

On the Structure of Russian Stress Oppositions

¹² Систему ударения в русском склонении мы предполагаем рассмотреть особо.

R. Jakobson: Footnote 12 to Морфологические наблюдения над славянским склонением (1958).

Ronald Feldstein

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My classification of Russian stress divides nouns, verbs, and adjectives into two subparadigms for the purpose of stress classification since they often work independently.

For the Russian noun, the two subparadigms are **singular and plural**.

For the verb, they are the **present/future** and **past** tense forms.

N	голова́	го́ловы
A	го́лову	го́ловы
G	голови́	голо́в
L	голове́	голова́х
D	голове́	голова́м
I	голови́й	голова́ми

Example of Subparadigms

Singular and Plural

The stress system uses the letters A, B, and C.

Two letters are used to indicate stress in reference to the two subparadigms. So, any noun or verb can be marked with the five basic stress types I have identified:

AA, BB, CC, BC, CB.

In one sense, this system looks easier and simpler than most other classifications since there are only three basic types that interact with each other in a total of five possible combinations.

But, since there are really **more** than three basic types, how do I manage this?

The answer is that within each of the basic types, certain grammatical and phonological information about stems or endings predicts what the stress really is.

So, there may be two, three, or more predictable manifestations of type B or C.

If you know how a noun is declined or a verb is conjugated, the exact stress of “type B” or “type C” can be predicted.

Definition of the “invariants” of A, B, and C types (that is, what they always mean).

1. Type A stress is fixed stress that stays on the same stem syllable throughout the whole paradigm (both subparadigms), in singular and plural for nouns and past and present for verbs. This means that type A in the present tense can only combine with type A in the past, giving us the AA type. The only place type A cannot occur is on the grammatical ending.

2. A simple stress mark can show the location of stress in type A. For the noun, крокодѐйл, жѐнщина, etc. For the verb, the basic stem or infinitive can be marked.

E.g. ста́ви— or ста́вить, which implies ста́влю, ста́вишь, ста́вила, etc. In other words, “type A” means that the stress is the same in all forms.

3. Since type A is easy, there are only two types that are hard to learn and more complicated because the stress is not always the same. These are types **B** and **C**.

4. B can be defined as stress that can occur on either the last stem syllable, the ending, or a combination of both inside a subparadigm. In other words, B stress is always adjacent—to the left or right—of the stem-ending boundary.
5. C can be defined as stress on either the first word syllable or the first syllable of the ending. That means that it always occurs to the right of either the word boundary or the stem-ending boundary.
6. These definitions can be illustrated by the following graphic.

Type A: #_____+...#

Type B: #.....-+...#

Type C: #-.....+...#

— = permitted stress placement

... = stress placement not permitted

= word boundary

+ = morpheme boundary

<i>Stressed Syllable</i>	<i>Type A</i>	<i>Type B</i>	<i>Type C</i>
Stem-initial	+	-	+
Stem-medial	+	-	-
Stem-final	+	+	-
Desinential	-	+	+

My most important finding about this stress system is the structural difference between A, B, and C types, as follows:

1. Type A is unchanging and tied to a specific lexical position.
2. Types B and C are controlled by grammatical factors.
3. If we take the noun as an example, B and C each have two possible stress locations, plus mobility between these locations.
4. The choice of the stress location comes directly out of the Jakobsonian division of Russian cases into **marginal and non-marginal**.
5. The sonority (high or low vowel property) of non-marginal endings predicts the precise placement of types B and C.
6. For the purposes of stress assignment, non-marginal cases (N-A-G) are subdivided into direct (Nom.-Acc.) and non-direct (Gen.)
7. The zero or non-zero property of the marginal non-direct (Gen.) controls the choice of type B stress.
8. The high, mid, or low vowel property of the marginal direct (Nom./Acc.) controls the choice of type C stress.

9. Types B and C past-tense verb stress also depend on sonority, but it is related to the verb stem rather than the grammatical ending.

10. The presence of a vocalic suffix neutralizes the type B vs. C opposition.

11. In the absence of a suffix, stem-final **consonant sonority** (obstruent or sonorant) predicts the choice of the B or C variant.

12. Type B vs. C opposition occurs when there is no overt vowel suffix, but has no subvariants, so no morphophonemic prediction is needed.

Thus: Noun stress ~ case endings. Verb stress ~ stem-finals

N/A: Vowel height predicts type C noun stress.

G: Zero/Non-Zero predicts type B noun stress.

-----OB- and -----SON: Stem-final obstruent/sonorant predicts past-tense verb stress.

Noun Stress

Nom/Acc (Direct, Non-marginal Case)		~ Type C
+ high ~ mobile го́ловы, голова́м	+ low ~ end-stress города́, города́м	– high/ – low ~ initial stress ко́локол, зе́ркало
Gen (Non-Direct, Non-marginal Case)		~ Type B
Non-zero ~ end-stress стола́, столы́, стола́ми		Zero ~ predesinential колба́сы, колба́с

Verb Stress

Present Tense	
Type B without overt suffix прошу́, про́сит	Predes ~ end
Type C without overt suffix говору́, говори́т	End
B with overt vocalic suffix (no type C) игр-а́й- (игра́ю, игра́ешь, etc.)	Predesinential

Past Tense	
Unaffixed type B Obstruent stem загры́зла Sonorant stem зача́ли ~ зачала́	Predesinential Predes ~ end
Unaffixed type C Obstruent stem понесло́ Sonorant stem про́жили ~ прожила́	End Initial ~ end
B with overt vocalic suffix (no type C) Syllabic root + V говори́ла	Predesinential
Non-syllabic root + V собра́ли, собрала́	Predesinential ~ end

Inventory of Different Noun Stress Types

I. Nouns with Nsg Zero ending

Type	Example	Description
AA	авто́бус/авто́бусы	Same stem-stress in whole paradigm.
BB	кома́р/кома́ры	End-stress in all forms. Gen. non-zero.
CC 1.Npl -i 2.N pl -a	лебе́дь/лебе́ди; ло́шадь/ло́шади го́род/города́	Initial stress in sing. with NA zero. Mobile plural if NA -i. End- stressed plural if NA -a. Applies to masc. and fem. nouns.
BC	гво́здь/гво́зди	Mobile plural with NA -i.
CB	са́д/сады́	C rules in sing./B rules in plural.

II. Nouns with Nsg -a ending

Type	Example	Description
AA	ко́рова/ко́ровы	Same stem-stress in whole paradigm.
BB	стрекоза́/стреко́зы; стреко́з	End if non-zero gen. (sing.). Predesinential if zero genitive (plural).
CC	голова́, го́лову го́ловы, голова́ми	Sing. and plural mobility both due to + high direct case (Sing. -u, Plur. -i).
BC	железа́/же́лезы, железа́м	End-stress in sing./Mobile plural.
CB	вода́, во́ду во́ды, вода́ми	Mobile sing. with +high direct case -u. Predesinential plural with zero genitive.

III. Nouns with Nsg -o ending

Type	Example	Description
AA	пра́вило/пра́вила	Same stem-stress in whole paradigm.
BB	веретенó/веретёна;веретён	End if non-zero gen. (sing.). Predesinential if zero genitive (plural).
CC	зёркало/зеркалá	Sing. initial due to non-high/non-low mid vowel NA; plural end-stress due to low -a NA.
BC	торжествó	End-stress throughout but follows plural C pattern with -a plural.
CB	óзеро; озëра	Initial sing. with mid-vowel NA. Predesinential plural due to zero genitive.

If end-stress can realize either type B or type C, how is an end-stressed subparadigm assigned to one of these types?

The answer is that if we compare identical morphological forms of types B and C, one of them almost always has an **unambiguous** pattern such as **initial for type C** or **predesinential for type B**.

Then, if the remaining unmarked end-stress type is opposed to a marked initial C, it can be assigned to B; in the opposite case, if the unmarked end-stress is opposed to a marked predesinential B, then it is assigned to C.

So, unmarked end-stress can realize either type B or C, depending on which marked type it is opposed to.

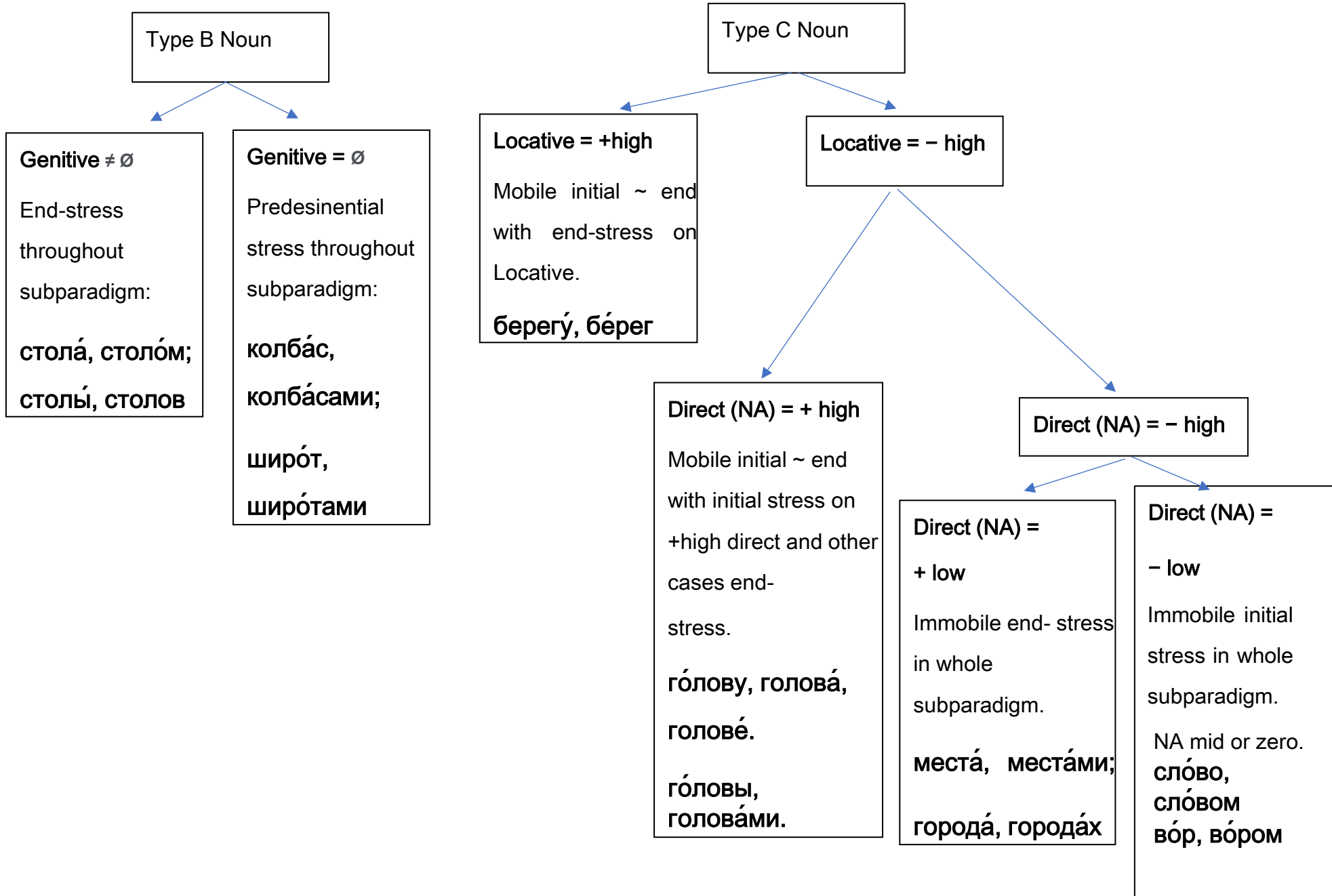
For example, the singular and plural end-stress of *комáр*, *комары́* is opposed to initial type C in the singular (*гóрод*, *кóлокол*, etc.), so the end-stress of *комáр* is type B.

Conversely, the end-stress of neuter plurals with the NA –a ending (*зеркала́*, etc.) is opposed to pre-desinential neuter plural *веретёна*.

Since a pre-desinential plural can only be type B, the opposed pre-desinential end-stress is assigned to type C.

This method stands in contrast to many classifications that identify a pattern as an unchanging type, regardless of its oppositions and function because it is thought to be too confusing to say that Russian end-stress is not always type B, but sometimes B and sometimes C. However, I would say that this reflects the complex behavior of the language.

Grammatical Stress Oppositions of the Russian Noun



Grammatical Stress Oppositions of the Russian Verb

Type B

Type C

B IMMOBILE
= PREDESINENTIAL

B MOBILE
= PREDES ~ END

C IMMOBILE
= END

C MOBILE
= INITIAL ~ END

PRESENT TENSE:
CVC-Ý...
игра́й- (игра́ю,
игра́ешь...)

PRESENT TENSE:
NO OVERT SUFFIX IN
PRESENT
пиш-у́, пи́ш-ут
Isolated mobile stress on
final high vowel.

PRESENT TENSE:
NO OVERT SUFFIX IN
PRESENT
говор-ю́, говор-я́т

(UNUSED IN PRESENT)

PAST TENSE:
1.OBSTRUENT STEM
гры́з-ла, гры́з-ли
2.CVC-V...
игра́-ла, игра́-ли
говори́-ла, говори́-ли

PAST TENSE:
1.SONORANT STEM
запи-ла́, запи́-ли
2.C/C-V...
зобра-ла́, зобра́-ли

PAST TENSE:
OBSTRUENT STEM
понес-ла́, понес-ли́

PAST TENSE:
SONORANT STEM
запи-ла́, за́пи-ли

Summary of Russian Structural Patterns Correlated to Stress Patterns (if time permits)

There are many examples where vowel sonority (either vowel height or vowel vs. zero) is correlated with stress. In Jakobsonian terms, vowel sonority represents **inherent sonority**, while stress represents **prosodic sonority**. It may be that stress is being used as a redundant feature of vowel sonority. Several examples will follow.

I. Noun

A. Predictable **variants of B and C types** depend on the sonority of endings: vowel~zero for B and vowel height for C.

1. The two variants of **type B** (end stress or predesinential) are determined by the sonority of the genitive case—either a vowel or zero. E.g. end stress столá/столóв for both subparadigms (non-zero genitives); plural predesinential subparadigm for колбáс (zero genitive).

2. Three hierarchical sonority variations determine the distribution of **type C**:

- a. Type C mobility with high locative ending (на берегу́, на о́си vs. other forms)
- b. Type C mobility with non-high locative but a high direct case ending (го́лову vs. other singular; го́ловы vs. other plural).
- c. Type C immobility direct cases are non-high vowel; end stress if a low direct case (plural ме́ста́); initial stress if non- high and non-low (i.e. mid or zero, e.g. singular зе́ркало, ко́локол).

B. Distribution of **mobile stress** within a single subparadigm

(Noun Singular/Plural; Verb Present/Past)

1. In each mobile subparadigm, a **single deviating stress** is opposed to all others and distributed in a particular way.

a. Noun plural and singular both share the use of a **direct case** (nominative and/or accusative) as the deviating stress.

b. In the **noun singular**, the direct case (accusative) deviating stress uses the unstressed **high rounded -u** (e.g. во́ду vs. водо́й, etc.).

c. In the **noun plural**, the matching direct case deviating form uses unstressed **high unrounded -i** (e.g. го́ловы vs. головáм, etc.)

d. The locative singular deviating form uses either high rounded or unrounded, but it is **stressed**, in contrast to the direct case type.

2. Thus the mark of **type C mobile nouns** is a high vowel ending in the deviating case (берег[́]/го[́]лову/го[́]ловы), but the mark of **C immobility** is a **non-high vowel** in both direct cases (nominative and accusative; either low or non-low, e.g. ко[́]локол, зе[́]ркало, зерка[́]ла).

II. Verb

A. In the noun, only type C can have stress mobility (initial~end), as in бе́рег/берега́; голова́/го́лову. But verbs can have two kinds of mobility: **type B** (predesinential~end, напишу́/напи́шет; забрала́/забра́ли) and also **type C** (initial~end, прожила́/про́жили). There is a minimal pair with two kinds of mobility in the past tense: за́пил~запила́ vs. запи́л~запила́.

B. Like nouns, verbs also have a single deviating stress in mobile subparadigms. As in the noun, there is a structural difference: low deviating vowels occur in the past tense, but high vowels occur in the present (e.g. past забралá, прожила́, but present расскажу́, напишу́).

C. Noun mobility is correlated with declensional endings in specific cases (mainly NAG), but verb mobility depends on the stem structure, as follows:

1. Both B and C obstruent stems have immobile past tense stress (B: гры́зло, стрі́гло, упáло; C: теклó, греблó, неслó, везлó), with B predesinential and C end stressed.

2. B and C sonorant stems have mobile stress: (B predesinential~end: зачáл~зачалá; C initial~end: нáчал~началá).

3. Presence of a vocalic suffix neutralizes the type B vs. C opposition and is realized as type B. E.g. говорить and просить lose their suffix vowel in the present and can oppose types B and C (present tense predesinential mobile прошу́/про́сишь vs. говорю́/говорíшь, but merged past tense due to suffix -и-: проси́ла/говорíла, etc.).

4. This stress rule does not operate on the Jakobsonian basic form, which always has the undeleted suffix vowel. Rather, it operates after the suffix vowel gets deleted in the present tense, but not in the past tense.

5. Other stress rules **do** follow the Jakobsonian basic form prior to consonant deletion. E.g. unsuffixed verb stems ending in *d/t* pattern like obstruents in the past tense, having immobile end stress, in spite of the deletion of the final consonant (e.g. велó, мелó), while sonorant stems with the same deletion are mobile in the past (жіло~жилá, піло~пилá).

6. The presence of a vocalic suffix means that no type B vs. C stress opposition can occur and both types merge as (unmarked) type B. There are two subtypes of merged B/C stress with a suffix vowel, as follows:

a. In the case of a non-syllabic root and syllabic suffix, types B and C merge with pre-desinential~end mobile stress in the subparadigm (e.g. забралá~забра́ли).

b. In the case of a syllabic root and syllabic suffix, types B and C merge with constant predesinential stress in the subparadigm (Present игра́й-у; Past игра́-ла. говори́-ла).

c. Thus, the greater or lesser number of vocalic morphemes in the root-suffix sequence represents a variable amount of sonority and is correlated to the B/C stress opposition and its mobility.