

THE SERBO-CROATIAN PHONOLOGICAL SYSTEM AND  
PROBLEMS IN PRESENTING IT TO FOREIGN LEARNERS.

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ABSTRACT

The paper deals with the Serbo-Croatian phonological system, covering all its prosodic features occurring in words.

The four melodic accents, the lack of reduction, as well as the sequence and distribution of vowels present a lot of challenges to foreign learners.

Six consonants have a vocalic nature in the phonetic sense.

A more precise description has been provided here as to the place or manner of articulation of several consonants.

Problems of presentation are coupled with the wrong rendering of the SC sounds on the part of foreign learners whose mother tongues belong to various language groups.

INTRODUCTION

The Serbo-Croatian phonological system covers 5 relatively pure vowels and 25 consonant-type sounds. A more detailed analysis, however, reveals a few extremely interesting points.

VOWELS

Phonetic Description

There are 5 vowels. According to the place and manner of articulation they are as follows:

- 1/ front, close, unrounded [i]
- 2/ front, half-close, unrounded [e]
- 3/ central to back, open, neutral [a]
- 4/ back, half-close, rounded [o]
- 5/ back, close, rounded [u]

There are no nasalised vowels.

All the 30 phonemes are always spelt in the same way as they occur in the written language. The Cyrillic Alphabet, as used in SC, is phonemic.

Suprasegmental Features

In some words there may be one of the four melodic accents:

- 1/ long-rising ' 2/ short-rising `
- 3/ long-falling ^ 4/ short-falling "

The accents may occur:

- a) only the falling ones:  
in one-syllable words
- b) only the rising ones:  
in the middle of a word
- c) any one of them:  
on the first syllable
- d) none of them:  
on the last syllable

Some words bear no accent, having unaccented long or short vowels only.

A theoretical problem could be raised at this point:

Could one - following an arithmetical transaction - come to a conclusion that there are virtually 25 vocalic phonemes in Serbo-Croatian?

Reduction

By definition, there is no vowel reduction in standard SC. In some subdialects, however, there is a lot of reduction, even elision, of some unaccented vowels. Cf. standard v. reduced:

S: Jesam li ti rekao šta ima da bude?

R: S'm ti rek'o bre štima da bidne?

S: Što ćeš raditi večeras?

R: Što's radit' večeras?

In the teaching process, on the contrary, emphasis is laid on the length of every unaccented long vowel, particularly for grammatical reasons, e.g., in the plural genitive: žēnā (of women). For practical purposes, a horizontal line is placed above the long vowel.

Sequence

By definition, there are no diphthongs in SC, but only vowel clusters, that is,

sequences of two vowels, each of which has retained its syllabic value, e.g.,

radio (ra-di-o), video (vi-de-o)

There are some interesting cases. Some men-of-letters spell some words differently, e.g., some spell the last syllable of the word meaning "tomato" with an "ai" cluster = paradaiz, whereas some spell it with a vowel + consonant group "aj" = paradajz. Taking into account the exact pronunciation of that word, the "ai" cluster could be treated as a diphthong.

In this connexion, a theoretical question could be raised: Are there diphthongs in SC after all, now that there are foreign words which have become integral part of the language? E.g., auto (au-to).

Distribution

Every one of the SC vowels can occur in all the positions within a word.

Problems of Presentation

Theoretically, the description of any vowels embraces the following features of articulation:

- 1/ the position of the tongue
- 2/ the shape of the lips
- 3/ the position of the soft palate

Practically, it is impossible for the learner to judge the position of the tongue or that of the soft palate. Only the shape of the lips is visible. It is advisable to mention that there are no nasalised vowels.

Although an empiric approach is of major importance in language teaching, it would prove useful if the teacher of SC knew the vocalic system of the native language of his student.

Foreign learners tend to mispronounce the SC sounds due to the prejudices of their mother tongues.

In Arabic there are only three vowels: /i/, /a/, /u/. Arabian students confuse between SC /o/ and /u/, and between /e/ and /i/, respectively. They mispronounce the words "bio" (was) and "beo" (white) in the same way: [biu].

The Spanish have no problems, as there is the same vocalic system in Spanish: "este, hijo, hasta, hombre, lunes".

In English there are 12 relatively pure vowels, 8 diphthongs and 5 triphthongs.

Instead of the SC /a/ the English even into pronounce RP No.5 vowel: sam = [sa:m], RP No.4: Ana = [ænə], RP No.10: čak = [tʃak] or RP No.12:sam = [səm], the last one being the problem of reduction. All SC vowels can be reduced that way.

In Russian there are a few varieties of all the vowels / i, e, a, o, u/ as well as two reduced vowels, [ə] and [ɪ]. The Russian vowels are never as long as the SC ones. There are also two degrees of reduction in unstressed syllables. That is why Russian learners of SC tend to make SC vowels shorter or reduced. They introduce their varieties of vowel sounds. E.g., selo = cełó [sji.ɬo]; bik = бик [bik]; delo = дeлo [dʲelə]; eho = эxo [ɛxə]; nauka = наука [na.uka].

There is no melodic accent like in SC, yet there is a strong dynamic stress (ударение), indicated by the mark ' . It can occur in all the positions within a word. The SC accent and the Russian stress are related in a specific way in the words of the same meaning:

- a) syllables bearing falling accents in SC correspond to R stressed syllables, e.g., mēso = Мясо; ūlica = улица;
  - b) syllables bearing rising accents in SC differ more from R stressed syllables, insomuch as in Russian the stress is shifted on to the following syllable e.g., rŭka = pyká; sēstra = cecrpá.
- There is also a minor stress in Russian marked ' : páquo-nepeжáqa. The Russians generally stress such similar SC words in their way.

Foreign learners find it very difficult to distinguish between the SC accents. While contrasting pairs of accents can be of some help, e.g. a long-rising accent against a short-rising one:

žēnā (of women) v. žēna (woman),

mere imitation of the accents occurring in words which cannot be contrasted does not necessarily prove efficient.

Foreign learners are usually aware of length distinction only. Because of the presence of both accented syllables and unaccented long vowels in a single word foreign learners often cannot determine which syllable bears the accent. Therefore, at each new attempt they may lay the accent on another syllable, e.g.: "vrabáč" (of sparrows) may become: vra-ba-ca, vra-ba-ca, or vra-ba-ca.

As for reduction, the English generally take care of the accented syllable only. Thus, they pronounce "A Happy New Year"

as ['sretʃnə 'nɔvə .gɔdnə].

There are diphthongs in French, Spanish and English. Speakers of these languages tend to make the SC vowel sequences into diphthongs, the English even into triphthongs occasionally: bio = [biou]. As for distribution of vowels, there are 5 English vowels which cannot occur finally: RP No.3/e/, RP No.4/æ/, RP No.6 /ɔ/, RP No.8/u/, RP No. 10/ʌ/. For that

reason, the English make similar SC vowels longer or into diphthongs:

ovde = [ɔvdeɪ]; znate = [znætæɪ];  
neko = [nekɔ:] or [nekou:];  
robu = [rɔbu:]; čeka = [tʃekə:].

CONSONANTS

There are 25 consonants in SC. Fifteen of them are voiced, ten are voiceless.

Plosives

Bilabial: [p] [b] (spelt p, b)  
Dental: [t] [d] (spelt t, d)  
Velar: [k] [g] (spelt k, g)

The voiceless stops are not aspirated.

Affricates

Alveolar: [ts] (spelt c)  
Palato-alveolar: [tʃ] [dʒ] (spelt č, dž)  
Alveolo-palatal: [tʃ] [dʒ] (spelt č, dž)

Nasals

Bilabial: [m] (spelt m)  
Dental: [n] (spelt n)  
Palatal: [ɲ] (spelt nj)

Phonetically, they are nasal vowels.

Apical sounds

Alveolar: rolled [r] (spelt r)  
Alveolar: flapped [r] (spelt r)

Rolled [r] is formed by rapid intermittent taps of the tongue tip against the teeth ridge. It is coupled with the central neutral vowel [ə].

The formation of the flapped alveolar [r] is similar, but involves one tap only.

Laterals

Dental: [l] (spelt l)  
Palatal: [ʎ] (spelt lj)

Being continuant and non-fricative, the two laterals are vowel sounds.

Fricatives

Labio-dental: [f] [v] (spelt f, v)  
Alveolar: [s] [z] (spelt s, z)  
Palato-alveolar: [ʃ] [ʒ] (spelt š, ž)  
Velar: [x] (spelt h)

Semi-vowel

Palatal: [j] (spelt j)

Being a variant of [i], this sound is phonetically a vowel.

Theoretical Problems

Several consonants have not been described adequately in previous works, because they are evaluated on the phonetic and phonological levels simultaneously. Thus, in all SC sections on Phonetics, the nasals, laterals and semi-vowel are dealt with first as they function in language, their phonetic description being almost neglected. There is no

mention of their vocalic nature.

From the point of view of phonetic description, the nasals, laterals, and semi-vowel are vowels. Linguistically, they occur marginally in the syllable, thus, they are included in the consonantal category on functional grounds. At times, however, owing to the phonetic context, they are accompanied by friction, thus becoming allophones of consonantal nature. /2/

In SC books the tongue is divided into the apex, front and back. According to the IPA books the apex is subdivided into the tip and blade. That has in turn brought about a more precise division of palatal sounds. (Cf. č, dž with č, dj).

The two apical sounds stand in complementary distribution, thus being two allophones of one phoneme. Rolled [r] occurs between two consonants; thus, it is considered a vowel on the linguistic level. Flapped [r] is considered a vowel if it precedes a consonant initially. In other positions, it is considered a consonant. The central neutral vowel [ə] does not exist in SC, consequently SC speakers are not aware of its existence and role in releasing the apical sounds.

In SC books [s] and [z] are treated as dental fricatives. Actually, they are alveolar sounds because the air-stream escapes by means of a narrow groove in the centre of the tongue, causing friction between the tongue and the alveolar ridge. /2/

Errors Made by Foreign Learners

Some of the consonants present a lot of problems to foreign learners. They tend to stick to the phonemes existing in their own mother tongues.

In Russian there are even doubled consonants, which are rather long. Russian speakers tend to pronounce similar SC words in their way: masa = [massə].

In Russian and German, voiced consonants are devoiced finally. That is why R and G learners devolve SC final consonants: nov = [nof]; vod = [vot].

The problem of palatalisation is worth considering. In Russian there are a lot of consonants which can have both hard (non-palatalised) and soft (palatalised) varieties. There are 18 palatals in R, and only 9 in SC. Only 3 palatals are the same in both languages: [ɲ], [ʎ], [j]. Three are similar: [tʃ] is softer in R, whereas [ʃ] and [ʒ] are harder. SC č, dj and dž do not exist in Russian.

R learners often palatalise SC sounds in those positions which call for palatalisation in R: delo = [dʲelə].

Plosives. Arabian speakers confuse [p] and [b]: Palestina = Balestina.

The Germans devoice stops in all positions: bití=piti; dobro=topro; gad=kat. The English often hear and reproduce SC /p,t,k/ as [b,d,g] due to the lack of aspiration in the SC voiceless stops:

Papić= Babić; klatno= gladno.

All Germanic languages have regressive assimilation, whereas Slavic languages have progressive assimilation. Compare the SC and English renderings of "pet banana" (five bananas):

SC rendering: ped banana  
E rendering: pet panana

The Spanish confuse [b] with their bilabial fricative [β]: subota= [suβota].

Affricates. Initial [ts] is difficult for the English. They sound [s] instead: cvet = svet

The French can never pronounce [ts], so they utter [s] instead: lonac = lonas.

All foreigners (and a lot of SC speakers too) find it almost impossible to distinguish between č and ć, and dž and dj, respectively. R learners neutralise č and ć into [tʃ]: kuće, kuće= [kutʃe], and dž and dj into [dʒ]: džak, djak= [dʒak].

It is advisable to point out to the double articulation of these palatals. The tip, blade, and rims of the tongue touch the upper alveolar ridge and side teeth. At the same time, the front of the tongue is raised towards the hard palate, less (for č, dž) or more (for ć, dj). That explanation should help anyone, particularly the Greeks, who pronounce [ts] instead of [tʃ] and [tɕ], and [dz] instead of [dʒ] and [dʒ]: čuti= [tsuti]; noć= [nots]; džep= [dzep]; Djura= [dzura].

Nasals. The French and Chinese do not sound final [n], but they nasalise the previous vowel: slon = [slɔ̃]. Russian, French, Italian, Spanish and Portuguese speakers find it easy to pronounce [ŋ], yet it is very difficult for the Germans and English. They sound it as [n] or treat it as [n/j], e.g., konj= [kon]; njuška= [nu:ʃka, n/ju:ʃka].

Rolled [r]. This sound is easy for the Spanish and Scottish. The French and Germans sound uvular [r] instead. The English pronounce RP No. 11 vowel [ɜ:] coupled with a kind of [r]: krv= [kɜ:rv]. The Japanese confuse [r] and [l]: gorak= golak; red = led

The English pronounce t+r and d+r like their affricates [tr] and [dr]: tri = [tri:]; drug = [dru:g].

Laterals. As [l] involves a double articulation (a tap of the tongue tip against the upper teeth, coupled with a rise of the middle of the tongue toward the hard palate), the French shift the second articulation forward, thus form-

ing their clear [l]: šal = [ʃal+]. While pronouncing final [l], the English sound their dark [ɫ], by shifting the second articulation backward: šal= [ʃa:ɫ]

The Russians always use their dark [ɫ]: lampa= [ʎampɫ]; sila= [sjiɫə]; bal= [bɫ].

The Japanese confuse [l] and [r]: Split = Sprit

Russian, Italian, Spanish and Portuguese speakers find it easy to pronounce [ʎ], yet it is difficult for French and German learners. Their rendering is always [j]: ljubav = [ˌjubav]. The English rendering is either [l] or [l/j]: ljubav = [ˌlu:bav], [ˌl/ju:bav].

Fricatives. Initially, Spanish learners confuse [v] and the stop [b]: vino= bino. Arabic speakers do so medially as well: navijam = nabijam

The Greeks and Spaniards have no [s], [z], [ʃ], or [ʒ] sounds, but the sounds in between [s] and [ʃ], and [z] and [ʒ], respectively. Thus, they pronounce:

uzela sam sok = [uzela sam sɔk]

doživela sam šok= [doživela sam sɔk].

The Spanish often assimilate [s] or [z] to the following nasal or lateral:

pismo = [pimmo]; razlog = [rallog]

The French have no [x], so they drop it: hitno = itno

The English have the glottal fricative [h], so they hear the velar fricative [x] as the voiceless velar stop [k], and pronounce it thus: hleb=kleb; Čeh= Ček.

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