The subject of this paper necessarily touches upon most of the problems of Slavic accentology, and it rightly deserves much more exemplification and argumentation than it can be accorded on these few pages. I shall be dealing with only the salient developments for Conservative Slovene, based on the dialects of central Lower Carniola and the southern part of Upper Carniola including Ljubljana, a Slavic language that has not lost intonational features but has undergone rather diverse accentological and intonational changes. I hope to demonstrate the key role played by analogy in accentology and thereby to dramatize the necessity of incorporating this powerful force in language into diachronic and even synchronic descriptions of individual languages.

We can begin our survey long before the independent existence of Slovene. In a consideration of the accentological development of individual Slavic languages most investigators accept as given an opposition between rising and falling pitch on long initial syllables. There is ample evidence that this opposition must have existed at one time in the prehistory of Slavic, but to accept it without question is to obscure the likelihood that it is of secondary origin and that it may easily disappear or change. An unqualified assumption of this opposition has led to much confusion in the field. It has prompted earlier scholars and even some recent ones\(^1\) to assume that unstressed syllables are also pitched high or low. This condition then has been used as motivation for various "laws" that advance or retract the stress usually from low-pitched to high-pitched syllables in accordance with what has been observed in the surface structure of the various languages. It turns out, however, that it is expedient to set up a more abstract condition, to wipe the slate clean, so to speak, and to assume that there were no original intonational differences. Here we might make the further assumption that early Slavic was a strictly mora-counting language with a universal absolutely final stress and that all observed intonations or differences in pitch are the result of the retraction of stress to the first or second morae of long syllables. The transfer to the first mora of long syllables must have originally occurred among nouns usually labeled oxytonic like *gord-u-s, *kost-l-s and
adjectives like *mold-u-s, i.e., among all substantives not felt at the time to be derived forms and obviously not barytonic. Here for some as yet obscure reason there developed an equal and opposite reaction to the absolutely final stress of the paradigm, and perhaps originally in direct-case forms the new stress appeared on the absolutely initial mora of the word. It is not clear whether this early shift of accent was phonologically or morphologically conditioned. To ascribe it to the influence of root nouns, where a similar accentological pattern presumably existed, would merely beg the question. I can only suspect the development to have been phonologically based. In the words above initial moric stress would appear: *görd-u-s, *köst-i-s, *mold-u-s and would be directly opposed to non-initial moric stress on first syllables, the so-called old acute that presumably arose by an earlier retraction of stress from absolutely final syllables: *goʃx-u-s, bɛtʃ-aa.

The newly arisen sequences -VV- in initial syllables are perfectly normal long stressed syllables in all languages with simple dynamic accent. This fact calls to account sequences of the configuration -VV-. Could such an unusual stress pattern on long vowels have been original? It looks very suspect, indeed. When one considers the fact that some 90% of the root morphemes in Slavic and Baltic that display the old acute seem to have been associated with a laryngeal and that -ā- and -ē-, utilized frequently in derivation and also often showing the old acute, may also be linked with laryngeals, some basis for the old acute begins to appear. Since it is difficult to see why the original stress should have been located on syllables with laryngeals, and since it it not too clear why the loss of laryngeal should have caused a rising pitch, I would prefer the hypothesis that stress was attracted to the syllable with the laryngeal from a final syllable and that the mere fact of retraction explains the configuration -VV-. This assumption carries the implication that except for certain morphological situations all words were stressed originally on their absolutely final syllables. It is perhaps worthwhile mentioning here that similar accentological conditions appear to obtain in the modern Turkic languages and to have obtained originally in the history of the Semitic languages.

Proceeding now from these early phonetic changes, let us see how even these early accentological conditions may have effected analogical changes at a much later date. We take first of all the condition created by the retraction of the stress to a long or laryngealized syllable. Some years
ago Stang sought to show that iterative verbs in -iti retract the stress from the -i- to the root syllable in the present while causative (and also denominative) verbs of the same type do not retract the stress. Thus, in the lst. sg. present in Slovene one gets bródim, vódím, nósim, vóžim (all iteratives); but budím, gubím, pojím, učím (all causatives); and greším, hladím, mladím, pustím (all denominatives). It seems quite clear that this is the earliest and only accentological distinction that can be made in this populous verb class except for that engendered by root syllables possibly containing laryngeals. I would assume here an original absolutely final stress in all forms of all such verbs, then retraction to laryngeal-containing root syllables and then a morphologically conditioned retraction to the -e~e- complex (verbalizing suffix plus fill-vowel), subsequently yielding -I- by an early contraction) in all finite forms except 1 sg. (leveled at a later date in Slovene) of the aspectual derivatives (the iteratives). In the latter case the retraction would have been conditioned by the many aspectual derivatives in -Å-, which, perhaps as a laryngealized vowel, would have acquired the stress in practically all forms at an earlier date. One must bear in mind that this dichotomy has not been maintained in the modern Slavic languages. The iteratives consistently have recessive stress, but numerous other verbs have been attracted to this type. A somewhat similar analogical retraction may be seen in the present-tense forms of -ovati verbs, where the original stress would have been placed on the fill-vowel directly following the derivational suffix -j-, as in kuupuujem. Retraction here would yield the stress kuupuujem, identical to that in many -aaje-, and -eje- verbs, all productive. The double vowels here indicate the dimorphic nature of the long syllables. As will be seen, this complex will yield -uże- and then -ðuje- to produce present-day kupujem.

The retraction of stress to the initial mora of the word has also exerted some analogical influence. As a result of this retraction among oxytonic neuter nouns, cf. blagò/blága all the plural forms with final accent (the nom.-acc. pl. ending -a retained the stress, therefore no retraction) remained opposed to most of the singular forms. Further analogical changes created a sg.-vs.-pl. accentological opposition featuring root stress in the singular and final stress in the plural only for formerly oxytonic neuter nouns. This development could not take place among the closely related masculine nouns because the direct cases of the plural here also experienced retraction.) This opposition was then
implemented among neuter nouns with final-columnar stress
(stress located on the final syllable of the root, i.e., on
the desinence in borrowed nouns and on the syllable contain-
ing consonantal derivational morphemes [again on the desin-
ence] in derivatives) by drawing the stress back to the root
in the plural forms and in this way preserving the original
accentological opposition between oxytonic and final-columnar
patterns. Here we see an analogical change that is a mirror
image of that developed in the oxytonic forms. Thus the
singualrs viinö, piismö become opposed to the plurals viinaa,
pilsmaa. From this point on the plural forms were treated
like barytonic forms and underwent changes to be discussed
later to produce vina, pisma.

There is another much later accentological development
that may be described as an analogical response to the ini-
tial retraction in Slavic. This change, which has invoked
much discussion and which is particularly but not exclusively
characteristic of Slovene is the advancement of stress from
an initial accented mora, i.e., -v-, or -VV-. Stankiewicz regards this peculiar development as a purely phonological
change triggered by a fair number of situations where stress
had been transferred to an initial weak jer: dôva, stôo,
brâal, sbgodil and with the loss of the jers was advanced to
the next syllable with concomitant lengthening of the newly
stressed syllable and loss of the jer: dvâa, stôo, brâal,
zgôodil. Supposedly then this shift of stress was extended
to all words with an initial nonrising intonation such as:
kostli, uhôo, gradu, sînôôvi, zaçêet, mladôo, pomôôôč. While
it is tempting to regard this advancement of stress as phono-
logically motivated, especially in view of the fact that there
seem to be no exceptions to its effect, it is not really con-
vincing to base this widespread phenomenon in Slovene on a
limited number of forms containing weak accented jers that
also disappeared elsewhere in Slavic without causing any
phonological repercussions. There seem, furthermore, to be
some exceptions among the 1-participles from nonprefixed
verbs with monosyllabic stems, e.g., dâl, dâla, dâlo, dâlî;
pîl, pîla, pîlo, pîlî; but this anomaly could be explained
by the fact that among such disyllabic verb forms with a long
vowel before the 1-morpheme there is no pattern for a para-
digm with final stress. This speaks in favor of our argument
for an analogical change since there is advancement of stress
among disyllabic nouns and adjectives. There are two strong
counterarguments to Stankiewicz’s thesis: 1) the shortening
of syllables with the old acute intonation must have affected
all Slavic languages and must therefore have preceded this
practically exclusively Slovene advancement of stress, and yet not one word of this type responded to this Slovene development; 2) this advancement of stress in Slovene has touched with absolute consistency only those forms that were originally oxytonic and only those forms that were originally final columnar (a-stem nouns and certain participles) and only by analogy acquired initial stress and a typical mobile stress pattern. Actually, it is quite possible that dêva, sêto, bbral, and sêgodil were not models for this shift, but themselves took part in the advancement of stress as forms actually or seemingly oxytonic (mobile). The accented jers in these words could easily have persisted after other weak jers had been lost; so such words could easily have joined in the general advancement of stress which must have occurred after the loss of final jers because no advancement took place in grâd, vâs, forms with earlier final jers. I think, therefore, that the only answer lies in an attempt on the part of the speakers to bring the accent pattern of originally oxytonic words that had acquired mobile patterns into a more or less columnar one, similar to other existing patterns. This was hinted at by Jakobson, who considered that this Slovene shift was carried out to eliminate "unaccented" words. Evidently the application of the shift was universal just because the original mobile pattern was quite distinctive from that for barytonic words and words with the final-columnar accentual pattern. That this development was an analogical shift is possibly borne out by the fact that it proceeded to the next syllable, not merely the next mora; thus we obtain graâdu but not graâd or graâdu. The quantitative relationships in the newly accented and previously accented syllables are another matter. While the loss of the jers in dêva, sêto, etc., might have lengthened the newly accented syllables and might have communicated this lengthening to all other newly accented syllables, it is most likely that, just as retraction of stress had been synonymous with rising intonation, this new advancement entailed falling intonation, realizable only on a long syllable. Length preceding this new circumflex was automatically lost when subsequent events disallowed two successive long syllables.

Undoubtedly the most spectacular event in the phonological history of the Slavic languages was the loss of the jers, and we here are particularly interested in the concomitant rise of the neo-acute. Slovene is not at all unique in its manifestation of the neo-acute. It is replete with examples of the retraction of stress from final weak jers to preceding long syllables (where the stress lodges to this day on the
second mora: lúč, múž (GP), pród, držím (1 sg.) and to preceding short syllables: šírők, živôt, začnèm (1 sg.), spletèn (ppp.). It will be interesting, however, to examine some types of neo-acute where there may not be unanimity of opinion or where the motivation may be in dispute, and, especially, where such types have arisen by analogy with some original manifestations of the neo-acute. First and foremost among these is the phenomenon that I term "parallel retraction" and Stankiewicz terms a "chain reaction." This kind of retraction can occur only in the right morphological situations where within one and the same category we find one series of forms with stress on a final jer and another series of forms with stress on an immediately preceding syllable. When the stress moves from the final jer to the preceding syllable in the one series, the stress moves back yet another syllable from the syllable preceding the jer in the other series: -CVCi/j > -CVCi/y and -CVCVCi/j > -CVCVCi/j. This situation obtains in only three morphological situations in the language: oxytonic and paroxytonic 1) present tense forms, 2) long adjectives, and (by analogy), in 3) past passive participles where the paroxytonic stress is not on a root syllable. In 1) we find only present tense verbs in -i- and in -e- because elsewhere there never developed an opposition of oxytones to paroxytones. We have already seen how vodìm, nosìm (as iteratives) developed versus oxytonic budìm, učìm, and želìm. With parallel retraction we get neo-acutes in all forms but on different syllables: vodìm, nòsìm and budìm, učìm, želìm. In the case of present tense forms in -e-, the original stress is placed on the -e- just after the derivational morphemes -j- and -n-. We therefore obtain originally kol-j-é-mb, gbn-j-é-mb, piis-j-é-mb, kes-j-é-mb, kou-j-é-mb, krent-n-é-mb. When corresponding but nonderived verb stems like: plet-e-mb, trees-e-mb, ber-e-mb retract the stress from the final syllable and parallel retraction occurs, we get pletem, treesem, berem but kbljem, zanjem, piisem, čišem, kuujem, kreñem. In 2) we find nonderived oxytonic adjectival forms like mlaadʒb, bosjb versus paroxytonic forms like beeljba, dobrjba. Parallel retraction yields mlaadzb, boszb and beeljzb, dobrjzb. In 3) we have only past passive participles formed via the fill-vowel -e-. Only this type permits both oxytones like: raz-cvet-e-nb, oproš-e-nb, zgres-e-nb, and paroxytones like: po-kreenj-è-nb, proš-è-nb, vož-è-nb, where a secondary stress develops over the fill-vowel by analogy with participles in -a-n. Parallel retraction will give the expected result: razcveten, oproščen, zgrešen and pokreñjen, prošen, vóžen. We have
here an analogical change triggered by a phonological change and calculated to maintain an original accentological opposition.

Parallel retraction and the general Slavic rule that shortens all unaccented long vowels except those in most pretonic syllables combine to produce a variety of analogical changes. First of all, forms like mlaåtiim, kuüpiim among verbs and beélii, tuužii among adjectives must have caused retractions to pretonic long syllables, in stoopåam and mlaadlii. Among the verbs we get finite forms like stoopaam, seèdaam, puüščaam, udaårjaam, ubiljaam, pokršvaam. Since this was a retraction, it naturally produced a rising intonation on the root syllables. At a later date a further analogical change took place when the infinitive stem (then identical with the present stem) also acquired the same stress: stópati, sèdåti, puüšçåti, ubijåti, pokršvåti. Among the adjectives we obtain the following: mlaådii, draågii, goostii, sleeppii, skošpii.

Next we consider instances where parallel retraction and the brevity of posttonic syllables effected a lengthening of short accented vowels. The short accented vowels here are almost exclusively vowels that at one time had the old acute accent, i.e., the dimorric complex -VV-. Such syllables were evidently shortened throughout Slavic by a complex process that involved a phonological response to the anomaly of a long syllable stressed on its second component plus a phonological attempt to maintain in initial syllables a distinction between long non-rising syllables (-VV-) and rising syllables (-V-) with the latter yielding therefore a -V- rather than an expected normal -VV- and an analogical response to the general shortening of absolutely final syllables, many of which were old acutes. This second-ary lengthening would seem to occur in two different situations: 1) where the short stressed vowel appears before newly acquired long vowels developing from coalescence of various disyllabic complexes or before vowels maintained long by analogy with situations where they were in pretonic position and where maintenance of length was aided by loss of jers and 2) where no long vowel follows the short stressed vowel. The first situation appears in four morphophonological environments: 1) present forms, dèlaam, misliim, vdiim; 2) pronominalized adjectives, màiili, bogåtaa, ståroo; 3) instrumental singular of a-stem nouns, lipoo, brêzoo, slaamoo; 4) various cases of length in a suffix or desinence, mšeec, jåstreeb, bàbiin, kråviin, mišiih, råkiih. The second
situation includes 1) finite forms, măžem, kupūjem, tâjem, dvīgnem; 2) past passive participles, krăden, vīden, dvīgnjen, mīšļjen. These two situations are frequently kept distinct from each other, and I too expect to keep them apart. In the first case investigators have seen a phonetic lengthening of the short accented vowel before the immediately following long vowel. This phonetic lengthening is not nearly so convincing, however, as is the assumption of an analogical response to the anomaly of posttonic length. Then mostly in response to this loss of length in the final syllable and partly in response to retractions to long pretonic syllables because of loss of jers, the preceding stressed syllable is lengthened to produce the so-called neo-circumflex intonation as one way of maintaining the original distinction between the accentological classes. I see a bit of interesting corroboration for this assumption among pronominalized adjectives that originally had a final-columnar stress. Thus, just before this process involving loss of posttonic length and secondary lengthening of the preceding stressed syllable one has forms like gōlı, širōkı, zelēnī, debēlī, dōbrī, mōkrī, vēdrī, kāsnī. Our two-stage analogical change will yield gōlı, širōki, zelēni, debēli, but no secondary lengthening occurs in the remaining forms, where in effect the stress is on a long syllable caused by the following two consonants. It is true that we do not get forms like nōsīm; but with the many verbs exhibiting suffixes under accent there is much more reason for the language to preserve the accentological classes, and forms like mlaādi, draāgi, had already destroyed some of the accentological distinctions among the adjectives. Besides, among verb forms there is no regular pattern of consonant clusters just after the newly retracted stress. In partial response then to mlaātiim, kuu̯piim, one presumably gets déelam, mīšlim; in answer to kijuči̯ih, kra̯lji̯ih one obtains mīšīh, rākii̯h; for pronominalized adjectives like be̯eli̯, tu̯ūja one gets mālī, bōgāta, sīlar̯o; for instrumental singular feminine forms strā̯do, su̯ūso one has nī̯po, brī̯ezo, sī̯amo. We get mēse̯c, jā̯astreb, bā̯abin, kra̯avin without any specific analogical assistance. The lengthening of the accented syllable before an original short vowel as in the second situation above would seem to stem analogically mostly from the process just described. Here, too, in partial response to forms like pi̯šem, da̯ājem, kre̯nem, we get māažem, ku̯pu̯u̯jem, dvīgnem; in partial answer to kre̯e̯jen, so̯o̯jen we have krā̯aden, dvīgnjen, mīšļjen.
The next noteworthy accentological event in the history of Slovene is usually considered to be phonological in origin, but may very well be analogical. This is the well known retraction from a final short syllable to a preceding long vowel, producing the configuration -VV- in the newly accented syllable. This shift of stress is most consistent when it takes place from an absolutely final open syllable: locative singular: grádu, brégú; nominative, dative-locative, singular feminine: zíma, zími; all forms of final columnar nouns and adjectives: víno (sg) kljúča/kljúču, bêla/bêlo; the feminine singular of formerly oxytonic adjectives: slépa, mláda; certain infinitives: tréstí, mréti; feminine singular and neuter plural of -l- participles from unproductive suffixed stems: brála, začéla, mîla; all final columnar -l- participles: trésla, trésló, tréšli; singular imperatives: tréší, sódí, kréni. By this time in the system there is a number of situations where the stress is on a long vowel followed either by an original final short vowel or by a recently shortened final vowel: pilšem, mlaátim, mądžem, dêelam, ključčih, rákiih, máali, beéli, lîipo, suášo, soójen, kráanden. Besides, in some paradigms, there already existed an established pattern for stress on the preceding syllable: DP ključčem, LP ključčih; pronominalized adjectives, beéli, beelo; finite forms, trešsem, sódíši, kreděne; l-participles, bráalo, začeæli. And, furthermore, all other final accented syllables were long, e.g., možá, goró, pletó, drže. It is likely, therefore, that this retraction is a complex analogical phenomenon supported on one hand by forces of assimilation and on the other hand by forces of differentiation. The complexity of this process may be borne out by the lesser degree of consistency observed when the stress is final but on a blocked syllable: present forms: trešem, râstsem, préðem; masculine -l- participles: sódíl, písal, dfžal; supines: sódít, písat, dfžat; some prefixed nouns: nálog, zákon, nážor. It would seem that a further analogical response can be found among infinitives like písati, where there was a nonfinal original stress and where the present forms have all developed a regular neo-acute on the root syllable: vězati/věžem, lížati/lížem. In the case of verbs in -l- we observe only a tendency to pull the stress back in the infinitive form: sódítí, mlátítí.

The above retraction, itself analogical, then engendered a series of analogical changes in stress. The first of these is the retraction from short final syllables to immediately preceding short syllables containing unreduced vowels. The
last condition effectively reduces the environment to preceding o/e. The centralized vowel a was not involved in this shift as well as u/i, which must have begun to become centralized at this time; therefore, no retraction in forms like stezâ, igrâj, suknô. The following kinds of forms, however, were involved: all original final-columnar words, kônja/kôn-jem, otrôka, živôta; dôbro, zelénâ, širôka, gôla; nom. sg. forms of words with a fixed internal accent, jézik, kôzhuh, médved, prédlog; locative singulars of oxytonic words, góri, kôstî, móstú; present tense (all forms), plétem, pléteš, plétemo, péčem, péčete; imperative singular, pléti, béri, čéisî, prósî, žéli; final-columnar -l- participles and past passive participles, pléla, plélo, plélî, pleténa, pleténo, pleténi; infinitives, plésti, grébstî, péči. It should be emphasized here that at this stage the newly accented vowels o and e are short and are pronounced ơ and ĕ.

The Slovene advancement of stress plus the two preceding retractions now point the way to another series of prosodic adjustments, whereby fixed medial or internal accents are lengthened to produce more neo-circumflex accents. Since the advancement created a significant number of internal nonfinal syllables with the configuration -VV- and the retractions produced only -VV-, we find a variety of instances where a fixed medial -V- passed to -VV-. In other words there is neither retraction nor advancement here, but analogical lengthening will produce actually a so-called neo-circumflex. In this category of items fall: plural and dual imperative forms: pletîmo, pletîte, pletîva, pletîta; present tense forms where a reduced vowel in the stem blocked retraction: cvatêmo, cvatête, cvatêva, cvatêta; locative singular forms: jelenu, kovâcu; feminine instrumental plurals and duals: gorâmî, rokâmî, gorâmâ, zîmâmâ; various polysyllabic feminine nouns: besêda, rabôta, telêtina, prasêtina. When the first retraction produced vîno from vînô in the singular, then the analogical response yielded plural forms like vîna > vlîna. This response spread widely among plural forms of neuter nouns to give: vretêna, rešêta, telêta, bremêna, drevêna, vîmêna, jâgnêta. When a retraction occurred in the feminine forms of participles in -l- from unproductive suffixed stems to yield: brâl, brâla, brâlo; orâl, orâla, orâlo; kovâl, kovâla, kovâlo, then all corresponding feminine forms originally accented on the verbalizing suffix lengthened that syllable: tkâl, tkâla, tkâlo; česâl, česâla, česâlo; pîsal, pîsala, pîsâlo; kupovâl, kupovâla, kupovâlo. Here again we obtain a mirror image of the previous pattern. When the stress was retracted to original long vowels throughout
the forms of derived imperfectives, as in stópar, stópati, púščam, púščasti, the short accents that had become established on the originally long root vowels of prefixed and nonprefixed imperfectives before the rise of the neo-acute were lengthened in response: jahati/jáham, klánjati se/klánjam se, prikládati/ prikládam, prinášati/prinášam, prestájati/prestájam, odgovár- jati/odgovárjam, preskákati/preskáкам, potáplati/potápljam. Interestingly enough this prosodic change seems to involve roots with original or secondary -a-; compare the verbs umí- rati/umíram, zbírati/zbíram, sékati/sékam, dvígati/dvígam, díháti/díham. Since retraction took place exclusively from final syllables and since disyllabic forms predominated here, disyllabic barytonic words tended not to produce circumflex accents: lípa, míši, léto, pfsta, ráka, lézi, míslí, i.e., the accented syllables here acquired length and a rising intonation just as if retraction had occurred. Since advancement of stress produced a circumflex on medial syllables, polysyllabic barytonic words with initial stress also tended not to produce circumflex accents: bůkovina, kládivo jág- neta (gen. sg.), právčka.

The last significant event in the prosodic history of Conservative Standard Slovene was the lengthening of all short nonfinal stressed syllables in the following way: -v- > -vV-, affecting all open syllables not previously circumflexed. When one considers the extensive accumulation of original and secondary neo-acutes lodged on long vowels, there is nothing illogical in the lengthening of short vowels free of any possible morphological opposition to previous neo-acutes (i.e., those that could not lead to neo-circumflexes) to produce another layer of syllables with rising intonation. It is interesting to observe that in the innovative type of Modern Standard Slovene rising intonation has been lost so that all open syllables under stress are redundantly long with greater energy expended on the first part of the syllable, a normal situation similar to that which might have obtained in Common Slavic at one time in the case of the old acute intonation.

The intonational history of Conservative Standard Slovene may still not be perfectly clear, but it does appear that analogy has been a powerful moving force throughout that history. As we have seen, it can be argued quite effectively that all the changes touched upon are analogical responses to just three phonological moments in the history of the language: the retraction of stress to a laryngealized or long syllable, the retraction of stress to the initial mora
of a word, and the retraction of stress occasioned by the loss of weak jers, aided and abetted, of course, by the preservation of length only in immediately pretonic syllables.

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Footnotes


Five other works frequently consulted:


