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Editors: L. L. Hammerich,

Roman Jakobson,

Eberhard Zwirner

Morris Halle

## A Minor Accentual Rule of Contemporary Standard Russian \*

In a recent paper (HALLE (1970)) I worked out some consequences of an idea originally due to ROMAN JAKOBSON (1963, 1965) that the accentual phenomena of the Slavic languages are best viewed as being similar to those of languages such as Japanese. As is well known Japanese words have a pitch contour which falls into two parts: the first part of the word is high pitched and the second part (if any) is low pitched. Because of this it suffices to mark some vowel in the word as being the locus of the pitchbreak (Tonbruch), for once this is done we know that all vowels before it are high pitched, whereas all vowels behind are low pitched. Analogously it is possible to mark some vowel in the Russian word by some special feature [+stressed] (or [+high pitch]). We shall further assume that this feature will be distributed to all vowels in the word that precede the originally marked vowel. Finally we postulate a rule that destresses (or returns to the normal pitch) all but the last vowel. Let us call these three rules:

- (1) a) the Accent Placement Rule
- b) the Distribution Rule
- c) the Deaccentuation Rule

Since other rules may intervene and may delete (or, for that matter, insert) vowels, the stressed vowel appearing in the final output after the Deaccentuation Rule has applied need not be identical with the vowel that was marked by the Accent Placement Rule. To see this clearly consider the derivation of the output form of the two words in (2):

- (2) *v.irt,ét*                      *v.ért,iš*                      "turn" (inf. and 2. sg. pres.)

We know that the underlying representations of these two words must be (3)

- (3) *v.ert,+é++t*                      *v.ert,+é++i+š*

where the accent above the verbalizing suffix *+e+* is supplied by the Accent Placement Rule (1a), */+t, /* is the infinitive suffix, */+i+ /* is the

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present tense marker of the so-called "second" conjugation, and /+š/ is the 2. sg. desinence. Since in Russian vowels are deleted before vowels by a special rule, which we shall call the Truncation Rule (cf. JAKOBSON (1948)) the form /v,ert,+é+i+š/ will not exhibit the verbalizing suffix in the output. Observe, however, if the Truncation Rule is ordered after the Distribution Rule (1 b) and before the Deaccentuation Rule (1 c), the output string will be /v,ért,+i+š/ with the correct placement of the stress on the first syllable. To account for the output form of the infinitive we need only recall that literary standard Russian is subject to Vowel Neutralization Rules, the so-called *akan'e* and *ikan'e*, which turn all unstressed nonhigh vowels into /i/ if the preceding consonant is palatalized or palatal, and into /a/, otherwise. If these two Neutralization Rules are ordered after the Deaccentuation Rule (1 c), the required output is readily obtained.

In my paper I also adopted a suggestion originally due to T. M. LIGHTNER (1965) that in modern Russian the so-called yers—/r, b/—appear in underlying representations. These vowels appear only in certain cases in the output. Word finally and before a syllable with a full, non-yer vowel, the yers are deleted; elsewhere they are converted into /o, e/. These Yer Rules apply after the Distribution Rule (1 b) and before the Deaccentuation Rule (1 c). These Yer Rules allow us to account quite straightforwardly for the vowel-zero alternations that are such a prominent feature of Russian morphology. We can now distinguish between words such as /párk/ /párka/ 'park' (nom., gen., sg.) and /túrak/ /túrka/ 'Turk' (idem.) by postulating different underlying representation as shown in (4). The rules we have postulated so far apply then in the order indicated, and yield the correct output.

(4)	túr <b>k</b> +r	túr <b>k</b> +a	pár <b>k</b> +r	pár <b>k</b> +a
Distribution		not applicable		
Vowel Truncation		not applicable		
Yer Deletion	ø	ø	ø	ø
Yer Conversion	o	---	---	---
Deaccentuation		not applicable		
Neutralization	a	---	---	---
Output	túrak	túrka	párk	párka

A more interesting effect of this theoretical proposal is that it allows us to simplify the rules for accent placement. In particular, we can now assert that with two minor exceptions, the accent in nouns is placed either on the stem or on the desinence in all case forms of the singular and/or

the plural. There is a small class of feminine nouns in /-a/, which retract the accent from the desinence to the stem in the acc. sing., and there is a larger class of nouns of all genders and classes which retracts the accent from the desinence to the stem in the nom. pl. For all other case forms the accent is located in the same position, either on the stem or on the desinence, in each number. The largest percentage of Russian nouns have stem accent in both sg. and pl. (about 91%), these are followed by nouns which have desinential stress in both the sg. and the pl. (about 6.5%), the remaining nouns, which we shall call nouns with movable stress, make up less than 2.5% of all cases.<sup>1</sup>

There are, however, a number of apparent exceptions to the fairly simple stress patterns formulated above. Some of these are listed in (5).

(5)	a) stalá	stól	"table"	(gen. + nom. sg.)
	kiškám	kišók	"intestine"	(dat. + gen. pl.)
	b) zájom	zájma	"loan"	(nom. + gen. sg.)
	kal,éc	kól,cam	"ring"	(gen. + dat. pl.)
	s,ist,ór	s,óstram	"sister"	(gen. + dat. pl.)

The problem with the forms in (5a) is that we have not stated any rule that retracts stress from the desinence to the stem in the nom. sg. and gen. pl., yet the forms cited there would presuppose such a retraction. In (5b) there appears to be a shift of the stress from one syllable of the stem to another, which is otherwise practically unknown in the Russian declension.

As the derivations in (6) below show, however, none of the forms are in the least exceptional, all follow directly from the underlying representations and the rules that have been postulated above:

(6)	stól+š	stól+á	kišk+š	kišk+ám
Distribution	stól+š	stól+á	kišk+š	kišk+ám
Vowel Truncation	---	---	---	---
Yer Deletion	ø	---	ø	ø
Yer Conversion	---	---	ó	---
Deaccentuation	---	stól+á	kišk	kišk+ám
Neutralization	---	stal+á	---	---
Output	stól	stalá	kišók	kišk+ám

Distribution	zaj̄m+ɓ	zaj̄m+a	kol,ɓc+ɓ	kol,ɓc+am
Vowel Truncation	zaj̄m+ɓ	zaj̄m+a	kol,ɓc+ɓ	kol,ɓc+am
Yer Deletion	∅	∅	∅	∅
Yer Conversion	ó	∅	é	∅
Deaccentuation	zaj̄óm	---	kol,éc	---
Neutralization	---	---	kal,éc	---
Output	zaj̄óm	zaj̄ma	kal,éc	kol,cam

Distribution	s,ost,ɓr+ɓ	s,ost,ɓr+am
Vowel Truncation	s,ost,ɓr+ɓ	s,ost,ɓr+am
Yer Deletion	∅	∅
Yer Conversion	ó	∅
Deaccentuation	s,ost,ór	---
Neutralization	s,ist,ór	---
Output	s,ist,ór	s,ostram

There is, however, a small class nouns where the stress pattern in the declensional paradigm is not explained by the rules proposed here:

(7)	úgal	uglá	“corner”	(nom. and gen. sg.)
	úgal,	ugl,á	“coal”	(nom. and gen. sg.)
	úgar,	ugr,á	“eel”	(nom. and gen. sg.)
	úz,il	uzlá	“pack”	(nom. and gen. sg.)
	kruživ	kruževám	“lace”	(gen. and dat. pl.)
	más,il	maslám	“grease”	(gen. and dat. pl.)

The forms in the second column show that these nouns are accented on the desinence, and we should therefore expect in the nom. sg. or the gen. pl. stress on the last syllable: \*/kružév/ \*/mas,ól/ just like in /kišók/ in (6) above. Instead we have prefinal stress as shown in the first column of (7). To account for the behavior of this small class of nouns we must—if only for the sake of completeness—postulate a special Retraction Rule (8):

(8) V → [–acc]/[X --- C<sub>0</sub> [ɓ,ɓ]]

i. e., the accent is removed from a vowel which precedes a word-final yer. We shall assume that (8) is a so-called minor rule, i. e., a rule which applies only in a very restricted class of cases like those in (7). If rule (8) is ordered before the Yer Deletion Rule the expected stress contours are readily derived:

(9)	kružev+ɓ	ugrl+ɓ
Distribution	kružév+ɓ	úgřl+ɓ
Vowel Truncation	---	---
Retraction	kružev+ɓ	úgřl+ɓ
Yer Deletion	∅	∅
Yer Conversion	---	o
Deaccentuation	---	---
Neutralization	i	a
Output	kruživ	úgal

This rather minor, almost pedantic extension of the grammar has a number of somewhat more interesting consequences. The first of these is that the Retraction Rule (8) allows us to bring out clearly the fact that all neuter nouns with movable stress have stem stress invariably on the last syllable in the plural, and on the first syllable in the singular. Thus, nouns of this class with stem stress in the plural exhibit alternations such as those in (10a), whereas those with stem stress in the singular show alternations like those in (10b):

- (10) a) kal,ɓs+ó kal,ós+a “wheel”; r,išit+ó r,išót+a “sieve”; dalaɓ+ó dalaót+a “chisel” (nom. sg. and pl.).  
 b) óblak+a ablak+á “cloud”; z,érkal+a z,irikal+á “mirror”; kruživ+a kruživ+á “lace” (nom. sg. and pl.).

The words in (11) would appear to constitute exceptions to this generalization:

- (11) palatn+ó palótn+a palót,in “inen” (nom. sg. nom. pl. + gen. pl.)  
 valakn+ó valókkn+a valókan “fibre” (idem.)  
 r,im,isl+ó r,im,ósl+a r,im,ós,il “craft” (idem.)

We note that the underlying representations of the nom. pl. of the forms in (11) are ambiguous, they could be either like (12a) or like (12b):

- (12) a) volokán+a b) volókkn+a

The former would conform to the generalization noted above that in this class of nouns the plural forms have an underlying accent on the last syllable of the stem. The underlying representation (12b) would fail to conform to this generalization. In view of the stress contour of the gen. pl. forms, the underlying representation (12b) would appear to be the correct choice. We recall, however, that the Retraction Rule (8) is part of the grammar of Russian. This allows us to derive the correct stress contour for the gen. pl. forms from underlying representation that conform to the generalization proposed above:

(13)

Distribution	volok <sub>bn</sub> + <sub>ɓ</sub>	polot <sub>bn</sub> + <sub>ɓ</sub>	r <sub>em,os</sub> bl+ <sub>ɓ</sub>
Vowel Truncation	vólók <sub>bn</sub> + <sub>ɓ</sub>	pólót <sub>bn</sub> + <sub>ɓ</sub>	r <sub>ém,ós</sub> bl+ <sub>ɓ</sub>
Retraction	vólók <sub>bn</sub> + <sub>ɓ</sub>	pólót <sub>bn</sub> + <sub>ɓ</sub>	r <sub>ém,ós</sub> bl+ <sub>ɓ</sub>
Yer Deletion	∅	∅	∅
Yer Conversion	o	e	e
Deaccentuation	volókon	polót <sub>en</sub>	r <sub>em,ós</sub> el
Neutralization	valókan	palót <sub>in</sub>	r <sub>im,ós</sub> il
Output	"	"	"

The Retraction Rule also appears to be operative in the accentuation of the short form adjectives. Like the nouns the adjectives include a class that has accent on the desicence:

(14)

v <sub>i</sub> l <sub>ik</sub>	v <sub>i</sub> l <sub>ik</sub> + <sub>á</sub>	v <sub>i</sub> l <sub>ik</sub> + <sub>ó</sub>	v <sub>i</sub> l <sub>ik</sub> + <sub>í</sub>	"great"
xaróš	xaraš+ <sub>á</sub>	xaraš+ <sub>ó</sub>	xaraš+ <sub>í</sub>	"good"
mál	mal+ <sub>á</sub>	mal+ <sub>ó</sub>	mal+ <sub>í</sub>	"small"

Adjectives whose stem ends with a yer show, however, two distinct accentual patterns. On the one hand, we have those in (15a) that correspond precisely to the adjectives in (14), yet on the other hand, we have those in (15b) that deviate from those in (14) by having prefinal stress in the masc. sg. forms.

(15)

a)	sm <sub>iš</sub> ón	sm <sub>iš</sub> n+ <sub>á</sub>	sm <sub>iš</sub> n+ <sub>ó</sub>	sm <sub>iš</sub> n+ <sub>í</sub>	"funny"
	xm <sub>i</sub> l <sub>ón</sub>	xm <sub>i</sub> l <sub>n</sub> + <sub>á</sub>	xm <sub>i</sub> l <sub>n</sub> + <sub>ó</sub>	xm <sub>i</sub> l <sub>n</sub> + <sub>í</sub>	"inebriated"
	čud <sub>ón</sub>	čudn+ <sub>á</sub>	čudn+ <sub>ó</sub>	čudn+ <sub>í</sub>	"strange"
b)	ból <sub>in</sub>	bal <sub>n</sub> + <sub>á</sub>	bal <sub>n</sub> + <sub>ó</sub>	bal <sub>n</sub> + <sub>í</sub>	"sick"
	l <sub>ógok</sub>	l <sub>igk</sub> + <sub>á</sub>	l <sub>igk</sub> + <sub>ó</sub>	l <sub>igk</sub> + <sub>í</sub>	"light" <sup>2</sup>
	ráv <sub>in</sub>	ravn+ <sub>á</sub>	ravn+ <sub>ó</sub>	ravn+ <sub>í</sub>	"equal" <sup>3</sup>

The difference between the two classes is that the former are not subject to the Retraction Rule (8), whereas the latter are. We show this in the derivation (16):

(16)

Distribution	xm <sub>el</sub> bn+ <sub>ɓ</sub>	bol <sub>bn</sub> + <sub>ɓ</sub>
Retraction	xm <sub>él</sub> bn+ <sub>ɓ</sub>	ból <sub>bn</sub> + <sub>ɓ</sub>
Yer Deletion	∅	∅
Yer Conversion	ó	o
Deaccentuation	xm <sub>el</sub> ón	---
Neutralization	xm <sub>i</sub> l <sub>ón</sub>	ból <sub>in</sub>
Output	xm <sub>i</sub> l <sub>ón</sub>	ból <sub>in</sub>

We note again that the Retraction Rule (8) affects only a relatively small number of words that are, otherwise, quite disparate. It expresses, therefore, a minor regularity in the language. I believe, however, that it is worth calling attention to this minor rule as it throws an interesting light on certain difficult points in the comparative study of the Slavic accentuation. The latter, however, is beyond the scope of the present paper and will have to be treated elsewhere.

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Morris Halle  
 Department of Linguistics  
 Massachusetts Institute of Technology

## NOTES

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1. Percentages based on data in ZALIZNJAK (1967).
2. The /g/ in this word is actualized as a continuant due to a special rule which we do not give here as it has no bearing on the problem under discussion.
3. We can add to (15a) the adjective /ast,ór/ "quick witted", /um,ón/ "clever", and to (15b) /dl,in,in/ "long", /pólan/ "full", /t,óm,in/ "dark", /t,óp,il/ "warm", and /čór,in/ "black" for these adjectives possess one variant where the stress falls on the desinence in all forms. We have not listed them above, as they possess a second variant where stress goes on the desinence only in the fem. sg.
4. See HALLE (1971). Moreover, since writing this article I have had occasion to acquaint myself with the interesting dissertation of Herbert S. Coats, *Word Stress Assignment in a Generative Grammar of Russian*, (University of Illinois, 1970). Mr. Coats' results indicate that some of the proposals I made in HALLE (1970) are in need of revision. I hope to deal with this topic in a publication now in preparation.

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