#### The rise and fall of the Kajkavian vowel system

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[Note on the 2009 version. This article originally appeared in *Studies in Slavic and General Linguistics* 3, 1983, 439-477. The present version reproduces the printed text with very minor exceptions. A handful of obvious and insignificant typos have been tacitly corrected. One or two misleading formulations have been rendered somewhat clearer. In addition the endnotes (pp. 468-472) have been changed to footnotes and the page numbers of the original edition have been marked as in the following example: "typically |442| kajkavian", meaning that "typically" is the last word on p. 441 and "kajkavian" the first on p. 442; to avoid fussiness, where words were originally printed partly on one and partly on the next page, numbers have been put after them rather than in the middle, as in "knowledge |471|" instead of \*"know-|471|ledge".]

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To Payle Ivić

## 1. Kajkavian.

The term 'kajkavian' has traditionally been applied to dialects which are spoken by Croats and which use the interrogative pronoun *kaj* 'what'. When used in this way the term lacks dialectological content. On the one hand nationality is an extra-linguistic fact notoriously independent of isoglosses. On the other the presence of the single word *kaj* is a superficial feature liable to be borrowed or lost under the influence of the speech of more prestigious neighbours. As a consequence dialectologists have tended to limit the use of the term 'kajkavian' to dialects which reflect the 'osnovna kajkavska akcentuacija' and the common kajkavian vowel system established by Ivšić (1936, 1937) and Ivić (1957b) respectively. The most important common kajkavian features reconstructed by these scholars are generally held to be the following:

- 1. Neocircumflex or "metatonijski akcenat ^" (a long falling accent continuing a PSl. short rising accent) "dolazi gotovo u svima slučajevima, u kojima ga nalazimo i u slovenskom jeziku" (Ivšić 1936: 70).
- 2. The normal reflex of the short neoacute is a long rising vowel which does not differ from the reflex of |440| PSl. long rising  $\bar{e}$  and  $\bar{o}$ , e.g. nom.pl.  $s\bar{e}la$  'village', gen.pl.  $l\bar{o}nec$  'pot', loc./instr.pl.  $k\bar{o}ni(h)$  'horse', (b)-stressed adjectives (long form) like  $d\bar{o}bri$  'good',  $zel\bar{e}ni$  'green', derivations like  $z\bar{e}nski$  'pertaining to women',  $k\bar{o}nski$  'pertaining to horses', etc. (op.cit.: 72).

<sup>&</sup>lt;sup>1</sup> Ivšić gives normalized examples which do not reflect the phonetic properties of any specific kajkavian dialect.

- 3. Long falling accents which arose after all PSI. instances of long falling accents in non-initial syllables had been eliminated ('Stang's law' or shortening, cf. Kortlandt 1975: 33) have lost the stress to the preceding syllable, provided the latter contained a long vowel, e.g. zãbava 'pleasure' < \*zābâva (Ivšić 1937: 188).
- 4. PSl. short posttonic vowels which became stressed in kajkavian because the preceding syllable contained a weak jer with a falling tone, have a long falling accent, e.g. vêčer 'in the evening' < \*vъ večerь (cf. Ivšić 1936: 71).²</p>
- 5. The progressive stress shift from PSI. falling vowels (which is general or next to general in Slovene) has not operated. Although Ivšić does not mention this point later investigators have generally added it (if often implicitly) to their lists of common kajkavian accentual characteristics (e.g. Jakoby 1974: 23f.).<sup>3</sup>
- 6. The product of the merger of the strong jers has merged with the reflex of PSl. *ĕ*, e.g. Bednja *dîen* 'day', with the same vowel as *snîeg* 'snow' (Jedvaj 1956: 286, 288). This phenomenon was discovered by Ivić (1957b: 403).<sup>4</sup>
- 7. Dialects in which we find the features listed here more often than not have vowel systems that are peculiar in several further respects, showing, e.g. a. merger of q and l in a vowel which is distinct from the reflex of PSl. u, b. velarization and/or

<sup>&</sup>lt;sup>2</sup> Ivšić gives three examples, without trying to specify the conditions under which lengthened vowels are to be expected. In Bednja it is only stressed weak jers that have caused lengthening; in the case of unstressed weak jers we always find a short vowel, e.g. ftico (Jedvaj 1956: 301) 'bird' (cf. further Vermeer 1979a: 372). It is my impression that this distribution is general and that examples like ftile vb xjvile are secondary. The kajkavian difference between vace and tile ois reminiscent of the more generally SCr. one between sto, dne on the one hand and dno on the other. The long falling vowel in examples like sto and vace is reminiscent of the one in Sln. nogo. I wonder whether in all these cases the long falling vowel is not due to a single mechanism. With respect to the appearance of long falling tones in the second syllable of forms which originally had a falling accent on the first syllable the SCr./Sln. territory can be divided into at least four areas: a cak./stok. (lengthening in disyllabic forms containing a jer in the first syllable), a normal kajk. (lengthening in all forms, whether di- or polysyllabic, containing a weak jer in the first syllable), a below, a below, section 2), a Slovene.

<sup>&</sup>lt;sup>3</sup> At first glance this looks like an archaism, which does not belong in a list of common innovations. However, this impression is probably mistaken. Both the common kajkavian character of something strongly resembling the progressive stress shift in cases like  $v\hat{e}\check{c}e$  (cf. the preceding note) and the regular occurrence of the shift under certain conditions in the Bednja dialect (cf. below, section 2) suggest that kajk. was receptive to an early manifestation of the shift and that a more complete version of the shift reached kajkavian territory. I rather think that by the time the shift reached Bednja, the rest of kajk. (together with the other SCr. dialects) had modified the falling tone in such a way |469| that the shift would not have made phonetic sense. Perhaps it was only now that the falling tone acquired the high onset which is so striking a feature of its realization in čakavian dialects like Novi (cf. Vermeer 1982: 308) and which seems so difficult to reconcile with a development like the progressive stress shift. Perhaps the rising and falling short tones had merged, which must have created unfavourable conditions for the propagation of the shift.

<sup>&</sup>lt;sup>4</sup> The relevant passage in "Osnovnye puti ..." (Ivić 1958a: 7f.) is incorrect. It was evidently written earlier.

labialization |441| of the reflex of a, c. a low/mid or low (rather than just plain mid) reflex of e, d. retention of the reflex of  $\check{e}$  (and strong jer) as a vowel which is distinct from both i and e, e. fronting of o (to  $\ddot{o}$  or e), f. diphthongization of the reflexes of long  $\check{e}$  and  $\bar{o}$  (to ie and uo), etc. (cf. in particular Ivić 1968).

Since there is no logical connection between most of the components of the common kajkavian systems, defective types are to be expected. Indeed, the search for defective types should be one of the recognized aims of kajkavian dialectology. Rather surprisingly only two kinds of defective kajkavian have so far been discovered.

#### 2. Defective kinds of kajkavian I: Bednja/Brezova Gora.

Some of the dialects spoken in the north-west seem to have undergone at least in part the progressive stress shift from falling vowels. The best-known example is Bednja (cf. Pešikan 1963-4: 70-72, Rigler 1976: 444, Ivić 1982: 186), cf. such forms as *eblâok* (Jedvaj 286, 296) 'cloud', *kerân* (296) 'root', *kekŷeš* (283, 303) 'hen', *vesâl* (305) 'cheerful', *zočâl* (325) 'having begun', *sod'êil* (294) 'having planted', *erâot* (310) 'to plough' (sup.), *jasâni* (307) 'autumn' (gen.sg.), *nojŷepok* (320) 'the wrong way round', etc.<sup>5</sup> The same holds for the dialect of Brezova Gora, seven kilometers to the north-west of Bednja, on the Slovene border, provided the forms *žrębiê* 'foal' and *sušît* 'to dry' (sup.) reported by Kolarič (1964: 398) are both correct and representative of the dialect.<sup>6</sup>

Geographically speaking this difference between the Bednja/Brezova Gora area and the rest of kajkavian is quite understandable. It must however be stressed that the vowel systems of both dialects are typically |442| kajkavian and very un-Slovene. In this respect at least there seems to be a deep rift between Bednja/Brezova Gora and the Slovene dialects spoken only a few kilometers away on the other side of the border (cf. the data in Kolarič 1962-3 and 1964).

#### 3. Defective kinds of kajkavian II: the south-west.

Some dialects spoken in the south-west of the kajkavian area have not merged the strong jer with  $\check{e}$ . Instead the jer has merged with  $\bar{a}$  if long; if short it has either been retained as a central vowel ( $\mathfrak{d}$ ) or it has merged with short a, depending on dialect. This too makes sense in geographical terms because central čakavian and central Slovene dialects that share the same feature are spoken quite near-by. Three different kinds of kajkavian with  $\bar{\mathfrak{d}} = \bar{a}$  have to be distinguished:

1. The Krašić dialects. These dialects are to be found in a smallish area between Jastrebarsko and Karlovac, e.g. Krašić (Ivšić 1936: 62), Mirkopolje, Trg, Polje,

<sup>&</sup>lt;sup>5</sup> Cf. the discussion of the material in Vermeer 1979a: 366-372. (In the examples I have accented the grapheme *ye* in accordance with Jedvaj's remark, p. 279.)

<sup>&</sup>lt;sup>6</sup> Some caution is in order in view of the background of Kolarič's informant, who was born in 1901, moved from Brezova Gora to Slapšina in the Slovenske Gorice in 1930 "in je redkokdaj obiskovala svoj rojstni kraj" (397). On Kolarič cf. also Rigler (1976: 444).

Zorkovac, Vukoder, Tuškani, Goršćaki (Težak 1957: 419f.), Draganići (Ivić 1968: 58), possibly also Domagović (Zečević 1981: 303f.).

- 2. The Ozalj dialects. These dialects are spoken immediately to the west of the Krašić dialects, from which they can easily be distinguished on the basis of the reflex of PSl. *ĕ*, which appears to be i/e-kavian according to Jakubinskij's well-known rule, as in the central čakavian dialects spoken near-by. Our main source on the Ozalj dialects is Težak's masterly description (1981).<sup>7</sup>
- 3. The Lukovdol dialects. These dialects are spoken in a small area in the eastern part of the Gorski Kotar, separated from the main body of kajkavian dialects, e.g. Severin na Kupi (Ivić 1961a: 196f.), |443| Lukovdol (Barac and Finka 1963), Močile, Smišljak, Mali and Veliki Jadrč, Osojnik, Nadvučnik, Zdihovo (Barac and Finka 1964/5), cf. also Barac-Grum (1981) and Finka (1974). The Lukovdol dialects differ in one important further respect from the remainder of kajkavian: they have not carried through the otherwise general kajkavian merger of l (which has yielded l) with l0 (which has yielded l0) (Ivić: 197, Barac-Grum: 299). As regards accentuation, however, the dialect seems to be typically kajkavian.

#### 4. On interpreting the common kajkavian characteristics

Ivšić and Ivić are primarily concerned with establishing the presence of common kajkavian features and with deriving the reflexes of these features in the living dialects. Neither scholar seems very much interested in the numerous problems connected with the rise of the common kajkavian features. Yet in order to clarify the historical affinities of kajkavian (which has always been among the most controversial problems in Serbo-Croat and Slovene dialectology) mere lists of shared features do not suffice. What is needed is a reconstruction of the rise of the shared features.

I think a tentative reconstruction of the rise of the kajkavian vowel system has now become possible, in particular owing to the large amount of work on kajkavian which has been going on during the past 25 years. However, before a reconstruction can be

<sup>&</sup>lt;sup>7</sup> The Ozalj dialect has many more ikavian forms than normal i/e-kavian dialects (Težak 1981: 227). It is at least conceivable that the dialect is originally a "purely" ikavian one and that all ekavian forms are borrowings (the Ozalj area is surrounded by ekavian and i/e-kavian dialects).

<sup>&</sup>lt;sup>8</sup> Rather similar dialects are spoken on the Slovene side of the border, cf. Logar (1958) on Vinica, Zilje, Preloka, Adlešiči, perhaps also Dobliče, Dragatuš, Tanča Gora. The dialects of the "Poljanska Dolina" (Stari Trg, Predgrad; this is another Poljanska Dolina than the well-known Poljanska Dolina) and those spoken to the north of the line Jelševnik pri Dobličah – Krasinec pri Podzemlju (Semič, Črnomelj, Metlika) are very different (and very Slovene). The latter group of dialects continues on Croat territory (Vivodina).

<sup>&</sup>lt;sup>9</sup> Up to 1956 the total number of publications on kajkavian dialects was very small, as a glance at Hraste's bibliography (1956) will show. However, in the same issue of the *HDZb* Jedvaj's description of the Bednja dialect for the first time gave a coherent impression of what a really archaic kajkavian dialect could be like. Since then much has been published about kajkavian by, among others, Brabec (1961, 1966, 1982), Brozović/Lisac (1981a/b), Herman (1973), Ivić (1957b, 1961b, 1962-3, 1963: 241, 1964, 1966, 1968, 1982), Jakoby (1974), Kalinski/Šojat (1973), Lončarić (1977, 1982), Rigler (1976), Sekereš

attempted one important remaining problem has to be faced: that of the kajkavian treatment of the jers in strong position.

### 5. The reflex of the strong jer in kajkavian.

The kajkavian reflex of the product of the merger of the strong jers differs rather conspicuously from |444| anything found elsewhere in SCr. or Sln. Since, as we have seen, the strong jer has merged with the reflex of  $\check{e}$ , it now occupies a position intermediate between the reflexes of i (<i/y) and e (<e/e/e). This contrasts rather sharply with the normal SCr./Sln. development, which seems to presuppose a central vowel with a tendency towards lowering: wherever the strong jer has not persisted as a central vowel, it has either merged with a or it has tended to develop into a low-mid front vowel (Ivić 1958a: 5, Vermeer forthc., section 12).

At first sight it looks as if the early kajkavian value of the strong jer must have differed fundamentally from the one that is reflected elsewhere in SCr. and Sln. This is awkward, because, as we have just seen (section 3), the kajkavian south-west (Krašić/Ozalj/Lukovdol) conforms to the standard SCr./Sln. treatment of the strong jer. As far as is known at present, dialects which reflect the typically kajkavian treatment of the strong jer are immediately juxtaposed to dialects that follow the standard SCr./Sln. pattern. There are no reasons for assuming the existence (past or present) of transitional possibilities, e.g. dialects in which the strong jer would have merged with e while staying distinct from e. The kajkavian value of the strong jer definitely requires an explanation.

#### 6. The mysterious schwa.

Part of the normal (i.e. non-SW) kajkavian dialects seem to reflect the strong jer as a central vowel in some positions. This phenomenon has been known for quite some time. It was discovered three quarters of a century ago by Fancev (1907). Its relevance as a problem for kajkavian historical dialectology was |445| pointed out by Ivić (1966: 379n.). Nevertheless most kajkavian dialectologists have remained unaware of it and tend to account for it in terms of synchronic vowel reduction. As a consequence uncertainty reigns, which is all the more to be regretted because the phenomenon appears to be pretty widespread. Evidence for the existence of the mysterious schwa has been found in at least five dialects:

1. Virje (north-east). Fancev writes: "In unbetonten auslautenden Silben (Suffixsilben) wird der Reflex der Halbvokale als ein sehr reduzierter Laut, wir könnten ihn Halbvokal nennen, gesprochen" (1907: 320). Although this is not quite clear it is the best description to date. Moreover, Fancev gives numerous examples, which allows the reader to draw his own conclusions. The examples show that the regu-

<sup>(1975/6),</sup> Sviben (1974), Šojat (1963, 1973a/b, 1981a-e, 1982), Šojat/Zečević (1968, 1969), Težak (1957, 1974, 1979, 1981, 1982), Zečević (1975, 1981). This list is far from exhaustive.

<sup>&</sup>lt;sup>10</sup> The available data on the dialects of the area are scanty. However, I suppose that a radically deviating feature like the one under discussion would not have gone unnoticed if it existed.

lar reflex of the strong jer in posttonic position is a vowel which Fancev writes with the cyrillic symbol for the hard jer, e.g.  $\partial t \omega / j \partial t \omega$  (308, 317, 320, 334) 'father',  $st\hat{a}^{o}r_{b}c$  (314, 320, 353) 'old man',  $j\partial g_{b}\hat{n}$  (326) 'fire',  $p\hat{e}t_{b}k$  (312, 317) 'Friday',  $v\ddot{u}z_{b}m$  (318) 'Easter',  $d\hat{e}^{i}s_{b}k$  (320) 'plank, board' (gen.pl.),  $sl\ddot{u}d_{b}k$  (320) 'sweet',  $s_{b}m$  (371) 'I am' (clit.), etc. The vowel does not occur in stressed syllables, cf. also  $s\ddot{e}n$  (317) 'dream',  $p\ddot{e}s$  (317) 'dog'. If Fancev's v is followed or preceded by a sonant (in particular v, v or v or v it is often dropped, e.g. v dv (323, 336) 'indebted' alongside v (336), v (336), v (317) 'pole', alongside, less often, v (317).

- 2. Bednja (north-west). Jedvaj writes: "Kratak e glas bez jasne glasovne kvalitete dolazi u sufiksnom nenaglašenom slogu na mjestu staroslov. poluvokala ili je sekundaran" (1956: 283). Like Fancev's rule, Jedvaj's rule is not completely clear. Unfortunately Jedvaj's |446| transcription does not differentiate between three contrasting e-like vowels, viz. A. a low vowel which is the reflex of o and, in certain positions, e/ę, B. a mid vowel which is the reflex of ě and the strong jer, and C. the mysterious short vowel "bez jasne glasovne kvalitete". As a consequence the reader is prevented for typographical reasons from drawing his own conclusions. Nevertheless Jedvaj's description leaves little doubt about the resemblance of Virje and Bednja with respect to the positions in which the mysterious schwa occurs.
- 3. Gornja Stubica (center). Jakoby, in his treatment of phonetics and phonology of the dialect, draws attention to the existence of a central vowel, which in his opinion is an allophone of /a/ (1974: 37). No examples are given to support this statement. Elsewhere in the description, which contains only a small amount of material, I have found only two examples of a. In both examples the a is the reflex of the strong jer in positions which conform to Fancev's rule; indeed, both examples are parallelled by forms in Fancev: õtac (38), alongside forms with e (40, 43, 54, 237), and dôužan (40), alongside forms with zero, as in Fancev (40, 47). Jakoby also gives one or two forms with zero in positions in which Fancev's dialect tends to have zero, too, e.g. Pètr (231)/Petr (41, 47), alongside Pèter (231)/Peter (125). Despite the small number of examples the similarity between Gornja Stubica and Virje is striking.

<sup>&</sup>lt;sup>11</sup> There is no trace of this in later publications on the Virje dialect by Herman (1973) and Šojat (1981d). In the case of Herman the explanation is simple: he is only interested in lexicological problems and does not even pretend to give a correct picture of the vowel system (he also neglects the contrast between the reflex of |470|  $\check{e}$  and that of e/e. In the case of Šojat there is a problem, in particular because we are not entitled to assume that a conscientious and old-fashioned scholar like Fancev, who besides was a native speaker of the dialect he was describing, made up an entire phoneme out of whole cloth. It is possible that the phenomenon disappeared between 1907 and the moment when Šojat was carrying out his investigation. It is also possible that it is one of those things a dialect speaker cannot bring himself to use in the presence of a total stranger with a questionnaire. (Cf. Ivić's remark on the status of the Draganići schwa, 1968: 63n.)

- 4. Turopolje (south). Šojat draws attention to the existence of schwa-like vowels, which he, like Jakoby, regards as reduced allophones of other vowels: "Alofon [ə] ostvaruje se samo iza naglašenoga sloga kao neutralizacija "kratkih" fonema, osobito fonema prednjeg |447| reda" (1982: 337), and: "u bržem govornom tempu na nenaglašenom završetku riječi može se svaki vokal (osobito prednje artikulacije) reducirati u centralni, poluotvoreni i nezaokruženi glas, kojemu artikulaciju ne mogu točno opisati. Možda i postoji neka razlika između a < e prema a < a ili a od kojega drugog vokala, ali ta razlika nije nikada dovoljno izrazita" (340). No examples are given. It is clear, however, that Šojat's a resembles Fancev's b in at least one important respect: both vowels occur in posttonic syllables only. The resemblance becomes even stronger if one takes a look at Šojat's only other explicit statement on the problem; after pointing out that the normal reflex of the strong jer is e, he adds: "to se e, u nenaglašenom krajnjem zatvorenom slogu najčešće reducira, u sufiksima gotovo redovito" (343). This sounds quite like Fancev's (and Jedvaj's) rule. Again no examples are given. If, however, one studies the small amount of material Šojat gives in phonetic transcription (most of the material is given in a phonemic transcription which suppresses the evidence for a  $\partial$ ), one notices some ten examples of a, all but one of which reflect the strong jer in posttonic position, e.g. õtəc (340), pürak (340) 'young turkey', püsekəl (342) 'having chopped', sam (439) 'I am' (clit.) and some similar forms. There are also a few cases of zero, which according to Šojat is a rare phenomenon, e.g. stölc (344) 'stool', cf. Virje stölc (Fancev 1907: 317), which is also rare. The only counterexample is  $pr\hat{i}$  inom (437) 'with him', in which a reflects e.<sup>12</sup>
- 5. Prodindol (south-west). Prodindol lies just inside the area where the strong jer has normally merged with *ĕ*. The regular reflex of the strong jer is *e*. However, we find *a* precisely in those positions in |448| which Fancev's dialect has a central vowel or zero, cf. examples like the following: *òtac*, *ògań*, *stárac*, *pétak*, *vùzam*, *slàdak*, *stèlac*, *kòlac*, *grîzal* 'having gnawed', *nísam* 'I am not' (Rožić 1893a: 72, 83, 103, 105, 1893b: 145, 1894: 62, 69). This rather unexpected *a* can be explained by assuming that at an early stage the Prodindol dialect had a schwa-like vowel in the same cases as Virje/Bednja/G. Stubica/Turopolje and that this central vowel later merged with *a*. In other respects, too, the dialect has rather an impoverished vowel system, cf. Rožić's letter to Oblak (1895). A strong tendency of *a* to be replaced with *a* is attested in the Krašić dialects, quite near Prodindol. Ivšić describes how he first noticed, back in 1904, that the Krašić dialect reflects the short strong jer as a central vowel, "koji se danas, kako sam se uvjerio na licu mjesta prošle godine [i.e. in 1935, W.V.], u samom Krašiću već gotovo posve zamijenio sa *a*" (1936: 62). About Draganići Ivić writes: "Iako je *a* običan kontinuant krat-

<sup>&</sup>lt;sup>12</sup> The form mṛṣsəc/mṛṣsəc (376) is not a counterexample, cf. Ozalj mṛṣsəc (Težak 1981: 229, 252), which has a "nepostojano ə" and follows the pattern of ἀešəlj/ἀešlja (252), Prodindol mṛṣsac (Rožić 1893a: 73, 104), which has a "nepostojano a" and follows the pattern of zdenac/zdenca (104), cf. also Šojat's own note on the problem (1982: 346).

kog poluglasa u draganićkom govoru, u razgovoru sa čovekom iz grada mnogi Draganićani radije izgovaraju *a*" (1968: 63n.).

The evidence shows that the mysterious schwa cannot be disregarded, although its precise properties cannot be ascertained. I shall assume tentatively *A*. that it is a common kajkavian vowel and *B*. that it is the regular reflex of the strong jer (including the secondary jer) in posttonic syllables.

### 7. First raising of ě, then merger.

Traditional accounts of the history of the kajkavian vowel system assume (often implicitly) that the kajkavian reflex of the strong jers was the outcome of the following sequence of events: |449|

- 1. Early changes: A. raising of  $\check{e}$  to a position intermediate between e and i, and B. development of the strong jer into a centralized vowel.
- 2. Development of the a into a high-mid front vowel, as a consequence of which merger with the reflex of  $\check{e}$  took place. Fancev's mysterious schwa can be accounted for by assuming that the merger failed to take place in posttonic syllables.

This explanation accounts in a felicitous way for Fancev's schwa: it is not unnatural that a development of a centralized vowel into a front vowel should lag behind in unstressed syllables. In several other respects, however, the explanation is unattractive because the development of the schwa it assumes is ad hoc and because it does not cast any light on the problem as to why the kajkavian development differs so strongly from the one we find everywhere else. It also remains unclear why in the south-west there are no transitional possibilities between the typically kajkavian reflex (a = e) and the one that presupposes the standard SCr./Sln. development of the strong jer  $(\bar{a} = a)$ .

#### 8. Merger as a consequence of raising of ě.

A second approach to the problem of the kajkavian reflex of the strong jer starts from the idea that in kajkavian the strong jer may never have become a schwa. It is not unreasonable to assume that the soft jer originally was an unrounded front vowel between e and i; when the hard jer (which was an unrounded back vowel) lost the back feature it naturally merged with the soft jer by also turning into a front vowel between e and i, cf. the development of y, which merged with i by losing its velarized character. Starting from this idea the following chronology can be devised: |450|

- 1. Loss of the velarized character of the hard jer, which thereupon merged with the soft jer in a high-mid vowel intermediate between e and i.
- 2. Raising of PSl.  $\check{e}$  to the position between e and i (as in the rest of SCr. and Sln.), where it merged with the reflex of the strong jers (Jakoby 1974: 119).

This theory accounts in a very natural way for the merger of the strong jer with  $\check{e}$ . However, it has two disadvantages. First, it posits a development of the jers which is fundamentally different from the one attested elsewhere (and in particular in SCr. and

Sln.). One would like to know why this deviating development took place. Second, it blocks the road towards a natural explanation of Fancev's mysterious schwa.

### 9. First merger, than raising of ě.

The third explanation starts from the well-known fact that PSI.  $\check{e}$  before it was raised to its later position between e and i must have been a low or low-mid front vowel intermediate between e and a, something like  $[\ddot{a}]$ . This is exactly the kind of vowel which the strong jer tended to develop into in SCr. and Sln. The problem raised by the kajkavian representation of the strong jer disappears if it is assumed that the merger of the strong jer with the reflex of PSI.  $\check{e}$  took place at a time before the latter vowel had been raised. This enables us to assume that the product of the merger of the strong jers was a central vowel (a) in all of SCr. and Sln. It tended to be lowered and somewhat fronted, thereby risking to lose its central character. The strength of this tendency depended, among other things, on prosodic factors: it was strongest when the strong jer was long, weaker when it was short, and weakest in posttonic syllables. The following chronology can |451| be posited:

- I. Merger of the strong jer with *ě*. At a certain moment the tendency towards a lowered and somewhat fronted realization of the strong jer had progressed to the point where the distinction between *a* and the reflex of PSl. *ĕ* (which had not yet been raised) could no longer be perceived except in posttonic syllables: merger took place.
- II. Raising of  $\check{e}$ . This change is common to kajkavian and the other SCr. and Sln. dialects (and Sorbian, Czecho-Slovak and East Slavonic besides). The only difference between kajkavian and the other dialects concerns the set of words in which the vowel occurred: in kajkavian it was not only the reflex of PSl.  $\check{e}$ , but also the reflex of the strong jer (except in posttonic syllables). Thus in kajkavian  $d\hat{a}n$  ( $< d\hat{a}n$ ) became  $d\hat{u}en$  just like  $sn\hat{a}g > sn\hat{u}eg$ , whereas elsewhere  $d\hat{a}n$  did not change. At the moment when  $\check{e}$  was raised, the strong jer had not yet merged with  $\check{e}$  in the kajkavian south-west (Krašić/Ozalj/Lukovdol). Merger now became impossible. Eventually the long  $\bar{a}$  merged with  $\bar{a}$ , as it did also in the neighbouring central čakavian and central Slovene dialects. This explains why in the kajkavian south-west there are no transitional possibilities between dialects with  $\bar{a}=\bar{a}$  and dialects with  $a=\check{e}$ .

For the time being the third explanation of the kajkavian reflex of the strong jer is definitely to be preferred. It lacks the disadvantages of the other two theories and

<sup>&</sup>lt;sup>13</sup> Things may have been even more complex. Ivić has argued that there are reasons for assuming that even in kajkavian the regular reflex of the long jer is  $\bar{a}$  in certain positions (1966: 379n.). The point cannot be decided without a detailed analysis of the material. If Ivić is right, the precise realization of a was not only influenced by prosodic factors, but also by consonantal context.

<sup>&</sup>lt;sup>14</sup> The view that the development failed to reach the north-western dialects of Slovene is untenable, cf. Vermeer forthc., sections 2-4.

does not seem to generate any new problems. Kajkavian must have become identifiable as a separate dialect at a remarkably early moment.

### 10. The rise of the kajkavian vowel system.

The common kajkavian vowel system can be derived from |452| the following late dialectal PSl. starting-point:

i/ī 
$$u/\bar{u}$$
 
$$e/\bar{e} \quad \partial/\bar{o} \qquad \qquad e/\bar{e}, \, \varrho/\bar{\varrho}, \, \varrho/\bar{\varrho}, \, l/\bar{l}, \, r/\bar{r}$$
 
$$\ddot{a} \qquad \ddot{a} \qquad a/\bar{a}$$

This is system *A*. In system *A* the PSl. unrounded back vowels have already been eliminated:  $i/\bar{i}$  is the reflex of both  $i/\bar{i}$  and  $y/\bar{y}$ ; similarly  $\partial/\bar{\partial}$  is the reflex of both the soft and the hard jer in strong position.<sup>15</sup> The number of nasal vowels has been reduced to two (cf. on this Kortlandt 1979). PSl.  $\check{e}$  still occupies its original position:  $\ddot{a}/\ddot{a}$ .

It is unfortunately still impossible to put into strict chronological order all changes that have to be assumed in order to derive the proto-kajkavian system. Therefore no intermediate systems can be reconstructed. For the sake of clarity, however, I have posited an intermediate system which arose after the two developments described above had taken place:

- I. Merger of  $\partial/\bar{\partial}$  with  $\ddot{a}/\ddot{\bar{a}}$  (= $\check{e}$ ) except in posttonic syllables, where  $\partial$  persisted as a central vowel, and
- II. Raising of  $\ddot{a}/\ddot{a}$  (>e/ie)<sup>16</sup>:

This is system B. It must be noted again that the system is given for the sake of clarity only and that several of the changes to be treated below may have preceded I and/or II. The common kajkavian vowel system (system C) arose as a consequence of the following |453| innovations:

III. Fronting of  $u/\bar{u}$  ( $>\bar{u}/\bar{u}$ ). Kajkavian shared the phonetic phase of this development with the following dialects: 1. north Istrian čakavian (the "Buzet dialects"), 2. Do-

 $<sup>^{15}</sup>$  Prior to the merger of the strong jers, the sequence ν<sub>δ</sub>- had merged with u-, while the sequence ν<sub>δ</sub>- did not change (Vermeer 1979a: 363f.).

 $<sup>^{16}</sup>$  For simplicity's sake two distinct changes have been subsumed here under one heading, viz. not only raising of  $\ddot{a}/\ddot{a}$ , but also monophthongization of the reflex of the short  $\ddot{a}$ . The reflex of the long  $\ddot{a}$  undoubtedly remained a diphthong, although it may not have been phonemically diphthongal.

lenjski and possibly also Gorenjski, 3. the eastern dialects of Slovene, and 4. Posavian štokavian. In all likelihood this development also reached the Lukovdol area (which nowadays has u < u): in Močile l has been palatalized before u (Barac-Grum 1981: 298), which is difficult to understand unless we assume that in an earlier phase of the development of the dialect the reflex of u was a front vowel (cf. the rather similar Slovene examples treated by Rigler 1958: 209). Fronting of  $u/\bar{u}$  may very well have preceded l and ll.

- IV. Fronting of  $o/\bar{o}$  ( $>\bar{o}/\bar{o}$  if it was earlier than V,  $>\bar{o}/\bar{u}\bar{o}$  if it was later). The evidence for this change was described by Ivić (1968: 61-66). In all likelihood the fronted character of  $\bar{o}/\bar{o}$  stayed subphonemic (allophonic) up to the end of the common kajkavian period. There are no clear parallels outside kajkavian (not even in neighbouring Slovene and Posavian dialects). The tendency towards a fronted realization of rounded vowels may have been stronger in kajkavian than elsewhere, which is not strange considering the central position kajkavian occupies in the area where fronting of u has been attested. In the Ozalj dialects and the Lukovdol area no evidence for fronting of  $o/\bar{o}$  has been found, which is easy to understand on the basis of the geographically marginal character of these areas.
- V. Elimination of the asymmetrical character of system B. After the reflex of PSl.  $\check{e}$  had been raised the vowel system was conspicuously asymmetrical: e/ie lacked a back/rounded counterpart. Almost everywhere in |454| SCr. and Sln. the asymmetry has been eliminated in one way or other. Kajkavian filled the gap in the following way:  $o/\bar{o}$  was raised so that it became the rounded counterpart of e/ie (>o/uo)<sup>19</sup>,  $a/\bar{a}$  was retracted and/or rounded,  $e/\bar{e}$  was lowered so that it became the front/unrounded counterpart of  $a/\bar{a}$ . The necessity for assuming this change was discovered by Ivić (1968: 58), who also pointed out the existence of close parallels in Slovene. It will be referred to as "Ivić's vowel shift" in the sequel. Kajkavian underwent Ivić's vowel shift together with the eastern dialects of Slovene, whereas in the western and central dialects of Slovene it took place in part only

 $<sup>^{17}</sup>$  On the reasons why this change has to be reconstructed cf. Vermeer 1979b. The principal reasons are the following: 1. fronted reflexes of u have been attested in six small areas in kajkavian and Posavian; such a distribution strongly suggests an archaism, 2. the development of the kajkavian vowel system, and in particular the fact that at a certain moment the reflexes of PSI.  $\check{e}$  and o became partners and stayed that way for a very long time (cf. V), remains a mystery unless it is assumed that the reflex of  $\varrho$  was a high vowel (u) which differed from the reflex of u, 3. certain aspects of the history and the geography of the syllabic l become much easier to understand if it is assumed that the reflex of PSI.  $\varrho$  was a high vowel (u) as elsewhere in SCr.

<sup>&</sup>lt;sup>18</sup> This may have to be modified in future. It is well-known that the reflex of long  $\bar{o}$  has been fronted in the čakavian dialects spoken near Labin in Istria (Belić 1914: 237:  $n \nu \ddot{u}\dot{c}$ ,  $dv \nu \ddot{\rho}r$ , Ivić 1961a: 207:  $st\ddot{o}$ :,  $n\ddot{o}$ :s). The phenomenon differs very strongly from its kajkavian counterpart and in the present state of our knowledge |471| we are not entitled to assume a connection.

<sup>&</sup>lt;sup>19</sup> I write o instead of o (which would be more consistent) because in kajkavology the symbol o traditionally refers to the reflex of o and o (Like o may not have been phonemically a diphthong, cf. above, note 16.)

(Rigler 1963: 32, Vermeer forthc., sections 9, 12). It is evident that Ivić's vowel shift was later than II. The change may have been facilitated by III (fronting of u), which enhanced the distance between  $o/\bar{o}$  and  $u/\bar{u}$ , or, conversely, it may have caused III because it exerted some pressure on u.

- *VI.* Raising of  $\varrho/\bar{\varrho}$  (> $u/\bar{\varrho}$ ). Kajkavian shared this development with all the rest of SCr., with the exception of two areas: 1. Istrian čakavian and 2. Lukovdol kajkavian, both of which retained the archaic value. This is explicable on the basis of the geographical facts. Raising of  $\varrho/\bar{\varrho}$  also took place in East Slavonic and Sorbian/Czecho-Slovak. The chronology of the change cannot very well be determined. It may very well have preceded all developments mentioned up to now.
- *VII.* Loss of the nasal feature:  $e/\bar{e} > e/\bar{e}$ ,  $u/\bar{u} > u/\bar{u}$ . This resulted in merger of  $e/\bar{e}$  with  $e/\bar{e}$  except, perhaps, in stressed initial syllables after certain palatal consonants, and in the rise of a new  $u/\bar{u}$  ( $<u/\bar{u}$ ) distinctively opposed to  $u/\bar{u}$  ( $<u/\bar{u}$ ). It is evident that the loss of the nasal feature was later than *III* (fronting of u) and v (raising of  $\varrho$ ); in other |455| respects its chronology cannot be strictly determined. It goes without saying that kajkavian shared this development with all other Slavonic dialects which had carried through v (raising of v) and in addition with Istrian čakavian, Lukovdol kajkavian and most of Slovene.
- *VIII*. Elimination of the syllabic l/l (>u/l ). This change was common to kajkavian (this time including the Lukovdol area), most of čakavian and štokavian, and the Pannonian dialects of Slovene. Speaking in terms of mergers the outcome of the development was strikingly different in different areas:
  - 1. In most čakavian and štokavian dialects the reflex of l merged both with the reflex of u (which had not been fronted) and with the reflex of  $\varrho$  (which had been raised).
  - 2. In kajkavian (not counting Lukovdol) the reflex of l merged with the reflex of l (which had been raised). It remained however distinct from the reflex of l (which had been fronted).
  - 3. In central Istrian čakavian the reflex of l merged with the reflex of u (which had not been fronted). It remained however distinct from the reflex of  $\varrho$  (which had not been raised).
  - 4. In Lukovdol kajkavian and Pannonian Slovene the reflex of l merged neither with u (which had been fronted), nor with the reflex of  $\varrho$  (which had not been raised). Instead it provided the long hoped-for back counterpart of  $\ddot{u}$  (< u). The same holds for north Istrian čakavian as far as the reflex of short u is concerned. The reflex of long  $\ddot{u}$  may have been provided with a back

 $<sup>^{20}</sup>$  Of course, since retention of the mid value of  $\varrho$  is an archaic feature, it cannot be adduced as evidence of early contact between Istrian čakavian and/or Lukovdol kajkavian on the one hand and Slovene on the other.

<sup>&</sup>lt;sup>21</sup> In the Lukovdol area, where  $\rho$  had not been raised and where Ivić's vowel shift does not seem to have taken place, the nasal vowel eventually merged with  $\rho$ .

counterpart at an earlier moment already as a consequence of raising of  $\bar{o}$  ( $>\bar{u}$ ).<sup>22</sup>

As is well-known, the syllabic l failed to yield |456| u in three groups of SCr. dialects:

- a. The čakavian dialects of Krk (Omišalj/Dobrinj/Vrbnik) and Cres/Lošinj (including surrounding small islands like Susak), which developed  $l/\bar{l}$  into  $al/\bar{a}l$  at a moment when the long strong jer had merged with  $\bar{a}$ , whereas the short jer still persisted as a separate sound, which now acquired a new long counterpart (cf. Oblak 1894: 209, Vermeer 1975: 155f.).
- b. In part of Torlak (including the dialect of the Karaševci) l has either persisted as such or it has changed into a sequence lu or l, often in part of the cases only, depending on phonetic context.
- c. In part of the ijekavian dialects l is reflected in a way which suggests that here it was l that provided the reflex of  $\check{e}$  with a back/rounded counterpart, thereby eliminating the asymmetry of system B (Ivić 1958a: 9f., 1958b: l53, Brozović 1966: l35f.).

The Quarnero/Torlak development is perhaps to be attributed to the unusually strong Latin substratum for which there is evidence in both areas; the ijekavian solution is connected with the structural properties of a vowel system in which Ivić's vowel shift has not taken place.

The outcome of all this was the following system:

i/ī ü/ū u/ū 
$$e/ie \quad \partial \quad o/uo \left[ \ddot{o}/\ddot{u}\ddot{o} \right] \qquad \rat{r/r}$$
 
$$e/\bar{e} \qquad a/\bar{a}$$

This is system C. From it all present-day kajkavian vowel systems can be derived except, of course, those of the south-west (Krašić/Ozalj/Lukovdol). |457|

### 11. Bednja.

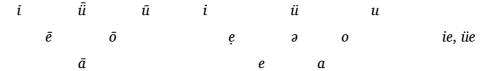
The vowel system of the Bednja dialect is in some respects still very much like system *C*. It can be derived by assuming a single chain of four developments which presuppose each other:

- 1. The fronted character of o/uo, which in system C is subphonemic, became distinctive ( $> \ddot{o}/\ddot{u}\ddot{o}$ ).
- 2. The gap was filled by  $a/\bar{a}$ , which was raised ( $>o/\bar{o}$ ; the long  $\bar{o}$  remained a monophthong).
- 3. The low front vowel  $e/\bar{e}$  was retracted ( $>a/\bar{a}$ ).

<sup>&</sup>lt;sup>22</sup> Cf. the data in Ivić (1963).

4. Short  $\ddot{o}$  and the second component of the diphthong  $\ddot{u}\ddot{o}$  lost their rounding (> $e/\ddot{u}e$ ). Rather than merging with  $\dot{e}$  the unrounded  $\ddot{o}$  turned into the front/unrounded counterpart of the new short a < e. A front/unrounded counterpart of the new back/rounded mid vowel  $\ddot{o} < \ddot{a}$  developed out of the epenthetic vowel that had arisen in front of  $\dot{r}$  (> $\bar{e}r$ ). The new vowel is also found in a few interjections, e.g.  $h\ddot{e}k$  (Jedvaj 1956: 320).<sup>23</sup>

The result of all this was the following vowel system:



This is system D. There is not in all respects a perfect correspondence between long and short vowels. It is not strange that in some positions the distinction between e and e is neutralized or optional. The distinction between e and e is neutralized or optional. The distinction between e and e is to some extent affected by neighbouring nasal consonants. The long high vowels  $(\bar{i}, \bar{u}, \bar{u})$  and  $\bar{o}$  (but not  $\bar{e}$ ) are non-distinctively diphthongized under the falling tone and in pretonic syllables, phonetically ei,  $e\bar{u}$ ,  $e\bar{u$ 

## 12. The elimination of $\ddot{u}$ : the example of Mraclin.

Bednja is the only kajkavian dialect to have retained a fronted reflex of PSl. u distinct from  $\varrho/l$  in all or virtually all positions.<sup>25</sup>

Contacts between kajkavian and non-kajkavian (in particular čakavian) Croats must always have been very frequent. Whenever such contacts took place, the kajkavian  $\ddot{u}$  must have come under pressure, which makes the rise of a tendency towards the elimination of  $\ddot{u}$  understandable. If this tendency was not already going on during the latter part of the middle ages, it must surely have arisen when the arrival of the Turks forced large numbers of čakavian-speaking Croats to settle on kajkavian territory.

The evidence indicates that  $\ddot{u}$  was not simply replaced with u, whether it be wholesale or in a word by word way. Instead,  $\ddot{u}$  started gradually to lose its fronted character and to creep back to the position from where it had started centuries earlier. The

 $<sup>^{23}</sup>$  Wherever and whenever [ $\ddot{o}$ ] is unrounded it merges as a rule with the reflex of  $\check{e}$ . The only known exceptions are Bednja and (possibly) Krapinske Toplice (Ivić 1957b: 403).

<sup>&</sup>lt;sup>24</sup> On the details of the Bednja vowel system cf. further Vermeer (1979a: 349-359).

 $<sup>^{25}</sup>$  In word-final position both vowels are reflected as u, cf. Vermeer 1979a: 356. (Cf. also the editor's remark in Janjčerova 1901: 187.)

southern dialects, where the process is going on at this very moment, show that it was a complex affair. In Mraclin (Turopolje)  $\ddot{u}$  and  $\ddot{o}$  have remained front vowels in most positions. However, they lose their fronted articulation if the final syllable of the word contains the reflex of a or u (in terms of system C), cf. Ivić 1957b: 403, 1968: 60f., Šojat 1982: 339f.). |459|

#### 13. From $\ddot{u}$ vs. u to u vs. o.

The tendency of  $\ddot{u}$  to return to its former place must have threatened the existence of the contrast  $\ddot{u}$  vs. u. In čakavian surroundings (a large area in the south-west) and in areas where neo-štokavian dialects are near-by the two vowels have usually merged (Ivić 1968: 59). However, in dialects further removed from the disturbing influence of čakavian and neo-štokavian the contrast was maintained: u was lowered to the position of a high/mid or mid back rounded vowel (usually written o in publications on kajkavian) as  $\ddot{u}$  was slowly usurping its place. In Mraclin o has already become the regular reflex of o/l. The property of the contrast was maintained: u was slowly usurping its place. In Mraclin o has already become the

It is evident that system C provides sufficient room for such a development, first because o/uo has been fronted and second because the diphthong uo is very different from  $\bar{u}$ , which is either a monophthong or an ou-like diphthong, cf. Bednja.

It might be objected that in fact there was not enough room for u to be lowered to o because, as  $\ddot{u}$  was slowly losing its fronted articulation, so  $[\ddot{o}/\ddot{u}\ddot{o}]$  must likewise have been reverting to its original state. Now whether or not this is what one expects, the evidence clearly indicates that it is not what actually happened: the elimination of  $[\ddot{o}]$  followed a different course from that of  $\ddot{u}$  in that  $[\ddot{o}]$  often lost its roundedness and seems to have lagged behind  $\ddot{u}$  in those cases in which it remained a rounded vowel.

There are striking differences between the reflexes of the rounded front vowels of system C:  $\ddot{u}$ , as far as it has not retained its old value (Bednja, the south, the northwest), has always been eliminated by being retracted (to u), whereas  $[\ddot{o}/\ddot{u}\ddot{o}]$  has very often shed its roundedness, turning into a full-fledged |460| unrounded front vowel. We have seen that this was what happened in Bednja in the case of short o. In all of kajkavian except the north we find unrounded reflexes of o in at least some positions (cf. Ivić 1968). Fronted reflexes of o are strikingly more widespread than fronted reflexes of  $\ddot{u}$ . This fact alone shows clearly that the elimination of  $\ddot{u}$  and that of  $[\ddot{o}]$  must be regarded as two quite distinct processes.

We have seen just now that in Mraclin  $\ddot{u}$  and  $[\ddot{o}]$  are treated in exactly the same way. This is not the usual state of affairs, however. In other southern dialects which are eliminating the rounded front vowels the process has gone further with  $\ddot{u}$  than it has with  $[\ddot{o}]$ . In Trebarjevo Desno, for example,  $\ddot{o}$  is still normal in a whole range of positions, whereas in the same positions  $\ddot{u}$  occurs only "u nekih ispitanika" as an op-

<sup>&</sup>lt;sup>26</sup> Surprisingly enough the dialect of Domagović, which is spoken in the south-west in the midst of dialects with  $\ddot{u} = u$ , seems to have managed to keep the two vowels apart (Zečević 1981).

<sup>&</sup>lt;sup>27</sup> Ivić (1957b: 402f.). Šojat (1982: 346) agrees.

tional realization: "takva je realizacija fonema /u/ relativno rijetka" (Šojat 1981e: 344). In Letovanić, where  $\ddot{o}$  is still quite common,  $\ddot{u}$  has been completely eliminated (Ivić 1968: 61f.).

In the period when u was slowly moving downward under the pressure of  $\ddot{u}$  turning into u there was sufficient room available in the system for the process to take place.

#### 14. The modern kajkavian asymmetry.

Whatever may have been the case in the period when u (in terms of system C) was being lowered,  $[\ddot{o}/\ddot{u}\ddot{o}]$  did eventually lose its fronted articulation in at least some positions in all dialects except Bednja. This resulted in an asymmetrical system in which the reflex of  $u/\bar{u}$  (in terms of system C) lacked a front/unrounded counterpart. Many dialects have managed to retain the asymmetry in one way or another. |461|

In a number of dialects spoken in the center of the kajkavian area we find an *ou*-like diphthong as the reflex of  $\varrho/l$ , usually in case of length only, but in some dialects in case of brevity too, cf. Zlatarski Martinci  $m \delta u k a$  'torment, trouble',  $p \delta u n e$  'full',  $z \delta u t$  'yellow',  $t \delta u \delta u \delta u e$  (Sviben 1974: 130). Other examples: Gornja Stubica, Lobor, Vidovec, Nedeljanev (Ivić 1961b: 404, 1968: 59). In Gornja Stubica, where the reflex of  $\varrho/l$  is reflected as  $\varrho u \ell u e$ , long  $u \ell u e$  is optionally diphthongized to  $u \ell u e$  (Jakoby 1974: 38f.). In Črečan monophthongal and diphthongal realizations of the reflex of  $\varrho/l u e$  in free variation, e.g.  $u e \ell u e$  'tooth'; "diftong je nešto izrazitiji pod akcentom nego pod akc." (Kalinski and Šojat 1973: 23). One is reminded of Bednja.

In several dialects the reflex of q/l is a "heavy phoneme", i.e. a phoneme which is only optionally distinct from one of the other members of the system (cf. Ebeling 1967: 134-136). In Začretje the reflex of q/l (q/q:) is optionally distinct from that of PSl. u (u/u:) (Brozović and Lisac 1981a: 315). The same holds for Trebarjevo Desno, although the details must be somewhat different because, as we have seen, fronted reflexes of u have persisted in some positions (Šojat 1981e: 343). In Biškupec the reflex of  $\bar{o}$  (u0) is optionally distinct from that of q1 (u0) (Kalinski and Šojat 1973: 22).

In the north the reflex of q/l seems to have merged with that of o in all positions. Fronted reflexes of o have not been found in this area. I assume that the development was not fundamentally different from the one that took place elsewhere in kajkavian:

- 1. Rise of system *C*.
- 2. Gradual elimination of the fronted value of  $\ddot{u}$  (in terms of system C), while the reflex of o/uo persisted |462| as a front vowel  $[\ddot{o}/\ddot{u}\ddot{o}]$ . The reflex of  $u/\bar{u}$  eventually turned into the back counterpart of the reflex of o/uo.
- 3. Elimination of the fronted articulation of  $\ddot{o}/\ddot{u}\ddot{o}$  (which had become phonemic, as a consequence of which  $\ddot{o}/\ddot{u}\ddot{o}$  had developed into a vulnerable isolated member of the vowel system). Merger with the reflex of  $\varrho/l$  took place.

The fact that the common kajkavian o/uo was a front vowel in the north, too, is reflected in the obligatory j-prothesis before initial o-.<sup>28</sup>

### 15. Kajkavian and Slovene.

Let us take a brief look again at the geographical properties of the innovations that shaped the common kajkavian vowel system:

- I. Merger of  $\partial/\bar{\partial}$  with  $\ddot{a}/\ddot{\bar{a}}$  except in posttonic syllables. This is the uniquely kajkavian outcome of a common SCr./Sln. tendency.
- II. Raising of  $\ddot{a}/\ddot{a}$ . This is a general SCr./Sln. development.
- *III.* Fronting of *u*. This change is common to part of čakavian (northern Istria), part of Slovene (Dolenjski, the east), kajkavian, and part of štokavian (Posavian).
- IV. Fronting of  $o/\bar{o}$ . This is a uniquely kajkavian phenomenon.
- V. Ivić's vowel shift. This development consists of several components. Kajkavian completely agrees with the eastern dialects of Slovene.
- VI. Raising of  $q/\bar{q}$ . This is a common SCr. development which failed to reach two marginal areas (Istria and the eastern part of the Gorski kotar) and which did not take place in Slovene.
- VII. Loss of the nasal feature. This change is common to all of SCr. and most of Sln. |463|
- VIII. l > u. This is common to SCr. (with some important exceptions) and Pannonian Slovene.

All this provides very little support for the traditional view that kajkavian is somehow closely related to Slovene. The only exclusively Slovene/kajkavian innovation is V (Ivić's vowel shift), and, as I shall try to show, there is strong evidence that V is not exclusively kajkavian/Slovene either.

#### 16. Ivić's vowel shift in Posavian (and beyond).

Kajkavian is surrounded almost on all sides by dialects and languages from which it is separated by clear-cut linguistic boundaries, e.g. central čakavian in Žumberak, or neo-štokavian in the entire east and south. Whoever wants to get a clearer idea of the position of kajkavian among the SCr. dialects has first to remove mentally those dialects which owe their present position to recent migrations. This results in a number of gaps. Since at an early date kajkavian was capable of carrying through innovations together with the rest of SCr., we have to assume that these gaps have not always been there: intervening dialects have disappeared.

In the east the gap between kajkavian and the Posavian dialect group of štokavian is fairly narrow.<sup>29</sup> It is tempting to look for common innovations which date from the times when kajkavian and Slavonian štok. were still connected. Ivić (1958b: 302) has

<sup>&</sup>lt;sup>28</sup> This modifies Vermeer (1979b: 173).

<sup>&</sup>lt;sup>29</sup> I assume for the time being that the point of contact between kajkavian and Posavian near Virovitica is secondary.

already drawn attention to one or two phenomena that presuppose contact between kajkavian and Slavonian štokavian in the period before the loss of the intervening dialects and several things could be added to the list.<sup>30</sup>

In evaluating the Slavonian evidence it has to be kept in mind that the dialect has been profoundly influenced by neo-štokavian as a consequence of massive |464| and continuing migrations to the area by speakers of Herzegovinian dialects:

"Während die Wechselbeziehungen mit den kajkavischen Mundarten in der neuen Situation unterbrochen oder auf ein Minimum reduziert wurden, verstärkten sich die Beziehungen mit der štokavischen Dialektgruppe, besonders mit ihren typischsten Mundarten: den hercegovinischen. Nicht nur, dass diese Mundarten jetzt fast vollständig die beiden Zonen umzingelten, in denen sich der slavonische Dialekt erhalten hatte, sondern auch in den Dörfern dieser Zone siedelten sich zahlreiche Ankömmlinge aus dem Süden an. Dadurch wurde die Štokavisierung dieser Mundarten verstärkt, so dass diese Mundarten heute ausgesprochen štokavischen Charakter haben – was man in keiner Weise von dem Stand dieser Mundarten z.B. im XIV. Jahrh. behaupten könnte" (Ivić 1958b: 303).

It will probably never be known what Slavonian was like before speakers of neoštokavian started pouring in. However, a partial reconstruction of certain elements may still be possible on the basis of relics in the dialects of the most archaic areas.

The vowel systems of most Posavian dialects are "normalštokavisch" (Ivić 1958b: 294). However, deviations from the normal pattern do occur and, what is even more important, they tend to cluster in the most archaic dialects. Ivić has pointed out that all of these deviations have parallels in kajkavian. However, he concludes pessimistically: "Der heutige Stand der Erforschung dieser Frage erlaubt es jedoch nicht, daraus apodiktisch auf eine ehemalige gemeinsame Entwicklung in einem grossen Verbreitungsgebiet im Norden des skr. Sprachraums zu schliessen" (op.cit.: 304).

I think that it is no longer possible to agree with this, in particular because the development of the kajkavian vowel system has become so much clearer. It is worthwhile to take a look at the Posavian evidence:

A. Fronting of *u* has been attested in three separate areas: 1. Siče (in the west), 2. Vrpolje together with a few villages in the immediate neighbourhood: |465| Čajkovci, Strizivojna, St. Perkovci (in the east, midway between Đakovo and the Sava), and 3. Babina Greda, somewhat further to the south-east, close to the Sava (Ivšić 1913a: 182). Ivšić points out the resemblance between the Posavian *ü* and

 $<sup>^{30}</sup>$  The problem requires an exhaustive analysis of the material. It is remarkable, for example, that lengthening of short vowels before word-final resonants is found in the same position in Virje kajkavian as in Posavian štokavian (Fancev: 353). It is also remarkable that in the western Posavian dialects the thematic e of the present tense is consistently short (Ivšić 1913b: 74-76; all relevant points are situated to the west of Slavonski Brod). This innovation is characteristic of a coherent area running from north-west čakavian to western štokavian by way of Slovene (except Prekmurski, which has length) and kajkavian, whereas the central čakavian dialect area, between north-west čakavian and western štokavian, has remained unaffected. The geographical pattern of the fronted reflexes of u is not dissimilar: northern north-west čakavian/Dolenjski/eastern Slovene/kajkavian/Posavian štokavian. In both cases Slovene served as an intermediary between two Serbo-Croat dialect groups. (On the terms "north-west čakavian" and "central čakavian" cf. Vermeer 1982: 290ff.)

the kajkavian  $\ddot{u}$  he heard in Đurđevec.<sup>31</sup> He also points out that the Posavian  $\ddot{u}$  is subject to strong sociolinguistic pressure and that as a consequence it is disappearing. Later investigators have not found the phenomenon in the Vrpolje area (cf. Ivić 1962-3 on Vrpolje and Strizivojna, Šojat 1981f on Strizivojna). In the Siče area the fronted reflex of  $\ddot{u}$  seems to have persisted, judging by the fact that Brozović and Lisac found it in Magića Mala (1981b: 375), contrary to Ivšić.<sup>32</sup>

- B. Retention of the distinction between the reflexes of u and q is attested in the language of late medieval documents (Ivić 1958a: 8, 1958b: 301).
- C. A velarized reflex of long  $\bar{a}$  is attested in four areas: 1. Selca kod Nove Kapele (nowadays Seoce, less than five km. removed from Siče and Magića Mala), 2. Vrpolje/Čajkovci/Strizivojna/St. Perkovci, 3. Sikirevci, some five km. removed from Babina Greda, and 4. Vranovci near Slavonski Brod (Ivšić 1913a: 180). In the Vrpolje area (2) and in Vranovci (4) not only long  $\bar{a}$ , but also short a is velarized. Ivić found velarization of long  $\bar{a}$  still alive in the Vrpolje area (1962-3), but Šojat does not mention it for Strizivojna (1981f).
- *D.* Ivšić found a lowered reflex of short e in the two most archaic dialects of areas 1 and 2, but it was clearly on its way out in the beginning of this century: "otvoreno naglašeno  $\check{e}$  ( $a^e$ ) zabilježio sam samo u Sičama i St. Perkovcima, i to samo od starije čeljadi" (1913a: 179). Ivšić notes explicitly that in St. Perkovci there is no difference in this respect |466| between the reflex of e and that of  $\check{e}$ , which, if taken literally, would seem to imply that in Siče  $\check{e}$  was still distinct from e in short stressed syllables (at least in the speech of the "starija čeljad").  $^{33}$
- *E.* On the basis of the language of medieval documents Ivić conjectured that Slavonian retained the reflex of PSl. *ĕ* as a separate phoneme until relatively late (1958a: 8, 1958b: 301). Several of Ivšić's formulations might point to retention of *ĕ* in some of the living dialects, e.g. his remark on the reflex of short *e* in Siče and his observations on the Gradište dialect (1913a: 171). It is therefore hardly surprising that retention of *ĕ* has now been found in quite a few living Slavonian dialects, e.g. Dušnok and Baćin in Hungary (Ivić 1961-2: 123, cf. also Brozović 1981 on Dušnok), Gradište (Finka and Šojat 1973: 9, 1981: 443) and a number of villages near Našice (Sekereš 1966: 235f., 1982), including Šaptinovci and Bokšić, where Ivšić failed to notice the phenomenon (1907: 113).<sup>34</sup>

 $<sup>^{31}</sup>$  Cf. Loncarić's important note on the difference between the strongly fronted u characteristic of Đurđevec (where Fancev noticed the phenomenon) and the weakly fronted u found in Virje (where Fancev failed to notice it). (Lončarić 1977: 194n.)

 $<sup>^{32}</sup>$  In view of what Ivšić has to say about the sociolinguistic status of the fronted u it seems rather unlikely that the phenomenon |472| has spread. The difference between Siče and Magića Mala may be comparable with that between  $\frac{1}{2}$  Brozović and Lisac's remark that the Magića Mala  $\ddot{u}$  "znatno je bliža glasu [u(:)] nego [i(:)]" does not point to a very strongly fronted u.

<sup>&</sup>lt;sup>33</sup> Both dialects have a jekavian reflex of the short jat'. Ivšić's remark (cf. also p. 170) suggests that the second element of the sequence -je- is identical with the reflex of e in St. Perkovci, but an independent phoneme in Siče (at least in the speech of the "starija čeljad").

<sup>&</sup>lt;sup>34</sup> Ivić (1958b: 297, 304) also draws attention to the *ie*-like diphthongs Ivšić (1913a: 179f.) found in a number of Posavian villages and which are strongly reminiscent of the kajkavian *ie* (cf. system *C*). Al-

The areas where fronting of u, velarization of a and lowering of e have been found are among the most archaic of the entire Posavina. Examples:

- a. All four areas have failed to undergo any stress retractions from medial syllables. The Siče area is in this respect unique among the dialects of the western Posavina. The Vrpolje area and Babina Greda are even more archaic (cf. Ivšić 1913a: 146-149).
- b. The only points where Ivšić heard examples of retained end stress in words with the prosodic structure ¬ \( (n\bar{i}st\bar{e}, p\bar{i}p\bar{a})\) were Siče (1) and Babina Greda (3) (op.cit.: 146n.).
- c. The only areas where  $-\bar{a}$  is *not* the most usual ending of the gen.pl. are 1 (among others Siče and Selca) and 2 (1913a: 213, 1913b: 15). |467|
- d. The only area where the instr.pl. ending -ami has been retained is 1 (1913a: 141).

All these facts can be combined into a coherent whole by assuming that Slavonian shared with kajkavian both III (fronting of u) and V (Ivić's vowel shift). The only innovations Slavonian seems not to have shared with kajkavian are I (merger of the strong jer with the reflex of  $\check{e}$ ) and IV (fronting of o). Before the neoštokavian onslaught brought confusion and levelling the Slavonian vowel system must have looked approximately as follows:

i/ī ü/ū u/ū 
$$e/ie \qquad ə/\bar{o} \qquad o/uo \qquad r/\bar{r} \\ e/\bar{e} \qquad a/\bar{a}$$

This is system  $E^{35}$  It explains both the properties of the most archaic Posavian vowel systems and those of the medieval sources analyzed by Ivić. Its rise is easy to understand on the basis of the geographical facts. System E avoids the awkward assumption (which is implicit in earlier reconstructions) that the northern Serbo-Croat dialects developed PSI.  $\varrho$  into a high/mid vowel  $\varrho$ , which not only quite unnecessarily divorces Serbo-Croat from East Slavonic and Sorbian/Czecho-Slovak, but also generates a whole set of difficult questions connected with the further development of the supposed  $\varrho$  in SCr. Why is it only in areas with fronted reflexes of u that we find evidence of a distinction between the reflexes of  $\varrho$  and u? Why is it that  $\varrho$  has nowhere been

though there may very well be a connection, I have left the phenomenon out of account here, for two reasons. First, most of the dialects where Ivšić found the diphthongs are less archaic than the Posavian average. Second, and more important, the diphthongs are virtually limited to points where the long jat' has merged with i (Dolina, Sičice, Štivica, Drežnik, Vrblje, Sr. Lipovac, Kuti kod Oriovca, Kaptol, Gundinci, Vrbova, Štitar); the only exception is Orubica, which is surrounded by ikavian dialects (cf. also p. 171).

 $<sup>^{35}</sup>$  Of course I do not insist on all details of system *E*. The diphthongs *ie* and *uo* may not have been diphthongal; on the other hand *e* may have been a diphthong, considering its frequent modern reflex *je*. On the reflex of the strong jer cf. Ivić (1958a: 8, 1958b: 301).

treated as the back/rounded counterpart of  $\check{e}$ , for which it would seem to be ideally suited, much better than o and l?

If it is true that the vowel systems of štokavian |468| dialects spoken to the east of kajkavian also underwent Ivić's vowel shift, then it is no longer possible to regard the shift as an exclusively kajkavian/Slovene innovation.<sup>36</sup> It follows that there is no evidence that the kajkavian vowel system ever underwent any exclusively kajkavian/Slovene developments.

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 $<sup>^{36}</sup>$  Fronted reflexes of u have not been attested east of Babina Greda. On the other hand several sets of facts suggest that Ivić's vowel shift may have penetrated much further eastward, possibly even to the extreme limits of the SCr. territory. In the Vojvodina dialectologists have found all of the deviations from the "normal" štokavian vowel system which Ivšić found in Posavian, with the single exception of  $\ddot{u}$  from u (Ivić 1958b: 304). Several small groups of dialects spoken in Rumania have vowel systems which have undergone Ivić's vowel shift, viz. Rekaš/Banatska Crna Gora (Ivić 1956: 151) and the dialect of the Karaševci (Ivić 1958b: 273). The same may hold for a few dialects spoken in Serbia, e.g. the Kolubara dialects investigated by Nikolić (1969: 33f.), provided that Simić's analysis (1980: 101) is correct, and the "crnorečko-negotinski" dialect group reported on by Simić himself (op.cit.: 112). The problem of the spread of Ivić's vowel shift to the east of Posavian requires a separate investigation. If it would turn out that Ivić's vowel shift did penetrate as far east as the Proto-Torlak dialect of the Proto-Karaševci, then it would become much easier to understand why the jat' was retained for such a long time in the dialects of northern Serbia, where nowadays it occupies an isolated position, as far as it has been retained at all, cf. Remetić (1981: 105) and Ivić and Remetić (1981: 477), cf. also Ivić (1957a: 42) on the dialect of the Gallipoli Serbs.

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