

## ASPECTS OF THE SOUND FORM OF THE WORD

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### ABSTRACT

The paper seeks to develop the systemic approach to the analysis of the sound form of the word (SFW) comprising the unity of the universal, group and individual properties of the language, hierarchal stratification of its structural levels, hierarchal organization of lexis. Accordingly the SFW includes characterological, constitutive and paradigmatic aspects. A word is structured phonetically as a meaningful unit connected by constitutive relations with the morpheme and the sentence. The material structure of the word is correlated with its formal-semantic organization and reflects the degree of generalization proper to different classes it enters. Hence the hierarchal nature of the SFW. The phonological typology of the word reflects its systemic characteristics and correlates with morphological typology.

The SFW in terms of the characterological aspect is the unity of the general, peculiar and individual. The specific traits of the SFW in every language depend not so much on its unique features but primarily on the interaction of universal, typological, genetic and areal characteristics.

Though its own supersegmental features may not necessarily be present the word is always organized by the segmental means. These are its universal characteristics. The word phonemic structure as well as its supersegmental peculiarities (if any) reflect, on the one hand, the position of the word in the hierarchy of language units and in the hierarchal organization of lexis, on the other. In other words, constitutive and paradigmatic aspects are always present in the SFW. The constitutive aspect characterizes the word as part of the system of interlevel relations and determines its inner and outer form. The inner form is inherent in the word as a particular type of composition of morphemes. The outer form characterizes the word as a syntactically indivisible integral part of the sentence-utterance. The inner form is discrete, the outer form is indiscrete. The constitutive aspect is inseparable

from the paradigmatic one: words of different semantic and grammatical classes differ in terms of their inner and outer forms. Therefore the morphological and syntactic features of the given class of the words as well as interrelations of this class with other classes of greater and/or less degree of generalization may play an important role in the SFW analysis.

The constitutive relations between the morpheme, the word and the sentence make for close connections between phonetic, morphological and syntactic properties of positions within the word. The statistic approach to the segmental structure of simple (root) full words in the languages of different typology and genesis /I/ has clearly demonstrated that the degree of activity of individual phonemes and phonemic classes in a given position depends on the above mentioned characteristics of this position. In accordance with the stratification of phonological oppositions, primary phonemes (in the sense of R. Jakobson, T. Milewski) play a leading role in the segmental structure of the word. That's why the above mentioned correlation characterizes first and foremost the consonantal structure of the word in general and distribution of the modal classes of consonants, in particular. The most contrasting types of primary consonants - voiceless stops and liquids reveal the strongest correlation with the position.

Being "a syntactic atom" (J. Baudouin de Courtenay) and "the potential minimum of the phrase" (E. D. Polivanov), the full word in its segmental structure reflects universal regularities of speech production, which are revealed in the universal tendency towards rising/rising-falling sonority of the word's segmental structure. This tendency manifests itself in mainly consonantal beginnings and vocalic ends of words, in preferable location of noise consonants in the initial and sonants in non-initial positions, in correspondence between synchronic sound positional modifications as well as diachronic phonetic changes and general dynamics of the word-utterance articulation. The sonorous structure characterizes the word as a whole and brings out its indiscreteness, the "con-

tour" character of its segmental structure.

Since different consonant classes (modal as well as local) are preferably used in different positions, contrast tendencies are rather typical of consonant combinatorics in every language.

The type and degree of contrasts in consonantal structure are determined by the group characteristics of languages. Genetic affinity of languages specifies the features of consonant contrasts within the root word. Though other contrasts are possible the following features come to the fore in different language families: noise/sonant in the Indo-European languages, peripheral/medial in the Indonesian languages, forward-flanged/backward-flanged in the Altaic languages. The degree of contrast (thus, the degree of positions differentiation) is determined by language typology and depends on syntactic and especially morphological characteristics of the word. The phonemic structure of a simple word reflects the canonic type of its morphological structure, including presence/absence of affixation, its type and functional load.

Consequently the consonantal structure of a simple (root) word includes 3 types of positions, thus revealing its discrete character: within-root position, potential

morphemes juncture, potential words juncture. The morphological status of position largely determines distribution and semiologically relevant potentials of phonemes, also their division according to markedness. As a reflection of phonological oppositions hierarchy and their development, this relationship is more typical of modal consonant correlations. In particular, the hierarchy of opposed voiceless-voiced (tense-lax) consonants depends mainly on their position regarding word boundaries. Higher distributional activity of "naturally" unmarked voiceless (tense) consonant corresponds to its position in the sonorous structure of a simple word and is observed in the position of potential words juncture even in the absence of phonological neutralization. This position coincides with the end of a simple word in prefixing languages and with its beginning in suffixing languages.

The degree of positions differentiation in consonantal structure of a simple word weakens as its semantic and syntactic independence is lessening and the functional load of affixation (primarily, post-root affixation) is increasing. The technique of morphemes connection (agglutination or fusion) is less important. Consonants in the position of potential morphemes juncture are similar to those of within-root, consonants in the position of potential words juncture are contrasting to those of within-root.

According to the degree of positions

differentiation in consonantal structure of a simple (root) word different types of languages constitute a successive graduation, thus revealing structural isomorphism. The strongest differentiation of positions is typical of root-isolating languages. Then come languages with mostly or solely unilateral affixation. The languages with bilateral affixation are characterized by the weakest positions differentiation.

The word sonorous structure is modified in accordance with its canonic morphological structure. The suffixing language type promotes the tendency for rising sonority. This tendency is suppressed to a certain degree in prefixing languages and languages with bilateral affixation.

Due to diagramic correspondence between consonantal structure of a simple (root) word and canonic morphological word structure of every language, phonological word typology clearly reflects morphological typology and therefore interrelations of all meaningful units - morphemes, words and sentences. The key role of the typological criterion for word segmental organization may be clearly seen in related languages of different types. Thus, the analytical Tajik language which possesses definite agglutinative traits differs in its consonantal structure of the word from the synthetic fusion-inflexional languages of the same Indo-European family - Russian and Czech, but resembles agglutinative languages of Altaic family - Turkish and Mongolian.

The universal tendencies in stratification of phonological oppositions also influence the word vocalic structure, which is testified by high activity of "primary" vowels, particularly "optimal" vowels of the [a] type as the most open. As far as typology is concerned the vocalic structure of the word as opposite its consonantal structure is of little informative value. This may be accounted for a greater functional load of vowels in the word supersegmental structure, the type of which definitely correlates with morphological typology of the language (tone with isolating structure, synharmonism with agglutinative structure, free mobile stress with inflexional structure).

The constitutive aspect of the SFW deals not only with the above mentioned universal and typological tendencies in simple words and not only with phonemic structure, but with syllabic structure as well as supersegmental structure (if any). The sound form of the word as a syntactic unity (the outer form) shows the degree of potential isolation, preferable location of the word in the utterance, preferable type of syntactic connection with other words in accordance with its function, meaning and the part of speech it belongs to. The outer form of the word is revealed

not only in definite modification of its sonorous structure, but also in the presence/absence of external sandhi, coincidence/non-coincidence of word and syllable boundaries. The outer aspect of the SFW in the languages with the word stress can also be vividly seen in a degree of influence of phrase prosody on word prosody and respectively in the mode of prosodic emphasizing a stressed syllable, in fixation/non-fixation and a degree of stability of word stress in speech, in a degree of accentual prominence of the word, in dependence of words and word-forms accent structure on their syntactic linkage and functions.

The inner side of the SFW reflects its morphemic composition and word-formation structure, the degree of synthesis and grammaticality. The sound form of the word as a morphological unit appears: 1) in a specific phonemic structure for different types of morphemes depending on their number in morphemic inventory, meaning and position in the word. It can be seen in the quality and quantity of phonemes used, their distribution within morphemes and in the positions of words and morphemes juncture as well as in the degree of differentiation of the given positions, in phonemic combinatorics depending on location in morpheme and type of morphemes juncture, in length of morpheme in syllables and phonemes; 2) in fusion or agglutination technique of morphemes connection depending on their functional and semantic characteristics as well as degree of independence and, hence, in presence or absence of morphonological modifications, in the direction and force of assimilation, in interrelations of morphological division and syllabification in different types of morphemes junctures; 3) in supersegmental characteristics of morphemes. For example, in Russian it appears in different accent properties of the derivational base and formant, in different accentual activity of morphemes according to the stage and mode of derivation.

Thus, every phonetic characteristics of a word (segmental, syllabic, supersegmental) have inner and outer aspects, i.e. both syntactic and morphological value. The sound form characterizes the word as a syntactic whole as well as a complex morphological unit, therefore its segmental and supersegmental structure is the unity of indiscreteness and discreteness.

Both inner and outer aspects of the form are closely interlinked. Consequently the tendency towards rising sonority and interrelations of word boundaries with syllabic boundaries may be realized in various ways depending on the morphological structure of a given language, and the phonemic structure of morphemes corresponds to the word structure as a

whole, and thus, to its outer form as a syntactic unit.

It is not by mere chance that quantitative typological approach to different types of languages showed good or medium essential correlation between the frequency of monophonemic morphs and the frequency of morphs juncture within the syllable, on the one hand, and indexes of lexical/grammatical, agglutination/fusion and synthesis characterizing the word. As grammatical, fusion and synthesis indexes increase, the frequency of monophonemic morphs grows and morphs division more frequently diverges from syllabification. The frequency of phonemes, mostly vowels, which can make up a morph by themselves increases respectively. The degree of phonemic autonomy in relation to morpheme is going down as grammaticality of the morpheme and the word is increasing. Specifically, in Russian the degree of phonemic autonomy in relation to the morpheme is higher in nouns which perform the nominative function and therefore can be regarded as lexical units to a greater extent than verbs which express the predicative function /2/. It follows that phonemes constitute a morpheme not as a separate (autonomous) element but as an integral part of the word as a whole which has a certain meaning and performs a certain function. Different functional load of phonemic classes in the constitution of different types of morphemes and, thus, in the expression of meanings can be vividly seen in phonemes and morphemes correspondence in regard to their markedness. The greater the degree of phonemic markedness, the less the occurrence of phonemes in marked, syncategorematic, morphemes. Phonological oppositions stratification is thus shown to correspond to stratification of morphological differences, lexical and grammatical meanings.

Due to the unity of inner and outer aspects, the SFW appears as a result of interaction of all systemic characteristics of the word: word-formation structure, morphemic constitution, inflexional type, syntactic linkage as well as functional and semantic properties. As the word is a many-sided unity, every characteristics of its sound form can be viewed upon from different angles. Thus, regarding the word accentuation from the point of view of word-formation structure the accentual properties of the derivational base and formant come to the fore ground. And from the second stage of derivation and on, the depth of accentual motivation (that is not only immediate but also distant accentual connections of derived and deriving words) get important. For the word as a system of word forms the location of stress on stem or flexion is relevant. In the word (word form) as a unity of morphemes (morphs) the stress marks one of the morphemes. In the

utterance the rhythmical structure of word-forms and the degree of their accentual prominence is getting dominant.

Interrelations of outer and inner form, word-formation and inflexion are clearly reflected in Russian in allomorphic root variations and dynamics of accentuation depending on the stage of derivation. With the increase of the stage of derivation the length of allomorphs alternation series gets shorter, the number of alternative phonemes in the allomorph is reduced, the frequency of alternative allomorphs is going down, the frequency of non-alternative allomorphs as well as of the basic allomorphs increases. Consequently the clarification of weak root phonemes in inflexional paradigm is growing more complicated. On the other hand, less accentual activity of the derivational affix, lower frequency of immediate accentual motivation and the growing frequency of distant accentual motivation on higher stages of derivation result in reduction of mobile and inflexional stress and domination of fixed stress on the inflexional stem.

As a result of interrelation of all systemic characteristics of the word, its sound shape apart from individual features includes definite class features which are closely linked with other properties of a given word class. The character and the degree of phonetic differences among different word groups, as well as groups qualification and means of their formal expression depend on language typology and the degree of morphological development of language in particular. However the biggest word groups - full and form words, nouns and verbs - seem to be more or less phonetically different in every language, including isolating languages.

Phonetic differences of parts of speech include all above mentioned characteristics. Especially modification of sonorous structure, the degree of positions differentiation, correlation between morphological and syllabic division change in line with different degree of syntactic independence, word-order and morphemic structure of parts of speech /2; 3/. Supersegmental differences of parts of speech rather various. They may be observed in the preferable use of a definite supersegmental means (not in all, but in one or several parts of speech), in type and number of supersegmental patterns, in functional load of supersegmental characteristics for the expression of lexical and grammatical meanings, in mobile or fixed supersegmental structure and in case of mobility - in its sphere, type and function, in predictability of the supersegmental pattern on the basis of the word morphological structure, in degree of stability of supersegmental structure of the word, in word's ability to retain it in speech /2/.

As the word enters various semantic and grammatical word groups which are diffe-

rent in terms of degree of generalization and in their scope, the SFW is hierarchal. It could be proved by comparing the length in syllables and the accentuation of different groups of words in Russian, starting from most general classes - full and form words. Form words, first of all the primary ones, lack the nominative and significative function, possess a relative and highly generalized meaning, are syntactically dependable, they usually lack phonetic independence. They assimilate with full words and may have a non-syllabic structure. In case of syllabic structure form words are usually unstressed and are liable to re-syllabification in the juncture with full words. Full words are of greater semantic, syntactic and accordingly of phonetic independence. Due to potential isolation (the full word can make up an utterance) they always have the syllabic form and are usually stressed. Substitutive words (pronouns, in particular) have intermediate position: being more abstract they differ from full words by fewer number of syllables and a weaker accent in the utterance. Among full words nominative word-signs (nouns) differ from predicative word-signs (verbs) by a greater length of the root and more stable word stress in the utterance. Accentual differences between these two major parts of speech also applied to distribution of accentual paradigms, a type of a stressed morpheme within a stem, rhythmical structure of word-forms. Further gradual division of nouns in terms of the categories: abstract/concrete, animate/inanimate, person/non-person, countable/uncountable - also display differences in all above mentioned accentual characteristics.

Different sound forms of different word classes prove the categorial nature of the relationship between the sound structure of a word and its meaning. Systemic correspondence of the material (phonetic) and semantic structures of the word provides for the unity of sound and meaning and brings the arbitrariness of the word-sign to its limitation /4/.

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