Is Bulgarian Language Losing Its Alveodental Consonant [l]?

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Abstract

This paper considers an increasingly dominating articulation of the alveodental consonant [l] as [ũ] in Bulgarian. This problem is rarely discussed in Bulgarian linguistic literature. Until this moment there are not any experimental researches proving the statement of the expansiveness of this articulation. The aim of this preliminary study is to find out if the real number of people pronouncing [l] as [ũ] is as big as we assume and to define the word position in which this articulation usually occurs. The results of the experiment prove our assumption and a deeper analysis shows that the process which has started in Bulgarian will probably deepen, following the tendency in other Slavic languages, as Polish, Byelorussian, Slovenian etc. where this articulation is standardized.

Keywords: incorrect articulation, alveodental consonant [l], spelling problems, semantics

1. Introduction

This paper is based upon our previous observations over the articulatory tendencies of the alveodentallaminalconsonant [l] in contemporary Bulgarian speech (Padareva-Ilieva and Mitsova, 2012). The correct articulation of the consonant [l] includes both a constriction and aclosure in the oral cavity. The bladeof the tongue is placed close to the alveolar ridge and the upper teeth obstructing the air passage.

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This closure does not allow the air stream to pass the centerline in the oral cavity - from the vocal folds to the lips. Consequently, the expiratory airstream can pass only around both sides of the tongue because of the lateral openings within the oral cavity. [l] is the only lateral consonant in Bulgarian language. This correct articulation has been in a process of fading during the past three decades. It is changing towards the articulation of [u] (in IPA - [w], indicated in Bulgarian linguistic literature as ý). Typical for this incorrect articulation is the participation of lips (lips spreading round) and the tongue blade does not create an alveodental closure, but it is loosened behind the bottom teeth as in the articulation of high back vowel [u]. The result is [心血管].

Some Bulgarian linguists (Naydenova, 1998; Murdarov, 2003) define this production of [心血管] instead of [l] as “a new one” or “mannered”. Probably it was new or mannered as a typical feature of youth slang in the last decades of the previous century. Nowadays this articulation is too expansive and deserves special attention because of the following two factors - influence upon spelling and semantics. It occurs that the presented pronunciation appears to be a problem for Bulgarianteachers of English and also for learners of Bulgarian as a foreign language. The truth is that young people including students in Linguistics are even surprised by the fact that this is not a correct articulation. In addition, the new Bulgarian media speech enforces the process. This articulation is inherent in Bulgarian public culture in general (radio and TV programmes, advertising industry and shows). Some Bulgarians, mostly highly educated, have noticed this problem and satirize its pronunciation by consciously using letter ý (Bulgarian alphabet) instead of л (Bulgarian alphabet) when writing their posts in internet forums.

Many Bulgarian linguists (Stoykov, 1956; Kochev, 2007; Tsonev, 2008; Burov, 2012) consider this articulation as a dialect characteristic. They claim that its origin is velar allophone of [l] which is very typical for most Bulgarian dialects especially those spoken in the south-western part of the country.

In this paper we argue this position and do not classify it as a dialect feature but as an expansive incorrect pronunciation throughout the country with corresponding consequences in the spelling, semantics and phonetic system of Bulgarian language.
2. Previous Studies

The discussed problem has been studied in two aspects in Bulgarian linguistic literature – as a dialect feature (Selishchev, 1929; Stoykov, 1956, 1962; Holiolchev 1974; Zhobov, 2004; Stoilov et al. 1993; Kochev, 2007) and as a new articulatory pattern (Holiolchev, 1974; Naydenova, 1998; Murdarov, 2001, 2003; Zhobov, 2004; Padareva, 2009; Padareva-Ilieva and Mitsova, 2012).

This phenomenon is also observed in other Slavic languages (Merkù, 1983, Kurjan, 1998, Chepar, 2011, Albul, Soroka, 2012).

2.1. [ŭ] as a dialect feature in Bulgarian

Stoykov (1956) first noticed a “new” phonetic change – [l] > [ŭ] – at the end of the word and in a position before a consonant in one of the Bulgarian central dialects – chuvaha, daŭand voðika. Zhobov (2004) refers to Selishchev (1929) who pointed out the same pronunciation in the same word position which is a specific feature of a dialect region beyond the West Bulgarian border nowadays.

Stoilov (1993) argues that in South-Western dialects the consonant [l] is often pronounced as [u] in a position before central [a] and [a] and before back vowels [o] and [u] – kuyav, klaya, sufkovs, sladko. The same paper (Stoilov & Georgieva, 1993) claims that this is a speech anomaly which constantly expands.

Kochev (2007) considers [ŭ] as a semi-vowel, one of the final phases of intensification process for non-palatalization.

Burov (2012) notes two variants of articulation – labiovelar [l] which is close to [ŭ] in the western part of Bulgaria and the traditional alveodental [l] in Eastern and Central Bulgaria. This pronunciation is distinctive for the standard Bulgarian language.

2.2. [ŭ] as a new Articulatory Pattern

Holiolchev (1974) noticed that this specific articulation of [l] as [ŭ] expands quickly among young people outside the dialectal areas.
Holiolchev even ascertains the existence of a phonetic homonymy between the variants [l] and [u] in the linguistic consciousness of teenagers. Naydenova (1998) defines the articulation of [u] instead of [l] as a “phonetic deformation”.

According to certain contemporary linguists (Naydenova, 1998; Zhobov, 2004) there is a transition process of the lateral consonant [l] to [u] among young people under 30 years of age. Zhobov (2004) observes that just 10 - 15 % of his students pronounce the consonant [l] correctly. Murdarov (2003) and Naydenova (1998) outline that the logical result of the [l] >[u] transition is the standardization of this defective pronunciation as an official one.

It is interesting how a foreigner discusses this topic. Soroka (2013) has noticed that according to [l] pronunciation Bulgarians could be divided into three groups:

1) People in and over their 40s who pronounce the standard alveodental[l].
2) People in their 30s who can articulate the standard [l], but unconsciously produce [u].
3) Young people, who almost do not make difference between [l] and [u]. They usually pronounce [u].

She has noted that her students who are foreigners studying Bulgarian do not understand the meaning of the Bulgarian words when pronounced with [u] instead of [l]. On the other hand, she has observed spelling mistakes made by Bulgarian students learning Ukrainian. They write the letter l instead of letter v which presents the non-sonorant [u]. According to Soroka (2013) the process which concerns the articulation of [l] or [u] is very dynamic and presently the two sounds are in a struggle. She supposes that this non-standard allophone of [l] will be standardized in several years (Soroka, 2013: 120).

2.3. The Phenomenon in other Slavic Languages

As we have already mentioned above this is not a new phenomenon in other Slavic languages. A similar pronunciation is a standardized one in Polish even in the same morphophonemic positions (at the syllable onset, before non-palatal consonants, before rounded vowels and at syllable coda) (Naydenova, 1998). Other Slavic languages as Slovenian are also familiar with the discussed problem.
Chepar (2011) affirms this articulation type as typical in Slovenian, in contrast to the official norm in Bulgarian language. This similar process, already completed in Serbian language, leads to the phonetic transition of the consonant [l] to the vowel [o] at the same end of the word [bel–beo]. It is also noted that the same process is current in Ukrainian language, but the linguistic interests towards it are still not extended enough (Albul&Soroka, 2012).

However, the process in most of these countries has begun long before it started in Bulgaria. Merkù(1983) refers on Ramovš(1924) who pointed out that this phenomenon in Slovenian had begun in XIVth century. It is noticed that in manuscripts of this period the phone is presented as either l or u. In a paper devoted on V. OblakKurjan(1998) states that for centuries the pronunciation of [u] as a variant of [l] in Slovenian is not marked in manuscripts if we do not take into consideration its articulatory description. This tradition is actually kept in some Slavic languages nowadays. Yet in Bulgarian there still is not a special grapheme for this sound (for example the grapheme in Polish is ł). It is important to point out that this problem is noticed but a real discussion is not raised yet. In other Slavic languages discussions of the type are held much earlier. That is the reason why the different articulation of [l] in some of these languages is now an authorized literary form.

3. Theoretical framework. The nature of consonant [l] and its allophones in Bulgarian

It is important to mention that alveodental [l] as the only lateral consonant in Bulgarian has two main allophones (rounded [lʷ] in a position before the rounded vowels [o], [u] and palatal [l] before front unrounded vowels [i], [e]) and a palatal correlate in a position before central and back vowels [ɑ], [æ], [o], [u].

[lʷ] is a result of an assimilation process. This allophone is influenced by the following rounded sounds which induce pronunciation of [l] with lips rounded. During this co-articulation process the consonant [l] does not lose its closure between alveolar ridge and the upper teeth ([lʷu`nɑ], [lʷuk]).
In standard Bulgarian there is a palatal pronunciation when [l] is in a position before front vowels [i] and [e], e.g. ([ljen], [li’lof]). However, this allophone differs from the palatal correlate which appears only before central and back vowels ([Fut], [løf]).

The discussed pronunciation (articulation of [l] as [u]) is not identical with the labial [l’] before rounded vowels [o], [u], although it may occur in this position as well. The difference lies in the presence of a closure in the oral cavity pronouncing [l’] and its absence when producing [u]. So in this paper we discuss the [u] pronunciation and its variants in all other in-word positions except the position before front vowels. The reason why we omit discussing the position before front vowels is that people who produce [u] instead of [l] pronounce [l’] before [e], [i] correctly.

4. Empirical Observations

4.1. Spelling problems

The expanding pronunciation of [l] as [u] induces confusion of those two sounds. That is why some spelling problems in words containing letters л or у have been indicated recently. Low educated people and especially young people confuse these two letters.

Алдитория/аудитория, Константинополу/Константинопол, пауза/пауза,
Уксор/Луксор, Халс/Хаус, вальчер/ваучер

4.2. Semantic Confusion

Subjects of special interest for us are those examples in which the semantics of the word is changed as a result of incorrect articulation of [l] as [u](Padareva, 2009). That is because if an incorrect articulation does not lead to a communicative confusion, it will not be an object of linguistic interests. Thus the problem enlarges and does not concern just a defective pronunciation. Practically the confusion of [l]/[u] leads to homophony. The following examples illustrate our statement that even the context sometimes fails to determine which word it is exactly.
We think it is appropriate to add the English translation of these examples for to prove our statement that the incorrect articulation of the discussed phone changes the meaning of the whole statement.

alt–aut: contralto - out
Tazipevtsa e alt / Tazipevtsa e aut. This singer is contralto / This singer is out.
pluhama-pluhama To receive – to lecture
Toy znaesamo da pluhama / Toy znaesamo da pluhama. He wants only to receive / He wants only to lecture.
lidiram-diram to lobby – to rob
Octaktozaetozi post, se nauchisamo da lidira / Otkaktozaetozi post, se nauchisamo da dira.
Since he held that post he has learnt to do everything but to lobby / Since he held that post he has learnt to do everything but to rob.
bluza-bluza a blouse – a cheek
Zhenatasassinyata bluza / Zhenatasassinyata buza. The woman in the blue blouse / The woman with a blue cheek.
bludna-bludna profligate – intelligent
Dneshnata bludna mladezh ... / Dneshnata budna mladezh ... The profligate young people of today / The intelligent young people of today ...

4.3. Problems with foreign language studying and Bulgarian language studying

English language teachers in Bulgaria have also indicated this problem. The reason is that u has a similar pronunciation with the English approximant [w]. The semantic problem arises here again in examples such as wife - life, why - lie, white - light, walk - lock.

We find the same situation in some loanwords in Bulgarian from English.

yan/ lan, yot/ lot, RowRoyts/RolRoyts
vans lan, vots 1d; RovRoyts/RovRoyts

Foreigners studying Bulgarian are confused because the standard form of [l] which they are taught occurs to be different from the one in everyday speech.
4.4. The articulation of [l] as [ǔ] in media speech and the discussion of the problem in the Internet

It was in 1974 when Holiolchev (1974) mentioned that some Bulgarian journalists in Radio Sofia pronounced incorrect [l] as [ǔ]. However, nobody took this note into account. And as a result nothing is done to correct this defective pronunciation.

One of our graduate students carried out a survey of Bulgarian media speech and Internet forums in 2013. She found out that [ǔ] instead of [l] can be heard in media all over the country. It proves our assumption that this articulation expands and is not limited to particular areas and speech situations.

Although most people do not pronounce [l] correctly, they notice the incorrect pronunciation and discuss it in their posts in the Internet forums, and this fact is very interesting. Some of the opinions concerning the [l] as [ǔ] articulation are really conversant. In fact, there are two points of view. The first one tries to affirm that this is not a speech defect but a speech tendency. The second one, on the contrary, states that this is a problem requiring speech therapy. There is another group of Internet users who are too extreme or they just ascertain or survey particular cases. Some of them belittle this problem claiming that this pronunciation does not affect communication. Others claim that it is a question of time for Bulgarian language to lose the consonant [l].

5. Aim of Study

The aim of this paper is neither to locate this kind of articulation as a particular dialect feature, nor to specify its place in historical vowel-consonant tendencies in Bulgarian. We aim to ascertain it as an incorrect pronunciation according to the official language norm. We claim that this is an expansive articulatory phenomenon.

In order to prove this claim we performed an experiment with two main goals.

1. To find out if the real number of people pronouncing [l] as [ǔ] is as big as we assume.
2. To define the in-word positions in which this articulation usually occurs.

6. Participants

30 randomly selected students studying Linguistics or Logopedy participated in this experiment. We have chosen them by these particular subjects of study because of the assumption that their pronunciation should be largely in accordance with the official language norm.

7. Recording Procedures

The participants were asked to read 5 sentences containing words with different in-word positions of [l]. Every single informant was recorded on a separate audio file by using an USB microphone on Praat software (Boersma & Weenick, 2010).

After the recordings an auditive analysis was carried out independently by two linguists, specialists in Phonetics and Sociolinguistics. Every recorded audio file was audited repeatedly as special attention to the words containing the consonant [l] has been paid. The aim was to specify if the pronounced sound is [l] or [u].

8. Corpus of the Study

Five sentences in Bulgarian containing words with different in-word positions of [l] were used in the experiment. The reason why we did not use just words but sentences was our aim to get close to spontaneous speech. We suppose that if the informants were to pronounce separate words they would be rather careful in articulation.

The observed positions of [l] are the following:

In a position between mid-vowel [α], [ɜ] and alveolar consonant [n] and [t] (вълнения, категориалната, екзалтиранията).
In between rounded vowels [o], [u] (пълзър, полуква).
In a position between bilabial consonant [b], [p] and rounded vowel [o], [u] (блуза, аплодиране).
In a position between rounded vowel [o] and velar consonant [k] (толкова, няколко).
In a position between alveodental consonant [s] and mid-vowel [a] (sladka).
In a position between alveodental consonant [s] and rounded vowel [o] (slovosâtchetaniya).
In a position between velar consonant [g] and mid-vowel [a] (glavnata).

Sentences:

Kogatobesheoblechena s vilniaplov; ne mi haresvashe, no s tazisinya zasitokovas.
Spored kategorialna prinadlezhnost na slovete, mnohko slovocetaniya.
Vsichkispecthelinagradata, vlyazoha v golyamata universitetska auditoriya.
Pevitsata, koyato imashe altogas, be autogolyamatastsenazaradi problem s gosite razky.
Otkakto zapochnha da se zanimava s politika, toy se nauchisamo da ldira i da produve komisionni.

9. Results

According to the previously marked aims of the study the results will be announced in the same order: 1. Number of people pronouncing [l] as [û], and 2. The positions in which the articulation of [l] as [û] usually occurs. It is interesting to mention that during the auditive analysis we found that many participants produced another sound except [l] and [û] – similar to [ɯ] (high unrounded back vowel) which is close to [û] in articulation, but with lips unrounded.

9.1. Number of people pronouncing [l] as [û]

We have found out that none of the participants produces [l] in all investigated word positions. It confirms our statement that this articulation process (i.e. transition of [l] to [û]) is too expansive nowadays. 9 of all 30 participants do not produce the correct [l] in any word. Only 2 participants pronounce [l] correctly, but only in half of the experimental words – the participants №12 and №30. 28 participants do not pronounce [l] in over 60% of the given words. Moreover, 3 informants never produce [l], but [û] in 13 words and [ɯ] in one word. (The frequency distribution of the three sounds for each participant is presented in Table 1A/B.)
The percentage distribution of the three sounds for each participant is presented in Table 2A/B and Diagram 1).

9.2. Positions in which the articulation of [l] as [û] usually occurs

The following conclusions were made after the audivite analysis. The collected results for each in-word position in the corresponding words will be presented.

1. In a position between mid-vowel [a] [æ] and alveolar consonant [n] and [t].
   - vâlneniya - 11 [û], 18[w], 1 [l]. We have already noticed this other variant which appears instead of [û]. It is close to the unrounded high vowel [u], similar to the presented [û], but with lips loose as they are when articulating [æ].
   - kategorialnata - 9 [û], 17 [w], 4 [l]
   - ekzaltiranata - 1[û], 7 [w], 22 [l]
   - altov - 28 [û], 2[l]

2. In between rounded vowels [o], [u].
   - pulover - 27[û], 3 [l]
   - poluchava - 23 [û], 7 [l]

3. In a position between bilabial consonant [b], [p] and rounded vowel [o], [u]
   - bluza - 29 [û], 1 [l]
   - aplodirani - 30 [û]

4. In a position between rounded vowel [o] and velar consonant [k].
   - tolkova - 30 [û]
   - nyakolko - 30 [û]

5. In a position between alveolar consonant [s] and mid-vowel [a].
   - sladka - 25 [û], 5 [l]

6. In a position between alveolar consonant [s] and rounded vowel [o].
   - slovosâchetaniya - 28 [û], 2 [l]

7. In a position between velar consonant [g] and mid-vowel [a].
   - glavnata - 24 [û], 3 [w], 3 [l]
   - glas - 23[û], 7 [l]
The frequency distribution of the three sounds for each word is presented in Table 3A/B. The positions are numbered as they are above. The percentage distribution of the three sounds for each word is presented in Table 4A/B and Diagram 2.

10. Analyses

It is obvious that the frequency and the percentage distribution of some words are similar. So, based on the provided results we could divide the words into groups according to that similar distribution. Practically these groups form the seven positions mentioned above. It means prima faci that the word position of [l] indicates its pronunciation as [l], [ʉ], or [ɯ]. But a deeper analysis shows that the position, as we marked it, is not the only determinant of the pronunciation. Actually the particular neighboring sound segment is the one which determines the pronunciation.

Group 1. In a position between mid-vowel [a, ə] and alveolar consonant [n] and [t].

Both consonants [n] and [t] are alveolar, but according to Bulgarian consonant system [t] is actually alveodental and [n] is alveolar in location, but nasal by manner. So the reason why these two consonants are a part of one and the same group is that they are both alveolar. The two words vəlneniya and kategorialnata have almost similar frequency distribution. Ekzaltiranata, which is a part of the same group according to the position of [l], has completely different frequency distribution, because of the neighbouring alveodental consonant [t], since [l], as we have mentioned already, has to be produced normally with an alveodental closure. So we ascertain that [l] is produced correctly when it is close to a consonant with the same location of articulation as is [t]. And when the neighbouring sound is different by location it tends to become [ʉ] or [ɯ] according to the principle of economy which governs the co-articulation.

The same position of [l] as in ekzaltiranata has another word altov. It is obvious that the results for ekzaltiranata and altov are quite the opposite. We suggest that the reason for these contradictory results should be the different place of the word stress. The word stress in altov is on the first syllable /al-/ which contains l as coda. In ekzaltiranata the word stress is on the third syllable, in a position after [l]. So the stress location is probably the factor that influences a diphthongization of the first syllable as /aʉ-/.
Group 2. In a position between rounded vowels [o], [u].

Both words pulover and poluchava receive almost the same frequency distribution which is logical. According to the economy principle when [l] is in between two rounded vowels it requires additional articulatory effort so as to be produced as alveodental unrounded [l]. It is much easier to articulate [û] in this position.

Group 3. In a position between bilabial consonant [b], [p] and rounded vowel [o], [u].

The frequency distribution for bluza and aplodirani confirms the previous conclusion.

Group 4. In a position between rounded vowel [o] and velar consonant [k].

It is interesting to mention here that this is the only position with such indisputable results. All participants produce [l] as [û] in this position. For this example we assume that the assimilation is regressive. It means that the precedent sound is responsible for the pronunciation of [l] as [û].

Group 5. In a position between alveodental consonant [s] and mid-vowel [a].

We suppose that in sladka the stress on the first syllable which includes -l- is the reason for the preponderance of [û] over [l] (see the analysis for Group 1). The probable reason for the presence of 5 unarguable [l] pronunciations is the preceding alveodental consonant [s].

Group 6. In a position between alveodental consonant [s] and rounded vowel [o].

It appears that in examples such as slovo and traniano the next rounded vowel is a more powerful factor for the occurrence of [û] than the position of the word stress.

Group 7. In a position between velar consonant [g] and mid-vowel [a].

We have placed the words davata and glas in the same group by the same position of [l] although the frequency distribution is not equal but similar.
The biggest distribution of $[\ddot{u}]$ confirms our suggestion for Group 1. We have noticed that in the one-syllable word $\text{glas}[l]$ is pronounced usually as $[\ddot{u}]$ contrary to its derivative polysyllable word $\text{glasovite}$.

11. Conclusions

According to the aims of the paper and the provided results we can draw these three conclusions.

Diagram 2 shows the percentage distribution of the three sounds for every word.

1. 30% of the participants never produce $l$ and 93% of them produce $[\ddot{u}]$ and $[uu]$ in over 75% of the words. Just 6.7% of the participants (2 participants) produce $[l]$ correctly in 50% and 57% of the words respectively.
2. The word ekzaltiranata (position of $[l]$ after mid-vowel $[\ddot{a}]$ and in front of alveodental consonant $[t]$) is produced most correctly – 73.3% of the participants. The other 13 words are produced correctly between 3% and 23.3%. In three of the words (aplodirani, tolkova, nyakolko – position of $[l]$ after labial consonant/ rounded vowel and in front of rounded vowel) 100% of the participants produce $[\ddot{u}]$ instead of $[l]$.
3. Beyond our aims we have found out that another sound appears instead of $[l]$ and $[\ddot{u}]$. This is the sound $[uu]$ (the articulation of which is the same as $[\ddot{u}]$, but with unrounded lips).

12. Discussions

1. We suppose that the articulatory habits of the informants (all of them under 25 years of age) influence the pronunciation. This is one of the possible reasons for the insignificant number of participants who pronounce $[l]$ correctly.
2. We have mentioned three cases of over-articulation of normative $[l]$. According to Farnetani and Recasens (1999: 34) “when the communicative situation requires a high degree of phonetic precision, speakers are able to over-articulate; when this is not needed speakers tend to under-articulate and economize energy.”. We suppose that some informants realize their abnormal articulation of $[l]$ as $[\ddot{u}]$ and even correct themselves sometimes when the communicative situation requires the normative pronunciation.
3. The original aims of the paper are to point out the word positions where [u] occurs most often and the real number of people who do not pronounce [l] correctly. Analysing the results we have found out another sound [u] which appears instead of [l] and which is not actually [u].

The three discussed topics here could be explored in further analyses and experiments which will reveal more details concerning the pronunciation of [l] and the dynamics of the phenomenon.

It was found that this problem is in fact profound and deserves much more linguistic attention than it has received until now.
References


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Table 1 A. (Frequency distribution – participants/sounds)

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Table 1 B. (Frequency distribution – participants/sounds)

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Table 2 A. (Percentage distribution – participants/sounds)

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<th>Participants №</th>
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<th>13</th>
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<th>15</th>
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<tbody>
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<td>85,7</td>
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<td>78,6</td>
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Table 2 B. (Percentage distribution – participants/sounds)

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<th>30</th>
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Diagram 1
Table 3 A. Frequency distribution (words/sounds)

<table>
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<th>Positions</th>
<th>1&lt;sup&gt;st&lt;/sup&gt; position</th>
<th>2&lt;sup&gt;nd&lt;/sup&gt; position</th>
</tr>
</thead>
<tbody>
<tr>
<td>Variants</td>
<td>vălneniya</td>
<td>kategorialnata</td>
</tr>
<tr>
<td>[ü]</td>
<td>11</td>
<td>9</td>
</tr>
<tr>
<td>[ɯ]</td>
<td>18</td>
<td>17</td>
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<td>[l]</td>
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</tr>
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Table 3 B. Frequency distribution (words/sounds)

<table>
<thead>
<tr>
<th>Positions</th>
<th>3&lt;sup&gt;rd&lt;/sup&gt; position</th>
<th>4&lt;sup&gt;th&lt;/sup&gt; position</th>
<th>5&lt;sup&gt;th&lt;/sup&gt; position</th>
<th>6&lt;sup&gt;th&lt;/sup&gt; position</th>
<th>7&lt;sup&gt;th&lt;/sup&gt; position</th>
</tr>
</thead>
<tbody>
<tr>
<td>Variants</td>
<td>bluza</td>
<td>aplodirani</td>
<td>tolkova</td>
<td>nyakolko</td>
<td>sladka</td>
</tr>
<tr>
<td>[ü]</td>
<td>29</td>
<td>30</td>
<td>30</td>
<td>30</td>
<td>25</td>
</tr>
<tr>
<td>[ɯ]</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
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<tr>
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### Table 4A. Percentage distribution (words/sounds)

<table>
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<th>Positions</th>
<th>Variants</th>
<th>1st position</th>
<th>2nd position</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>välneniya</td>
<td>kategorialnata</td>
<td>ekzaltiranata</td>
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<tr>
<td>[ɨ]</td>
<td>36,7%</td>
<td>30%</td>
<td>3,3%</td>
</tr>
<tr>
<td>[ɯ]</td>
<td>60%</td>
<td>56,7%</td>
<td>23,3%</td>
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<tr>
<td>[ɪ]</td>
<td>3,3%</td>
<td>13,3%</td>
<td>73,3%</td>
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</tbody>
</table>

### Table 4B. Percentage distribution (words/sounds)

<table>
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<tr>
<th>Positions</th>
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<th>4th position</th>
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<th>6th position</th>
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</thead>
<tbody>
<tr>
<td></td>
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<td>aplodirani</td>
<td>tolkova</td>
<td>nyakolko</td>
<td>sladka</td>
<td>slovosâchetaniya</td>
</tr>
<tr>
<td>[ɨ]</td>
<td>96,7%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>83,3%</td>
<td>93,3%</td>
</tr>
<tr>
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<tr>
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</table>
Diagram 2