

PHONOLOGICAL CONCEPTION OF A SYLLABLE  
(APPLIED TO THE LANGUAGES WITH PHONIC SYSTEM)

VLADIMIR RUDELYOV

Russian Language Chair  
Tambov State Pedagogical Institute  
Tambov, Russia, USSR 392000

ABSTRACT

So far there is no phonological theory of a syllable. There are only some approaches to such theory in some linguists' papers /1/ or unexpected guessing at the genuine laws /2;3/. The syllabic theory has not enough explanatory power and no theoretico-informational basis in any of the cases, while these very points distinguish present-day phonology from empirical phonetics /4/.

INTRODUCTION

It turned out that farthest from phonology is the part of syllable theory studying syllable-boundary, i.e. the boundaries between separate syllables. Just here can we find the greatest bulk of the material for phonological interpretations. The material can become the basis of syllables classification and the basis for constructing the overall syllabic theory as a part of word phonology.

The essence of the above mentioned interpretations is the statement confirmed long ago intuitively and experimentally. The statement is that in the languages with phonic system a non-syllabic phoneme chooses the strongest position - either explosive or implosive position. The position is stronger if it provides more correlations and relevance of the most important distinctive features /5/.

The Russian language is a brightest realization of the phonic system, just Russian is selected by us define the phonological rules of syllable-boundary; some of the rules hold good for other languages, some of them are unique and have different bases.

RULES OF SYLLABLE-BOUNDARY

Rule-1: A consonant or a sonorant preceding a vowel is explosive (symbol ".").

The examples of syllabication are:

/ka-ró-va/ 'cow', /žə-l'ě-zə/ 'iron',

/pə-ra-xó-da/ 'of a ship',

/əu-má/ 'of the mind', /ə'ě-xə/ 'echo'.

The phonological background of this rule is that the pre-vowel position is a strong position for all the Russian phonemes. Vowels seldom occur in this position - such are the cases when writing fixes the vocalic beginning which does not exist in reality. According to rule-1 we can speak about two syllable types: TA and RA;

the former begins with a consonant phoneme, the latter begins with a non-consonant phoneme, i.e. a sonorant or a vowel phoneme (cf.: /6, 173/ and /7, 100/.

Rule-2: A consonant preceding a sonorant is explosive.

This rule concerns not only Russian, but also the languages in which there is a consonantal correlation in resonance - voicelessness. In Russian it has the following background: consonants adjoin the explosive or some other sonorant because it provides for them a strong position in the feature of resonance - voicelessness, the most important and the most unstable feature of the phonological system /9, 6/. The examples of syllabication are:

/ma-tró-sy/ 'sailors', /əa-bla-ká/

'clouds', /əa-bmə-na/ 'of the deception'.

Syllable type-2:

TRA,

where T is a consonant, R is a sonorant, A is a vowel. Final combinations of the kind contain the same explosive consonant and implosive sonorant (syllable typ-3: TR)

The examples of syllabication are:

/smó-tr/ 'review', /ru-bl/ 'rouble',

/vó-pl/ 'howl', /ká-zn/ 'execution'.

Rule-3: A consonant or a sonorant in the absolute ultima

of a word is implosive.  
This rule is as trite as the first one. But it is deduced, i.e. proven phonologically, in rather a complicated way. Not any consonant at the end of the word can be considered implosive. If in a language an implosive position does not differ from an explosive position in the number of correlations we cannot speak about implosion. Implosion is the loss of some relevant features, it is the position of neutralization.

In Russian (in most of its dialects) the position of a consonant in the word final is really an implosive position, while here the most important feature of the system - the feature of resonance - is dephonologized. Cf.: /kót/ 'code' and 'cat', /lúk/ 'meadow' and 'onion'. The sonorants indifferent to the feature of resonance also have every ground to be in the implosive position as in it they lose their sonority getting mixed with vowels. However it happens rarely, when sonorants have vocalic pairs. In the Russian literary dialect only one sonorant /j/ has a vocalic pair - the vocalic zero /ə/ (cf.: /8/, /9, 6/, /10/.

Cf.: /móž/ 'my' (m.) and /maj'á/ 'my' (f.)  
In subdialects vocalic pairs have sonorants /l/ and /w/. Cf.: /u-pá-la/ 'fell down' (f.) and /əu-páu/ 'fell down' (m.); /tra-wá/ 'grass' - /tráu/ 'of the grasses'.

The phonological feature of resonance for consonants is functionally identical with the feature of sonority for non-consonants (vowels and sonorants). Dephonologization of the both is the index of an implosive position for the Russian language.

Rule-3 gives syllable types: TAT, TAR, RAT, RAR, TRAT, TRAR.

Rule-4: A sonorant preceding a sonorant is implosive. Phonologically this rule is confirmed by the fact that this position is weak in the feature of "sonority - vocality", i.e. sonorants are vocalized in it if they have vocalic pairs. Cf.: /vaə'ná/ 'war', dial. /wou-ná/ 'wave'.

If a sonorant has no vocalic pair it is not vocalized before another sonorant, but it gains implosion: /val-ná/ 'wave', /tón-na/ 'ton', /kar-má/ 'stern', /t'ur-má/ 'prison', /əar-lá/ 'of the eagle'.

A sonorant can be implosive at the beginning of a word too (syllable type R). Cf.: /m-rák/ 'gloom', /l-ná/ 'of the

flax', /m-nú/ 'am crumpling', /m-n'ý/ 'crumple!'.

At the end of a word two sonorants present an example of double implosion, but the implosive segments belong to different syllables:

/vóž'-n/ 'of the wars', /gór'-n/ 'bugle'.

Rule-5: A sonorant preceding a consonant is implosive.

Phonological background for this rule is similar to that for rule-4. The examples of syllabication are:

/tróž'-ka/ 'troika', /pál-ka/ 'stick', /k'ýr-ka/ 'pick', /tal-pá/ 'growd', /əál'-fa/ 'alfa', /kar-tó-f'ə́l/ 'potatoes'. Cf. also: /l'-dá/ 'of the ice', /l'-d'ý-na/ 'block of ice', /r-žý/ 'of the rye', /l-gú/ 'am telling a lie'.

At the end of the word an implosive sonorant together with an implosive consonant present the same syllable demonstrating an extraordinary mirror reflection in the arrangement of structural elements.

Cf.: /skál't/ 'skald', /mórs/ 'fruit juice', /púl't/ 'control panel' - the implosive elements of a syllable come the reverse way as compared with the explosive elements.

Rule-6: A consonant preceding a consonant is neutral in the way of explosion-implosion,

i.e. non-explosive and non-implosive or both explosive and implosive.

The neutral consonant T is a certain intersyllabic element, however it is not an independent syllable and according to the situation it belongs to one of the adjacent syllables.

In fact the neutral explosive-implosive position mixes consonants in the feature "resonance - voicelessness" and consequently it follows the law of implosion. But it reveals assimilative dependence on the next syllabic.

Cf.: /val-žbá/ 'magic', /va-gzál/ 'railway station' and /nóš-ka/ 'leg'. Cf. also: /əa-ccá/ 'of the father', /əóč'-č'ym/ 'stepfather'.

The existence of the intersyllabic elements which are not independent syllables and which adjoin either the preceding or the following syllable complicates the procedure of word syllabication.

Not independent syllables, neutral segments have to adjoin the preceding or the following syllable becoming positionally implosive or explosive. The essence of positional explosion or implosion is that it depends on the informational force of syllables. As a rule the most informational syllable of a word is stressed and this very syllable subordinates the segment neutral in the way of explosion - implosion and makes this segment a part of its own.

The neutral segment T complicates the syllable without changing its structure much. Cf.: syllables TA and TTA. But in some cases adjoining the neutral segment makes the syllable of one type resemble the syllable of another type.

Cf. syllables: TAR, TART and TART, TRAR, TRART and TRART

Quite evident is the actual neutralization of syllables which results from adjoining the neutral segment T. While such

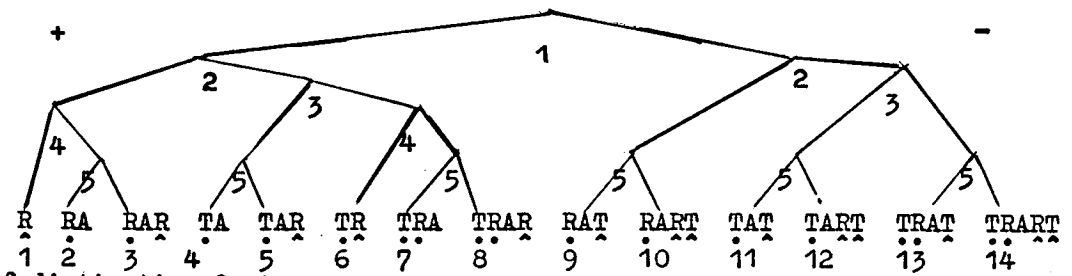
neutralization brings about the increase in the number of close syllables we can admit that just open syllables have the greatest informational value in present-day Russian and in the languages of the same system.

At the beginning of a word the neutral segment T is always positionally explosive: /stráx/ 'fear', /pt'ý-ca/ 'bird' etc.

At the end of a word the position of a neutral segment is unusual: the syllables having an implosive consonantal element are complicated by the segment T so that the latter takes the position after the vowel and precedes the implosive segment proper: /póšt/, /vósk/ 'wax',

cf. also: /S'ýnkx/ 'Singh', /bórtš'š' / 'bortsch', /vóž'sk/ 'of the troops'.

Classification scheme of Russian syllabemes:



- Names of distinctive features:  
DF-1 "absence of consonantal implosion",  
DF-2 "absence of consonantal explosion",  
DF-3 "absence of sonorant explosion",  
DF-4 "absence of the vocalic syllable-bearer",  
DF-5 "absence of sonorant implosion".

CONCLUSION

In conclusion we can state for sure that in Russian there are strict rules of arranging phonemes about syllables. These rules obey phonological laws which are 6 in number. As to the syllables proper there stand out among them the syllabic structures which do without a vowel syllable-bearer. A consonant cannot form an independent syllable.

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