

## Phonological shift in progress: the rise of neutralization in a North Russian dialect

The paper addresses the rise of vowel neutralization in a North Russian dialect. There has been a general consensus in the literature that the discrimination of low and mid vowels, namely /a/ and /o/ in unstressed syllables, known in Russian dialectology as *okan'e*, is a distinctive property of the North Russian dialects, by which they are opposed to the South Russian and a number of Central dialects (Zaxarova & Orlova 1970, Avanesov & Bromlej 1986). While this is still true for some of the older speakers of the dialect in question, this situation does not hold for the majority of speakers and particularly if we move down the age scale. Recently collected field data reveal radical deviation from this archaic model leading to a complete decay in the speech of the middle and of the younger generations.

### *Data*

The study is based on recordings made in 2006 in the Archangel region (the village of Safonovo, 500 kilometers east from Archangel). The speakers born between 1937 and 1995 were asked to read and repeat (in pairs) 220 tokens targeting the pronunciation of vowels in a variety of stressed and unstressed syllables. The results were tested against recordings of their spontaneous speech. For the purpose of this paper the data related to phonemes /a/ and /o/ in unstressed positions after non-palatalized consonants have been used.

### *Analysis*

With respect to the spread of the neutralization the recorded idiolects fall into three clearly contrasted types which I conventionally call A, B and C. Type A presents the most conservative system with no neutralization patterns applied systematically and only rare isolated instances of neutralization (1.1). Type B presents a transitional system where the neutralization pattern is applied inconsistently (1.2). Finally, in Type C we find obligatory neutralization of /o/ and /a/ in unstressed syllables (1.3). The distribution of the three types across the age groups is as follows: types A (lack of neutralization) and B (inconsistent neutralization) are found in the speech of the older generation, Type C (obligatory neutralization) is characteristic of the idiolects spoken by middle and younger generations.

The comparison of the three types of the idiolects allows us to suggest a two-stage scenario in the rise of neutralization of low and mid vowels. At the first stage (Type A) the dialect employs a mechanism by which unstressed vowels undergo significant shortening (up to 50% length compared to the stressed allophone). For /a/ this results in the raised allophones [e] or even [ɛ], while the undershoot of /o/-allophones is less significant: in most cases we observe a clear but rather short [o], sometimes raised to [ʊ] or [u] (2.5). Shortening therefore does not affect the relationship between low and mid vowels in Type A. Dialects where the /a/ - /o/ opposition in unstressed syllables surfaces as the [ɛ] - [o] contrast were relatively frequent in the North Russian dialects as early as in the middle of the 20<sup>th</sup> century (Avanesov & Bromlej 1986, maps 10 and 11). The neutralization is blocked in such system as it will lead to the loss of the labialization contrast, which according to the typological observations is harder to neutralize than other contrasts, e.g. height (Flemming 2005). This hierarchy of contrasts explains the opposite phenomenon, namely the /a/ - /o/ neutralization through the labialization of *a* found (though rather rarely) in the Safonovo dialect, as well as in a number of other North Russian dialects. It is significant that labialized allophones of /a/ are typically found in the dialects where *o* either preserves its quality in unstressed syllables or is raised to [u] (Avanesov & Bromlej 1986, map 10). However the tendency to develop neutralization through labialization of /a/-allophones turned out to be generally unproductive. At the same time we can assume that there was a significant period before extreme shortening of pretonic

vowels resulted in the delabialisation of unstressed /o/ and consequently in the rise of the neutralization pattern, such as the one found in Type B and Type C.

As neutralization spread, a number of conditioning factors came into play. One of them is the wave-like rhythmic structure of the phonetic word in the North Russian dialects with a strong stressed and (relatively) strong second pretonic syllable, and a weak first pretonic (Kasatkina 1996: 219-220). Our data for Type B, a transitional system which combines neutralization and non-neutralization patterns, indicate that allophones of /o/ in the first pretonic syllable are more likely to undergo delabialisation than those in the second pretonic. Consequently in Type B neutralization is more advanced in the first pretonic and less so in the second pretonic. Type C which present a system with obligatory /a/ - /o/ neutralization in unstressed syllables reanalyzed this contrast in the rhythmic structure with respect to the degree of reduction. As demonstrated in (2), (3), (4) and (5) for Type C, each of the two phonemes, /o/ and /a/, may be presented by either by [e] or [ə] both in the first and in the second pretonic. However there is a significant difference in the distribution of both sounds. Stronger reduction (to [ə]) is more frequent in the first pretonic, while second pretonic syllables provide more favourable conditions for moderate reduction (to [e]). This situation is opposite to that attested in Standard Russian, Central and South Russian dialects which have a strong accentual nucleus (first pretonic and stressed syllable) with weak periphery and where degree of reduction increases in direct proportion to the distance to stress (Švedova 1980: 25-27; Crosswhite 2001: 57-71).

### **Conclusion**

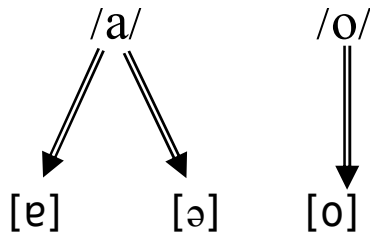
The study shows that the Safonovo dialect is moving from a system where (the) neutralization of low and mid vowels was absent or sporadic to a system with obligatory neutralization, and this change is at an advanced stage in the speech of the middle and younger generation. The analysis presents the evidence that phonological contrasts (such as labialization) can be preserved despite extreme decrease in duration (cf. Barnes 2006: 42) and reveals the leading role of the word rhythmic structure in the development of the neutralization pattern in the dialect in question.

### **References:**

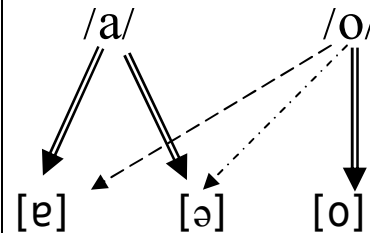
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1. Types of idiolects with respect to discrimination / neutralization of /a/ and /o/ in unstressed syllables after non-palatalized consonants.

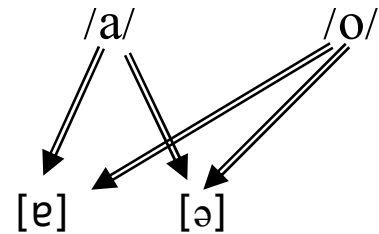
(1.1) Type A. Discrimination of low and mid vowels in unstressed syllables



(1.2) Type B. Inconsistent neutralization of low and mid vowels in unstressed syllables



(1.3) Type C. Obligatory neutralization of low and mid vowels in unstressed syllables



## 2. Phoneme /o/ in the first pretonic syllable

		Type A	Type B	Type C
2. 1	/domá/ 'houses'	domá	domá	dəmə
2. 2	/stolŭ/ 'tables'	stolŭ	stolŭ	stəlŭ
2. 3	/prʲixodʲí/ 'come'	prʲixodʲí	prʲixədʲí	prʲixədʲí
2. 4	xorófʲj 'good'	xorófʲj	xerófʲj	xerófʲj
2. 5	bolʲfój 'big'	bəlʲfój	bolʲfój	bəlʲfój

## 3. Phoneme /a/ in the first pretonic syllable

		Type A	Type B	Type C
3. 1	/stərʲík/ 'old man'	stərʲík	stərʲík	stərʲík
3. 2	/navʲérʲx/ 'to the top'	nəvʲérʲx	nəvʲérʲx	nəvʲérʲx
3. 3	/trəvá/ 'grass'	trəvá	trəvá	trəvá

## 4. Phoneme /o/ in the second pretonic syllable

		Type A	Type B	Type C
4. 1	/govorʲítʲ/ 'to speak'	govorʲítʲ	govərʲítʲ	gəvərʲítʲ
4. 2	/golová/ 'head'	golová	golová	gələvá
4. 3	/poskorʲěj/ 'faster'	poskorʲěj	poskərʲěj	pəskərʲěj
4. 4	/moloko/ 'milk'	molokó	moləkó	mələkó

## 5. Phoneme /a/ in the second pretonic syllable

		Type A	Type B	Type C
5. 1	/nə nogʲé/ 'on the leg'	nə nogʲé	nə nogʲé	nə nəgʲé
5. 2	/zədavʲítʲ/ 'to crush'	zədavʲítʲ	zədəvʲítʲ	zədəvʲítʲ
5. 3	/trəvʲanój/ 'herbaceous'	trəvʲenój	trəvʲinój	trəvʲinój