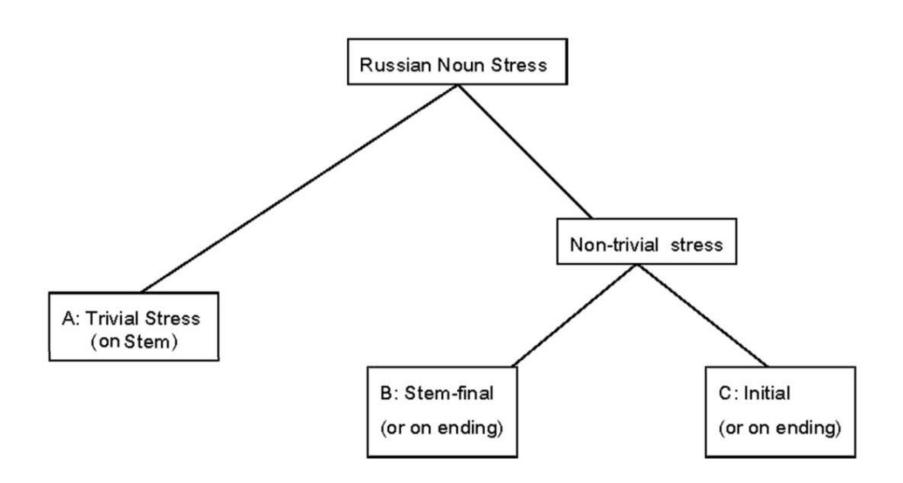
Basic Principles of Russian Noun Stress

- Russian stress types can often look complicated and hard to remember.
- I would like to present the stress types in a new way.
- The vast majority of Russian words has constant stress on a fixed syllable in all of its forms. For these words, you just have to remember where the stress is.
- Called **type A**, e.g. желу́док, ба́бушка, де́йствие.
- Can also be called "lexical" stress: a word (lexical item) determines where the stress is in all its forms.

- More troublesome types of Russian stress: accent is not on the same stem syllable in all forms.
- Grammatical or morphological stress: grammatical positions determine stress.
- We will concentrate on Russian noun stress and look at the singular and plural patterns as separate units, since that shows the system better.
- Singular and plural forms together are known as the paradigm. Singular or plural forms alone are subparadigms.
- Two basic types of morphological stress are: type
 B and type C.

- Types B and C each have two possible stress positions:
- 1. Type B can stress either the ending or the stemfinal syllable (right before the ending).
- 2. Type **C** can stress either the ending or the word-initial syllable.
- Recalling that type A can stress any stem syllable, here is a diagram comparing all three, where the underline shows possible stress for each type:
- A: #_____ # B: #..... __ # C: # __..... __ #



- Here are some examples showing these stress positions. For types B and C, the examples are shown either in the singular or plural subparadigm:
- 1. Examples for A on different stem syllables: **бабушка**, **желу́док**, **боло́то** (stress remains on the same syllable throughout the paradigm).
- 2. Examples for **B** on ending and stem-final: **веретено́/веретёна**; **сирота́/сиро́ты**
- 3. Examples for **C** on ending and initial: голова́/го́лову; го́ловы/голова́м; ве́домости/ведомосте́й

- Types B and C each can have two subtypes. Type B subtypes depend on the genitive case ending, while type C subtypes depend on the nominative case ending.
- Let us start with rules and examples for type B.

Type B Stress Pattern Rules								
Applies to: Both Singular and	Applies to: Plural only.							
Plural								
Genitive = Non-zero	Genitive = Zero							
Result: End-stress in entire	Result: Stem-final stress in							
subparadigm	entire subparadigm							

- The B subtypes are genitive case ending in a zero or something else (non-zero). In the singular, there is only the non-zero genitive and end-stress.
- Rule: if the type B genitive is zero, all subparadigmatic forms stress the stem-final; if the genitive case is non-zero, they stress the ending.
- Thus, the B singular has no opposition of B subtypes and has a neutralized end-stress. But, B plural can have both zero and non-zero genitives, so it can have either stem-final stress (веретёна) or end-stress (столы́).

 Examples of type B subparadigms with non-zero genitive and end-stress (since all genitive singular endings are non-zero, all singular Bstress is end-stress):

N	язы́к	веретено́	стрекоза́
Α	язы́к	веретено́	стрекозу́
G	языка́	веретена́	стрекозы́
L	языке́	веретене́	стрекозе́
D	языку́	веретену́	стрекозе́
I	языко́м	веретено́м	стрекозо́й

Now consider the same nouns in the plural. Note that
the first noun also has a non-zero genitive plural, like
its genitive singular. But, the other two nouns have
zero genitive plurals, which causes them to have
stem-final stress in the entire plural subparadigm, as
follows:

N	языки́	веретёна	стреко́зы
Α	языки́	веретёна	стреко́зы
G	языко́в	веретён	стреко́з
L	языка́х	веретёнах	стреко́зах
D	языка́м	веретёнам	стреко́зам
1	языка́ми	веретёнами	стреко́зами

 Note that a type B noun has the same stress throughout each subparadigm (either stem-final or end-stress). (Mobility is only number mobility, i.e. across singular and plural subparadigms.

- Type C differs in that stress can have case mobility, i.e. a single case form that differs from all the other cases within a subparadigm (e.g. голова́, but голову).
- This single opposed form always has a high vowel ending (/i/ or /u/) and always affects either the Direct (Nominative/Accusative) cases or the Peripheral Locative-2 (e.g. на берегу́).

- Thus, every C type subparadigm involves a double calculation:
- 1. Determination of the possible single mobile form.
- 2. Determination of the uniform stress of all the other forms, except for the **single mobile form**.
- The existence of a single mobile form depends on whether there is a nominative, accusative, or locative which ends in a high vowel (by definition, one could say that a high vowel locative is a "locative-2).

- The stress of type C subtypes is based on the nominative case. As with type B, the major factor is whether a zero occurs.
- 1. If the nominative zero or mid-vowel ending, all subparadigmatic forms have initial stress, except for the single mobile form, which has end-stress.
- 2. If the nominative has something other than a zero/mid-vowel ending, i.e. a high or low vowel (i, a), then the subparadigmatic forms are the opposite, having end-stress, except for the single mobile form, which has initial stress.
- This pattern is illustrated in the following table.

Type C Stress	Pattern Rules
Nominative = Zero/Mid	Nominative = High/Low
Applies to: Singular only.	Applies to: Both Singular
	and Plural.
Result: Initial stress in	Result: End-stress in entire
entire subparadigm, except	subparadigm, except for
for one mobile form:	one mobile form:
end-stress in high-vowel	initial stress in high-vowel
locative (Locative-2).	nom./acc. (Direct case).
Mobile form = high-vowel	Mobile form = high vowel
locative-2	nominative/accusative

- Let us examine the range of type C singular subparadigms. Both high/low and Ø/mid nominatives can occur here, yielding primarily initial stress and end-stress.
- The first four examples in the table have zero nominatives and end-stress only on high-vowel locatives (if they occur). Midvowel nominative (зе́ркало) is similar.
- **голова́** represents the high/low class, with mainly end-stress, except for a direct case in a high vowel. **Mobile** forms bolded.

N	бе́рег	во́лк	ве́домость	óсь	зе́ркало	голова́
A	бе́рег	во́лка	ве́домость	óсь	зе́ркало	го́лову
G	бе́рега	во́лка	ве́домости	о́си	зе́ркала	головы́
L	бе́реге	во́лку	ве́домости	о́си	зе́ркале	голове́
D	бе́регу	во́лке	ве́домости	о́си	зе́ркалу	голове́
	бе́регом	берегом волком ведом		о́сью	зе́ркалом	голово́й
L2	берегу́			оси		

 Here is the plural of the nouns shown above. Only the high/low types of nominatives can occur in the type C plural (since there is no zero or mid-vowel nominative plural); likewise, no high-vowel locative is possible. The pattern is end-stress, except for the syncretic direct case form (nom./acc.), with high vowel ending /-i/.
 Opposed forms are in bold.

N	берега	во́лки	ве́домости	о́си	зеркала́	го́ловы
Α	берега	волко́в	ве́домости	о́си	зеркала́	го́ловы
G	берегов	волко́в	ведомосте́й	осе́й	зерка́л-Ø	голо́в-Ø
L	берегах	волка́х	ведомостя́х	ося́х	зеркала́х	голова́х
D	берега́м	волка́м	ведомостя́м	ося́м	зеркала́м	голова́м
I	берега́ми	волка́ми	ведомостя́ми	ося́ми	зеркала́ми	голова́ми

- The stress behavior seen above permits some conclusions.
- Both types B and C rely on zero or non-zero forms in the genitive and nominative, respectively.
- When no zero form occurs, B has a default end-stress in the singular, while C has a default end-stress in the plural.
- A zero form triggers the subparadigmatic use of the distinctive stress of B (stem-final) and C (initial).
- Since a zero ending cannot admit actual stress, this appears to be the avoidance of end-stress in subparadigms containing a zero. In the type C singular, mid-vowel endings (marked negatively for both high and low) follow the zero pattern, with initial stress (i.e. зе́ркало, like го́род), in contrast to the end-stressed low-vowel nominative (голова́).

- In addition to the pure type B and C types shown, there are "mixed" types, with type B singular and type C plural, or vice versa. Thus, the entire regular stress inventory for Russian consists of five types:
- 1. Type A lexical stress with constant stress in all forms.
- 2. Type **B** in both singular and plural.
- 3. Type **C** in both singular and plural.
- 4. Mixed BC, with B in singular and C in plural.
- 5. Mixed CB, with C in singular and B in plural.

- **BC** examples: конь, губа, очко
- **CB** examples: шаг, вода, озеро

In the case of a BC noun, the genitive form would determine the stress in the singular, while the nominative would do so in the plural. For example, конь acts like a B, with end-stress, in the singular (коня́); but, like a C, with mobile stress in the plural (кони, коней, коня́ми).

• For reference, examples of all the major types are shown on the following table. The "pure" types are listed as **AA**, **BB**, **CC**, to show that both singular and plural subparadigms follow the same pattern, in contrast to **BC** and **CB** types.

Basic Inventory of Nominal Stress Types in the Main Russian Declensions										
Nominative in	Zero	Nominative	in -a	Nominative in	Nominative in -o					
рак, ладонь	AA	липа	AA	яблоко	AA					
стол, путь	BB	жена	BB	число, очки	BB					
зуб, ночь	CC	голова	CC	море	CC					
конь	BC	губа	BC	вещество	BC					
сад	CB	вода	СВ	озеро	CB					

It also should be noted that there are some exceptional groups that don't fit this model. One of the main ones is a group of loan words, largely from Caucasian, Central Asian, and Old Church Slavonic sources, which have type **B** end-stressed plurals, in spite of their zero genitive plurals and expected stem-final stress. E.g. **тамада**; plural **тамады**, not expected ***тамады**.

- Note that bisyllabic stems (ко́локола, колбасы) distinguish initial and stem-final stress. We can infer that similar monosyllabic stems have the same pattern, (во́лка, во́ды), since there is no singular pattern of stem-final in a singular noun like ко́локол and no initial pattern in a plural noun like колбасы. Thus, I identify колокол and волк singular stress patterns as type C, and also колбаса and вода plural stress patterns type B.
- Lagerberg criticized my system for using "historical" data to conclude that the similar stresses of singular во́лк(а) and plural во́д(ы) are really different. The point is that you do not make phonological conclusions about neutralized forms!
- The final phonemes of Russian [kot] can only be determined if we look outside word-final, since that also is a neutralized environment (слабая позиция). Cf. кота́, ко́да.

 Survey of how the subparadigmatic paradigms function on the level of full paradigms.

I. AA types with constant stress throughout, on any stem syllable. (я́блоко, желу́док, учени́ца)

					Desinence	Γ					Desinence
Type AA		Initial	Medial	Stem-final	(Ending)			Initial	Medial	Stem-final	(Ending)
Туре AA я́блоко	N	X					N	X			
	Α	X					Α	X			
	G	X					G	X			
	L	X					L	X			
	D	X	i				D	X			
	1	X					1	Χ			
	(L-2)		1								,

Result: Constant initial.

				Desinence					Desinence
Type AA	Initial	Medial	Stem-final	(Ending)		Initial	Medial	Stem-final	(Ending)
желу́док	N	X			N		X		
	Α	X			Α		X		
	G	X			G		X		
	L	X			L		Χ		
	D	X			D		X		
	1	X			1		Χ		
	(L-2)							•	

Result: Constant medial.

					Desinence					Desinence
Type AA		Initial	Medial	Stem-final	(Ending)		Initial	Medial	Stem-final	(Ending)
учени́ца	N			Χ		N			X	
'	Α			X		Α			X	
	G			Х		G			X	
	L			Х		L			X	
	D			Х		D			X	
	1			X		I			X	
	(L-2)									

Result: Constant stem-final.

II. BB types, where plural stress depends on presence or absence of genitive zero-ending. (учени́к, ремесло́, колбаса́

					Desinence						Desinence
Type BB		Initial	Medial	Stem-final	(Ending)	١.		Initial	Medial	Stem-final	(Ending)
учени́к	N				X		N				X
Gpl≠Ø	Α				X		Α				X
op., p	G				X		G				X
	L				X		L				X
	D				X		D				X
	1				X		T				X
	(L-2)		1			Ι.					

Result: Constant desinential.

Type BB		Initial	Medial	Stem-final	Desinence (Ending)		Initial	Medial	Stem-final	Desinence (Ending)
	N.	miciai	·	Sterri riirar	V	NI.	miciai	Tricular	v	(Erraing)
ремесло	N				X	N			Χ	
Gpl=Ø	Α				X	Α			X	
J.	G				X	G			X	
	L				X	L			X	
	D				X	D			X	
	1				X	1			X	
	(L-2)									

Result: Entire singular vs. plural (number mobility).

					Desinence					Desinence
Type BB		Initial	Medial	Stem-final	(Ending)		Initial	Medial	Stem-final	(Ending)
колбаса́	N				X	N			X	
Gpl=Ø	Α				X	Α			X	
-	G		•		X	G			X	
	L				X	L			X	
	D				X	D			X	
	1				X	T			X	
	(L-2)									

Result: Entire singular vs. plural (number mobility).

III. CC types:

- A. Singular stress depends on whether Nsg ending is "Ø/mid" or "high/low"
- B. Case mobility depends on whether direct (NA) and L2 cases have high vowels (i, u).

(зуб, ве́домость, голова́, зе́ркало, го́род)

					Desinence	Π					Desinence
Type CC		Initial	Medial	Stem-final	(Ending)			Initial	Medial	Stem-final	(Ending)
зу́б	N	Χ					N	X			
Nsg=	Α	Χ					Α	X			
Nsg= "Ø/mid"	G	Χ	1				G				X
	L	Χ					L				X
	D	Χ					D				X
	1	Χ		Ì			1				X
	L-2		!		X						

Result: Number mobility in oblique, leads to pressure to change Npl to -a', with full number mobility, as in $z \circ p \circ d$.

					Desinence					Desinence
Type CC		Initial	Medial	Stem-final	(Ending)		Initial	Medial	Stem-final	(Ending)
ве́домость	N	Χ				N	X			
Nsg=	Α	Χ				Α	X			
Nsg= "Ø/mid"	G	Χ				G				X
	L	Χ				L				X
	D	Χ				D				X
	1	Χ				1				X
	(L-2	2)								

Result: Number mobility only in oblique cases.

					Desinence					Desinence
Type CC		Initial	Medial	Stem-final	(Ending)		Initial	Medial	Stem-final	(Ending)
голова́	N				X	N	X			
Nsg=	Α	Χ				Α	X			
Nsg= "i/a"	G		•		X	G			1	X
	L				X	L				X
	D		:		X	D			!	X
	1				X	1				X
	(L-2))								

Result: Number mobility only in the nominative.

					Desinence					Desinence
Type CC		Initial	Medial	Stem-final	(Ending)		Initial	Medial	Stem-final	(Ending)
зе́ркало	N	Χ				N				X
	Α	Χ				Α				X
Nsg= "Ø/mid"	G	Χ				G				X
	L	Χ				L				X
	D	Χ				D				X
	1	Χ				T				X
	(L-2))								

Result: Number mobility in full paradigm.

Type CC		Initial	Medial	Stem-final	Desinence (Ending)		Initial	Medial	Stem-final	Desinence (Ending)
го́род	N	X	1	. Stein illia	(Ename)	N	miciai	Wicaiai	i stem man	X
1 1	A	X	!			A			!	X
Nsg= "Ø/mid"	G	X	i			G				X
p/illia	L	Х	1			L				X
	D	X	1			D			!	X
	1	Χ				T				X
	(L-2)		:						•	

Result: Number mobility in full paradigm, thanks to new -a ending in direct (NA) plural.

IV. BC mixed type: singular stress follows B type and must be end, due to non-zero Gsg. Plural stress follows C type and cannot be fully initial, due to no possible "Ø/mid" ending in Npl. (гвоздь, губа, существо).

					Desinence	Γ					Desinence
Type BC		Initial	Medial	Stem-final	(Ending)			Initial	Medial	Stem-final	(Ending)
гво́здь	N				X		N	X			
	Α				X		Α	X			
	G				Х		G				X
	L				Х		L				X
	D				Х		D				X
	1				Х		T				X
	(L-2)										

Result: Number mobility in direct (NA) cases only

					Desinence					Desinence
Type BC		Initial	Medial	Stem-final	(Ending)		Initial	Medial	Stem-final	(Ending)
губа́	N				X	N	Χ			
	Α				X	Α	Χ			
	G				Х	G				X
	L		-		Х	L				X
	D				X	D			:	X
	1		-	!	X	1		! !	!	X
	(L-2)		-	 						

Result: Number mobility only in direct cases NA.

Type BC	Initial	Medial	Stem-final	Desinence (Ending)		Initial	Medial	Stem-final	Desinence (Ending)
существо́	N	1		X	N			!	X
-, -,	Α	į		X	Α			!	X
	G		:	Х	G			;	X
	L			X	L				X
	D			X	D				X
	1			X	1				X
	(L-2)								

Result: All end-stress, no mobility.

V. CB mixed type: singular stress follows C and plural stress follows B (сад, вода, озеро).

					Desinence					Desinence
Type CB		Initial	Medial	Stem-final	(Ending)		Initial	Medial	Stem-final	(Ending)
са́д	N	X				N				X
	Α	X				Α				X
	G	X				G				X
	L	X	1			L				X
	D	Χ				D			!	Х
	1	Χ				1			:	Х
	(L-2))								,

					Desinence					Desinence
Type CB		Initial	Medial	Stem-final	(Ending)		Initial	Medial	Stem-final	(Ending)
вода́	N				X	N			X	
Nsg=	Α	X				Α			X	
Nsg= "i/a"	G				X	G			X	
Gpl=Ø	L				X	L			X	
Opi-2	D				X	D			X	
	1				X	1			X	
	(L-2)									,

Result: Number mobility except for accusative; accusative mobility cannot be realized due to no polysyllabic stems in this type, neutralizing initial and stem-final positions.

					Desinence					Desinence
Type CB		Initial	Medial	Stem-final	(Ending)		Initial	Medial	Stem-final	(Ending)
о́зеро	N	Χ				N			X	
Nsg=	Α	Χ				Α			X	
"Ø/mid"	G	Χ				G			X	
Gpl=Ø	L	Χ	1			L			X	
Ghi-60	D	Х	1			D			X	
	1	Χ	1			1			X	
	(L-2)								,	

Result: Number mobility within stem, opposing initial and stem-final, due to bisyllabic stem.

A quick glance at how verb stress works:

- Present tense verb stress is much simpler than noun stress. The roles of B and C are reversed.
- In nouns, type C (initial~end) was mobile, but for verbs type B is mobile (stem-final~end) and type C has constant end-stress, a kind of role reversal.
- Type B stem-final is conditioned by an ending in a vowel (люблю́, любя́, люби́; but лю́бит).

Table 5. Verbal Present Tense Stress Opposition of AP B vs. C.

AP B		APC	
Stem-Final Stress Desinence: -	End-Stress Stress is ad- vanced when	Stem-Initial Stress	End-Stress Stress is ad- vanced to all
VC	desinence is -V#		desinences.
(i.e. desinence consists of a vowel followed	(i.e. desinence is a single vowel)	cur in present.	E.g. govorjú, govoríš', gov-
by a consonant)	E.g. prošú, pro- sí, prosjá		orját
E.g. prósiš', prósjat	10%	- 17.	

- In the past tense, there is no difference between stress types B and C, since the past is considered a derived form, and B and C merge when derived.
- A combination of stem-size and stem-type allows us to predict B/C merged past tense stress in almost all cases. Here is a table that shows the rules:

Table 6. Verbal Past Tense Subparadigm (non-trivial AP B and C merge and stress is predictable).

Longer, heavier stems. Non-suffixed obstruent stems and syllabic root+suffix. Stress: No stress mobility in past subparadigm.		Shorter, lighter stems. Sonorant stems and non-syllabic root+suffix. Stress: Mobility occurs in past subparadigm, with advancement to the -a desinence.	
Non-suffixed with mid vow- el root.	Syllabic Suffixed and non-suf- fixed with high/ low vowel root.	Non-suffixed	Non-syllabic suf- fixed
Obstruent stems (with mid-vow- el root): e.g. moglá, mo- gló; velá, veló.	Syllabic suf- fixed stems: e.g. govorila, govorilo; prosi- la, prosilo.	Sonorant Stems: e.g. próžilo, prožilá; náčalo, načalá.	Non-syllabic root plus suffix: e.g. sobrálo, sobra- lá; porválo, por- valá; prospálo, prospalá.
	2. Non-suffixed with high or low root vowel: e.g. grýzla, strígla, krála, klála.		
Generalization of same AP C pattern as in present tense: stress shift to all desinences.	Generalization of AP B stress on stem-final syllable: no stress shift from stem- final.	Generalization of AP C, with rule that shifts stress to -a desinence (prožilá). Before other endings, stress generalizes AP C stem-initial: próžilo, próžili.	Generalization of AP B, with rule that shifts stress to a-desinence (rvalá). Before other endings, stress generalizes AP B stem-final: porválo, porváli.

 That ends our survey of Russian stress. Due to the large number of details, it takes many hours of study to master the system.

 I hope this gave you some idea of what the system looks like.