

THE SOMATIC CHARACTERISTICS OF THE KYRGYZ VOWELS IN COMPARISON WITH THE SOUTHERN-SIBERIAN TURKIC LANGUAGES

СОМАТИЧЕСКИЕ ХАРАКТЕРИСТИКИ КИРГИЗСКИХ ГЛАСНЫХ
В СОПОСТАВЛЕНИИ С ТЮРКСКИМИ ЯЗЫКАМИ ЮЖНОЙ СИБИРИ

GÜNEY SİBİRYA'NIN TÜRK DİLLERİNDE KARŞILAŞTIRMALI OLARAK
KIRGIZ DİLİ SESLİLERİNİN ANLAMSAL DEĞERLENDİRİLMESİ

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ABSTRACT

The article by I.Ya. Selyutina and G.A. Esenbayeva “The somatic characteristics of the Kyrgyz vowels in comparison with the Southern-Siberian Turkic languages” is devoted to results of contrastive-typological analysis of vowel systems of Kirgiz and the related Turkic languages of South Siberian region. The investigation, based on objective instrumental data, reveals not only integrating but also differential features both in inventories of vocal phonological units and in the principles of its system-structure organization.

Keywords: Phonetics, Phonology, Vocalism, Articulatory-Acoustic Base, Experimental-Phonetic Methods.

АННОТАЦИЯ

Статья И.Я. Селютиной и Г.А. Эсенбаевой «Соматические характеристики киргизских гласных в сопоставлении с тюркскими языками Южной Сибири» посвящена результатам сопоставительно-типологического анализа систем гласных фонем киргизского языка и родственных тюркских языков южносибирского региона. Исследование, базирующееся на объективных инструментальных данных, свидетельствует о наличии не только интегрирующих, но и дифференцирующих признаков как в инвентарях вокальных фонологических единиц, так и в принципах их системно-структурной организации.

Ключевые слова: Фонетика, Фонология, Вокализм, Артикуляторно-Акустическая База, Экспериментально-Фонетические Методы.

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ÖZET

İ.Y. Selyutin ve G.A. Esenbayev'in "Güney Sibirya'nın Türk Dillerinde Karşılaştırılmalı Olarak Kırgız Dili Seslilerin Anlamsal Nitelemesi" adlı makalede Güney Sibirya'da konuşulan akraba Türk Dili ailesinden ve Kırgız Dili seslilerin karşılaştırılmalı-tipolojikel tahlili yapılmıştır. Objektif verilere dayalı olarak bu çalışma vokal-fonolojikel birimlerin ayırımı belirtiler ile birlikte ortak sistem-yapılı ve iç içe olduğunu göstermektedir.

Anahtar Kelimeler: Fonetik, Fonoloji, Vokalizm, Boğumlama-Akustik Esaslar, Deneme-Fonetiksel Metodlar.

Introduction. The comparative investigation results of Kyrgyz vocalism and the related Turkic Southern-Siberian languages such as Altai, Khakas, Tuvan are presented in the article. The purpose of the paper is to reveal both the general system characteristics being formed in the period of the Kyrgyz people having lived in the Yenisei riverhead and later on the territory of Southern Altai and the specificity resulted from their further migration to the region of their contemporary living.

The Kyrgyz phonetics has been investigated previously by the experimental-phonetic methods: the consonantism has been described by Akhmatov (Akhmatov, 1970: 3-24), the acoustic parameters of the vowels have been stated by Orusbayev and Toktonaliev (Orusbayev, 1974; Orusbayev, Toktonaliev, 1991: 140-149). But it is to be emphasized, that the articulatory characteristics of the vowels have not been studied by the objective somatic methods yet.

Phoneme inventories. In the Kyrgyz language there function 14 vowel phonemes: 8 short ones – *a, e, y, i, o, ö, u, ü* and 6 long ones – *aa, ee, oo, öö, uu, üü*; phonemes *y* and *i* do not have their long correlates. The comparative analysis of the vowel inventories of Kyrgyz and the Southern-Siberian Turkic languages proves their considerable similarity. All the systems under consideration are characterized by the tendency to the ideal symmetric Turkic vocal model, which includes 8 short and 8 long phonemes. Nevertheless, all the system positions are fully occupied only in the Altai literary language (Chumakayeva, 1976), in Tuvan (Dambyra, 2005) and in one of the Altai dialects – in Tuba (Sarbasheva, 2004). In all the other dialects of Altai as well as in Khakas there is noted to exist an incompleteness of the long narrow non-labialized vowel sub-system that resembles the Kyrgyz language, in which there are no long phonemes *yy, ii*.

System organization of vocalism. The experimental-phonetic researches have shown that the system of the Kyrgyz vowel phonemes and the vocalisms of the other Southern-Siberian Turkic languages exhibit the common organization principles: they are all structured by the oppositions based on the row, height, labialization, length. The exception is made by the Tuvan (Bicheldey, 2001) and Tofalar (Rassadin, 1971) languages as well as by the Altaian Tuba-dialect (Sarbasheva, 2004), in which the characterization by the presence/absence of the pharyngealization is one of the constitutive-differential features (CDF) of the phonemes: in the Tuvan vocalism it is one of the main CDF while in the Tuba-dialect it is a differential feature accompanying the length.

Thus, all the Southern-Siberian Turkic languages can be divided into two groups: 1) languages, in which the vocal system is structured by glottalization/non-glottalization

(Tuvan, Tofalar, the Tuba-dialect of Altai) and 2) languages, in which pharynx work is not a phonemic feature (the Altai literary language, the Altai-Kizhi dialect, Telengit, Bachat-Teleut, Kumandy, Chalkan dialects of Altai, Sagay and Kachin dialects of Khakas) (Selyutina, Shaldanova, 2003).

The Kyrgyz language resembles in this sense the languages of the second group: the vowel pharyngealization as a phonemic feature is not typical for the Kyrgyz vocalism, the Kyrgyz pharyngealized articulations are realized only on the phonic level as the facultative or positional-combinatory variants of an individual pronunciation, which represent a rudimentary phenomenon preserved by the genetic memory of the people.

Qualitative vowel characteristics. The investigations of the Kyrgyz vocalism and the Southern-Siberian Turkic vocal systems have showed that though having some common structure principles they significantly differ in realizing their articulatory-acoustic characteristics resulting from the articulatory-acoustic base specificities of the ethnoses. The comparison of the Kyrgyz vocal substantive base investigation results obtained by the somatic methods of digital X-ray with the results of the analogous studies of the Siberian Turkic languages (Shaldanova, 2003; Sarbasheva, 2004; Selyutina, 1998; Kyshtymova, 2001; Dambyra, 2005) witnesses the following.

If considering the articulatory row, the allophones of the central-back Kyrgyz phoneme *aa* are similar to the corresponding sounds of Bachat-Teleut, Kumandy, Chalkan, Tuba, Sagay dialects and differ from Altai-Kizhi (in which the vowel *aa* is central or back) and from the Kachin dialect of Khakas and the Kaa-Khem subdialect of Tuvan (where the sound *aa* is of a combined central-back/back row character). By the degree of rise the Kyrgyz *aa* is the closest to the Altai dialects.

The tunings of the Kyrgyz central-back vowel *y* generally coincide with all the languages being compared except Chalkan, in which the sound *y* is of a combined front/central row.

The realizations of the central-back phoneme *oo* are similar to the Altai-Kizhi, Bachat-Teleut and Kumandy dialects, differing from the central Altai literary *oo* and back Kachin *oo*. Talking about the rise of the Kyrgyz *oo*, it joins the languages with the least degree of openness – Tuba, Sagay and Kaa-Khem (the third level), greatly differing from Kachin and Kumandy (the 6th level).

The Kyrgyz *uu*, like in the majority of the Southern-Siberian languages, is of central-back row and coincides with Telengit and is close to the Onguday, Chalkan, Tuba dialects. The considerable differences are fixed with Kumandy and Altai literary, where this sound is central, as well as with Khakas-Kachin, in which there functions back realization of *uu*. The third distance degree of the Kyrgyz tunings make them alike with Onguday and Kaa-Khem: the vowel *uu* realizes as semi-narrow.

The combined front/central Kyrgyz vowel *e* is the nearest to the Sagay *e*, differing from more front tunings in Kumandy and from more back ones in the Altai (Onguday dialect), Tuba, Tuvan, Kachin-Khakas dialects. The Kyrgyz *i* is identical to the Altai, Kumandy, Chalkan and Sagay sounds, differing from more back realizations in the Tuba, Kachin-Khakas, Tuvan languages. The Kyrgyz sound? coincides with Sagay, while? – with the Sagay and Chalkan tunings.

Thus, the Kyrgyz language, though fitting in the area of Southern-Siberian Turkic languages functioning by the substantive characteristics of the hard labialized vowels *oo*

and *uu*, does reveal the specificity of its articulatory-acoustic base. Being realized in the central-back tunings like in the majority of the Southern-Siberian Turkic languages, the Kyrgyz vowels *o* and *u* join the group of languages, in which these vowels occupy the middle position on the articulatory row scale. At the same time, if taking into account the parameter of closeness/openness, the Kyrgyz vocalism manifests the same laws as the Tuvan Kaa-Khem subdialect, where the vowel differentiation by the degree of rise is the least evident than in other languages under consideration.

The characteristics of the soft Kyrgyz vowels attribute this language to the group of languages, in which the functional soft vocalism is realized mainly with the front vowels: these are the languages of southern and northern Altai-people (except Tuba) – Telengit, Bachat-Teleut, Altai-Kizhi, Kumandy, Chalkan, as well as the Sagay dialect of Khakas. In the Tuvan, Tuba and Kachin vocalisms in the soft-row word-forms there function the central-back vocal units of a different advancement degree. The maximal likeness should be noted between the soft vowel articulations of Kyrgyz and Sagay-Khakas correlates.

The vocal systems of the Southern-Siberian languages under consideration are characterized by the less articulation uniformity than the Kyrgyz vocalism that can be reckoned resulting from the historical interactions of the substrate Sayan-Altai languages with the Turkic ones.

The vowel quantitative characteristics. In the majority of the Turkic languages including Kyrgyz, the vowel quantitative differences (along with the articulatory parameters of a row, rise and labialization) serve as a main phonemic feature: the phonemes are opposed as the long and the short ones. There can be distinguished three types of the vowel lengths: the secondary or the contracted length; the primary or the etymological one; the positional one.

The validity of the auditive observations concerning the length relevance in the Kyrgyz vocal system has been verified with the objective data obtained with the CoolPro and SpeechAnalyzer computer programmes developed for sound files creating and processing. The analysis results of the Kyrgyz vowel absolute and relative length indices have proved the vocal units being opposed by the quantitative parameter: the secondary long vowels, developed as a result of inter-vocal consonant omitting followed by vowels contracting into one long sound, have turned out to be 1.7 times longer than their short correlates. In the Southern-Siberian Turkic languages under consideration the vowels are also clearly differentiated by the quantitative parameter: the long vowels are in the mean 1.5-2.0 times longer than the short ones. The Kyrgyz vocalism is the closest to the Ongudai dialect of the Altai language if considering the length characteristics ($V:V=1,7$).

The problem of the Turkic vowel primary length does not have an unambiguous solution. Some scientists (V.V. Radloff, V. Groenbeck, A. Biishev) deny its existence, the others (M. Räsänen, K. Phoy, Yu. Nemeth) believe it to be considered as a Proto-Turkic phenomenon. A.M. Scherbak, belonging to the second group, reconstructs the Proto-Turkic long vowels in 78 words (Scherbak, 1970: 50); 53 words from this list being fixed in the modern Kyrgyz language. The analysis results of the quantitative characteristics of the vocal components of these words have shown that in 27 reference words the vowels are being realized as the long ones, making it possible to suggest functioning of the primary vowel length relicts in the Kyrgyz language. In this case, the loss of the etymological length in the other 26 common Turkic words demands explaining from the comparative-historical phonetics point of view.

The results of the analogous Southern-Siberian Turkic dialects investigations prove that the hypothetic system of the primary long vowels have been only partially preserved in some of them. In the Altai-Kizhi dialect the quantitative parameters are differently realized by the different speakers, sometimes they are of a facultative character witnessing the etymological length system break-up (Shaldanova, 2003). In the Tuba-dialect there have been fixed 12 words with the vocal units qualified as the long ones (V₁:V=2,1) by the instrumental methods from the 21 word-forms selection with the presupposed primary length (Sarbasheva, 2004).

Thus, if the existence of the Proto-Turkic primary vowel length is to be accepted, the comparative analysis results prove the phonetic processes similarity in Kyrgyz and in the Altai dialects: the etymological length as an integral system is being disintegrating.

Along with the secondary and etymological lengths, in some Southern-Siberian Turkic languages there functions a positional vowel length, i.e. broad vowels lengthening in the open syllables in bi- and polysyllabic words before a syllable with a narrower vowel, having as a rule phonological character (Borgoyakov, 1966; Selyutina, 1998; Kyshtymova, 2001; Shaldanova, 2003; Sarbasheva, 2004; Dambyra, 2005). As shown experimentally, the Kyrgyz broad vowels in the first open syllables in the bi-syllabic words are obligatory 1.4-1.9 times longer than the narrow vowels in the second syllables. Consequently, the positional length can be stated in the Kyrgyz language as well as in the typologically related Turkic languages of Southern Siberia.

To sum up, in the vocal systems of Kyrgyz and the Turkic languages of the Southern-Siberian region there are found both the common features and the specific ones, proving the different historical contacts of the Kyrgyz people with the other ethnoses both while having lived on the territory of Siberia and during the subsequent migration.

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