load of the opposition e ≠ ę in posttonic position was small: ę (<<ę, *ę) was relatively rare in posttonic syllables before the stress retraction. The merger was in accordance with the overall tendency of Kajkavian dialects to reduce the number of oppositions in unstressed syllables (cf. Zečević 1993).

The results of these changes are shown in the following diagram.

**Diagram 14**

<table>
<thead>
<tr>
<th>stressed and pretonic</th>
<th>posttonic</th>
</tr>
</thead>
<tbody>
<tr>
<td>i  ā</td>
<td>i  a</td>
</tr>
<tr>
<td>ė  e  i, e, i, u, ou  ou</td>
<td>ė  e  ou</td>
</tr>
</tbody>
</table>

8. Shortening of pretonic lengths, stress retraction

Now the changes already discussed in § 2.2 took place:
(a) The pretonic lengths were shortened, which caused i, ā and ā to merge with i, u and a. The four diphthongs remained distinct, both from each other and from e. As a result, the vowel system in pretonic syllables consisted of four short vowels and four diphthongs (see diagram 15).

**Diagram 15**

<table>
<thead>
<tr>
<th>stressed and pretonic</th>
<th>posttonic</th>
</tr>
</thead>
<tbody>
<tr>
<td>i  ā</td>
<td>i  a</td>
</tr>
<tr>
<td>ė  e  i, e, i, u, ou  ou</td>
<td>ė  e  ou</td>
</tr>
</tbody>
</table>

(b) Subsequently short final syllables lost the stress to the preceding syllable.

Formerly pretonic and now stresseć syllables could contain the following vowels: i, u e, a, ie, ei, ou and ou. For examples see § 4.2 (Note that my present-day notation of e, ei, ou and ou is ę, ę, ą and ą). Stressed syllables that were subject to the stress retraction could contain the vowels i, u e, a, ie and ou. When they became posttonic, ie and ou were identified with posttonic e and o, respectively. For examples see § 4.5.

9. Further development of the unstressed vowels in Fe

In Fe the diphthongization on pretonic vowels was lost. The resulting vowels were monophthongs with a mid level of opening. The diphthongs ie and ei and the monophthong e merged to e; ou and ou merged to o.

**Diagram 16 (Fe only)**

<table>
<thead>
<tr>
<th>stressed</th>
<th>unstressed</th>
</tr>
</thead>
<tbody>
<tr>
<td>i  ā</td>
<td>i  a</td>
</tr>
<tr>
<td>ė  e  i, e, i, u, ou  ou</td>
<td>ė  e  ou</td>
</tr>
</tbody>
</table>

i  u
a

<table>
<thead>
<tr>
<th>stressed</th>
<th>unstressed</th>
</tr>
</thead>
<tbody>
<tr>
<td>i  ā</td>
<td>i  a</td>
</tr>
<tr>
<td>ė  e  i, e, i, u, ou  ou</td>
<td>ė  e  ou</td>
</tr>
</tbody>
</table>

i  u
a
Apart from the rise of the new long counterpart of stressed e and the phonological reinterpretation of ie, ei, uo and ou as ã, â, ô and õ, the present-day situation for the dialect of Fe was now reached.

10. Further development of the unstressed vowels in Hi

In Hi a rectangular system was restored in short syllables, with very low allophones of e and a strongly rounded a. The similarity between e (present-day ë in my notation) and a in the dialect of Hi and the corresponding vowels in the variety of Hungarian spoken in the area is striking and suggests that the reestablishment of a rectangular short vowel system was due to the influence of Hungarian.¹⁸ This led to an asymmetrical picture in posttonic position. In contradistinction to northwest Hungarian, which has a rectangular system in short (stressed and unstressed) syllables with three degrees of openness back and front, the dialect of Hi lacked a front counterpart for posttonic õ. The system was asymmetrical in the most unfavourable way (with more back than front vowels). Now õ came under severe pressure and was pushed towards u. For a period it remained optionally distinct from u.

Diagram 17 (Hi only)

<table>
<thead>
<tr>
<th>stressed</th>
<th>stressed and pretonic</th>
<th>posttonic</th>
</tr>
</thead>
<tbody>
<tr>
<td>ð</td>
<td>i</td>
<td>u</td>
</tr>
<tr>
<td>â</td>
<td>ie, ei, uo, ou</td>
<td></td>
</tr>
<tr>
<td></td>
<td>i</td>
<td>u</td>
</tr>
<tr>
<td></td>
<td>e</td>
<td>(ô)</td>
</tr>
<tr>
<td></td>
<td>e</td>
<td>a</td>
</tr>
</tbody>
</table>

The brackets indicate optionality.

If it is true that the reestablishment of rectangularity in short syllables was due to Hungarian influence, the rise of the triangular system (diagram 14) must be dated before the migration.

There are indications that the above system existed around 1700. Recently 16 sales contracts and receipts written between 1661 and 1710 in Hidegség, Fertőhömök, Kiscenk and Köpházak were published (Njomárkay 1992)¹⁹. The language used in these documents is strongly influenced by the neighbouring i/e-kavian Çakavian dialects, e.g. sused ‘neighbour’ (with u for *ô, text no. 6), sam ‘I am’ (with a instead of expected e, no. 6), dice ‘children’ Gsg (with i for *ê, no. 10)²⁰. However, the texts from Hi and Fe also contain many local forms, e.g. roke ‘hands’ (no. 6), sem ‘I am’ (no. 7), dece ‘children’ Gsg (nos. 10 and 13.1).

In the documents from Hi and Kiscenk attestations of posttonic u instead of õ can be found, e.g. ne budem mogli ‘we would not be able’ (no. 12), jednu oranje zemle (no. 12) ‘one parcel of land’, ovy moju poštovano pismo ‘this my respected letter’ Asg (no. 15), ovy pismu ‘this letter’ Asg (no. 16). At the same time, posttonic õ occurs in forms where it cannot have been borrowed from Çakavian, e.g. uerpapl ‘suffered’ with õ (<=ô). This points to exactly the optionality described above.

When, as in the dialect of Fe, the diphthongization on pretonic vowels was lost, pretonic mid vowels were obtained. These developed in a way that was parallel to the mid vowels in posttonic syllables: ie, ei, uo and ou merged into two mid vowels that were merely optionally distinct from their high neighbours (see diagram 18).

Diagram 18 (Hi only)

<table>
<thead>
<tr>
<th>stressed</th>
<th>unstressed</th>
</tr>
</thead>
<tbody>
<tr>
<td>ð</td>
<td>i</td>
</tr>
<tr>
<td>â</td>
<td>e</td>
</tr>
<tr>
<td></td>
<td>(ô)</td>
</tr>
<tr>
<td></td>
<td>i</td>
</tr>
<tr>
<td></td>
<td>e</td>
</tr>
</tbody>
</table>

Later ë and õ merged with i and u, respectively:
According to RHSJ (vol. 20: 729), the lexeme from which věk was derived (veljek, I attested vejak in Kópháza) is found only in the varieties of Croatian spoken around the Austrian-Hungarian border. This makes it improbable that the word was present in the pre-migratory stage of the dialect, let alone in its contracted form.\footnote{21}

11.3 An interesting and yet unsolved problem is how ė arose in lēštē. It is clear that it is not the reflex of the original ending *ē (Proto-Kajkavian ė), which would have been ę in Gsg vodě ‘water’. It is possible that the ending was originally disyllabic, as it mostly is in unstressed position in the present dialect, and that ė is due either to contraction or to morphological replacement of the disyllabic ending by a monosyllabic one. How eventful the history of third person plural present endings in Kajkavian dialects can be is illustrated by Fancev (1907: 372-373). The origin of -ē in lēštē must probably be seen in connection with the origin of nonetymological -ē in Hi idu ‘go’ (Fe has idē). What the endings in lēštē, idu and idō have in common is that they are the present-day long counterparts of the monosyllabic unstressed endings, which in their turn are perfectly etymological.

11.4 In the present-day dialect, ie, ei, ou and ou in terms of diagrams 16 and 19 are occasionally realized as monophthongs. The diphthongs must now no longer be seen as diphthongal phonemes, but as the most common allophones of the mid vowels ě, ē, đ and đ. In Hi this phonological reinterpretation can have taken place at any stage after diagram 17 (restoration of the rectangular system). Together with the changes already discussed this led to the present-day Hi vowel system.

Diagram 20: Hi

<table>
<thead>
<tr>
<th>stressed</th>
<th>unstressed</th>
</tr>
</thead>
<tbody>
<tr>
<td>ě</td>
<td>đ</td>
</tr>
<tr>
<td>ė</td>
<td>a</td>
</tr>
<tr>
<td>i</td>
<td>u</td>
</tr>
<tr>
<td>ī</td>
<td>ū</td>
</tr>
</tbody>
</table>

Apart from the rise of the new long counterpart of stressed e and the phonological reinterpretation of ie, ei, ou and ou as ě, ē, đ and đ, the present-day situation for the dialect of Hi was now reached.

### 11. The rise of the new stressed ė

11.1 Somewhere between the system shown in diagram 9 and the present day a new long counterpart of stressed e arose, which is reflected in the present-day dialect as ė. As was said in § 2.3 (remark 5), the distribution of ė is restricted, especially in Fe, and the opposition ė ≠ ě has a small functional load.

In Fe ė occurs only in the word věk ‘immediately’ (contraction from *veljek) and in end-stressed third person plural forms of *i-presents, e.g. lēštē ‘they fly’. In forms of the type lēštē ė is not phonemically opposed to ě, which does not occur in final syllables of polysyllabic words.

Hi has, in addition, another source for ė, viz. the fronting of a/i before tautosyllabic j, e.g. zējt ‘go behind’. In this position ė is not phonemically opposed to ě.

11.2 If words of the type lēštē and/or zējt were the first in which the new ě occurred, it was a long allophone of e and/or a front allophone of ā until the appearance of věk. In other words, it is improbable that ě was a phoneme before it appeared in věk.

The new long vowel phoneme ě can in principle have arisen at any time between the system shown in diagram 9 and the present day. There is one indication, however, that it did not arise before the migration, which, in its turn, probably took place between the stages presented in diagrams 14 and 17 (see the remark after diagram 17).
In the dialect of Fe the phonological reinterpretation of the diphthongs probably took place after the rise of the new ā. When e (in terms of diagram 16) obtained a new long partner, new possibilities for phonemic symmetry were created and stressed e, ē, a and ā developed into each other’s front-back counterparts. The diphthongs were reinterpreted as mid vowels and the present-day Fe vowel system was obtained.

**Diagram 21: Fe**

<table>
<thead>
<tr>
<th>stressed</th>
<th>unstressed</th>
</tr>
</thead>
<tbody>
<tr>
<td>ē</td>
<td>ē</td>
</tr>
<tr>
<td>ā</td>
<td>ā</td>
</tr>
<tr>
<td>ĕ</td>
<td>ĕ</td>
</tr>
<tr>
<td>ė</td>
<td>ė</td>
</tr>
<tr>
<td>u</td>
<td>u</td>
</tr>
<tr>
<td>e</td>
<td>o</td>
</tr>
<tr>
<td>a</td>
<td>a</td>
</tr>
<tr>
<td>i</td>
<td>i</td>
</tr>
</tbody>
</table>

On the phonetic level the stressed Fe vowel system is still less rectangular than the Hi one: a and ā are less rounded and the average realization of ĕ and ē is higher (see § 2.3, remarks (2) and (3)).

12. Conclusions

In the above I have tried to show that the Hi and Fe vowel system, including its asymmetries, can be derived from Proto-Kajkavian by assuming a series of natural developments. Hence, as far as the vowel system is concerned, there is no need to suppose that the dialect is of mixed Kajkavian–Čakavian or Kajkavian–Štokavian origin.

In the Hi dialect pretonic Proto-Kajkavian ĕ (⟨ *ē⟩, *o) is reflected as i, which yielded such results as *dićči ‘young men’ and *tjdnöv ‘week’ Gpl with *i. If such forms are viewed in isolation (from e.g., *kišniję ‘later’ and *stěklěna ‘glass’ Nsg f, with *i) they at first sight look like ikavisms, i.e. unexpected i-like reflexes of *ē. This, in its turn, suggests influence of non-Kajkavian varieties of Croatian, such as i/e-kavian Čakavian. However, the forms in question are not ikavisms but isolated results of a more general vowel reduction in pretonic syllables in Hi (see § 10).

The dialect shows a very modest number of true ikavisms (most of them were found only in Hi, see § 4.9, (3a)-(3d)) and u-like reflexes of Proto-Kajkavian ā (⟨ *ā⟩, *f; see § 4.9, (2)). These must be ascribed to borrowing at some stage of the development of the dialect.

University of Groningen

NOTES

* I wish to thank Willem Vermeer for his unremitting willingness to share his views on Kajkavian with me and for his detailed and critical comment on several earlier versions of this article.
1 For a general picture of the Croatian dialects in this area see Neweklowsky (1978).
2 The provenance of the Croatian population of Hidegșg and Fertőhomonok has not yet been established with certainty. One of the theories is that the ancestors of the present inhabitants came from (the surroundings of) the fortified towns Velika (now Kraljeva Velika) and Meduřič in Slavonia, which, as Hidegșg and Fertőhomonok, formed part of the possessions of the Nádasdy family. There is some evidence in support of this theory: (1) a letter from Tamás Nádasdy from 1538 in which he states that he gave land in Hungary to the population of (villages around) Velika and Meduřič (Šišić 1915, 226-227); (2) a report of a visit in 1631 by a Lutheran bishop to Fertőendrőd (another Nádasdy possession not far from Sopron) which makes mention of several church ornaments which the inhabitants said to have brought along from Velika on their flight from the Turkish invaders (Nagy 1883: 27). However, Tamás Nádasdy had many more possessions, in Croatia and Slavonia as well as in Hungary, and Velika and Meduřič were not the only places the population had reason to flee from: in another letter (Šišić 1915: 478) Szerdahely is mentioned in a similar context. In 1988 I spent a week in the Hungarian State Archive in search of more direct documentary evidence for or against a connection between Velika and Hidegșg and Fertőhomonok. Although I was unsuccessful, it is not excluded that such documents exist: the Archive possesses a great amount of unstudied material from the sixteenth century.
Fertőhőmok vowel system is started from Ivić’s system, it essential that the long counterparts of e and o be viewed as phonetically diphthongal. Ivić gives many examples of diphthongization of long e and o (> ie, uo) from different Kajkavian areas, which he explains partly as a consequence of the overladenness of the system given above. If this is what happened, the diphthongization must have taken place before the other post-Proto-Kajkavian changes discussed in the present article, otherwise the Hideség and Fertőhőmok changes cannot be explained. It seems preferable, however, to interpret the diphthongal nature of *e and *o as a characteristic already present in Proto-Kajkavian. Ivić himself points out that *e is more often diphthongal than *o and concludes: “to pokazuje da u našem slučaju prenatranost zadnjeg vocalnog ređa nije jedini uzrok diphongizacije”. It is simpler to explain the diphthongal pronunciation of *e as archaic and the diphthongization of *o as a consequence of its development into the back-rounded partner of *e.

The examples of forms with *o in the present section are the only examples available. One of the problems for the analysis of the development of *o is that it was relatively rare.

Fe gõška (cf. Hi guska) ‘goose’ and õka (Hi not attested) ‘narrow’ Nsg f show length on the root-vowel.

In the literature on Hi and Fe sometimes non-local examples of ikavisms (unexpected i-like reflexes of *e) are given, e.g. drugdir ‘elsewhere’, nedilja ‘Sunday’ (Neweklowsky 1982: 258) instead of local drugdir, nadejia; driva ‘wood’, vreme ‘time’ (Brabec 1970: 500) instead of local dřiva, vřemj. The forms given by Neweklowsky and Brabec belong to the neighboring Čakavian dialects. These are clearly felt more as prestigious by the inhabitants of Hi and Fe and spontaneous borrowing is not uncommon.

Both variants in both villages in šije/sije ‘send’ PR3sg Fe Hi; only i in both villages in posije ‘chaff’ Gsg; only e in both villages in ději‘divide’ (j < ij, unexpected shortness).

The same phenomenon (sestra instead of expected *sjestra) is found in Črečan near Zelina (Kalinski and Šojat 1973: 22).

In Biškupec (Kalinski and Šojat 1973: 22) the treatment of Proto-Kajkavian o differs (optionally) from that of a, but there the asymmetry is due to the optionality of the opposition ‘high mid’ # ‘mid’ on back vowels.

The tendency of e to be more closed than e is known not only in other Kajkavian dialects (e.g. Pančev 1907: 319; Ivić 1968: 58) but also in the rest of Serbo-Croatian and in many other European languages such as Dutch. Ivić (1982: 7-8) formulated a principle “žvaranje dugih, ovrzanje kratkix” for Slavic.

These were Hideség, Fertőhőmok and maybe a few now magyarized villages where a similar dialect was spoken, such as Fertőendrőd (see note 2) and Kiscenk (see § 10). On northwest Hungarian see Imr (1971). Hi and Fe are situated north of point A-10 and west of A-6. These points occur on all the maps in the book. The
dialects in this area belong to the northwest Transdanubian group (őszaknyugat-
dunántúli nyelvjárásútus, see p. 333-335) and have a type I\a phoneme inventory
(see p. 63-64, 72-73, 334). On the diphthongal mid vowels see pp. 273 and 334,
on the realization of e see 292 and 334.

18 Apparently the influence of Hungarian was greater in Hi than in Fe. This
could be due to the fact that Hi was the westernmost of the small group of villages
where it is likely that similar Kajkavian dialect were spoken. Fe was probably sepa-
rated from all sides from purely Hungarian villages. It is also possible that Hi had
more Hungarian inhabitants than Fe at or soon after the time of the migration. For
references concerning northwest Hungarian see preceding note.

19 Kiscenk and Köphaza are in the direct neighbourhood of Hi and Fe. The dia-
lect of Köphaza is entirely different and will not interest us here. If the scribe of
text nr. 12 was from Kiscenk, it is clear that a Hi and Fe type of dialect was spo-
ken there.

20 I have normalized the orthography of the consonants.

21 If the new ē did appear before the stage presented in diagram 14, the develop-
ment towards triangularity shown in that diagram only affected pretonic and postto-
nic vowels.

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NOMINAL AND VERBAL INFLEXION IN THE ČAKAVIAN DIALECT OF KALI ON THE ISLAND OF UGLJAN

PETER HOUTZAGERS AND ELENA BUDOVSKAJA

1. Introduction

1.1 The present article is the sequel to an earlier work on the main phonological characteristics of the dialect of Kali, which appeared in volume 22 of *Studies in Slavic and General Linguistics* (1993). It can be read independently, however, because the relevant phonological information will be summarized wherever necessary. In order to make the notation understandable to the reader, we shall briefly present the vowel inventory in the following subsection. The notation of the consonants requires no explanation.

1.2 The dialect possesses the following vowels:

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STRESSED

long falling   long rising   short
i̯       u̯       i̯       u̯       i̯       u̯
IE̯       UO̯       IE̯       UO̯       Ő       Œ

UU̯ (ã)   UU̯   Œ
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Old short stressed vowels have often become long and rising in closed syllables. Therefore the stressed long vowels given above not only reflect originally long vowels; in addition, long rising vowels in closed syllables frequently reflect old short vowels (see our 1993 article).