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Сравнительный анализ реализации восходящего тона в родной и иноязычной речи

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Аннотация. Целью исследования является изучение кросс-лингвистического влияния родной и иноязычной

речи на реализацию восходящего тона, а именно: на расположение тона во фразе и его конфигурацию. В работе применялся сравнительный и акустический анализ. Материалом исследования послужили аудиозаписи носителей русского и английского языков. Результаты подтвердили кросс-лингвистическое влияние двух языков на реализацию восходящего тона, которое проявляется в общей иллокутивной силе высказывания, определяющей место тона и его значение. Интонационный контур в иноязычной речи обладает особыми характеристиками, а не является

«эхом» похожего контура в родной.

Ключевые слова: кросс-лингвистическое влияние, восходящий тон, несущий акцент, интонационный контур,

конфигурация акцента, родная речь, иноязычная речь

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Original article

Rising Tone Realization in Native and Nonnative Speech

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Abstract. The present study aims at analyzing the cross-linguistic influence of the rising tone realization in

native and nonnative speech in the tone placement in the phrase and its pitch contour configuration. The comparative and speech acoustic analyses were employed. The material consists of the speech recordings provided by the Russian- and English-speaking respondents. The findings evidence the cross-linguistic influence of the rising tone realization. It is manifested in the converging phrase illocutionary force and the tonal meaning. The nonnative speech pitch contour has its own parameters

rather than being an echo of the native contour.

Keywords: cross-linguistic influence, rising tone, pitch accent, pitch contour, pitch configuration, native speech,

nonnative speech

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Языкознание

INTRODUCTION

The ubiquitous proliferation of polylingualism in modern society drives the research of crosslinguistic influence (CLI) in speech perception and production (cf.: the notion of linguistic interference [Вишневская, 1990]).

Thus, a vast body of literature explores how the first (L1) native language interacts with the second (L2) nonnative language in all linguistic facets across perception and production [Bergman, et al., 2016]. Arguably, there is a bidirectional CLI which is supported by many L2 acquisition models, see, e. g. *Speech Learning Model* [Flege, Bohn, 2021], the main assumption of which is that there is a strong perception-production link within L1 and within L2 separately as well as between L1 and L2 in both directions [Cyxoba, 2023; Lee, Park, 2024].

Despite the long-standing interest in the field, there are some areas which need further consideration.

Firstly, empirical research offers evidence of CLI at the segmental level in speech production [Kim, Clayards, Goad, 2018]. The pitch accents, tones and melodic contours are more challenging to investigate [Цибуля, 2023].

Secondly, the studies of local discourse structure have concentrated on the lexical and syntactic levels, not infrequently separately, looking at their phonetic implementation [Касаткин, 2007; Вольская, Скрелин, 2009].

Thus, the question of information status (i. e. new, inferable, evoked vs given, accessible information; thematic vs rhematic distinction) of the rising accents and tones in bigger phonopassages across the Russian and English similar texts would provide some insights into the speech production phonological programming.

The present study **addresses** the distinct category of rising tone in L1 Russian, L1 English and L2 English. More concretely, it focuses on the rising tone and its location and configuration in the intonation phrase in native and nonnative speech.

The research pilots the necessity to describe the Russian English variant of the English language (its philosophical foundations see in [Прошина, 2022]) considering CLI between Russian and English. The previous studies have stated the prosodic *interference* of the Russian language onto the English language speech production with the focus on the distinctions and differences in the realization of phonological categories [Фокина, 2013]. The emphasis of this research lies on *the potential blend* of the English and Russian prosodic categories in the production of the rising tone in L2. Moreover, the rising tones of various geneses are studied, rather than nuclear tones only.

Hence, it is **hypothesized** here that an advanced speaker of English with Russian as L1 produces rising tone with a specific configuration in the Russian variant of the English language. The configuration has characteristics of both L1 and L2.

The research **aims** at analyzing the lexical units in L2 and L1 associated with the rising tone, their location in the phrase and their pitch configuration.

The material consists of 11 audio recordings done by the English and the Russian native speakers. The total duration is three minutes (167 seconds). There are 118 words with the rising tone under scrutiny.

RISING ACCENTS: PROSODIC CUES AND MEANINGS

The intonation research concerns the relationships between the prosodic characteristics in speech and the abstract categories of meaning.

American scholars J. Steffman et al. have pointed out that there is "a hierarchy of distinctions among nuclear tunes" [Steffman, Cole, Shattuck-Hufnagel, 2024, p. 1]. They have proved that primary tune distinctions, such as timed F0 trajectories and the temporal tonal center of gravity, are well-clustered and well-perceived, whereas other tune distinctions are limited in clustering and often confused in perception.

The F0 configuration encompasses those parameters which are perceived as the pitch tune and express the meaning. The parameters are average F0, the pitch range and level, and the velocity of pitch change in the phrase [Вишневская, 1990].

The more traditional approach is to examine tones via intonational curve, or a melodic (intonation, pitch) contour, where the diapason change and the curvature over the stressed and unstressed syllables are observed [Светозарова, 1982; Кодзасов, 1999].

The western viewpoint if marked by *Tone and Break Indices* transcriptional system (ToBI) [Pierrehumbert, 1980] where *pitch accents* are associated with strong stressed syllables to mark prominence; the *phrase accents* in the intermediate phrase are associated with the edge of the prosodic domain; in a larger intonational phrase they are called *boundary tones* [Steffman, Cole, Shattuck-Hufnagel, 2024]; see also the attempt to use the system for the Russian language intonational transcription [Oдe, 2007]. The accent classification seems concomitant with the modern Russian overall position on the accents' distinction within the utterance [Кибрик, Подлесская, Коротаев, 2009].

In this paper we adhere to two prosodic categories, i. e. accent and the pitch movement in the accent.

There are integral factors for the accent placement, for more details see [Янко, 2008], the crucial ones being:

- communicative component (rheme vs theme);
- syntactic component (noun phrase, verb phrase, clause, etc.);
- given or new referent, etc.

The literature on intonational meaning of an utterance offers support for the associations between "a particular tune and the pragmatic meaning of an utterance related to illocutionary force (speech act), or the speaker's epistemic state" [Steffman, Cole, Shattuck-Hufnagel, 2024, p. 2]. In other words, the rising tone iconically marks the discourse semantics of 'non-end' and anticipated continuation; the level tone – the semantics of continuation; the falling tone – the semantics of completion, or the end. However, the tones may be not only semantically prone but also "adaptive" to communicative intention, to the illocution or to the clause or elementary discourse unit [Кибрик, Подлесская, Коротаев, 2009, р. 75; Касаткин, 2007; Вольская, Скрелин, 2009].

The present study provides more insight into the nature of the less categorical prosodic parameter as the rising accents are. It is attempted to compare the configuration of the Russian pitch accents on the stressed words and the nuclear tones with the English phrasal accents and nuclear tone in L1 and L2.

MATERIAL AND METHODOLOGY

Five Russian native speakers (17–18 years old; four females and one male; B2–C1 level of English proficiency) read the stimulus text in Russian¹ and in English [Grant, 2011, p. 3] at home and recorded their readings (see Examples 1–2). One English native speaker (18 years old; a female)² recorded the text in English.

(Example 1) English version:

(a) Have you ever watched young children practice the sounds of the language they are learning? (b) They imitate, repeat, and sing consonant and vowel combinations without effort. (c) For young children, learning to speak a language is natural and automatic.

(Example 2) Russian version:

(а) Вы когда-нибудь наблюдали, как маленькие дети практикуют звуки языка, который они изучают? (b) Они имитируют, повторяют и поют сочетания согласных и гласных без усилий. (c) Для маленьких детей обучение языку происходит естественно и автоматически.

The text serves as a good example of three different communicative types (a general question, a statement with enumeration and a statement with the initial object) potentially eliciting the rising tunes usage. The texts are paralleled in such a way that the syntactic constructions also coincide (e. g. see 2c as a direct translation of 1c).

The proposed design would allow for the information centers in both versions to intersect. Thus, the global structure of the passages is the same, and the pragmatic meaning will potentially be the same. That would lead to pure tone correlation, once we adopt a universal view on meaning construction with the similar illocutionary forces [Кибрик, Подлесская, Коротаев, 2009, р. 75].

The audio files have been textgrided and analyzed with *Praat*³. The visible pitch contours and the word tier have been drawn and illustrated graphically for each word with the rising tone.

RISING ACCENTS PLACEMENT

The material proves the peculiarity of the reading technique in native and nonnative language. The data collection setup has not been controlled, so the acquired recordings prompt that some respondents have not seen the texts or familiarized themselves with them in any way before the recording. The pausation and the unclear or wrong pronunciation of some parts indicate that presumption. However, the initial task contained the recommendations how to do the exercise⁴.

Here, on the one hand, as O. Parshina et al. argue, "the saccadic planning adheres to a 'regular' pattern, accounting for language-specific word length expectations" [Parshina, Zdorova, Kuperman, 2024, p. 1700]. However, "the saccade lengths and landing positions did not differ between English and Russian readers even in the cross-linguistically lengthmatched stimuli" [ibid., p. 1694]. For the present study the findings show that the texts readings are aligned and depend only on the language proficiency and individual differences.

On the other hand, there is evidence for proactive and reactive control of the pitch level in reading utterances of different length when the utterance is evolving in time (i.e. it resembles the reading settings), when "participants adopted a higher register ceiling and broader span in longer utterances" and

¹The translation was done by the author of the article.

²The author expresses gratitude to Emma Wraight for the reading.

³Boersma, P., Weenink, D. (1992–2024): Praat: doing phonetics by computer [Computer program]. Version 6.4.23, retrieved 4 September 2024 from https://www.praat.org.

⁴The task is the part of the "A Course on Phonetics" for Year 1 students in MISIS University whose invaluable help the author would like to acknowledge.

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they "continuously estimate the remaining length of the utterance and use that information to adjust pitch register" [Kim, Tilsen, 2024, p. 1]. There is some evidence for this effect in our material.

There are three big utterances in each text, corresponding to the sentences.

The correlation between the English and the Russian versions lies in the word choice with the rising tone and the choice repetitiveness across two languages in Russian native speakers (see Table 1).

As Table 1 shows Phrase 1 contains the most diverse list of words with the rising tones. It can be accounted to the reading adjustment to a big utterance as well as the proactive pitch level adjustment when the speakers have to modulate the pitch level as the end of the utterance is not "visible". Here I also refer to the reading from the phone where one cannot see the full screen mode and the phrase appears gradually making the speaker go up and down with the pitch, realizing that the utterance is not finished yet. L1 English and L2 English word choice is most similar in *Phrase 2*, which is a clear enumeration pattern and proves to be quite universal. Surprisingly, the same phrase demonstrates more agreement cases on the word choice between native Russians. Phrase 3 contains the syntactic structure where the rising tone and its placement coincide among all speakers in both Englishes: L1 and L2.

Table 1
THE CORRELATION BETWEEN WORD CHOICE
AND THE RISING TONE PLACEMENT
IN L1 ENGLISH AND L2 ENGLISH

	English		L2 English	Number of
Phrase Number	L1 English word choice	Number of cases in L2 English (out of 5)	word choices	coinciding cases
1	ever	1	you	2
	sounds	4	watched	1
	learning	2	young	2
			children	4
			practice	1
			of the	1
			language	2
2	imitate	3	they	1
	repeat	4	sing	3
	consonant	2	vowel	3
	combinations	4	without	3
3	young	5	language	5
	learning	2	and	1
	speak	2		
	natural	3		
	automatic	1		

The L1 Russian reading demonstrates a good correlation between the word choice which was made in the English reading and the same word choice in the Russian text (see Table 2). Table 2 illustrates the joint illocutionary forces in the phrases as they are perceived by the L1 Russians and extrapolated onto the L2 English.

Table 2
THE CORRELATION BETWEEN THE ENGLISH
AND THE RUSSIAN WORD CHOICE WITH THE
RISING TONE

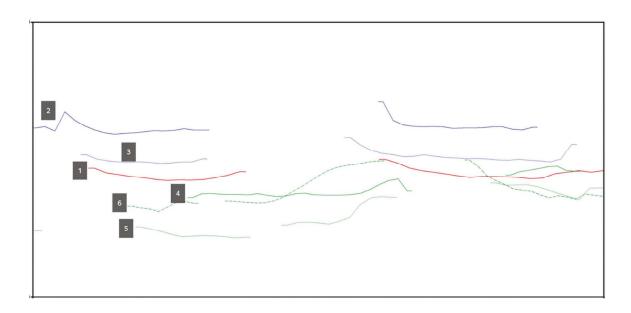
Phrase number	English word choice	Russian word choice	Number of coinciding cases (out of 5)
1	children	дети	4
	language	языка	2
2	imitate	имитируют	1
	repeat	повторяют	2
	sing	поют	2
	consonant	согласных	1
	vowel	гласных	3
3	young	маленьких	4
	language	языку	5
	natural	естественно	3

The most correlated word choices in *Phrases* 1–3 show the cases (3–5 cases) which have NO correspondence in L1 English but are numerous in L1 Russian and L2 English. The reason may be a discourse global structure as viewed by the Russian speakers and being transferred into their Russian English variant.

RISING ACCENTS PITCH CONFIGURATION

The CLI intonational research stated long ago that the Russian intonation contour 3 (*NK-3*) is realized instead of the English rising contour which is curvy or scoop. Our material presents the variety of the pitch configurations across the words which are similarly marked with the rising tones in L1 English, L2 English and L1 Russian (see Tables 1, 2). There were 5 pairs of words where the L1 English, L2 English and L1 Russian had the counterparts: *Phrase 2* – IMITATE – ИМИ-ТИРУЮТ; REPEAT – ПОВТОРЯЮТ; CONSONANT – СОГЛАСНЫХ; *Phrase 3* – YOUNG – МАЛЕНЬКИХ; NATURAL – ECTECTBEHHO. The sets total in 38 pitch contour pictures.

As an example, we consider the pitch contour of the words CONSONANT and COFACHBIX (see figure 1).



1) a red line is L1 English; 2) a blue line is L2 English by speaker 1_MP1; 3) a blue dotted line is L2 English by speaker 5_SP; 4) a green line is L1 Russian by 1_MP; 5) a green dotted line is L1 Russian by 2_SS; 6) a green dashed line is L1 Russian by 4_PP.

Fig. 1. The extracted pitch level of the words CONSONANT and COΓΛΑCHЫX in L1 English, L2 English and L1 Russian

There are six concomitant contours displayed in Figure 1: three are in English and three are in Russian. The English contours resemble each other in the curvature (1 – 3) however, they are different in FO values: the nonnative English contours are higher than the native one in pitch register. Whereas the Russian contours (4–6) lie lower than the native English (1): it is known from the literature that the English contours start higher in pitch level than the Russian ones. Interestingly, the realizations of the L1 Russian rising tone on СОГЛАСНЫХ by different speakers are rather various: some of them are rising (5) and some of them are rising-falling (6) or even rising-level (4). The contour indicates the threefold "heavily centralized" (N. D. Svetozarova's term [Светозарова, 1982]) nature of the Russian word СОГЛАСНЫХ where the pre-stressed part differs from the central (stressed) and the poststressed (tail) parts.

CONCLUSIONS

In summary, the present study has attempted to compare the placement and the configuration of the Russian pitch accents on the stressed words and the nuclear tones with the English phrasal accents and nuclear tone in L1 and L2.

Our results suggest that the communicative type of the sentence and its overall illocutionary force drive the usage of the rising tone and its placement across identical phrases in Russian and English. Phrase 2 with the enumeration is the most concomitant, whereas the reading of Phrase 1 which is a general question with a complex object and a participial clause varies a lot across the speakers. This finding marks the universal and language-specific continuum in CLI when one speaker highlights different information centers with the rising tone on well-aligned bilingual texts.

Prior research has focused on the similarity between rising contours in L1 Russian and L2 English with the Russian contours being imposed on the English phrase. A closer look on the pitch contours of the words which: 1) take a rising tone, thus bearing the common 'non-end' communicative intention; 2) are the same in meaning (English and Russian equivalents), – has proved the hypothesis and shown the configuration diversity. The main finding is that L2 English does not resemble L1 Russian rising tone configuration. It rather resembles the L1 English curve with a higher F0 values. A further experimental and methodological studies are needed to consider the prosodic characteristics of the Russian variant of the English language.

¹The letters stay for the participants' code in the dataset.

СПИСОК ИСТОЧНИКОВ

- 1. Вишневская Г. М. Методология и методика экспериментально-фонетических исследований: учеб. пособие. Иваново, 1990.
- 2. Bergman C. [et al.]. L2 immersion causes non-native-like L1 pronunciation in German attritors / C. Bergman, A. Nota, S. A. Sprenger, M. S. Schmidt // Journal of phonetics. 2016. Vol. 58. P. 71–86.
- 3. Flege J. E., Bohn O. S. The revised speech learning model (SLM-r) // Second language speech learning: Theoretical and empirical progress. Ed. R. Wayland. Cambridge: Cambridge University Press, 2021. P. 3–83.
- 4. Сухова Н. В. Перцептивно-продуктивная связь в условиях просодической русско-английской интерференции (на примере терминальных тонов) // Вестник Московского государственного лингвистического университета. Гуманитарные науки. 2023. Вып. 6(874). С. 131–137.
- 5. Lee J., Park H. Acoustic cue sensitivity in the perception of native category and their relation to nonnative phonological contrast learning // Journal of Phonetics. 2024. Vol. 104. Article 101327.
- 6. Kim D., Clayards M., Goad H. A longitudinal study of individual differences in the acquisition of new vowel contrasts // Journal of Phonetics. 2018. Vol. 67. P. 1–20.
- 7. Цибуля Н. Б. Жесты-иллюстраторы со значением контраста и их просодические корреляты // Вестник Московского государственного лингвистического университета. Гуманитарные науки. 2023. Вып. 3(871). С. 129–135.
- 8. Касаткин Л. Л. Русская интонация: тональные контуры // Проблемы фонетики: сборник статей / отв. ред. Р. Ф. Касаткина. М.: Наука, 2007. Вып. V. С. 250–266.
- 9. Вольская Н. Б., Скрелин П. А. Система интонационных моделей для автоматической интерпретации интонационного оформления высказывания: функциональные и перцептивные характеристики // Труды третьего междисциплинарного семинара «Анализ разговорной русской речи» (АР3–2009). СПб.: ГУАП. 2009. С. 28–41.
- 10. Прошина З. Г. Язык и его варианты реальность или виртуальность? // Социальные и гуманитарные науки на Дальнем Востоке. 2021. Т. XVIII. Вып. 3. С. 108–113.
- 11. Фокина С. Л. Акцентуация терминологических словосочетаний в подъязыке нанотехнологий (на материале английского языка): автореф. дис. ... канд. филол. наук. Ярославль, 2013.
- 12. Steffman J., Cole J., Shattuck-Hufnagel S. Intonational categories and continua in American English rising nuclear tunes // Journal of Phonetics. 2024. Vol. 104. Article 101310.
- 13. Светозарова Н. Д. Интонационная система русского языка. Ленинград: Издательство Ленинградского университета, 1982.
- 14. Кодзасов С. В. Уровни, единицы и процессы в интонации // Проблемы фонетики. 1999. Вып. 3. С. 197-215.
- 15. Pierrehumbert J. The phonology and phonetics of English intonation: Doctoral dissertation. Massachusetts Institute of Technology, 1980.
- 16. Оде С. Заметки о понятии тональный акцент на примере русского языка // Проблемы фонетики: Сборник статей / отв. ред. Р. Ф. Касаткина. М.: Наука, 2007. Вып. V. С. 237–250.
- 17. Кибрик А.А., Подлесская В.И., Коротаев Н.А. Структура устного дискурса: основные элементы и канонические явления // Рассказы о сновидениях: Корпусные исследование устного русского дискурса / под ред. А. А. Кибрика и В. И. Подлесской. М.: Языки славянских культур, 2009. С. 55–102.
- 18. Янко Т. Е. Интонационные стратегии русской речи в сопоставительном аспекте. М.: Языки славянских культур, 2008.
- 19. Grant L. Well Said! 2nd Edition. Cengage Learning, 2011.
- Parshina O., Zdorova N., Kuperman V. Cross-linguistic comparison in reading sentences of uniform length: Visualperceptual demands override reader's experience // Quarterly Journal of Experimental Psychology. 2024. Vol. 8. P. 1694–1702.
- 21. Kim S.-E., Tilsen S. Planning for the future and reacting to the present: Proactive and reactive F0 adjustments in speech // Journal of Phonetics. 2024. Vol. 104. Article 101322.

REFERENCES

- 1. Vishnevskaya, G. M. (1990). Metodologija i metodika jeksperimental'no-foneticheskih issledovanij = Methodology and methods of phonetic experiments. Ivanovo. (In Russ.)
- 2. Bergman, C., Nota, A., Sprenger, S. A., Schmidt, M. S. (2016). L2 immersion causes non-native-like L1 pronunciation in German attritors. Journal of phonetics, 58, 71–86.
- 3. Flege, J. E., Bohn, O. S. (2021). The revised speech learning model (SLM-r). In Wayland, R. (ed.), Second language speech learning: Theoretical and empirical progress (pp. 3–83). Cambridge: Cambridge University Press.
- 4. Sukhova, N. V. (2023). The perception-production link in the Russian-English prosodic interference (the case study of terminal tones). Vestnik of Moscow State Linguistic University. Humanities, 6(874), 131–137.
- 5. Lee, J., Park, H. (2024). Acoustic cue sensitivity in the perception of native category and their relation to nonnative phonological contrast learning. Journal of Phonetics, 104, 101327.
- 6. Kim, D., Clayards, M., Goad, H. (2018). A longitudinal study of individual differences in the acquisition of new vowel contrasts. Journal of Phonetics, 67, 1–20.

- 7. Tsibulya, N. B. (2023). Gestures-illustrators with the meaning of contrast and their prosodic correlates. Vestnik of Moscow State Linguistic University. Humanities, 3(871), 129–135. (In Russ.)
- 8. Kasatkin, L. L. (2007). Russkaja intonacija: tonal'nye kontury. Problemi fonetiki = Russian intonation: pitch contours. Issues in Phonetics, 5, 250–266. (In Russ.)
- 9. Volskaya, N. B., Skrelin, P. A. (2009). Sistema intonacionnyh modelej dlja avtomaticheskoj interpretacii intonacionnogo oformlenija vyskazyvanija: funkcional'nye i perceptivnye harakteristiki = System of intonation models for automatic intonation contours' detection: Functional and perceptual characteristics (pp. 28–41). Trudy tret'ego mezhdisciplinarnogo seminara «Analiz razgovornoj russkoj rechl» (AR3–2009). St. Petersburg: GUAP. (In Russ.)
- 10. Proshina, Z. G. Language and its varieties reality or virtuality? The Humanities and Social Studies in the Far East, XVIII(3), 108–113. (In Russ.)
- 11. Fokina, S. L. (2013). Akcentuacija terminologicheskih slovosochetanij v pod'jazyke nanotehnologij (na materiale anglijskogo jazyka) = The accentuation of the terminological word combinations in the nantechnological field: PhD in Philology. Yaroslavl'. (In Russ.)
- 12. Steffman, J., Cole, J., Shattuck-Hufnagel, S. (2024). Intonational categories and continua in American English rising nuclear tunes. Journal of Phonetics, 104, 101310.
- 13. Svetozarova, N. D. (1982).Intonacionnaja sistema russkogo jazyka = Intonation system of the Russian language. Leningrad. (In Russ.)
- 14. Kodzasov, S. V. (1999). Urovni, edinicy i processy v intonacii. = Levels, units and processes in intonation. Problemi fonetiki, 3, 197–215. (In Russ.)
- 15. Pierrehumbert, J. (1980). The phonology and phonetics of English intonation. Doctoral dissertation. Massachusetts Institute of Technology.
- 16. Odé, C. (2007). Zametki o ponjatii tonal'nyj akcent na primere russkogo jazyka = Notes on pitch accents with the example of the Russian language. Problemi fonetiki, 5, 237–250 (In Russ.)
- 17. Kibrik, A. A., Podlesskaya, V. I., Korotaev, N. A. (2009). Struktura ustnogo diskursa: osnovnye jelementy i kanonicheskie javlenija = Spoken discourse structure: main elements and canonic phenomena. In Kibrik, A., Podlesskaya V. I. (Eds.), Night Dream Stories: A corpus study of spoken Russian discourse (pp. 55–102). Moscow: Languages of Slavonic Culture. (In Russ.)
- 18. Yanko, T. E. (2008). Intonacionnye strategii russkoj rechi v sopostavitel'nom aspekte = Intonational strategies of the Russian speech in the comparative aspect. Moscow: Languages of Slavonic Culture. (In Russ.)
- 19. Grant, L. (2011). Well Said! 2nd edition. Cengage Learning.
- 20. Parshina, O., Zdorova, N., Kuperman, V. (2024). Cross-linguistic comparison in reading sentences of uniform length: Visual-perceptual demands override reader's experience. Quarterly Journal of Experimental Psychology, 8, 1694–1702.
- 21. Kim, S.-E., Tilsen, S. (2024). Planning for the future and reacting to the present: Proactive and reactive F0 adjustments in speech. Journal of Phonetics, 104, 101322.

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