

## CHAPTER 1

### THE *l*-PARTICIPLE

#### 1.1 INTRODUCTION

The subject of this chapter is the origin and the persistence of accentual mobility in the Slavic *l*-participle. According to Ebeling (1967:579), there is no trace of IE mobility in the Slavic verb. Starting from this supposition one can distinguish four verb classes in pre-Slavic IE on the basis of the place of the stress and the intonation of the root :

(1) The stressed root syllable is acute e.g. Ru. *lězut, lězli, lázjat, lázili*.

(2) The stressed root syllable is circumflexed, e.g. Ru. *mógut, mogli, nójat, nosili*.

(3) The unstressed root syllable is acute, e.g. Ru. *gryzút, grýzli, edját, éli*.

(4) The unstressed root syllable is circumflexed, e.g. Ru. *nesút, nesli, rodját, rodili*.

Now I shall first give a short account of Ebeling's theory of Slavic accentuation as far as it has an immediate bearing upon the place of the ictus in the *l*-participle, and then go on to discuss the difficulties.

#### 1.2 EBELING'S THEORY

(a) IE inheritance: I give the infinitive, the 1st and 2nd singular of the present, the 3rd singular of the aorist, and the feminine forms of the *l*-participle and the passive participle. The symbol *N* stands for a nasal of unknown quality, *S* for a spirant of unknown quality.

*\*nósítej, \*nósijōN, \*nósejSi, \*nósit, \*nósilā, \*nósijenā,  
\*rodítej, \*rodijōN, \*rodějSi, \*rodít, \*rodílā, \*rodijenā,  
\*nestėj, \*nesōN, \*neséSi, \*nesét, \*neslá, \*nesénā.*

(b) Law of marginal oxytones: if in one paradigm *xé* and *xéx*, then *xéx* > *xxé*, where *x* symbolizes a syllable. Examples: *\*rodijōN, \*rodejSi, \*rodílā*, but *\*rodítej, \*rodijenā* because the infinitive and the passive participle constitute separate nominal paradigms, *\*nesōN, \*neseSi, \*nesénā*.

(c) Law of maximal contrasts : if in one paradigm  $x\acute{x}$  and  $xx\acute{x}$  (but no  $\acute{x}x$  or  $x$ ), then  $x\acute{x} > \acute{x}x$ . Examples : \**nēsōN*, \**neseSī*, \**néset*, \**néslā*, but \**piHlā* because of the aorist \**piHt*, where *H* symbolizes a laryngeal.

(d) Hirt's law : a vowel which is immediately followed by a laryngeal attracts the ictus from the following syllable, cf. Ru. *grīva*, *dym* (gen. sg. *dýma*) versus Skt. *grīvā*, *dhūmah*. Thus : \**grúzenā*, but \**grūzeSī*, \**nesénā*.

(e) Reshuffling of mobile paradigms : if in one paradigm  $\acute{x}(x)$  and  $x\acute{x}$ , then  $x\acute{x} > \acute{x}x$  unless the final accent is motivated because it helps avoiding homonymy. As a result, most disyllabic forms in mobile paradigms received root-stress, cf. Ru. *pil*, *pilá*, *pilo*, *pili*, \**pīlu*, \**pīlá*.

(f) Dybo's law : a stressed short or circumflexed vowel in a paradigm with fixed stress loses the ictus to the following syllable (if there is one). Examples : \**nositi*, \**nošō*, \**nosīšb*, \**nesti*, neuter \**nošéno*, \**nesenō*, \**nosilo*, \**neslō*, but \**pīlo*.

(g) Stang's law : a final syllable with a long vowel which has received the stress as a result of Dybo's law loses the ictus to the preceding syllable. Example : \**nósiš*/\**nòsiš* (dialectally conditioned).

### 1.3 HIRT'S LAW

As was pointed out ten years ago by Illič-Svityč (1963:80f.), the retraction established by Hirt for Baltic and Slavic took place only if the vowel which received the stress was immediately followed by a laryngeal, not if the laryngeal followed a diphthong with a resonant as its second component, e.g. \**káHylos*, Latv. *kaūls*, Gr. *kaulós*, versus \**tenHyós*, Latv. *tiēvs*, Gr. *tanaós*. In this period the laryngeal was still a segmental phoneme, characterized by its position in the word.

The feminine form of the Slavic *l*-participle seems to contradict Hirt's law. Though \**piHlā* has escaped Ebeling's "law of maximal contrasts" because of the old root-aorist \**piHt*, it cannot escape Hirt's law in the above formulation. Moreover, the final accent in Ru. *pilá* cannot be due to restoration because the other *l*-participles had received root-stress by the law of maximal contrasts, e.g. \**néslā*, \**grúzlā*, and the restoration should have taken place before the "reshuffling of mobile paradigms", where the mobility in the *l*-participle originated. Besides, it is not clear why the final accent was not restored in \**grúzlā* if it was in \**pīlá* because these types had coalesced after Hirt's law. The inevitable conclusion is that the ictus was never retracted in \**pīlá*

and that, consequently, the reconstruction *\*piHlǎ* is incorrect. This conclusion is supported by the Sanskrit and Greek material, which points to a stem *\*poH/\*poHi/\*pHi*, e.g. Skt. *pāyáyati*, *pītiḥ*. On the basis of this connection I assume that Ru. *pilá* goes back to *\*pHiláH* and that the ictus was not retracted because the laryngeal preceded the vowel. Thus, the place of the stress in Ru. *pilá* is another indication that the laryngeal was still a segmental phoneme characterized by a position in this period.

The same accentuation is found in Ru. *lilá*, where I assume *\*lHiláH*, cf. OChSl. *lějo* from *\*léHǐāN*, and in Ru. *vilá*, *gnilá*, *žilá*, *plylá*, *sylá*, *bylá*. The accentuation must be old in view of Latv. *liēt*, *būt*, which point to final stress. It is possible (though not likely) that some of these verbs have obtained their accentuation by analogy. It is equally possible, however, that Slavic reflects an older stage than Greek and Sanskrit in this case. On the basis of the latter languages one cannot distinguish *CHiC/CHuC* from *CiHC/CuHC* (cf. Beekes 1969:173 ff; the counter-example Skt. *śúṣkaḥ* < *\*sHuskos* does not hold because both Lith. *saūsas* and Čak. *sūh* < *\*sousós* point to the absence of a laryngeal, in spite of Gr. *aūos*). I think that the laryngeal was not in all positions strictly ordered with respect to a neighbouring resonant in these languages and that later levellings have led to the remarkable absence of IE *CVHR*-roots and the high frequency of *CVRH*-roots, while the former type occurs almost always with a concurrent *CVH*-root. This may simply be due to the over-emphasis on Greek and Sanskrit in IE reconstructions. Cf. in this connection the short *u* in Gr. *phúsis* and Lat. *futūrus* with the short *i* underlying Irish *del* from the stem *\*dheH/\*dheHi/\*dhHi*. [See also Appendix C.]

The situation is slightly different in the case of Ru. *dalá* and *rodilá*, which cannot go back to *\*doHláH*, *\*rodiHláH* for the same reason as *pilá* cannot go back to *\*piHláH*: Hirt's law would have prevented the rise of accentual mobility. I am inclined to assume an original *\*dHláH*, with zero-grade before the *l*-suffix. It is plausible that the stem vowel was introduced after other forms of the verb when the laryngeal disappeared without a trace in interconsonantal position, cf. Lith. *duktė*, Gr. *thugatēr*. Incidentally, there is no evidence for the vocalization of an interconsonantal laryngeal in Baltic or Slavic. The form Ru. *rodilá* presents greater difficulties, especially because of the long *ī* in Čak. (Novi) *ròdil*, *rodilà*, *ròdilo*, as opposed to short *i* under the stress, e.g. *pāhla*, *ženla*. Here short *i* under the stress may have been generalized on the basis of the infinitive and

long *i* in the case of mobility on the basis of the (mobile) passive participle, so that neither may be old, cf. *kovât*, *kovàla* but *skòvân*, *skovànà*, *skòvāno*, where Slovene *kovâl*, *kovàla*, *kovâlo* points to earlier *\*kòvalb*, *\*kovalà*, *\*kòvalo*. The same relationship between short vowel under the stress and long vowel in the case of mobility is found in the aorist, cf. SCr. *pisa* versus *kòvā*. On the basis of these considerations I regard the final stress in Ru. *rodilá*, Čak. *rodilà* as sufficient evidence for the absence of a laryngeal in the *l*-participle and tentatively reconstruct *\*rodiláH*, cf. also Pedersen's law below. The laryngeal must have belonged to the infinitive formative.

#### 1.4 EBELING'S LAW

Ebeling's most important contribution to Slavic accentology is the establishment of a general retraction of the ictus in disyllabic forms of mobile paradigms as formulated in his "law of maximal contrasts" and "reshuffling of mobile paradigms" quoted above. In this section I shall discuss the conditions and the chronology of the retraction.

According to the law of maximal contrasts, the accent is retracted in *\*néslā* because the *l*-participle forms a single paradigm with the personal forms, whereas the infinitive and the passive participle constitute separate nominal paradigms. I find it hard to assume that the *l*-participle belonged more closely with the personal forms than the passive participle in a period which must have been Balto-Slavic because it preceded Hirt's law, especially in view of the elaborate verb system which still existed at that time and in view of the numerous inflected *l*-participles in the contemporary Slavic dialects, e.g. Ru. *gnilój*, *požilój*, *ustályj*, which are extremely rare in Baltic. Moreover, the modern languages show final stress, cf. Ru. *neslá*, *nesló*. If the accent is retracted, final stress can only be restored as a result of Dybo's law or on the analogy of the infinitive. Both possibilities are unlikely. The application of Dybo's law presupposes that the *l*-participle does not belong with the personal forms any longer in a later period, which is contrary to the whole development of Slavic verb morphology. Ebeling's problem is that the *l*-participle of these verbs should have become mobile according to his reshuffling of mobile paradigms if the ictus was not retracted according to his law of maximal contrasts.

Thus, the law of maximal contrasts does not prevent the retraction in *\*piHlā́* by Hirt's law and yields a doubtful retraction in *\*néslā*

which must be restored later under unclear conditions. As to *\*nésōN*, *\*néset*, this retraction need not be separated chronologically from the reshuffling of mobile paradigms. The reconstruction *\*maHterés* is probably incorrect: on the basis of Lith. *mótė* vs. *duktė* I assume gen.sg. *\*maHtrés* for the oldest period of Balto-Slavic, with regular retraction according to Hirt's law and subsequent insertion of *\*e* after the acc.sg. and the nom.pl. Thus, the chronological difference between the two laws established by Ebeling disappears. Moreover, the conditions of the two laws are complementary, apart from the homonymy condition. But the latter condition does not work, as I shall try to show presently.

According to Ebeling (1967:584), the ictus is retracted in disyllabic forms of mobile paradigms unless the accent helps avoiding homonymy. However, in some of his examples the ictus is retracted in one of two previously homonymous forms, thus removing the homonymy: dat.sg.fem. *\*básē* but loc.sg.fem. *\*basé*, and gen.sg.masc.neut. *\*básā* but nom.acc.pl.neut. *\*basá*, cf. Ru. *bosój*. Ebeling does not explain why the retraction occurs precisely in the forms where the long vowel goes back to an early contraction (dat.sg.fem., gen.dat.sg.masc.neut.) and not in the forms where the long vowel goes back to an IE laryngeal (nom.loc.sg.fem., nom.acc.pl.neut.). In the nom.sg.fem. there is no retraction though there is no fem. form with the same ending. The existence of a gen.sg.masc.neut. with the same ending in the adjective can hardly serve as an argument because the retraction in the loc.sg. masc.neut. and the absence of retraction in the loc.sg.fem., which supposedly had the same ending, indicate that the masc. and fem. paradigms were strictly separated. And if the fem. and neut. paradigms were not strictly separated one would even expect retraction in the nom.sg.fem. because the ictus was not retracted in the nom.acc.pl.neut. Thus, I am inclined to assume that the presence of a laryngeal in the ending prevented the retraction of the ictus. Moreover, homonymy cannot have played a part in the inst.pl.masc.neut. *\*basú* because the ending was not homonymous with the ending of the acc.pl.masc. *\*básū* at this stage, cf. OChSl. acc.pl. *konje*, inst.pl. *konji*, ORu. acc.pl. *koně*, inst.pl. *koni*, Slovene acc.pl. *kónje*, inst.pl. *kónji*.

Finally, a similar retraction law operated in Baltic, cf. Lith. gen.sg. *vīlko*, dat.sg. *vīlkui*, but inst.pl. *vilkaĩs*, and nom.sg. *galvà*, gen.sg. *galvõs*, but dat.sg. *gálvai*. This can hardly be accidental. Mainly on the basis of the Baltic evidence I formulate the following law: in disyllabic word forms the stress is retracted from a final short or

circumflexed vowel or diphthong unless the preceding syllable is closed by an obstruent. The latter condition is added to cover Ru. *nesló*, *vezló*, *pekló* versus *pilo*, *žilo*, *býlo*. If we assume that \**H* was an ordinary consonant in this period, we can simply say that the stress is retracted from final open syllables, e.g. \**vilkā*, \**vilkkōj*, \**vilkkōjS*, \**golHvāH*, \**golHvās*, \**gólHvāj*, \**pHilāH*, \**pHilo*, aorist \**neše* because final \**t* has been lost, cf. the gen.sg.masc., but \**nešlāH*, \**nešló*, \**nešeSj*.

For the 1st sg. of the present tense and for the inst.sg.fem. I assume concurrent forms \**nešōH*/\**nešq̄*, \**golHvāH*/\**gólHvq̄*, with \**-q̄* from \**-ām* like \**-ō* from \**-ōN* in Lith. *akmuō*, OChSl. *kamy* and \**-ē* from \**-ēr* in Lith. *mótē*, OChSl. *mati*. Apparently a laryngeal was lost before word-final nasal at an early stage in the development of Balto-Slavic, and a word-final resonant could not be maintained after a long vowel. The early loss of a laryngeal in this position is indicated by the fact that the ending of the acc.sg. does not attract the ictus according to de Saussure's law, cf. Lith. *rañkq̄*. Lith. *nešù* goes back to the first and OChSl. *nešq̄* to the second variant, cf. ORu. *živu* etc. (Stang 1957:109). In the inst.sg.fem. the first variant was homonymous with the nom.sg. and the second with the acc.sg. The homonymy was removed by a contamination of the two variants, cf. Lith. *gálva*, which goes back to \**gólHvaH*, and *šaltāja*, which points to \**šolHtq̄-jaH* (i.e. the definite form of the adjective *šáltas*). Slavic had probably \**golHvq̄*.

The retraction in Ru. *grýzla* (vs. *gryzěš'*) is not accounted for by the law formulated in the preceding paragraph. This retraction must be due to Hirt's law: \**grúHžlaH*, \**gruHžeSj*. The same holds true for Ru. *éla* (cf. Polish *jadla*): the place of the ictus points unambiguously to the presence of a laryngeal in the root because Hirt's law is the only law which produces a retraction of the stress in verbs with a stem ending in an obstruent. An interesting case is Ru. *péla*, where the present stem *poěš'* /*paјóš'*/ indicates that the laryngeal cannot have preceded the \**i*, so we have to reconstruct \**poiHeSj*. But the *l*-participle cannot have been \**poiHlāH* because in that case Hirt's law would not have operated, cf. above. The solution is that we must assume zero-grade before the *l*-suffix, like in the cases discussed above. The original form \**piHlaH*, \**piHlo* was replaced by \**pójHlaH*, \**pójHlo*, just as \**dHlāH*, \**dHló* was replaced by \**daHlāH*, \**dáHlo*. This substitution was certainly favoured by the existence of \**pHilāH*, \**pHilo*, Ru. *pilá*, *pílo*. If this analysis is correct, Ebeling's law cannot have preceded Hirt's law.

Finally, Hirt's law has apparently not operated in Ru. *bralá*, *zvalá*, Čak. *zválà*, *prālà*. These verbs belong to the mobile type, cf. Čak. *òprāl*, *pòbrālo*. The same holds true for Slovene *kovāl*, *kovála*, *kovālo* < \**kövalb*, \**kovalà*, \**kövalo*. If we assume that the *a* is secondary before the *l*-suffix, the latter forms must have replaced earlier \**kóuHlu*, \**kouHláh*, \**kóuHlo*, where the mobility had regularly originated according to Ebeling's law, cf. Lith. *káuti*. The other verbs are less clear because of the vowel alternation. However, whether we assume \**berláh*, \**zouláh* or \**birláh*, \**zuláh*, mobility is regular in both cases.

### 1.5 THE PASSIVE PARTICIPLE

The accentual parallelism between the *l*-participle and the passive participle makes it probable that these forms have influenced each other as far as they do not have a similar origin. Whenever the forms are different, this is an indication of the old distribution of stress patterns in the participles. I do not agree with Stang (1957:150) that there was originally complete agreement between the place of the ictus in the *l*-participle and the *n*-participle. As we have seen above, Ru. *neslá*, *nesló*, *nesená*, *nesenó* go back to \**nesláh*, \**nesló*, \**nesénaH*, \**neséno*, with final stress in the passive participle due to Dybo's law. I have suggested above that there was originally a perfect correspondence with these forms in \**rodiláh*, \**rodiénaH*, which is supported by Čak. (Novi) *rodilà*, *ròdilo*, with mobility, versus *rojenì*, with final stress due to Dybo's law. Indeed, Russian also shows end-stressed participles in verbs of this type. SCr. *lòmljen* from *lòmiti* < \**lomiHtej* (with final stress) must be analogical after *prèlomljen* < \**pér-lomienu* from \**pér-lomiHtej* (with fixed stress, so that Dybo's law applies), cf. *lòmim* vs. *prèlomim*.

Verbs with original root-stress have root-stress in the *n*-participle, e.g. SCr. *nòšen* from \**nošén* because of Stang's law, from \**nòšēnb* because of Dybo's law, from \**nósienu* because of Van Wijk's law (cf. Ebeling 1967:587). The long *ā* in SCr. *pīsān* presents a problem. Stang states that the "causes are not known to us" (1957:147), and Ebeling explains the length by analogy after *nòšen*, where the long vowel was later shortened in Serbo-Croat (1967:589,592). However, I fail to see why the vowel was not shortened in *pīsān* if it was in *nòšen*. In view of the analogy with \**nesláh*, \**nesénaH* and \**rodiláh*,

*\*rodjénaH* I am inclined to assume *\*pisaHlaH*, *\*pisaHenaH*, with regular fall of *\*H* and contraction yielding *\*písānaH*. The latter solution also explains the final accent in Ru. *danó*, as opposed to *dálo*, which must be old in view of Slovene *dán(o)* vs. *dāl(o)*. The final stress must be due to Dybo's law because an original final accent would have been retracted according to Ebeling's law. Moreover, the final stress points to the absence of a laryngeal in the root because otherwise Dybo's law would not apply: *\*dāno*. A similar case is presented by Slovene *končán* vs. *končāl* and *brán(o)* vs. *brāl(o)*, cf. Čak. (Novi) *nabrānò* vs. *pòbrālo*. These forms reflect an older stage than Ru. *sóbran(o)* etc. The long rising vowel in Slovene *končán* cannot be due to levelling, as Stang suggests (1957:147), because there was no model. The final accent in Slovene *počesán* (-a, -o), as opposed to the retracted stress in *zastôpan* (-a, -o), supports Ebeling's hypothesis that Stang's law operated in final syllables only. The accentuation of the latter word must be due to the later, specifically Slovenian retraction from a short vowel to a preceding long vowel, e.g. in *dúša*. A long vowel which had received the stress as a result of Dybo's law and did not lose the ictus according to Stang's law, was shortened in Slovene like everywhere else (cf. Ebeling 1967:592, the circumflex in the imperative *hvalíte* is secondary, cf. *nesī ga*).

I conclude that there is no indication of original accentual mobility in the *n*-participle and that, consequently, any occurring mobility must have been introduced on the analogy of the *l*-participle. The retraction in SCr. *kùpovao*, *kùpovān* is due to analogy after the aorist *kùpovā*, cf. Slovene *kupovāl*, *kupován* (Stang 1957:144).

#### 1.6 PEDERSEN'S LAW

Ebeling's law as stated above yields mobility in disyllabic words, e.g. Ru. *pílá*, *pílo*, but the retraction does not operate in polysyllabic words, cf. Lith. *sūnumì*. Nevertheless, mobility has spread to polysyllabic *l*-participles, as is shown by Čak. *rodilà*, *ròdilo*. It is not quite clear how this mobility came about. I would suggest that *\*rodiló* was replaced by *\*rodilo* after the model *\*pHilo* and that subsequently the ictus was retracted from an inner syllable in mobile paradigms. The relative chronology of the latter law presents a difficulty, however.

The retraction of the ictus from medial syllables was first proposed for Baltic by de Saussure as an explanation of Lith. *dùkteri*, *dùkteres*,



cf. Gr. *thugatéra, thugatéres*. This retraction cannot have been phonetic, however. The solution was found by Pedersen, who suggested a "recul d'un accent qui contrastait avec un autre accent (final) dans le même paradigme, et qui à cause de ce contraste était exagéré et anticipé" (1933:25). The importance of this idea can hardly be overestimated. In fact, several accent shifts in the history of Slavic are subject to conditions of this type.

Pedersen assumes that mobility spread from the consonant stems to the *aH*- and *o*-stems in Balto-Slavic. I think that this is probable. It is an indication that the retraction in Lith. *dùkterį, dùkteres* is very old indeed. If Ebeling's explanation of the oxytonesis in the oblique case forms of the *i*- and *u*-stems is correct, the retraction must be older than his law of marginal oxytones and, consequently, older than any other law of Slavic accentuation. However, the retraction cannot be so old in other cases. In Slavic the ictus is regularly retracted to a preposition from a barytone form of a mobile paradigm, e.g. Ru. *ná vodu*. Since this phenomenon is unknown in Baltic, it can hardly have arisen before the dissolution of the Balto-Slavic unity. Besides, the retraction to a prefix in such forms as Ru. *né byl, pródal* cannot have occurred before Ebeling's law, when the mobility arose.

On the other hand, the Baltic evidence seems to point unambiguously to two temporally distinct retractions. In Lithuanian there is one type of verbs where the ictus is retracted to a prefix and which has mobile stress in the active participle, e.g. *vedù, vėda, nèveda, priveda, vedąs, vėdanti*, preterit *vėdė*. Other verbs have fixed stress on the root-syllable except in the forms where de Saussure's law operated, e.g. *sakaũ, sãko, nesãko, sãkas*, preterit *sãkė*. On the basis of the form *vedąs* I am inclined to assume that this verb was originally end-stressed and that it became mobile as a result of Ebeling's law: *\*uedóH, \*uédó* from earlier *\*uedóH, \*uedó*. The same retraction must be assumed in the preterit *\*uédė*, which goes back to pre-Baltic *\*uedėHet*, with loss of word-final *\*t* prior to Ebeling's law, cf. above. Then the retraction of the ictus from medial syllables in mobile paradigms yielded *nèveda, priveda, nèvedė* in a period after Ebeling's law. The ictus was not retracted in *nesãko, nesãkė* because the latter paradigm had fixed stress until de Saussure's law operated. The retraction in *nèveda, priveda* cannot be identical with the retraction in *kãtinus, vãlandas* (acc.pl.) because of the different quantity of the stressed vowel: the latter retraction must have preceded the lengthening of stressed *e, a* whereas the former must have been later. The lengthening

of stressed *e, a* was certainly later than the rise of distinctive intonation, which followed the end of the Balto-Slavic linguistic unity. Thus, we arrive at the following chronology of sound laws for Lithuanian: (1) Pedersen's law, (2) oxytonesis, (3) Hirt's law, (4) Ebeling's law, (5) rise of distinctive intonation, (6) lengthening of stressed *e, a*, (7) Pedersen's law again, (8) de Saussure's law, (9) Nieminen's law (retraction of the ictus from a short *a* in final syllables to a preceding long vowel or diphthong, e.g. *kiekas, meňkas*), (10) Leskien's law, cf. Kortlandt 1974.

In Slavic, like in Baltic, we have to assume that Pedersen's law operated once again after the dissolution of the Balto-Slavic unity and then yielded the accentuation of Ru. *ná vodu, né byl, pródal*. The lateral mobility in Slavic noun inflection must be older and go back to the earliest Balto-Slavic period.

#### 1.7 MEILLET'S LAW

A final point to be discussed here is the metatony in Slovene *hódil* (from *\*hodíl*), *hodíla, hodílo*, which is matched by the converse metatony in *gostíl, gostíla, gostílo*. The latter forms are the regular reflexes of *\*göstilb, \*göstilâ, \*göstilo*, cf. Čak. (Novi) *zvônîl, zvonîlâ, zvônîlo*. A falling accent shifts to the next syllable in early Slovene, and a short final accent is retracted to a preceding long vowel, cf. *okô, dúša* vs. Ru. *óko, duśá*. The former metatony is less clear, however. I cannot accept Jaksche's suggestion that it is a morphological rebuilding (1965:25), especially because it is absent in *ě*-verbs, e.g. *žélel, želéla, želélo*. This is all the more remarkable because Dybo's law never applied to *ě*-verbs, whereas it did operate in such verbs as *hodíti, nosíti*. Moreover, we find the same neo-circumflex in other trisyllabic word forms where Dybo's law applied, e.g. *ženâmi*. I conclude that the metatony is phonetic.

According to Meillet's law, an acute root vowel in a mobile paradigm becomes circumflexed, e.g. SCr. *glâvu, sîn*. This law is definitely Slavic, cf. Lith. *gálva, súnų*. As far as I know, it has never received a satisfactory explanation, however. Yet I think that an explanation of this as well as other laws of Slavic accentuation can be found if we connect them with the loss of the IE laryngeals. More precisely, I assume that the IE laryngeals have been lost in different periods depending on their position in relation to the place

of the ictus and thereby produced a number of successive sound laws. The dependence of the development of the laryngeals on the place of the ictus is attested in other branches of the IE language family as well, e.g. Skt. *vānitā*, *vantārah*, *jānitoh*, *jantūh* (Kuiper 1947:206). [See also Appendix C.] In this section I shall confine myself to a discussion of the earliest loss of laryngeals in Slavic, which must have occurred shortly after the dissolution of the Balto-Slavic unity. At that time, the laryngeals had been lost already in interconsonantal position (Lith. *duktē* < \**dukHtēr*), between two full vowels (Lith. gen.sg. *galvōs* < \**golHvaHes*), and before word-final nasal (Lith. acc.sg. *rañka* < \**ronkaHm*).

I assume that in Slavic, in contradistinction to Baltic, the IE laryngeals were lost first of all in pretonic position, and that an immediately preceding or following vowel received compensatory lengthening: \**golváH* < \**golHváH*, \**sūnumi* < \**suHnumi*, \**píláH* < \**pHiláH*. The alternation between the presence of a laryngeal in \**gólHvā*, \**súHnuN*, \**pHilo* and its absence in the end-stressed forms was eliminated by the removal of the laryngeal from the barytone forms as well: \**gólVā*, \**súnuN*, \**pílo*. This is Meillet's law. The laryngeal was retained in words with fixed stress, cf. SCr. *đim*, *grīva* < \**dúHmuN*, \**griHvaH*.

At the same time, as far as we can see, the laryngeals were lost in posttonic syllables, except in the first posttonic syllable. I think that this is the explanation of the neo-circumflex in Slovene *osnōva*, *nosīla*, *ženāmi*. The non-initial accent in these words must be due to Dybo's law, cf. the final accent in Ru. *ženú* and the recessive stress in *nošú*, *nósiš'* with retraction in accordance with Stang's law. I reconstruct \**ósnovā*, \**nósi(H)lā*, \**žēnaHmīS* from earlier \*-*aH*, \*-*miHS*, cf. Lith. *galvomis*. After Stang's law, the posttonic quantity in \**osnòvā*, \**nosilā*, \**ženāmī* was lost in Slovene with compensatory lengthening of the preceding vowel, which yielded the standard forms (cf. Stang 1957:28f.). Indeed, I think that compensatory lengthening is the only source of the Slovenian neo-circumflex. It is not strange that lengthening yielded a falling vowel because at the time there was no intonation on short vowels.

After the period of Meillet's law, the laryngeals were retained in the stressed syllable and in the first posttonic syllable until the general loss of final consonants and concomitant changes led to the characteristic absence of closed syllables in Slavic. Then the posttonic laryngeals, like other final consonants, were lost without compensatory lengthening, e.g. \**žēna* < \**žēnaH*, Ru. *žená* after Dybo's law, like

\**sŷn̄* < \**sūnuN* and \**sl̄ovo* < \**sl̄ovos*, cf. Gr. *kléos*. The loss of laryngeals in the first posttonic syllable entailed the rise of new timbre oppositions /a~o, ě~e, i~ь, y~ѣ/. Henceforth I shall write \**ĕ* instead of \**ě* for typographical reasons. In stressed syllables a laryngeal lost its phonemic status and became a feature of the preceding vowel, as did a nasal resonant: \**dŷm̄* < \**dūHmuN* like \**zŷb̄* < \**zōNbuN*, Ru. *zub*. The symbol ' denotes the laryngeal feature (and simultaneously the place of the ictus). I assume that \**ŷ*, like \**ŷ̄*, was neutral with respect to quantity in the period immediately following this sound change. Finally, the laryngeal feature was lost in a period after Dybo's law but before Stang's law, cf. below.