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THE EFFECT OF SPEECH STYLE ON VOT VALUES IN SERBIAN-ENGLISH INTERPHONOLOGY

The paper analyzes VOT values in Serbian-English interlanguage phonology, as well as in the production by native American English speakers, with a special focus on the effect of speech style formality on the values of VOT. In order to answer the proposed research questions, the investigation included 72 first-year students at the Faculty of Philology and Arts, University of Kragujevac, whose plosive production was recorded in three tasks differing in the degree of formality: a word list, paragraph reading and an interview. The same tasks were performed by the native speakers, too. The obtained corpus was analyzed from the perspective of experimental phonetics accompanied by descriptive and qualitative interpretation of results. Speech style proved to be a statistically significant predictor of variation in VOT for all the plosives both among native and non-native speakers. The differences detectable among speakers are best represented by the values of VOT for both voiced and voiceless plosives, most often interpreted as a result of the differences in phonological systems of Serbian and English. The results of the paper underscore important pedagogical implications and expand the options for future research in the field of interlanguage phonology.

Key words: voice onset time, speech style, native speakers, non-native speakers, Serbian-English interlanguage phonology

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1. INTRODUCTION

Interlanguage phonology research recognized mother tongue interference as a key factor in explaining the occurrence of pronunciation errors back in the 1980s, but it was also noted that the characteristics of the mother tongue were gradually being replaced by features similar to those belonging to the L2 sound system as the period of learning progressed, and as the contact with the target language became more frequent (Major 1987). Consequently, the entire process of acquisition of an L2 phonological system represents a specific process of selecting features during which certain features remain, while some of them disappear from the interlanguage system, whereas the answer to the question why this is so often remains unclear.

Inspired by a relatively scarce amount of research of voice onset time (VOT) especially concerning the Serbian-English interlanguage system, as well as by virtually nonexistent studies dealing with the influence of speech style on VOT values, the present paper focuses precisely on the dependence of VOT values on the formality of speech style in the production of plosives by Serbian EFL learners at the tertiary level of education.

2. SPEECH STYLE AND THE PRODUCTION OF SOUNDS IN INTERLANGUAGE PHONOLOGY

One of the earliest studies in interlanguage phonology focused on the influence of style on the variation in production is the study with Japanese speakers of English (Dickerson 1974), which showed that the production of target sounds was more accurate in the task of reading the word list than in a spontaneous conversation. Other studies likewise demonstrated that informal speech style resulted in less attention being paid to pronunciation and the respondents being more precise when reading a formal word list or isolated sentence list (Tarone 1983: 152). Particularly relevant to our research since it employs similar methodology, a relatively recent study with Chinese participants, indicated that the pronunciation of English interdental fricatives was conditioned by the phonetic context, but also by the formality of speech style in the testing tasks (Rau et al. 2009: 603–604). The exploration of the pronunciation of lateral consonants in the final position with Thai EFL speakers underscored that variations in pronunciation depended on the formality of speech style, too, specifically, on the production of isolated words and sentences (Chaitawin 1993: 51–55). Some authors believe that the effects of coarticluation, vowel centralization, dissimilation of consonants or elipsis, increase as the formality of speech style decreases, i.e. gradually increase along the continuum from reading isolated words to spontaneous speech (Moon, Lindblom 1994: 44).

However, there are studies whose findings proved contrary to the given assumptions, having shown that the variability of pronunciation is independent of the

type of task, involving many other factors (Sato 1985: 185). A classical study with Chinese speakers of English as a foreign language drew attention to the fact that the formality/informality of style alone is not a sufficient predictor of variability within the interlanguage system, showing that there is no difference depending on the task type when it comes to epenthesis, or the insertion of the vocalic element in the pronunciation of final syllables, yet that there are statistically significant differences in the omission of the last consonant in the syllable, where the omission is lower in the formal task (5.5% word list reading versus 13.3% in reading the passage) (Weinberger 1987: 412–414). Later on, a study investigating the pronunciation of /b d g/ by English speakers of Spanish as a foreign language, also underlined the increase in the influence of mother tongue interference causing errors in pronunciation in a more formal type of task (reading aloud) compared to spontaneous speech (answering questions), simultaneously stressing the importance of the orthography of a foreign language (Zampini 1994: 478–480).

3. PLOSIVES IN SERBIAN AND ENGLISH

During the articulation of /b d g/ vocal cords vibrate, thus the sounds are classified as voiced, while /p t k/ are distinguished by the absence of vocal cord vibration, and are therefore voiceless. There are no mismatches in the classification of plosives in Serbian and English when it comes to phonation, however, there are slight differences when it comes to classifications according to the place of articulation.

In English plosives are classified in the following way – bilabial: /b/, /p/, alveolar: /d/, /t/, velar: /g/, /k/. In the Serbian language, nevertheless, the classification slightly varies, especially in the case of /d/ and /t/, which are classified as apico-dental by some authors (Simić, Ostojić 1996: 195), while other authors talk about the range from dental to alveolar articulation (Petrović, Gudurić 2010: 285). The voiceless sound in the pair will vary the position of the top of the tongue from the edges of the upper incisors to the alveoles in line with the canines (Miletić 1933: 45). Authors generally agree on the localization of bilabial and velar plosives. It is interesting to note that Belić (1972: 57) allows for dental articulation of /d/ and /t/ in intervocalic position in particular.

The period between the burst and the beginning of periodic vibration of the following vowel is known as *Voice Onset Time* (VOT) (Lisker, Abramson 1964: 422). It is negative if it begins before the burst, and positive if it starts after releasing the air. The aforementioned authors studied the initial voiceless plosives in eleven languages and defined three general groups of plosives according to the voice onset time values (Ibid. 1964): voiceless unaspirated (VOT=0–25 ms), voiceless aspirated (VOT=60–100 ms) and voiced with negative VOT (VOT=-25 ms).

Voiceless plosives in English are characterized by aspiration in initial accented pre-vocalic positions. According to some relevant literature, aspiration is not common in the Serbian language, whatsoever (Belić 1972: 51). Čubrović (2013) describes Serbian as a short-lag language, which confirms the presumptions on the lack of aspiration in a typical, non-marked Serbian speech. Investigating speech pathology, Punišić (2012) resorts to describing aspiration as a non-typical feature in Serbian speakers. However, there are authors who allow for aspiration as a feature following explosion in plosive articulation, comparing voiced plosives to voiceless ones in terms of VOT duration difference (Jovičič 1999; Sovilj-Nikić 2014; Jovičić, Kašić 2015). Devising a phone duration prediction model for Serbian, Sovilj-Nikić et al. (2014) describe plosives as consonants consisting of occlusion and explosion with no specific mention of aspiration and VOT.

The values of VOT will vary depending on the place of articulation, hence bilabial plosives will have a shorter VOT than alveolar and velar. However, there were somewhat different findings in a study with British English speakers, for example, a significant difference was found between labial and non-labial plosives but not between alveolar and velar ones (Docherty 1992), i.e. between velar and alveolar, but not labial and alveolar. Overall, the studies concluded: the farther the location of the obstruction inside the oral cavity, and the wider the contact and slower the movement of articulators, the higher the VOT (Cho, Ladefoged 1999).

Compared to the research in the world, studies conducted in the Serbian scientific context are significantly scarcer in number. In a preliminary study of Serbian voiceless plosives, Čubrović (2013: 13–15) lists the average values of VOT in four contexts: initial accented syllable (/p/=13 ms, /t/=16 ms, /k/=39 ms) , initial unaccented syllable (/p/=15 ms, /t/=20 ms, /k/=36 ms), medial accented (/p/=17 ms, /t/=20 ms, /k/=44 ms) and medial unaccented syllables (/p/=18 ms, /t/=21 ms, /k/=43 ms), and concludes that Serbian is a short-lag VOT language. Unlike English, VOT will be shorter in Serbian accented syllables. It is also surprising that the results in this study suggest that Serbian EFL learners' VOT is longer in medial than in initial positions. Studying the influence of the spectral characteristics of the release burst and formant transitions on the Serbian EFL learners' perception of English voiceless plosives in initial position, Batas (2010: 271–272) finds that the total duration of plosives in initial and intervocalic position goes in line with the duration of occlusion, hence, in final position, the total duration correlates with the duration of the explosion. The burst phase is rather prolonged, thus the longest sounds in general are voiced bilabial plosives.

4. METHODOLOGY

4.1 Aim of the Study

The aim of the research is to analyze the effect of task type, i.e. speech style formality on the values of VOT in Serbian-English interlanguage system. In order to compare the results of production of plosives between non-native speakers (Serbian students of English as a foreign language) and native speakers of English, the paper additionally presents the results of measuring the VOT values in the production by speakers of the General American variety.

4.2 Research Questions

Having the aims of the research in mind, the paper is based upon the following research questions:

- What are the values of VOT in the production of plosives by non-native speakers, i.e. Serbian EFL learners?
- What are the values of VOT in the production of plosives by native speakers, i.e. speakers of General American variety?
- How does the speech style affect VOT values of plosives produced by native and non-native speakers of English, more precisely, is there a difference in the values of VOT produced while reading a word list, reading a paragraph and answering questions in an interview (spontaneous speech)?

4.3 Participants

A total of 72 first-year English-major students at the Faculty of Philology and Arts, University of Kragujevac, academic year 2013/2014, participated in the study. The average age of our respondents was 18.97, most of them being female (65.3%), and the largest number coming from Kragujevac (27.8%), having attended grammar school (54.2%). In order to compare the production of target consonants, we included two native speakers of American English variety, a male (Endover, Massachusetts) and a female (Cleveland, Ohio), average age=23.5. The speakers were not laymen in linguistic sense since they were both language instructors at the departments of English at the philological faculties of the University of Novi Pazar and Kragujevac.

4.4 Research Material

The material used in the research is the following: the wordlist of target sounds that had the aim to obtain careful enunciations from the participants since it was the

most formal task type; two passages to read aloud, as a slightly more informal form of examination; and an interview aimed at eliciting spontaneous speech. The word list contained examples taken from various sources (Gimson 1978: 149–219; Rau et al. 2009: 614–615; Jones 2012). For measuring VOT values one predominantly needs examples of target sounds in initial prevocalic position, hence the corpus was composed of these examples mostly. When it comes to the paragraph reading instruments, two paragraphs were adapted from the texts *The Story of Arthur the Rat* (Markham, Hazan 2002: 16) and *The Three Little Pigs* (Rau et al. 2009: 610–611). Questions in the interview were similar to a semi-structured interview (Saunders et al. 2003: 245–246) in the sense that, for most of the questions, there was an additional sub-question in case the respondent hesitated and stopped, or gave an extremely short answer.

4.5 Procedure

Testing the production of target sounds, i.e. the process of recording the respondents was performed in the winter semester of the 2013/2014 academic year (October-January) during the course of *English Phonetics*. Two native speakers whose production was subsequently analyzed for comparison (Endover, Massachusetts and Cleveland, Ohio) were recorded in November 2015 in Novi Pazar and Belgrade.

While recording the corpus, we took the recommendations of the literature into account, especially the ones related to the environment in which the recording was to take place, the necessary equipment and the recorded material long-term keeping rules (Kent, Read 2002: 101).

4.6 Corpus and Statistical Analysis

The methods of experimental phonetics (acoustic analysis) and quantitative, statistical analysis were used for processing the data obtained by testing the production of target sounds. The results of the acoustic analysis of participants' production were compared to the results of the native speakers, recorded while producing the target sounds in identical tasks as non-native speakers. Acoustic analysis was carried out using the *Praat* speech analysis software, version 6.02.3[1] (Boersma, Weenink 2016).

Statistical processing of production results was performed using the statistical program SPSS, version 20.0 (Field 2009), and it included descriptive statistics and analysis of variance (*ANOVA*).

[1] Available for download at http://www.fon.hum.uva.nl/praat/download_win.html

5. RESULTS AND DISCUSSION

Tables 1, 2 and 3 show values of VOT for plosives in all three tasks in initial prevocalic accented position. Along with the VOT values, we also indicate the minimum and maximum values, as well as the total number of analyzed examples (N). When it comes to the paragraph reading task, we did not present absolutely all the cases in order to illustrate acoustic values, yet, for the sake of economy and better overview, we selected the most representative examples, especially regarding those sounds for which there were numerous examples in the corpus.

Voice onset time of voiceless plosives was measured from the moment of release burst to the beginning of the periodical vibrations of the succeeding vowels. For more precise measurements we cut off the portion of the plosive and the transition into to the vowel. VOT of voiced plosives was measured from the first traces of a stable voice bar to the moment of release burst at the transition to the vowel. Certainly, there were examples in the corpus without a negative VOT, but the value is very close to zero, mostly in preconsonantal contexts regarding native speakers' examples. There are no examples of VOT values approaching zero for voiced stops in Serbian speakers' production. Such results point to the phonetic differences of plosives in Serbian and English – Serbian typically being a short-lag language with no aspiration; the voiced plosives being characterized by negative VOT and prevoicing; English being completely opposite regarding the voiceless stops especially, and VOT being shorter for voiced plosives, though still negative.

Table 1. *Voice Onset Time in Native (NS) and Non-Native Speakers (NNS): Word List*

Plosive	**VOT (ms)**		**Min.**		**Max.**		**N**	
	NS	**NNS**	**NS**	**NNS**	**NS**	**NNS**	**NS**	**NNS**
[p]	***62***	***26***	52	10	99	75	14	504
[t]	***75***	***34***	70	14	95	82	12	432
[k]	***84***	***45***	75	6	105	98	22	792
[b]	***-98***	***-156***	-85	-125	-102	-152	12	432
[d]	***-95***	***-130***	-82	-115	-115	-145	10	360
[g]	***-96***	***-77***	-80	-58	-112	-128	10	360

Table 2. *Voice Onset Time in Native (NS) and Non-Native Speakers (NNS): Paragraph Reading*

Plosive	VOT (ms)		Min.		Max.		N	
	NS	NNS	NS	NNS		NS	NNS	NS
[p]	***68***	***28***	54	8	114	85	14	504
[t]	***70***	***39***	65	4	108	102	12	432
[k]	***89***	***34***	72	6	119	124	22	792
[b]	***-28***	***-126***	-17	-88	-102	-160	12	432
[d]	***-22***	***-98***	-10	-85	-85	-140	10	360
[g]	***-32***	***-65***	-12	-54	-92	-102	10	360

Table 3. *Voice Onset Time in Native (NS) and Non-Native Speakers (NNS): Interview*

Plosive	VOT (ms)		Min.		Max.		N	
	NS	NNS	NS	NNS		NS	NNS	NS
[p]	***89***	***22***	78	8	99	92	10	216
[t]	***82***	***18***	74	5	116	88	10	216
[k]	***80***	***25***	68	8	122	96	10	216
[b]	***-15***	***-104***	2	-75	-82	-146	10	216
[d]	***-12***	***-89***	8	-62	-62	-115	10	216
[g]	***-23***	***-68***	-5	-48	-104	-126	10	216

First and foremost, when we look at the voiceless plosives in all three tables, we notice that the values are significantly lower in the case of Serbian speakers, which points to the fact that Serbian speakers do not pronounce aspirated plosives, yet Serbian variants of voiceless plosives. There is no aspiration in prevocalic accented positions in Serbian, hence the VOT is short. The situation is very similar in all the tasks, with the exception of the interview as the most informal task where we detect additional decrease in VOT duration in voiceless plosives. Such values emphasize the fact that the deviations from the phonetic features of target sounds, aspiration of voiceless plosives in this case, increase as Serbian EFL learners' concentration on the pronunciation of individual sounds and words in spontaneous speech drops. The minimum and maximum values of VOT are indicated in order

to actually see the range of the values, and consequently the extent of variability in the interlanguage system. Minimum values tell us about those students who fully realize Serbian variants of voiceless plosives, while maximum values tell us about the productions approaching the authentic production of native speakers and the potential formation of a new category. VOT values somewhere between these two extremes testify to the process of acquisition and gradual perception of subtle phonetic differences, as well as to the inability of absolutely adjusting the articulators to produce specific phonetic features absent from the mother tongue system.

VOT of voiced plosives is negative in both languages, which means that voicing begins before the explosion, with the differences in the values being high. Namely, the negative VOT is longer with Serbian speakers, which leads to the conclusion that the pre-voicing in Serbian plosives is longer than in English. Reduction in the duration of VOT is also noticeable in voiced plosives produced by Serbian speakers across tasks, whereas the native speakers exhibit a relatively low and stable VOT. Similar results concerning the assimilation of voiceless plosives into the variants of the mother tongue and the non-realization of aspiration were obtained in previous studies with Serbian speakers (Čubrović 2013), but also in other languages (Flege, Efting 1987). Bearing all the aforementioned in mind, it may be concluded that VOT is a reliable parameter for the comparison of Serbian and English speakers' realization of stop consonants.

Table 5 provides an overview of the results of statistical analysis, i.e. the effect of speech style on phonetic features of plosives. Taking into consideration that there is a large number of sounds, and thus an extensive output of statistical processing, the table displays only the basic data relevant for indicating the presence/absence of statistical significance. The *p* values that indicate statistical significance are highlighted in the table.

Table 4. *Statistical Analysis Results for VOT Values in Different Tasks*

Independent Variable	**Dependent Variable**
	VOT
Native Speakers (ANOVA)	
Speech Style	[p] F=104.093 **p=0.001** [b] F=103.763 **p=0.001** [t] F=4.229 **p=0.025** [d] F=5645.077 **p=0.01** [k] F=3013.959 **p=0.03** [g] F=5172.578 **p=0.01**
Non-Native Speakers (ANOVA)	

Speech Style	[p] F=9.783 **p=0.003** [b] F=135.945 **p=0.001** [t] F=327.957 **p=0.01** [d] F=1517.375 **p=0.01** [k] F=2333.484 **p=0.02** [g] F=101.679 **p=0.004**

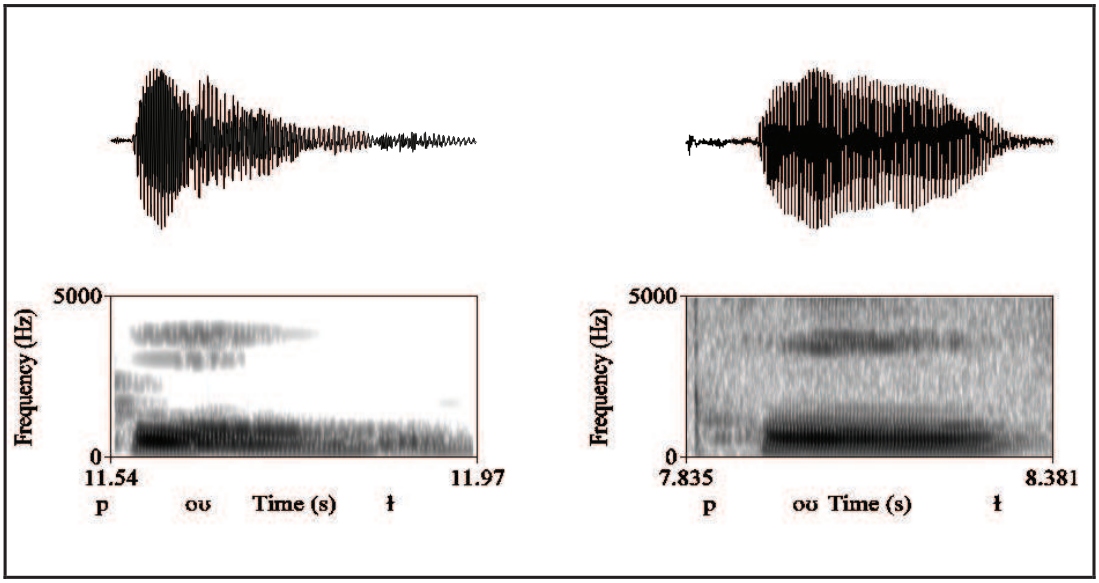
Judging by the results in Table 4, all the speakers from our sample, both native and non-native, realize English plosives with the tendency of reducing VOT values as the speech becomes faster and more spontaneous. The reason for this can be found in the less attention paid to articulation, hence, the very length of words is shortened, and simultaneously the length of the segments from which they are made. Therefore, the results underline the importance of the effect the formality of speech style exerts on VOT values in Serbian-English interlanguage system. Therefore, we can conclude that speech style proved to be a statistically significant predictor of variation in production.

On the other hand, we allow the possibility for interpreting the results as a consequence of too many examples in the corpus differing in terms of immediate phonetic context which conditioned such a state of affairs. This situation offers the following explanation: on the basis of the results we can say that Serbian speakers from our sample fail to detect subtle differences in the two languages regarding the given phonetic parameter (VOT), and dominantly realize the acoustic and articulatory features, characteristic of the plosives in their mother tongue, by transferring them to the sounds of the target language.

In order to graphically illustrate the investigated values and visually support the results of the quantitative calculations, in the ensuing sections of the paper the spectrograms showing realizations of examples from the corpus are outlined and elaborated on.

Figure 1 demonstrates the difference in the realizations of an initial prevocalic voiceless plosive in non-native (left) and native speaker's production (right).

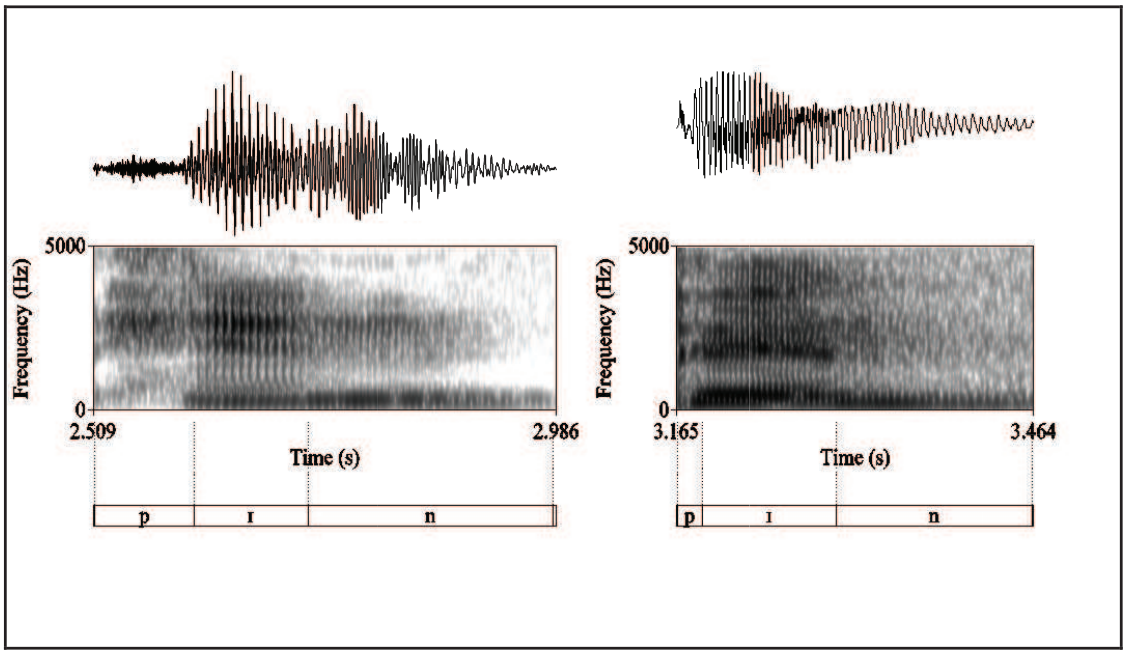
Figure 1. **Differences in VOT Between Non-Native and Native Speakers: Word List (example: *pole* [pʰoʊɬ])**



The non-native speaker realizes the sound closer to the sound of the mother tongue, with a minimal presence of aspiration, therefore the VOT being considerably shorter in the first spectrogram. The native speaker, on the other hand, realizes the initial plosive accompanied by frication, which is significantly longer than that of the speaker of Serbian. It is also interesting to note the difference in burst intensity which is so much weaker in the first case that it is almost entirely absent from the spectrogram. The difference is noticeable in the oscillograms, as well, so the amplitude in the second figure is more conspicuous, possibly due to the velarization of the word-final lateral approximant, which almost assumes the tonality of the vowel, hence the amplitude of the central diphthong is preserved until the end. In the first case, the Serbian speaker exhibits velarization only mildly, so the realization remains alveolar, therefore the lateral retains its consonant properties and the amplitude decreases.

The situation is similar in Figure 2.

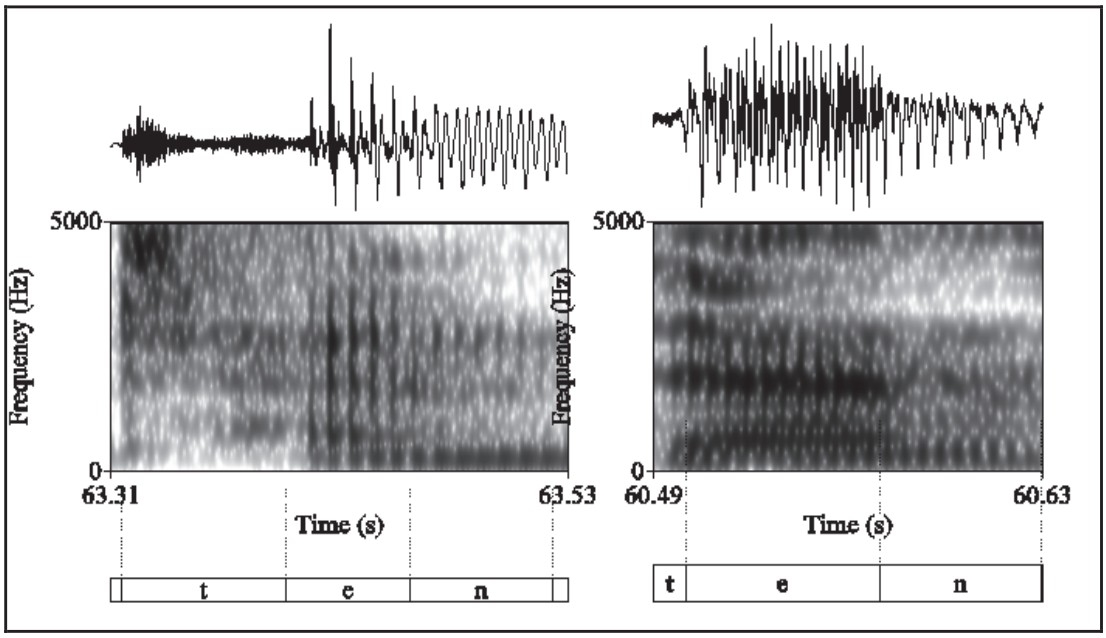
Figure 2. **Realization of an Initial Bilabial Plosive in Prevocalic Accented Position in Native and Non-Native Speakers (Aspiration): Word List (example: *pin* [pʰɪn])**



In the spectrogram showing a bilabial voiceless plosive in the initial position for the native (left) and non-native speakers (right), a difference in the realization is evident. Namely, the frication, after the burst, visible both in the oscillogram and spectrogram of the native speaker, is absent from the spectrogram of the non-native speaker. Thus, the non-native speakers realize the allophone via the native phonological system and without aspiration, VOT being much shorter at the same time, which was already seen from the measurements.

In a somewhat less formal speech style, the paragraph reading task, this difference in the realization of the initial alveolar voiceless plosive in the accented prevocalic position seems even more prominent judging by the spectrogram in Figure 3.

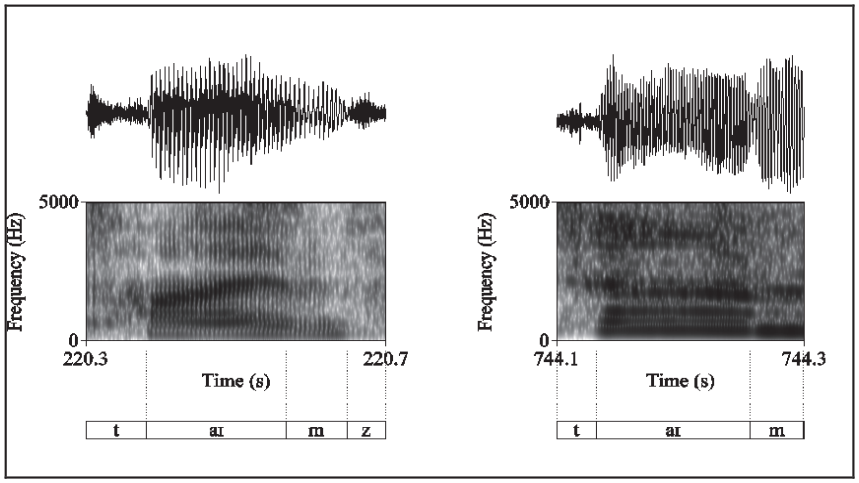
Figure 3. **Aspiration of Alveolar Plosive in Initial Position in Native and Non-Native Speakers: Paragraph Reading (example: *ten* [t^{h}en])**



The spectrogram to the left shows the pronunciation of the native speaker, while the right one is reserved for the non-native speaker. In the second case the absence of aspiration can be noticed, as well as the low intensity of the burst, while in the first picture, the situation is almost completely the opposite. The native speaker demonstrates almost no difference in the realization of the target sound, regardless of the task type, although a lower intensity of the burst is noticeable compared to the task of wordlist reading due to faster speech rate and coarticulation effects in connected speech. A difference in the quantity of the front short vowel is likewise visible, yet a more in-depth analysis of vowel production exceeds the scope of the current research.

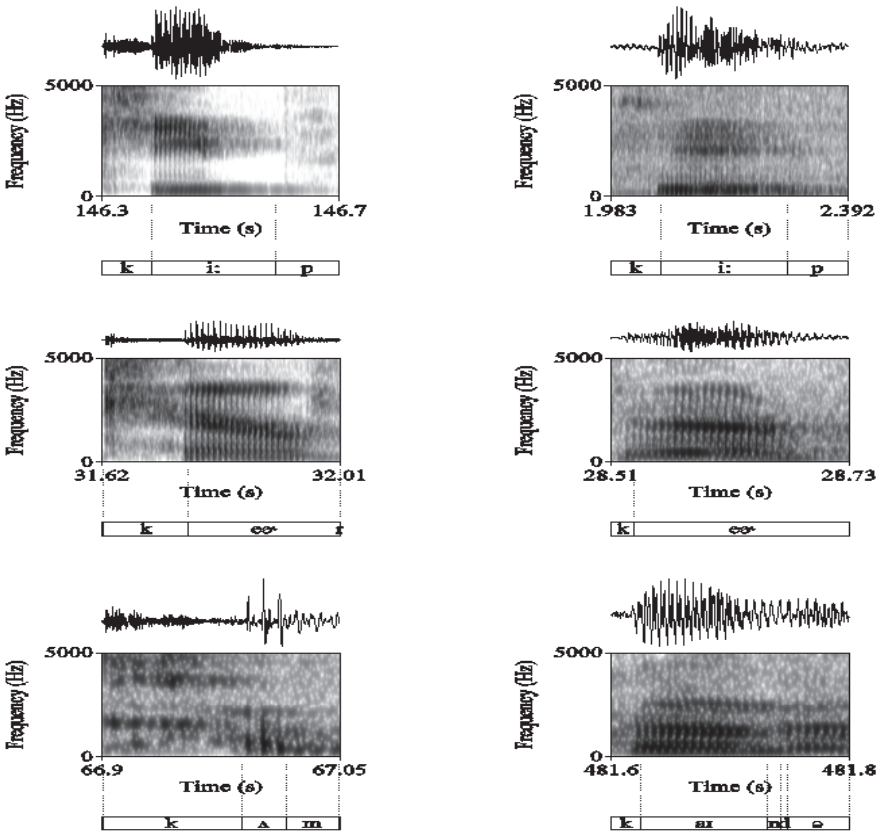
Even though the interview represents a quick succession of words in connected speech, the native and non-native speakers still differ in the realization of the initial voiceless alveolar plosives which is evident in Figure 4.

Figure 4. **Aspiration of Alveolar Plosive in Initial Position in Native and Non-Native Speakers: Interview (example: *time* [tʰaɪm])**



The situation is similar with the velar plosive, as well, and in Figure 5 we see the realization of a voiceless velar plosive in all three tasks, in particular order: the wordlist, paragraph reading and the interview with the native speaker (left) and the Serbian EFL speaker (right).

Figure 5. **Voiceless Velar Plosive in Initial Position in All Three Tasks in Native and Non-Native Speakers (examples: *keep* [kʰi:p], *care* [kʰeə], *come* [kʰʌm], *kind of* [ˈkʰaɪndə])**



6. CONCLUSION

After the theoretical introduction in which we presented the relevant research related to VOT in the Serbian and world scientific context done so far, the results of the conducted empirical research were overviewed and explained.

The results obtained by recording the speakers in three types of speech style varying in the degree of formality showed that speech style could be considered as a statistically significant factor affecting the VOT values; the latter being a phonetic parameter used to describe plosives not only in Serbian-English interlanguage system, but in the phonological systems of native speakers of general American variety. With the reduction of the formality of speech style, the attention paid to the pronunciation is likewise reduced, hence the values of VOT in non-native and native speakers diverge appreciably. When we take all the described acoustic and articulatory details of the plosives present in the interlanguage system into account, we cannot help but notice that assimilation is a prevalent way of realizing the target phonemes and their allophonic variants. Due to the inability of discerning the difference, concurrently assuming similarity (identicalness even) of plosives in the two languages, Serbian speakers transfer the phonetic features (or the absence of features) into the target language, which results in erroneous production in terms of diverging from the native-like model, reinforcing the presence of foreign accent. There are inarguably examples of non-native production approaching native speakers' pronunciation, which serves as a confirmation that it may be absolutely realistic to expect the formation of a new category in the interlanguage system, yet it is prerequisite to determine which linguistic and extralinguistic factors cause the differences in the ultimate attainments of L2 learners.

Bearing all the previously stated in mind, consonants in the interlanguage system, such as Serbian-English, plosives in particular, open up vast possibilities for further research which could be crucial for improving pedagogical practice, and therefore for raising the level of pronunciation and gradually reducing foreign accent. Considering the diversity and partial unsystematicity and unpredictability of phonetic values in the interlanguage system, teaching should include as many different types of exercises as possible, especially authentic and contextualized ones, with particular reference to the formality of speech style in which the values of the realized phonetic parameters will vary.

The limitation of this research lies in the control of examples in all three tasks, primarily referring to the interview, in which, due to the spontaneity of speech, one can not foresee the appearance of the same examples, as is the case with the pre-determined word list.

Future research could address the influence of speech style on other phonetic parameters relevant to the description of plosives in the interlanguage system, as

well as the realization of other sounds of the English phonetic and phonological system. The differences between British and American varieties could likewise be focused on in future research.

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УТИЦАЈ ГОВОРНОГ СТИЛА НА ВРЕМЕ НАСТУПА ЗВУЧНОСТИ У СРПСКО-ЕНГЛЕСКОЈ МЕЂУЈЕЗИЧКОЈ ФОНОЛОГИЈИ

Резиме

У раду се анализирају вредности времена наступа звучности у српско-енглеском међујезичком фонолошком систему, као и код изворних говорника америчког енглеског варијетета, са посебним освртом на утицај формалности говорног стила на вредности поменутог фонетског обележја. У циљу одговора на постављена истраживачка питања, у истраживању је учествовало 72 студента прве године англистике на Филолошко-уметничком факултету Универзитета у Крагујевцу, чија је продукција плозива снимљена у три типа задатка: листи речи, читању пасуса и интервјуу. Исте задатке имала су и два изворна говорника. Анализи добијеног корпуса приступило се методама експериментално-фонетске анализе и квалитативно-дескриптивним методама интерпретације резултата. Говорни стил се показао као статистички значајан

предиктор вредности времена наступа звучности код свих плозива и код изворних и код неизворних говорника. Разлике међу говорницима очитавају се у дужини трајања времена наступа звучности и код звучних и код безвучних плозива, што је последица различитих фонетских специфичности енглеског и српског језика. Резултати рада указују на важне педагошке импликације за наставу енглеског као страног језика и отварају могућности за даља истраживања у оквиру међујезичке фонологије.

Кључне речи: време наступа звучности, говорни стил, изворни говорници, неизворни говорници, српско-енглеска међујезичка фонологија

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