# Rhythmical Ambiguity: Verbal Forms and Verse Forms

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Abstract: In undertaking the statistical analysis of the rhythm of Russian syllabic-accentual verse, one confronts a problem: how to accentuate words whose natural-language stress is weaker than that of fully-stressed words. Zhirmunsky called such words "ambiguous" and formulated a rule: they should be considered stressed in "strong" (ictic) positions and unstressed in "weak" (non-ictic) positions. Gasparov, who accepted and elaborated on Zhirmunsky's rule, pointed out that "this difference in the quality of stress in strong positions [...] has a significant impact on the rhythm of verse, especially that of ternary meters." The main point of the present paper is that this ambiguity equally impacts Russian binary meters. In the case of iambic tetrameter, for example, fully-stressed lines that contain rhythmically ambiguous words are often isomorphic with the predominating rhythmical form. In the present paper, this phenomenon is explored in connection with Jakobson's hypothesis that rhythmically ambiguous words gravitate toward "weak" (i.e. less frequently stressed) ictuses. Although Jakobson's view of accentual ambiguity was different from Zhirmunsky's, and Jakobson's calculation was, in fact, methodologically inaccurate, a cross-pollination of their approaches may prove fruitful.

Keywords: syllabic-accentual meters; rhythmical varieties; rhythmical ambiguity

# 1. The problem

In undertaking the statistical analysis of the rhythm of Russian syllabic-accentual verse, one confronts a specific problem: how to accentuate words whose natural-language stress is weaker than that of fully-stressed words. This group includes monosyllabic pronouns, monosyllabic verbal copulas, disyllabic possessive pronouns in the post-nominal position, disyllabic prepositions, and the like.

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Viktor Zhirmunsky called these words "metrically ambiguous" ("*metricheski dvojstvennye*") and formulated a rule: they should be considered stressed in "strong" (ictic) positions and unstressed in "weak" (non-ictic) positions (Zhirmunsky 1925: 95–120 [§§ 17–19]; English translation: Zhirmunsky 1966: 93–113). In other words, their rhythmical interpretation depends on the metrical scheme. It would therefore be more reasonable to describe such words as "rhythmically ambiguous" rather than "metrically ambiguous", because they never alter or violate the metrical interpretation of a line but indeed affect its rhythmical interpretation.

Mikhail L. Gasparov, who accepted and elaborated on Zhirmunsky's rule (see Gasparov 1974: 132–137), issued an important caveat: he pointed out that "schematic stresses may have different strengths depending on whether they are represented by an unconditionally stressed word or an accentually ambiguous word. This difference in the quality of stress in strong positions has not yet been studied by verse theorists, though it has a significant impact on the rhythm of verse, especially that of ternary meters" (Gasparov 1974: 148–149).<sup>1</sup>

The main point of the present paper is that this ambiguity equally affects Russian binary meters, and therefore is all the more deserving of examination. To demonstrate this claim, I will target the best studied Russian meter, iambic tetrameter. In the rhythmical compositions of many poems, the fully-stressed lines (Form I), which contain rhythmically ambiguous words, often tend to be isomorphic with the predominating rhythmical form.<sup>2</sup> To put it simply, if we mark the rhythmically ambiguous words on ictic positions as unstressed, the resulting rhythmical forms could theoretically coincide with any of the other seven rhythmical forms of iambic tetrameter. In practice, however, rhythmically ambiguous lines often coincide with the form that predominates in the poem. In particular, this applies to poems with a high level of "rhythmical monotony", i.e. the poems (or fragments thereof) in which one or two forms constitute extensive homogeneous groups (see Beglov 1996a, 1996b, 1997; Liapin 2001). In terms of the Jakobsonian dichotomy of *verse instance* and *delivery instance* (Jakobson 1960 [1958]: 364–367), almost all such rhythmically ambiguous lines can be "delivered" (i.e. recited) in two different ways: either with or without

<sup>1</sup> Translations from Russian are mine unless otherwise noted.

<sup>&</sup>lt;sup>2</sup> It is generally accepted to use the form numbers proposed by Georgii Shengeli (see Shengeli 1923: 139–141). The unstressed ictuses are underlined here and in all later examples:

xXxXxXxX(x)	Ι	$x \underline{x} x \underline{x} x X x X(x)$	V
$x \underline{x} x X x X x X (x)$	II	$x \underline{x} x X x \underline{x} x X(x)$	VI
$xXx\underline{x}xXxX(x)$	III	$xXx\underline{x}x\underline{x}xX(x)$	VII
$xXxXx\underline{x}xX(x)$	IV	$x\underline{x}x\underline{x}x\underline{x}x\underline{x}xX(x)$	VIII

skipping the stress on the rhythmically ambiguous word. Even if such words do not completely lose stress in the course of recitation, they can bear a "lighter" stress in comparison with fully-stressed words (Gasparov 1974: 133–135).

#### 2. Examples

#### 2.1. Konstantin Batiushkov's "Moj Genij" (1815)

Many of Batiushkov's four-foot-iambic poems of 1815–17 have a two-mode rhythm: Forms I and IV add up to almost 87% of the total (57.5% are Form IV and 29% are of Form I; see Taranovski 1953: Table II; Dobritsyn 2016: 42–43). A typical example is Batiushkov's "Moj Genij" ("My Genius", 1815), where Forms I and IV are used throughout the poem, while Form II in the concluding line serves as a kind of "rhythmical italics" ("*ritmicheskij kursiv*"). However, out of six fully-stressed lines two can be considered ambiguous, and both are isomorphic with Form IV (see Figure 1). In Form IV, the third ictic stress is skipped. Correspondingly, in the ambiguous lines, the monosyllabic rhythmically ambiguous words fall on the third ictus: *O pámjať sérdtsa, ty sil'néj...* ['O memory of the heart, *you* are more powerful...'] (line 1); *Khranítel' Génij moj – ljubóvju...* ['*My* Guardian Genius <given> by love...'] (line 13).

O pámjať sérdtsa! <i>ty</i> siľnéj	I(IV)
Rassúdka pámjat <u>i</u> pecháľnoj,	IV
I chásto sládosť <u>ju</u> svoéj	IV
Menjà v strané plenjáesh' dál'noj.	I(II)
Ja pómnju gólos mílykh slóv,	Ι
Ja pómnju óchi <u>go</u> lubýe,	IV
Ja pómnju lókonỵ zlatýe	IV
Nebrézhno v'júshchikhsj <u>a</u> vlasóv.	IV
<i>Moèj</i> pastúshki n <u>e</u> sravnénnoj	IV(VI)
Ja pómnju vés' narjád prostój, <sup>3</sup>	Ι

<sup>&</sup>lt;sup>3</sup> 'I remember *all* her simple dress'. I do not consider *vés*' ['all'] as rhythmically ambiguous here (cf. Kolmogorov, Prokhorov 1968: 422) because it carries the logical (tonal) stress of the phrase.

I óbraz míloj, n <u>e</u> zabvénnoj,	IV
Povsjúdu stránstvu <u>e</u> t so mnój.	IV
Khranítel' Génij <i>m<u>o</u>j</i> – ljubóv'ju	I(IV)
V utékhu dán razlúke ón:	Ι
Zasnú l'? priníknet k <u>i</u> zgolóv'ju	IV
I <u>u</u> sladít pecháľnoj són.	II

$$\begin{split} \mathrm{I}(\mathrm{IV}) &-\mathrm{IV} - \mathrm{IV} - \mathrm{I} \\ \mathrm{I}(\mathrm{II}) &-\mathrm{IV} - \mathrm{IV} - \mathrm{IV} \\ \mathrm{IV}(\mathrm{VI}) &-\mathrm{I} - \mathrm{IV} - \mathrm{IV} \\ \mathrm{I(IV)} &-\mathrm{I} - \mathrm{IV} - \mathrm{II} \end{split}$$

Figure 1: The rhythmical composition of Batiushkov's "Moj Genij"

Note, though, that Form II in the last line is heralded by lines 4 and 9, in which we find the disyllabic rhythmically ambiguous pronouns *menjà* ['me'] and *moèj* ['my', gen. fem.] on the first foot (see Figure 1). These pronouns can hardly be considered pure clitics but they surely carry a "lighter" stress in comparison with fully-stressed content-words. I will elaborate more on that below, in Section 3.

2.2. Joseph Brodsky's "Soznan'e, kak shestoj urok..." (1960s)

"Brodsky is the most monotonous poet in Russian" (Beglov 1996b: 124). A typical example is his 24-line poem "Soznan'e, kak shestoj urok..." ("Consciousness, like the sixth lesson...", 1960s), in which 75% of the lines belong to Form III (Beglov 1996a: 113). The rest (25%, i.e. six lines) consists of two lines corresponding to Forms I, three to Form IV and one to Form II. The Form II line and two Form IV lines are found in the concluding quatrain, whereas both fully-stressed lines are isomorphic with Form III (see Figure 2). In Form III, the second ictic stress is skipped. Correspondingly, in the ambiguous lines, the rhythmically ambiguous words fall on the second ictus: *v prostránstve mezhdu dvúkh desníts* ['in a space *between* two right hands'] (line 11); *zovjót ego, kak púť nazád* ['...calls *him*, like a way back...'] (line 19).

Soznán'e, k <u>a</u> k shestój urók,	III
vyvódit <u>i</u> z kazjónnykh stén	III
rebjónka n <u>a</u> nochnój poróg.	III
On táshchitsj <u>a</u> vo ťmú zatém,	III
chtob, túcham p <u>o</u> kazáv perstóm	III
na tónushch <u>i</u> j v snegú pogóst,	III
sebjá zdes' <u>o</u> seníť krestóm	III
u tsérkvi v ch <u>e</u> lovéchij róst.	III
Skopléne m <u>e</u> rtvetsóv i ptíts.	III
No zhízni <u>o</u> stajótsja míg	III
v prostránstve <i>m<u>e</u>zhdu</i> dvúkh desníts	I(III)
i v stóron <u>y</u> <i>ot n<u>i</u>kh.</i> Ot níkh.	III(VII)
Odnáko zh <u>e</u> , stremjás' vperjód,	III
tak tjázhek n <u>a</u> prjazhónnyj vzór,	III
tak sérdtse sdávlen <u>o</u> , chto rót	IV
ne próbu <u>e</u> t vdokhnúť prostór.	III
I tóľko z <u>a</u> spinóju sád	III
pokínuť n <u>e</u> izvéstnyj kráj	III
zovjót <i>eg<u>o</u>, kak púť nazád,</i>	I(III)
znakómyj, k <u>a</u> k sobáchij láj.	III
Da v túchakh <u>i</u> z kholódnykh dýr	III
luná staráetsj <u>a</u> blesnúť,	IV
chtob p <u>o</u> dskazáť, chto v nóvyj mír	II
zabór ukázyv <u>a</u> et púť.	IV

$$\begin{split} & \text{III} - \text{III} - \text{III} - \text{III} \\ & \text{III} - \text{III} - \text{III} - \text{III} \\ & \text{III} - \text{III} - \text{III} - \text{III} \\ & \text{III} - \text{III} - \text{I}(\text{III}) - \text{III}(\text{VII}) \\ & \text{III} - \text{III} - \text{IV} - \text{III} \\ & \text{III} - \text{III} - \text{I}(\text{III}) - \text{III} \\ & \text{III} - \text{IV} - \text{II} - \text{IV} \end{split}$$

Figure 2: The rhythmical composition of Brodsky's "Soznan'e, kak shestoj urok..."

In lines 11 and 12, Form I and Form VII are both isomorphic with Form III which predominates in the poem.

#### 2.3. Batiushkov's "Otvet Gnedichu": redactions 1810-17

Batiushkov wrote "Otvet Gnedichu" ("Reply to Gnedich") in 1810 and then reworked it twice, in 1815 and 1817. Besides the predominant Forms IV and I (as is usual in Russian iambic tetrameter of the eighteenth and nineteenth centuries), the poem features Forms II (one occurrence) and III (five or six occurrences, depending on the redaction). The share of Form III is here as high as that of the fully-stressed form (Form I). It is instructive to compare the rhythm of the edited lines in subsequent versions. In this case, the isomorphism of Forms I and III bears, so to speak, a diachronic character.

The first line is rhythmically ambiguous, and it remains the same in all redactions:

Tvoj drúg <i>teb<u>e</u></i> navék otnýne	I(III)
['Your friend <gives> <i>you</i> forever now']</gives>	

Line 10 has Form III in the first redaction and Form I in the last redaction:

Pod nébo gr <u>o</u> mozdít svoj dóm	III	(redaction 1810)
['Up to the skies he builds his house']		
Brosáet s Mársom ógn' i gróm	Ι	(redaction 1817)
['He throws fire and thunder with Mars']		
The final line was rewritten twice:		
Nasýtivsh <u>i</u> s, ostávlju mír	III	(redaction 1810)
['Sated, I'll abandon the world']		
Ostávlju zhízn' i krásnyj mír	Ι	(redaction 1815)
['I'll abandon my life and the beautiful world']		

Pokínu r<u>a</u>vnodúshno mír!III(redaction 1817)['I'll indifferently leave the world!']

Therefore, the invariable rhythmical structure of these lines manifests itself in a series of transformations, in which each *rhythmic variant* (Jakobson's *verse instance*) follows the same *rhythmical pattern* – more individual and concrete than the general *metrical invariant* of the iambic tetrameter (Jakobson's *verse design*).

#### 2.4. Aleksandr Pushkin's "Otvet" (1830)

A more sophisticated compositional design is developed in Aleksandr Pushkin's playful 16-line madrigal "Otvet" ("Response", 1830). The first part of the poem is based on Form VI with its "paeanic" rhythm (the first and the third ictic stresses skipped), as it was described by Andrei Belyi (1910: 265– 266). In Pushkin's late period, Form VI is the third most preferred form after Forms IV and I (Taranovsky 1953: Table III). In "Otvet", the share of Form VI (43.8%) is even higher than in Pushkin's other poems of 1829 and 1830 (and much higher than in any theoretical model of Russian iambic tetrameter – either the stochastic model or the model based on the distribution of stresses in Russian nineteenth-century prose) and exceeds the shares of Forms IV and I (Beglov 1997: 57–58, Tables 5 and 6; Liapin 2001: 90; see Table 1 below).

Poems	Ι	II	III	IV	VI	Lines
"Tsiklop" (1830)	100%	-	-	-	-	6
"Chto v imeni tebe mojom?" (1830)	31.3%	12.5%	6.3%	43.8%	6.3%	16
"Otvet" (1830)	18.8%	6.3%	-	31.3%	43.8%	16
"V chasy zabav" (1830)	30.0%	5.0%	10.0%	55.0%	-	20
"Na Bulgarina" (1830)	83.3%	-	-	16.7%	-	6
"Novosel'e" (1830)	50.0%	12.5%	-	12.5%	25.0%	8
"Proshchanie" (1830)	33.3%	6.7%	6.7%	40.0%	13.3%	15
"Epigramma" (1830)	80.0%	20.0%	-	-	-	5
"Zaklinanie" (1830)	25.0%	12.5%	-	54.2%	8.3%	24
"Stambul gjaury nynche slavjat" (1830)	33.3%	8.9%	2.2%	46.7%	8.9%	45
"Geroj" (1830)	26.8%	9.0%	17.9%	37.3%	7.5%	67 <sup>4</sup>
"Moja rodoslovnaja" (1830)	21.4%	4.8%	6.0%	57.1%	10.7%	84
lyrical poems 1830	30.5%	7.7%	7.1%	44.2%	10.3%	<b>312</b> <sup>5</sup>
lyrical poems 1828–29	30.5%	7.8%	6.8%	45.3%	9.1%	629
lyrical poems 1830–33	34.3%	8.0%	4.7%	44.9%	8.1%	1195

Table 1: Rhythmical forms of iambic tetrameter in Pushkin's lyrical poems of 1830 (from Beglov 1997: 54, 58, Tables 3 and 6, and Taranovsky 1953: Table III)

<sup>&</sup>lt;sup>4</sup> Other rhythmical forms: 1.5% (an incomplete line – the last line of the poem).

<sup>&</sup>lt;sup>5</sup> Other rhythmical forms: 0.3% (one incomplete line in "Geroj", see the previous note).

The first line of the poem is rhythmically ambiguous: Form I, which is isomorphic with Form VI. An unexpected turn awaits us in the middle of the poem. Lines 7 and 8 are rhythmically ambiguous. Both are isomorphic with Form VI, but the location of the rhythmically ambiguous words is different: line 7 can be recited as either Form VI or Form II, whereas line 8 can be read as either Form VI or Form IV (see Figure 3). According to Taranovsky, Form II often supports the "bipartite rhythmic inertia" of Form VI, and poets like to use them together (Taranovsky 1953: 89). A similar impression of "non-contrast difference" is produced by the combination of Forms IV and VI (see Liapin 2001: 89–90 and esp. 99, endnote 26). At the same time, Form IV in combination with Form I is a different type of rhythm – the one we have already met in Batiushkov's "Moj Genij". Therefore, the rhythmical composition of "Otvet" can be described as a transition from predominant Form VI to predominant Form IV (see also Pertsov 1999).

Ja v <u>a</u> s uznál, o <i>m<u>oj</u> orákul,</i>	I(VI)
Ne p <u>o</u> uzórnoj p <u>e</u> stroté	VI
Sikh n <u>e</u> podpísannykh karákul,	VI
No p <u>o</u> vesjóloj <u>o</u> stroté,	VI
No p <u>o</u> privétstvij <u>a</u> m lukávym,	VI
No p <u>o</u> nasméshliv <u>o</u> sti zlój	VI
I po uprjókam <i>stol</i> ' neprávym,	II(VI)
I <u>e</u> toj prélest <u>i</u> zhivój.	IV(VI)
S toskój nevóľnoj, s v <u>o</u> skhishchénem	IV
Ja p <u>e</u> rechítyv <u>a</u> ju vás	VI
I vosklitsáju s neterpénem:	VI
Porá! v Moskvú, v Moskvú sejchás!	Ι
Zdes' górod chópornyj, unýlyj,	IV
Zdes' réchi – ljód, serdtsá – granít;	Ι
Zdes' <i>net</i> ni vétrenosti míloj,	IV(VI)
Ni múz, ni Présni, ni kharít.	IV

$$\begin{split} I(VI) &- VI - VI - VI \\ VI &- VI - II(VI) - IV(VI) \\ IV &- VI - VI - I \\ IV &- I - IV(VI) - IV \end{split}$$

Figure 3: The rhythmical composition of Pushkin's "Otvet"

Besides two fully-stressed lines of Form I, the two last quatrains contain three lines of Form IV, two lines of Form VI and an ambiguous line that can be recited as either Form IV or Form VI. Form IV first appears in line 8 as an ambiguous transitional form (IV/VI), and immediately becomes the "hero" of the second half of the poem, where it competes with Form VI and eventually "wins" in the last quatrain (see Figure 3). Just as in a heterometric poem "[metrically] ambiguous lines can serve as a convenient transition between fragments written in different meters" (Gasparov 1974: 253), rhythmically ambiguous lines in a monometric poem can serve as a transition between fragments that use different rhythmical patterns.

#### 3. Roman Jakobson's approach

The phenomenon discussed above may be considered in connection with Roman Jakobson's hypothesis that monosyllabic words gravitate toward "weak" (i.e. less frequently stressed) ictuses (Jakobson 1973). The very last ictus is always the "strongest" because it is compulsorily stressed in classical Russian verse (Jakobson 1960 [1958]: 361). The "weakest", i.e. the least frequently stressed ictus in Russian iambic tetrameter is supposed to be the third (penultimate) one – precisely because the next ictus is compulsorily stressed and every polysyllabic word at the end of the line produces a skipped stress on the penultimate ictus (Tomashevsky 1923a: 37). According to Jakobson's calculations, the percentage of stresses produced by monosyllables is the highest on the third ictus and the lowest on the last. He attempted to explain this fact by the non-phonological nature of stress in the stressed monosyllables: the nonphonological stress allegedly functions in the same way as the absence of stress (Rudy 1976: 493–495; Krasnoperova 2001: 51–52). Although Jakobson's view of accentual ambiguity was different from Zhirmunsky's, a cross-pollination of their approaches may prove fruitful.

Caveat lector: it has been demonstrated that Jakobson's calculations are methodologically inaccurate and monosyllables, either stressed or unstressed, are *not* most frequent on the weak ictuses. Jakobson used Taranovsky's data on Russian iambic and trochaic tetrameters but did not exclude from his data set the trochaic lines with feminine endings where monosyllables on the last ictus are impossible, so that his figures for the last ictus are not reliable (Gasparov, Skulacheva 2003: 38–39). In trochaic tetrameter with uniform masculine endings the percentage of monosyllables on the last and penultimate ictuses is equal (Golovastikov 2011: 44–45). Moreover, both in trochee and iamb the

monosyllables are usually either equally frequent on both ictuses or even more frequent on the last ictus than on the penultimate (Liapin 2010; Golovastikov 2011: 46–47). However, Jakobson's insight may nevertheless be correct if we could prove that the words that gravitate toward the less frequently stressed ictuses are not necessarily monosyllabic, but rhythmically ambiguous, and they can be either mono- or disyllabic (or even trisyllabic: compare the three forms of the preposition *pred / pered / peredo* 'before, in front of'). Or, as Gasparov put it on another occasion – that "the rhythm of light stresses in verse follows the same pattern as the rhythm of skipped stresses: light stresses act as 'substitutes' for skipped stresses" (Gasparov 1974: 155).<sup>6</sup>

The list of rhythmically ambiguous disyllabic words includes, for example, the prepositions *sredi* ['among'], *pròtiv/protiv* ['against'], *mèzhdu/mezhdù* ['between'] etc.; the personal/possessive pronouns *egò* ['him; his'] and *eë* (*ejò*) ['her; hers']; the possessive pronouns *mojà* ['my', nom. fem.], *tvojù* ['your', acc. fem.], *svoèj* ['his/her/its/their', oblique cases, fem.] etc. – especially if they are used as enclitics, i.e. in the post-nominal position; and others. Their special accentual status was already emphasized by Viktor Zhirmunsky, Boris Tomashevsky, Kiril Taranovsky and Roman Jakobson. In particular, these words may generate the forbidden trochaic "trans-accentuation" (or "accentual reversal") of an iambic foot (Jakobson 1979a [1955]: 168; 1979b: 583–584).

An excursus on "trans-accentuation" is needed here. In syllabic-accentual verse, stresses can be skipped and extrametrical (extra-schematic) stresses added. However, the possibility of skipping and adding stresses depends on the word-boundaries: a (phonetic) word in a syllabic-accentual line can *either* skip a metrical stress *or* add an extrametrical stress, but cannot do *both* simultaneously. As Aleksandr Iliushin put it, in classical Russian verse "a word cannot be a double violator", i.e. it cannot violate the metrical schema twice at the same time (Iliushin 1988: 49).

This rule is known as "the Jakobson-Tomashevsky thesis about the impossibility of shifting the accent in Russian [poetry] within a word" (Erlich 1965: 220), or "the law of inadmissibility of trans-accentuation in verse" (Kolmogorov, Prokhorov 1968: 405), or "the trans-accentuation ban" (Gasparov 1974: 14). One version of this rule is widely known from Jakobson's "Linguistics and Poetics": "...a stressed syllable cannot fall on the upbeat if a downbeat is fulfilled by an unstressed syllable of the same word unit (so that a word stress

<sup>&</sup>lt;sup>6</sup> This formula should be treated with caution: it can be applied to a homogeneous group of poetic lines (such as a single poem with a sufficiently monotonous rhythm), but not to a heterogeneous group of texts even if they are written by one poet (see Gasparov's own caveats in Gasparov, Skulacheva 2003: 44–45).

can coincide with an upbeat only as far as it belongs to a monosyllabic word unit)" (Jakobson 1960 [1958]: 361).

To use Tomashevsky's well-known example (Tomashevsky 1928: 16), of the following two lines, both of which are phonetically identical, one is an iambic line and the other is not – because of different word-boundaries:

*Brát <u>u</u>prosíl nagrádu dáť* (a perfect iambic line) vs. *Brát<u>u</u> prosíl nagrádu dáť* (the line violates the rules of Russian iambus).

The crucial difference is where the second syllable *-u*- belongs. In the first case, it is a prefix of the second (trisyllabic) word, whereas in the second it is an ending of the first (disyllabic) word. In the first case, the first word is monosyllabic, whereas in the second it is disyllabic. The line *Brát uprosíl nagrádu dát*' (X | xXX | xXx | X) is a perfect iamb, because each word is "a single violator", whereas the line *Brátu prosíl nagrádu dát*' (X | xX | xXx | X) is not iambic, because the first word is "a double violator", and we are faced with a "trochaic trans-accentuation of an iambic foot", which is prohibited in classical Russian iamb (see also Garzonio 1985: 305–306, and Tarlinskaja 1987: 643–644).

Jakobson formulated his version of the rule only in regard to binary meters (iambs and trochees): thus, according to Jakobson, only monosyllabic words could bear an extra-schematic stress. However, as early as 1919, at the same time as Jakobson (and, in fact, at the same meeting of the Moscow Linguistic Circle to which they both belonged) Tomashevsky suggested a general solution applicable to both binary and ternary meters: "A more general law should be deduced: a word with an extra-schematic stress should be shorter than a foot period" (quoted in Pilshchikov 2017b: 161; see also Pilshchikov, Starostin 2015: 94-95). Tomashevsky developed this thesis further in his 1923 treatise on Russian versification. In Russian syllabic-accentual verse, he explained, "non-metrical stress can fall on words that fit within a merically unstressed interval and do not extend to the metrically stressed syllables. To put it another way, in classical [Russian] verse non-metrical stresses are only allowed on monosyllabic words in iamb and trochee, whereas in dactyl, anapaest and amphibrach, they are allowed on both monosyllabic and disyllabic words" (Tomashevsky 1923b: 62). Compare Gasparov's later restatement: "In Russian syllabic-accentual verse, extrametrical stress and skipping of metrical stress cannot occur in one word ('the trans-accentuation ban'). Therefore, extrametrical stresses can fall only on those words whose size does not exceed the inter-ictic interval - monosyllabic words in iamb and trochee, mono- and disyllabic words in dactyl, amphibrach and anapaest" (Gasparov 1974: 14).

Therefore, monosyllabic words can bear an extra-schematic stress in binary and ternary meters, and disyllabic words can bear an extra-schematic stress in ternary meters if both syllables occupy weak positions (otherwise the transaccentuation ban would be violated). Both version of the rule (Jakobson's and Tomashevsky's) were first published in Russian in 1923 (see Jakobson 1923: 29;<sup>7</sup> Tomashevsky 1923b: 62), but Jakobson's is more widely known because of his Anglophone "Linguistics and Poetics". Moreover, this rule is applicable not only to binary and ternary meters, but also to the meters with variable inter-icitic interval, such as dolnik (Pilshchikov, Starostin 2010; Pilshchikov 2017b: 159).

It should, however, be taken into account that the trans-accentuation ban is not absolute, but probabilistic: its violation is very unlikely, but nevertheless possible (Pilshchikov, Starostin 2015: 95). Trans-accentuation is much less common in Russian poetry than, say, in English poetry. But even in Russian verse there are meters and positions, in which the forbidden trans-accentuation is "less forbidden" (i.e. more acceptable) than in others – in particular, in Russian folk trochee, especially at the beginning of the line. However, the classical Russian iamb does not tolerate non-ictic stresses produced by polysyllables (Tarlinskaja 1987: 634–635).

Tomashevsky noticed that the only example of such trans-accentuation in Pushkin's iambs involves the possessive pronoun *egò* ['his']: *Ja pr<u>e</u>dlagáju výpit' v <u>eg</u>ò pámjat'* ['I suggest we should drink to *his* memory']<sup>8</sup> (Tomashevsky 1923a: 55). Pushkin treats the disyllabic personal pronoun *egò* ['his'] "as if" it is unstressed – or, in fact, he uses it as rhythmically ambiguous (Kolmogorov, Prokhorov 1968: 422). If Pushkin had considered it completely unstressed, there would have been many examples of this kind in his poetry, rather than only one (Shapir 2005: 50; English translation: Shapir 2019: 125).

Taranovsky showed that the more numerous trans-accentuations in Aleksandr Radishchev and some other eighteenth- and nineteenth-century poets are of the same nature. They involve the pronouns *egò* ['him; his'], *svojù* ['his/her/its/their', acc. fem.], *tvoìm* ['your', instr. masc. or dat. pl.] and the like: *Ispólni sérdtse tvoìm zhárom* ['Fill my heart with *your* ardor'], etc. (Taranovsky 1953: 19). Such examples are especially frequent in Radishchev. His renowned ode "Vol'nost" ("Liberty", 1780s) features eight lines (1.5%), in which several parts of speech are trans-accentuated: the possessive pronouns *tvoìm* ['your', see

<sup>&</sup>lt;sup>7</sup> A preliminary and not very distinct formulation is found in Jakobson 1922: 229–230 (see Rudy 1976: 483; Uspensky 1997: 134).

<sup>&</sup>lt;sup>8</sup> The original line from John Wilson's "The City of the Plague" (1816) that Pushkin translates here, in "Pir vo vremja chumy" ("A Feast in Time of Plague", 1830), reads: *Therefore let us drink unto his memory*.

above], *tvoè* ['your', nom./acc. neut.] and *svoì* ['his/her/its/their', nom./acc. pl.], the pronouns *mnòju* ['by me', instr. of *ja* 'I'], *(za) tò* ('[for] that/this') and *sebè* [a reflexive pronoun], and even the adverb *vsegdá* ['always'], which is, moreover, trans-accentuated twice (Shapir 2005: 50; 2019: 125). However, the fact that all of Radishchev's trans-accentuations are of the same kind suggests that these words are rhythmically ambiguous – he did not allow himself to "trans-accentuate" fully-stressed words. Characteristically, they all fall on the penultimate (third) ictus, the weakest in the ode. The ode's stressing profile is 97%–82%–54%–100% (Taranovsky 1953: Table II). The predominant forms are Form IV (42.5%) and Form I (36.5%)<sup>9</sup>. All the irregular forms can be considered as Form IV (and one – as Form VI) if the rhythmically ambiguous word is recited as unstressed:

Ispólni sérdtse <b>tv<u>o</u>ìm</b> zhárom	['Fill my heart with <i>your</i> ardor']
I v n <u>e</u> izménnom <b>vs<u>e</u>gdà</b> víde	['And in a form that is <i>always</i> intact']
Veshcháj, zlodéj, <b>mnòj<u>u</u> venchánny</b> j	['Speak, villain, who is <i>by me</i> crowned']
Edínoj smérti <b>z<u>a</u> tò</b> málo	['One death is not <i>for this</i> enough']
Iskhódit s vídom <b>vs<u>e</u>gdà</b> zlóbnym	['Comes with an appearance
	always malicious']
Sebé vsjak séjet, <b>s<u>e</u>bè</b> zhnet	['For himself everyone sows and
	for himself reaps']
Otrávy pólny <b>sv<u>o</u>ì</b> strély	['Full of poison, <i>its</i> arrows']
Bljustí vsjak búdet <b>sv<u>o</u>jù</b> chásť	['Everyone will guard his own part']
Togdá slozhén'je <b>tv<u>o</u>è</b> brénno	['Then, perishable, <i>your</i> body']

Compare Brodsky's rhythmically ambiguous disyllabic words on the weak ictus: *v prostránstve mèzhdu dvúkh desníts*; *zovjót egò, kak púť nazád.* These lines can be recited as either Form I or III. Although no trans-accentuation is observed here, the second ictus is "weak" (because Form III, in which the second ictic stress is skipped, predominates in the poem) – and rhythmically ambiguous words appear on the second ictus. Similarly, in Pushkin's "Otvet", with its stressing profile *50%*–100%–*25%*–100%, rhythmically ambiguous words gravitate toward the first and third ictuses.<sup>10</sup>

<sup>&</sup>lt;sup>9</sup> The average figures for the eighteenth-century iambic tetrameter are quite similar: 93%– 80%–53%–100%, with Form IV at 41.9% and Form I at 31.1% (Taranovsky 1953: Table II).

<sup>&</sup>lt;sup>10</sup> The frequency of stresses on the first ictus in "Otvet" is significantly lower than in Pushkin's lyrics of that period on the average: the overall stressing profile of Pushkin's lyrics 1830–33 is 84%–95%–47%–100%, compare 83%–93%–45%–100% for Pushkin's lyrics 1828–29 (Taranovsky 1953: Table III).

## 4. Rhythmical impulse

The presence of rhythmically ambiguous lines is one of the manifestations of what Russian verse theorists of the 1920s referred to as "rhythmical impulse" ("*ritmicheskij impul's*"). Tomashevsky and Zhirmunsky thus described it in their treatises on Russian versification:

When initially conceiving a poem, the poet adopts a metrical scheme which he feels to be a kind of rhythmical-melodical contour, a framework, into which words are "inserted". As it is realized in words, the rhythmical impulse finds expression in the actual rhythm of individual lines. [...] The listener perceives the rhythm in inverse order. First he is confronted with the actual verse-line rhythm. Then, under the impression of the reiteration of rhythmical configurations, due to his perception of a sequence of verse-lines, the listener grasps the rhythmical impulse [...] At a still higher degree of abstraction from the rhythmical pattern he grasps the metrical scheme which may be uncovered by scanning. (Tomashevsky 1923b: 83)

Only the entire poem exhibits that inertia of rhythm, that general rhythmical impulse, those regularities of rhythmic movement, which we call meter. [...] The presence of a metrical scheme in verse is perceived by the reader as the *inertia of rhythm* [...]. From the point of view of the author or the performer of the poem this metrical scheme or law can be described as a sort of impulse dominating the given linguistic material. In more abstract terminology we speak of a metrical *design* [*zadanie*] or a metrical *law* [*zakon*]. (Zhirmunsky 1925: 67, 71; translation quoted from Zhirmunsky 1966: 67, 71; author's emphasis)

The concept of *rhythmical impulse* describes a stochastic, not deterministic, norm (Červenka 1984: 30). Scholars of Russian verse have defined this phenomenon in statistical terms: as a *rhythmic tendency* in the works of Taranovsky and as an "*image of the meter*" ("*obraz metra*") in the works of Andrei Kolmogorov (Kolmogorov, Prokhorov 1963: 84–85, Kolmogorov 2015 [1961]: 239–243; see also Gasparov 2015: 12, 16; Pilshchikov 2017a: 16–17).<sup>11</sup> Taranovsky's *stressing profile* (as a particular case of a rhythmic tendency) and Gasparov's *rhythmic profile of the meter* are also statistical characteristics, but they are not identical to the statistics of rhythmical forms and do not

<sup>&</sup>lt;sup>11</sup> Kolmogorov, one of the greatest mathematicians of the twentieth century, was among the partisans of the statistical-probabilistic approach to the study of verse.

always reflect the differences between individual types or patterns (or, to use Kolmogorov's definition, "images") of the meter (see Dobritsyn 2016: 35–38).

A rhythmic or stressing profile of the meter in a single poem or a group of poems is the percentage of non-skipped stresses on each ictus (Taranovsky 1953: 4 et passim; 1971: 424, 426; Taranovsky, Prokhorov 1982: 156). Very often the scholars ignore the important fact that the same stressing profile can be produced by different sets of rhythmic forms that sound completely differently. For example, a poem consisting of 50% of Forms III (xXxxxxX) and 50% of Forms IV (xXxXxxX) would have the same *U*-shaped rhythmic profile as the poem consisting of 50% of Forms I (xXxXxXX) and 50% of Forms VII (xXxxxxX): 100%–50%–50%–100%. However, the latter has a recognizable rhythm of "bending iambus", as Vladimir Nabokov described the rhythm of Andrei Belyi's experimental verses abounding in Form VII with its five unstressed syllables in the middle (Dobritsyn 2016: 34–35), whereas the former would have a completely different type of rhythm with no super-long unstressed intervals.

"I tried, for the sake of curiosity, to write a few stanzas using this rare line form" (Belyi 1910: 294). This is Andrei Belyi's explanation of how he composed a 20-line poem "Noch'ju na kladbishche" ("Graveyard at Night", 1908), which contains 15 lines of Form VII (75%), two lines of Form VI (10%), two lines of Form III (10%), and one line of Form IV (5%) (see Figure 4). Correspondingly, its stressing profile is 90%–*15%*–*10%*–100%. Or, by quatrains:

75%-25%-25%-100% 100%-0%-0%-100% 100%-0%-0%-100% 100%-0%-0%-100% 50%-50%-25%-100%

Belyi made every effort to avoid metrically ambiguous words in order to produce "pure" and "perfect" lines with two skipped stresses. The only disyllabic preposition in the poem is found in line 10, but it should be considered an unstressed proclitic rather than a rhythmically ambiguous word: *Kolébljutsja iz-za* ogrády ['They flutter from behind the fence']. At the same time he did not avoid extrametrical stresses on non-ambiguous monosyllables, such as *khràm* ['the temple'] and *v nòch*' ['in(to) the night'] in lines 7–8 because these stresses on non-ictic syllables (marked here as "lightly" stressed) do not affect the super-long unstressed intervals in the middle of the line: *Khràm jásnitsja*, *ots<u>epenév</u> / V nòch' výrez<u>annymi</u> krest<u>ami</u> ['<i>The temple* is glowing, numb / *in the night*, into which its crosses are carved'].

Kladbíshchensk <u>i</u> j ubógij sád	III
I z <u>e</u> lenéjushch <u>i</u> e kóchki.	VI
Nad pámjatn <u>i</u> kam <u>i</u> drozhát,	VII
Potréskiv <u>a</u> jut <u>o</u> gonjóchki.	VII
Nad zároslj <u>a</u> mi <u>i</u> z derév,	VII
	VII
Proplákavsh <u>i</u> kol <u>o</u> kolámi,	
Khràm jásnitsj <u>a</u> , ots <u>e</u> penév	VII
V nòch' výrez <u>a</u> nnym <u>i</u> krestámi.	VII
Serébrjan <u>y</u> e t <u>o</u> poljá	VII
Kolébljutsj <u>a</u> iz-z <u>a</u> ogrády,	VII
Razmjótyv <u>aj</u> a n <u>a</u> poljá	VII
Bushújushch <u>i</u> e l <u>i</u> stopády.	VII
V kolébljushch <u>e</u> msja s <u>e</u> rebré	VII
Besshúmno <u>e</u> vozn <u>i</u> knovéně	VII
Vzletájushch <u>i</u> kh net <u>o</u> pyréj, –	VII
Ikh zhálobn <u>o</u> e sh <u>e</u> lestene,	VII
O sérdtse tíkho <u>e</u> mojó,	IV
Sozhzhónno <u>e</u> v poldnévnom znóe, –	III
Ty pogruzháesh'sj <u>a</u> v rodnóe,	VI
V kholódno <u>e</u> neb <u>y</u> tijó.	VII
III - VI - VII - VII	VII

 $\begin{aligned} \text{VII} &= \text{VII} = \text{VII} = \text{VII} \\ \text{VII} &= \text{VII} = \text{VII} = \text{VII} \\ \text{VII} &= \text{VII} = \text{VII} = \text{VII} \\ \text{VII} &= \text{VII} = \text{VII} = \text{VII} \end{aligned}$ 

Figure 4: The rhythmical composition of Andrei Belyi's "Noch'ju na kladbishche"

Therefore, a joint analysis of rhythmical forms and stressing profiles can help us to grasp and describe the rhythmical impulse of verse. In particular, rhythmical impulse manifests itself in the placement of rhythmically ambiguous words on particular ictuses and extrametrical stresses on particular non-icitic syllables.

### 5. Conclusion

The statistics of rhythmical forms may be complemented with an analysis of ambiguous forms, better reflecting the rhythmical impulse of the poem. Batiushkov's iambic tetrameter in 1815–17 has a two-mode rhythm (with predominating Forms IV and I), but a single rhythmical impulse, which makes both modes isomorphic. Form I in Batiushkov's "Moj Genij" sounds different from Brodsky's because it is governed by a different rhythmical impulse. Forms I and III in different redactions of Batiushkov's "Otvet Gnedichu" can replace each other because they both fit the same rhythmical impulse.

Gasparov conducted an experiment: he counted separately the minimum and the maximum number of stresses in rhythmically ambiguous lines (Gasparov 1965: 77–78; 1967: 329–330; 1974: 376–377, 407–409; see also Baevsky 1970: 157–166). His conclusion was that "the divergences [between the values] are negligible" (Gasparov 1967: 329; 1974: 408). However, the statistics of ambiguous forms may prove useful in the analysis of the rhythmical predilections of particular poets (my examples 2.1 and 2.2), in the analysis of the rhythmical impulse of a single poem that remains invariable in its various redactions (example 2.3), and – most obviously – in the analysis of the rhythmical composition of a particular poem, where ambiguous forms can constitute a "transition zone" between adjacent compositional parts (example 2.4).<sup>12</sup>

<sup>&</sup>lt;sup>12</sup> This paper is part of a research project based at Lomonosov Moscow State University and supported by Russian Science Foundation Grant № 17-18-01701. I am grateful to Sergei Liapin, Gail Lenhoff, Ronald Vroon and the participants in the *Quantitative Approaches to Versification* conference (Prague, June 24–26, 2019) for criticism and suggestions. Preliminary theses were published in the proceedings of the aforementioned conference (Pilshchikov 2019).

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