

# THE TURKIC WORD PROSODY PROBLEM

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## ABSTRACT

The hypothesis of a word-stress lack in the Turkic languages phonetic system is being put forward. The constitutive, culminative and word-distinctive functions of synharmonism as well as the role of synharmonic co-articulation both in Turkic syllable formation and in syllabation are being elicited. Synharmonism predetermines the linear size of a morpheme, the latter being less than a syllable does not exist in the Turkic languages.

The Turkic word prosody has been completely reduced to the Indo-European word-stress, vowel-harmony being neglected as the result of thereof. Besides, vowel-harmony is a phonologically unjustified and phonetically inexact term. However, the idea of vowel harmony which presupposes the presence of at least 2 syllables in a word, has played its misleading role as far as research is concerned, monosyllabic words being excluded from the field of study.

It is inferred from the present situation in the Turkic prosody that synharmonism has been denied a proper place in the succession of known in general linguistics prosodic units. Being theoretically the most thoroughly elaborated ones, stress and tone remain nowadays in general linguistics as the only generally recognized prosodic units.

"Europocentrism" has not solved and is not in a position to, cardinal problems of the Turkic phonetics, the reason thereof being the transference of the accentual (non-synharmonic) languages phonological analysis principles and means to the non-accentual (synharmonic) ones.

Accumulated experimental data have failed to lay down the basis for creating the Turkic phonological theory as it is, because of their "europocentrist" interpretation, the latter, in the final run, confirming the result obtained by traditional

acoustic methods.

Attempts to produce evidence for the existence or lack of Turkic stress and its place only by means of experimental phonetics' methods are bound to fail.

To our mind, the reasons thereof are as follows: all the linguistic functions of synharmonism are, this way and that, attributed to word-stress, the latter acquiring the status of an important linguistic unit in the eyes of researchers. The identity of both word-stress functions and synharmonism as the same level prosodic units presents illusive logic of such a substitution, and the hypnotic influence of word-stress ideas still remains an insuperable obstacle.

The problem seems to envisage a Turkic word either having accentual nature (and this means segment analysis being carried on phonemic level) or synharmonic one (thus, obliging us to find the predetermined by it, principles of division into functional synharmonosegments and synharmonosegments proper).

This problem still remains obscure as researchers fail to understand the fact that phrasal words and words in a phrase are intonationally alike as far as sentence prosody is concerned. However, researchers differentiate phrasal words as isolated words proper, in contrast to the same words in a phrase. As a result, various manifestations of phrasal word intonation are interpreted as acoustic stress correlatives. Taking into consideration that both phrasal words and expanded phrases can be pronounced with various logical, emotional, expressive accessory intonation in dependence of the phrasal word contextual semantics, the difficulty of word-stress unambiguous interpretation is quite understandable. In effect, researchers are oblivious of the fact that isolatedly pronounced words, allegedly proving word-stress presence in the Turkic languages, are, in fact, contained in a syntactical unit with a more-than-word volume, and, thus, they bear partly this units' intonation.

Hence, the Turkic "word-stress" does

not possess the Indo-European word prosody's main characteristics of being the word acoustic image's obligatory element.

The analysis of results in various investigations into the Turkic languages "word-stress" nature shows that one should speak of phrasal, rhythmic-syntagmatic, logical-expressive prominence of this or that syllable in the word rather than of word-stress, and this makes quite a difference. Phonemic stress significance in the Indo-European languages and tone significance in the syllabic ones is known to win recognition from all researchers. As far as synharmonism in the Turkic languages was concerned, phoneticians did not pay special attention to it from the functional analysis point of view despite synharmonism being recognised as a really existing acoustic phenomenon.

Partially this occurred due to the fact that turkologists-phoneticians as we have already told cherished their pet theory of word-stress.

Thus, the leading phonological function of synharmonism pertains to keeping homogenous synharmonic timbre of the Turkic word's whole image, this being the obligatory element of its phonetic image. Violation of homogenous character of timbre disrupts the word, grates upon the ears, impedes perception or makes it absolutely unintelligible.

Thus, the constitutive function of synharmonism provides proper recognition of a word. For example, such Turkic words as

[bas], [b'es'], [b'os°], [b'ös'°] etc. are characterised not only by a certain linear combination of sound but also by unique quality of each word's synharmonic timbre, both vowels and consonants alike being synharmonic timbre bearers. The importance of synharmonism constitutive function is also proven by the fact that any synharmonically properly organised word is easily and correctly pronounced by Turkic languages native speakers. A word sounds familiar though its meaning may not be clear, such as dialectal or professional vocabulary.

Another function of similar importance is the culminative one, i.e. unification of word image forming sounds. Provided the word is polysyllabic, all syllables are organised according to one of the synharmonic timbres. This function plays an important role in the Turkic word general phonetic image formation and it proves synharmonism being characteristic not only of polysyllabic words but monosyllabic ones as well. It means that the terms "synharmonism" and "vowel harmony" are not synonyms, the latter being inexact both as a term and a phenomenon. Vowels play but syllable forming role in the Turkic languages without being "harmonisers" and, moreover, without performing word-distinctive

function.

From the phonetic point of view, the set of synharmonic allophones (synharmonic sounds) proper is of great importance. Correct recognition of a Turkic word under unfavourable phonetic conditions of communication, as in case of vowel deviating, depends on the audibility of the whole syllable, i.e. on consonant synharmonism.

Word-distinctive function of synharmonism is significant as well. One can prove it by taking minimal (and polysyllabic) synharmonic pairs or quartettes of words widely used in the Turkic languages. (One can say that Turkic vocabulary contains systems of synharmonic pairs or quartettes of words). For instance, the words

[tys], [t'is'], [t'os°], [t'ös'°] are distinguishable not only through vowel synharmonism, but also by consonant one. Participation of all sounds comprising the word in word distinction (contrast) is strictly obligatory. It is impossible for any synharmonic variant of one consonant to be replaced by another one. In other words, the above words should not sound as [tys'] or [t'is] or [t'os] etc. Such a violation brings about unnatural sounding of profoundly Turkic words which become inconvenient to be pronounced by native speakers of the Turkic languages.

Since spectral characteristics of sounds comprising a syllable (a word) is acoustic correlative of synharmonic timbre, and its general spectral picture is, in a certain way, retentionary and constant, one can speak of register character of synharmonic timbres. These timbres are distinguished from one another by this or that order of placing vowel and consonant formants. A certain type of synharmonic timbre (its characteristic acoustic contour) begins with a consonant preceding a vowel (if a syllable begins with a consonant) and is expanded over to a consonant concluding a syllable (if the syllable ends up with a consonant). Thus, synharmonic timbre is a property of the whole syllable, both vowel and consonant included.

Existence of synharmonic timbres is proven by their functioning as word-distinctors, word formers and word-dividers, thus the difference between them being of phonological significance. Since synharmonic phonology allows to distinguish 4 synharmonic timbres (hard, soft, labial, non-labial), Turkic languages can be called polytimbral ones.

Thus, the language functions inherent in stress of accentual languages and in tone of syllabic ones are found on the Turkic languages in synharmonism. This shows their functional identity in general linguistics plane and seems to represent important leading typological features pointing

at principal differences rather than at similarities of these language groups.

In connection with these typological differences one should distinguish, in consecutive order, phonetic (universal) co-articulation, characteristic of all languages as a result of mutual influence of adjacent sounds, and phonological (particular) one, where it is preconditioned by the Turkic languages synharmonism. Violation or some inconsistency of co-articulation in the first case is quite possible, while in the second case it should be strictly observed, for each synharmonic segment, synharmonic syllable included, is a phonological unit. That is why, one should look for syllable division types, syllable boundary features in synharmonism. A Turkic syllable is the smallest pronounced language unit, acoustically strictly limited by one of synharmonic timbres. Such limitation is so stable that synharmonic co-articulation violation within a syllable is absolutely impossible. The feature of syllabic synharmonic co-articulation is that very linguistic signal showing syllable-boundary.

To our mind, a morpheme less than a syllable does not exist in the Turkic languages. The morpheme linear size is equal, at least, to a syllable. It is predetermined by the very nature of synharmonism, for timbral characteristics of synharmonism can be realised only in a syllable. It excludes the existence of consonant morphemes, while vowels comprise morphemes because they can form syllables independently.

Traditional concepts of general linguistics were unable to explain the fact that the word's first syllable predetermined the synharmonic accessory of the antecedent syllables, their stable phonetic homogeneity, i.e. strong position of the first syllable and recognised by all researchers fixed stress at its end which means another strong position at the opposite end of the word. This led to a compromise: the existence of 2 opposite strong positions in the Turkic structure is recognised, i.e. word-stress and synharmonism which allegedly complement each other.

Such a paradoxical compromise would not have existed, if the Turkic word prosodic feature were scientifically justified and were not attributed to disagreeable with it accentual prosody.

We have formulated the following main principles:

1. Word-stress, word-tone and word-synharmonism as the same level units, implement analogical functions, i.e. they unite acoustic segments of words into the whole. While word-stress is prosodic means of a word unity on a phonetic level in the Indo-European languages, word tone is the same means for the syllabic

languages, and word synharmonism - for the Turkic (and, possibly, for all the Ural-Altai) languages. These means are equal in carrying out constitutive and word-distinctive functions. Therefore, each of these means contains prosodic feature, characteristic for a certain language type.

2. All the 3 means, being prosodic features of the word, regulate phonetic gradation of syllable, i.e. word-stress-accentual (stressed, pretonic, counter-pretonic, posttonic, etc. syllables), word tone-tonal (low, medium, high, rising, falling and the like registers), word synharmonism - timbral (hard non-labial, hard labial, soft non-labial, soft labial timbres).

3. Each of the 3 means originally regulates articulation-acoustic interaction (co-articulation) of sounds in a syllable.

4. Each of 3 means accomplishes specific word division into minimal (in functional plane) sound segments, i.e. word-stress-into phonemes, word-tone-into tonemes, word synharmonism - into synharmonic segments (synemes).

5. The common basic phonetic unit for all 3 means is a syllable, but their phonetic realisation is different.

6. In our opinion, the existence of all or 2 identical in function but different in realisation types of word prosody in one language or a related languages group phonetic system is impossible. Therefore, the word-stress existence in the Turkic languages should be considered false.