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ONSET CLUSTERS IN ENGLISH AND SERBIAN**

Abstract: The aim of this paper is to provide a comparison of onset clusters in English and Serbian within the theoretical framework that employs the concept of sonority. According to the Sonority Sequencing Principle (Kiparsky, 1979; Selkirk, 1984; Clements, 1990), consonant sequences can be divided into core clusters, sonority reversals and sonority plateaus. In order to divide onset clusters into these three groups, we used the principles referring to possible consonant clusters provided in Roach (2009) and the classification of consonant clusters in Petrović & Gudurić (2010). The classification shows that the majority of sequences in English and Serbian represent core clusters. All three types of clusters are more numerous in Serbian. Dispersion of demisyllables in the two

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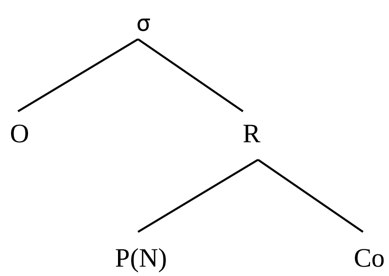
languages was calculated with the aim of determining their complexity. Complexity ranking indicates that more complex structures tend to occur less frequently in both languages. On the other hand, the simpler demisyllables can be found in a larger number of words.
Key words: onset clusters, English, Serbian, sonority, demisyllables.

INTRODUCTION

Consonant clusters have received considerable attention in the phonological literature and sonority has played an important role in the analysis of the syllable structure. While there are many research studies dealing with consonant clusters in English, these sequences have not been investigated thoroughly in Serbian. Furthermore, comparative studies between consonant clusters in two languages seem to be quite rare. The aim of this paper is to explore initial two-member consonant sequences in English and Serbian within the theoretical framework centred around the concept of sonority and thus provide a clearer picture of similarities and differences between onset clusters in these two languages.

According to Lass (1991), a syllable is a phonological unit which consists of an onset (O) and the rhyme (R). The rhyme includes a peak (P) (which is also called nucleus (N)) and a coda (Co). The only obligatory part of the syllable is the peak (e.g. *ah*). A syllable is represented as a branching tree:

(1)



The position of the peak is occupied by a vowel, while consonant segments constitute the onset and the coda. The number of consonants in the onset in English and Serbian varies from 0 to 3. Nevertheless, this paper is concerned with two-member onset clusters only (since this is the optimal number of segments in a consonant cluster in Serbian (Petrović & Gudurić, 2010, p. 401)). The prototypical syllable contains a vowel as the most sonorous segment, while sonority of the segments in the onset should rise steadily. As we shall see, this is not always the case.

The rest of the paper is organized in the following way: first, we explain the notion of sonority and present the sonority scales, after which we provide a comparison of onset clusters in English and Serbian. In the second part of the analysis, we deal with the Dispersion Principle by placing emphasis on the notion of demisyllable. Even though the demisyllable includes a vowel apart from the consonant cluster, it enables an important classification of initial sequences according to a degree of their complexity. The final section contains summary of the most important results obtained in the paper.

SONORITY

DEFINITIONS OF SONORITY

Sonority is an important factor which influences the structure of the syllable. Different sounds possess different sonority values according to which they can be ranked on the sonority scale. The notion of sonority can be treated as a phonetic property, as well as a phonological feature.

According to Ladefoged (1982, 1993) sonority represents perceptual salience or loudness of a sound, whereas Goldsmith (1995) claims that sonority should be defined as the amount of airflow in the resonance chamber. Škarić (1991) suggests that sonority does not depend on the sound itself but stems from physical properties of the speech organs. For instance, increased tension of the larynx, a larger size of the oral cavity and a greater degree of its openness will result in higher sonority values. On the other hand, sonority can be defined as a phonological primitive in the form of a multi-valued feature (Selkirk, 1984). Clements (1990) argues that sonority is derived from more basic binary features of phonological theory (syllabic, vocoid, sonorant), including one additional feature – approximant.

Despite a large number of definitions of sonority and disagreements between the authors, the Sonority Sequencing Principle is generally accepted in the phonological literature (Kiparsky, 1979; Selkirk, 1984; Clements, 1990). It can be stated in the following way (Clements, 1990, p. 285):

(2) The Sonority Sequencing Principle

Between any member of a syllable and the syllable peak, only sounds of higher sonority rank are permitted.

Sonority scales

According to Parker (2002, p. 62), the most frequently cited sonority scale in the literature is probably the one provided in Clements (1990):

(3) The sonority scale

V(owels) > G(lides) > L(iquids) > N(asals) > O(bstruents)

The authors disagree on whether sonority scales vary from one language to another (Steriade, 1982) or whether the sonority scale is universal (Selkirk, 1984; Clements, 1990). Sonority scales which have fixed universal values usually refer to the major natural classes of sounds (as in (3)), and finer distinctions between segments are drawn by using sonority-independent parameters, such as voicing, coronality, etc. (Morelli, 1999, p. 5). The idea that we pursue is that the sonority scale is universal.

The sonority hierarchy employed in this paper is based on the one which Babić (1988) created for Croatian. In Živanović (2019), we used a somewhat different sonority scale: /j/ and /v/ were classified as semivowels. As suggested by Subotić et al. (2012, p. 50), the surrounding phonetic context determines whether /j/ is going to be realized as a vowel, semivowel, spirant[1] or it is not going to be realized at all. The authors suggest that /j/ is realized as a spirant in the initial position and after the consonant. Since /j/ occurring in the examples analyzed in this paper represents the second segment of a consonant cluster, in the sonority hierarchy provided below it is classified as a fricative.

Serbian /v/ is traditionally classified as a sonorant, for the following reasons: it does not undergo voicing assimilation, as opposed to voiced obstruents: *lov* + *ca* → *lovca*; *iz* + *tupiti* → *istupiti*; its position is usually the same as that of sonorants since it is preceded by obstruents in initial consonant clusters, e.g. *tvoj*, *dva*, *kvar*; it is characterized by approximant articulation and its acoustic characteristics include low energy output and barely visible friction (if it is present at all) (Marković & Jakovljević, 2012, p. 16). The spectrograms analyzed by Gudurić & Petrović (2006, p. 337) indicate

[1] The term ‘spirant’ is usually used interchangeably with the term ‘fricative’.

that /v/ can be realized as a sonorant, as a semivowel or as a voiced fricative. Nevertheless, even in the contexts in which it is realized as a sonorant or semivowel, its sonority before a voiceless consonant decreases in the same way as that of the fricative; according to the authors, this is an argument for classifying /v/ into the group of fricatives. Subotić et al. (2012) also treat /v/ as a fricative and this is the position taken in this paper as well.

The sonority scale is given in Table 1; vowels, as the most sonorous segments, occur on the left and plosives, as the least sonorous, on the right.

Table 1. The sonority scale, based on Babić (1988)

V(owels)	L(iquids)	N(asals)	F(ricatives)	A(ffricates)	P(losives)
a	r	m n nj	j v z ž	đ dž	b d g
e o	l lj		h f s š	c č ć	p t k
i u					

The same sonority hierarchy was used for classifying English consonant sequences. However, we added the group of semivowels to this scale since they do occur in English consonant clusters; semivowels represent the second most sonorous group of sounds.

(4) The sonority scale for English

Vowels > S(emivowels) > Liquids > Nasals > Fricatives > Affricates > Plosives

The sonority scales enable classifying consonant clusters into three types based on the Sonority Sequencing Principle – core clusters, sonority reversals and sonority plateaus. Core clusters are the best formed clusters according to the Sonority Sequencing Principle. Their sonority decreases towards the syllable margin. In sonority reversals, the most sonorous segments occur closer to the syllable margin than to the syllable peak. Sonority plateaus consist of the members which have the same sonority values.

THE CLASSIFICATION OF ONSET CLUSTERS

In order to provide an appropriate typology of onset clusters in English, we used the principles referring to possible onset clusters provided in Roach (2009). Serbian onset clusters were classified based on the set of possible consonant sequences collected by Petrović & Gudurić (2010). The classification of initial two-member consonant sequences in English is given in Table 2.

Table 2. Onset clusters in English

Core clusters	Sonority reversals	Sonority plateaus
P + L (pray, blue)	F + P (spit, skin)	F + F (sphere)
P + S (cue, twist)		
F + N (smile, snow)		
F + L (fly, through)		
F + S (swim, hue)		
N + S (muse, news)		
L + S (lewd)		

As expected, the largest number of clusters are core clusters. Within this group, plosives, fricatives, nasals and liquids can be combined with semivowels. Fricatives represent the most frequent first members of English core clusters (they are also the most frequently occurring group of sounds in general, since they can be found in all groups of clusters in both languages). A sequence which includes neither semivowels nor fricatives is the one containing a plosive and liquid.

Affricates do not occur in two-member clusters in English. On the other hand, they seem to be much more productive in Serbian. As initial segments, affricates can be combined with fricatives, nasals and liquids to form a two-member core cluster; there is also one sonority reversal (affricate + plosive). Affricates are possible second members of plosive + affricate sequences (core clusters) and fricative + affricate clusters (sonority reversals). The status of affricates within the literature is still controversial. Linn (2011) presents three approaches: 1) the Stop Approach (Kehrein, 2002), according to which affricates are analyzed as 'strident stops'; 2) the Affricate Approach, according to which affricates form a separate class and are characterized by the feature [+delayed release] (Chomsky & Halle, 1968); 3) the Complex Segment Approach

(Lombardi, 1990), according to which affricates share the feature [-cont] with stops and the feature [+cont] with fricatives. For this reason, there is a possibility that sequences such as /pč/ and /kć/ cannot be treated as core clusters, as they are in our analysis, if one defines affricates as complex segments consisting of stops and fricatives.

As regards sonority reversals and sonority plateaus, there is only one possible combination for each group – fricative + plosive and fricative + fricative. The only fricative that can be found in these sequences is /s/. In Serbian, the fricatives /s/, /z/, /š/ and /ž/ are possible initial members of sonority reversals. The number of fricatives at the beginning of sonority plateaus is even greater.

Table 3. Onset clusters in Serbian

Core clusters	Sonority reversals	Sonority plateaus
P + A (pčela, kći)	F + P (škola, zbor)	P + P (gde, tkati)
P + F (psovati, gvožđe)	F + A (šćućuriti se, ščepati)	F + F (shodno, zvezda)
P + N (kmet, gnjida)	A + P (čtec)	N + N (mnogo, mnjenje)
P + L (pljačka, brak)	N + F (mjaukati)	
A + F (čvor, cvet)		
A + N (čmičak, cmizdriti)		
A + L (član, crep)		
F + N (znak, žmuriti)		
F + L (sram, vlaga)		
N + L (mrak, mlak)		

As the classification shows, Serbian contains a larger number of possible onset clusters. The majority of them adhere to the Sonority Sequencing Principle. However, some of the segments, such as the fricative /j/, are present in only few examples. On the other hand, /j/ is a very frequent second member of clusters in the ijekavian varieties of Serbian, e.g. *pjesma*, *tjerati*, *djeca*, *sjesti*, *mjera*, *vjera*. Apart from the above-mentioned distinction concerning the occurrence of affricates, we should also mention that Serbian contains a higher number of onset clusters containing plosives (7) than English does (3).

There are four types of sonority reversals – fricative + plosive, fricative + affricate, affricate + plosive and nasal + fricative. As concerns sonority plateaus, plosive

+ plosive sequences are documented in several examples: *bdeti*, *gde*, *ptica*, *tkati*, *ktitor*. Fricative + fricative clusters are more numerous primarily due to a large number of combinations including /v/: *zvati*, *zvezda*, *žvaka*, *žvakati*, *hvala*, *hvatati*, *svako*, *svet*, *švalja*, *švargla*, etc. Nasal + nasal sequences are well-formed only if the first member is /m/ (/m/ is also the only possible nasal to begin nasal + liquid and nasal + fricative sequences and it is the only nasal that can occur as the second member of affricate + nasal sequences; when preceded by a plosive or fricative, any nasal can be the second segment of a core cluster).

THE DISPERSION PRINCIPLE

Clements (1990) proposes the principle of The Sonority Cycle, which comprises principles of Core Syllabification and Feature Dispersion. Within syllables, sonority tends to rise and fall. A sonority cycle is the term which Clements uses to name this increase and decrease. In order for a syllable to be created, three steps need to be performed. The first implies seeking [+syllabic] segments and introducing a syllable node over them. Further actions include joining unsyllabified segments to the left of a syllabified segment and then to its right side. These segments should contain lower sonority values than the segment to which they are added. These are the steps which yield the principle which Clements names the Core Syllabification Principle (CSP). However, not all strings of segments adhere to the CSP. The author introduces the Dispersion Principle with the aim of ranking syllable types according to the degree of their complexity, i.e. how much they differ from the prototypical syllable (the 'unmarked' syllable (Clements, 1990, p. 302)).

The Dispersion Principle can be defined by using the notion demisyllable. The idea is that each syllable consists of two overlapping parts – two demisyllables. The term refers to the part of the syllable which ends or begins with a vowel. Initial syllable ends with a vowel, while final demisyllable begins with this segment: *lenj* → *le* + *enj*; *mrav* → *mra* + *av*; *ar* → *a* + *ar*; *big* → *bi* + *ig*; *space* → *spa* + *ace*; *it* → *i* + *it*. Clements (1990, p. 303) defines the demisyllable formally in the following way:

(5) A demisyllable is a maximal sequence of tautosyllabic segments of the form $C_m \ldots C_n V$ or $VC_m \ldots C_n$, where $n \geq m \geq 0$.

As the author explains, the first part of the syllable does not depend on the second part regarding their sonority values, and vice versa – this is the reason why the notion of demisyllable is appropriate for defining dispersion in sonority, *D*. *D* can be calculated by the following equation (Clements, 1990, p. 304):

$$= \sum_{i=1}^{m} 1/d_i 2$$

Figure 1. Dispersion in sonority

d – the distance in sonority between each pair of segments (including nonadjacent pairs)

m – the number of pairs of segments, equal to n (n - 1)/2

n – the number of segments

The distance in sonority, marked with a *d*, refers to the distance between the members on the sonority scale. In the scale V > G > L > N > O, the distance between the obstruent and the liquid is 2 and stays the same regardless of the order of these two elements.

The Dispersion Principle can be stated in the following way (Clements, 1990, p. 304):

(6) The Dispersion Principle

(a) The preferred initial demisyllable minimizes *D*.

(b) The preferred final demisyllable maximizes *D*.

We calculated dispersion in sonority for initial demisyllables in English and Serbian and classified them according to four categories: 1) demisyllable, which specifies the structure of the demisyllable;[2] 2) *D*, which reports the measure of

[2] As noted by Parker (2002, p. 22), the Dispersion Principle treats sonority reversals (e.g. the onset in the syllable /rta/) and core clusters (e.g. the onset in the syllable /tra/) in the same way – since the formula for *D* squares sonority distances, it reduces the effect of a negative slope. Therefore, the two structures have the same dispersion values, which is not the optimal result since it implies that they are both equally well-formed. For this reason, in this section we deal only with core clusters. Clements (1990, p. 311) is aware of this problem and suggests that the Complexity Metric should be extended to cover all types of consonant clusters.

dispersion in sonority; 3) *C*, which states the complexity ranking of a demisyllable, i.e. how marked it is.[3] To calculate *D*, we used the sonority scales in Table 1 and (4). For convenience, the scales with the assigned rank for each group of sounds are repeated below.

(7) The sonority scale for English

plosives 1 < affricates 2 < fricatives 3 < nasals 4 < liquids 5 < semivowels 6 < vowels 7

Table 4. Initial demisyllables in English

Demisyllable	D	C
P + L + V (pray)	0.34	1
F + L + V (fly)	0.56	2
P + S + V (cue)	1.07	3
F + N + V (snow), F + S + V (hue)	1.17	4
N + S + V (news)	1.36	5
L + S + V (lewd)	2.25	6

The best initial demisyllable in English is the one with the lowest *D* value (0.34) consisting of a plosive, liquid and vowel. The smallest distance between its members is 2, while the largest distance is 6. Its complexity ranking is 1. The demisyllable which is ranked the highest, and thus represents the most complex type, is liquid + semivowel + vowel (*D* = 2.25). The rise in sonority is not that abrupt, as required by the initial demisyllable, since the smallest distance between the members is 1 and the largest only 2. Therefore, it has been assigned the highest complexity ranking – 6.

[3] "The complexity ranking, *C*, of an initial demisyllable increases as its ranking in terms of *D* increases" (Clements, 1990, p. 305). Therefore, the demisyllable with the lowest value for *D* is the most preferred sequence and is assigned the lowest complexity rank – 1, the demisyllable with the second lowest value – 2, and so on.

The classification of initial demisyllables in Serbian is provided in Table 5. It was made based on the sonority hierarchy in (8).

(8) The sonority scale for Serbian

plosives 1 < affricates 2 < fricatives 3 < nasals 4 < liquids 5 < vowels 6

Table 5. Initial demisyllables in Serbian

Demisyllable	D	C
P + F + V (gvožđe), P + N + V (kmet)	0.40	1
A + N + V (cmizdriti)	0.56	2
P + A + V (pčela), P + L + V (brak)	1.10	3
A + F + V (cvet), A + L + V (član)	1.17	4
F + N + V (znak), F + L + V (vlaga)	1.36	5
N + L + V (mlak)	2.25	6

The most preferred initial demisyllables in Serbian are plosive + fricative + vowel and plosive + nasal + vowel sequences (D = 0.40). The most complex demisyllable consists of a nasal, liquid and vowel (D = 2.25). As in the classification of English demisyllables, this is the structure which contains members of the highest groups of sounds in the sonority hierarchy. Although Serbian includes a higher number of possible demisyllables, in both languages there are six complexity ranks.

What the notion of markedness implies is that structures which are more marked will occur less frequently in a language as opposed to those that are less marked. The most marked demisyllable in English supports this claim since /lju:/ seems to be quite a rare sequence, used by a limited number of speakers of English (/j/ is an optional segment in the sequence). The most marked demisyllable in Serbian is not frequent in this language either since /m/ is the only nasal allowed as the first segment. The distribution of the most unmarked demisyllables in English (P + L + V) and Serbian (P + N + V) speaks in favour of this idea as well since there are many such combinations: *play*, *pray*, *cry*, *clay*, *brave*, *blouse*; *tmina*, *kmet*, *knez*, *knjiga*, *dno*, *Dmitar*, etc. Nevertheless, there are examples whose structure cannot be explained in this way. For instance, the plosive + fricative + vowel sequence, which occurs in Serbian, also has the lowest complexity ranking, but cannot be found in a large number of possible combinations. The reason for this may be related to place features, i.e. even though the sequence is unmarked with respect to sonority dispersion, it may be marked along some other dimension (and vice versa).

CONCLUSION

The classification of English and Serbian onset clusters into core clusters, sonority reversals and sonority plateaus shows that both languages possess a large number of the best consonant sequences according to the Sonority Sequencing Principle, with Serbian having more. The reason for this is probably that Serbian allows more flexibility concerning combining consonant sounds at the beginning of the syllable. The most striking differences regarding core clusters involve the distribution of affricates and plosives. Namely, affricates do not occur in English onset clusters, neither as first nor as second members, whereas Serbian makes use of these segments in both positions to form four types of core clusters. Plosives do occur in English consonant clusters, but Serbian allows a higher number of these segments. Sonority reversals and sonority plateaus are more numerous in Serbian. Fricatives constitute a productive group of sounds in both languages since they occur in all three types of consonant clusters. As concerns the demisyllables' complexity, both English and Serbian have six complexity ranks. Less complex demisyllables tend to have a higher frequency of occurrence, while more complex structures are characterized by a lower frequency.

Sonority is a property of great importance for the analysis of the syllable structure. However, it is not the only criterion which should be taken into account. The contrastive analysis presented here should be used as a starting point for further analysis of onset clusters and the syllable structure in English and Serbian.

REFERENCES

Babić, Z. (1988). Slogovna struktura hrvatskoga književnoga jezika. *Jezik*, 36 (3), 65–71.

Chomsky, N. & Halle, M. (1968). *The Sound Pattern of English*. New York: Harper and Row.

Clements, G. N. (1990). The Role of the Sonority Cycle in Core Syllabification. In: Kingston, J. & M. Beckman (eds.), *Papers in Laboratory Phonology* 1 (283–333). Cambridge: Cambridge University Press.

Goldsmith, J. (1995). *The Handbook of Phonological Theory*. Oxford: Blackwell Publishers.

Gudurić, S. & Petrović, D. (2006). O prirodi i statusu foneme [v] u srpskom jeziku. *Zbornik radova Filozofskog fakulteta u Kosovskoj Mitrovici* XXXVI, 321–340.

Kehrein, W. (2002). *Phonological Representation and Phonetic Phasing: Affricates and Laryngeals*. Tübingen: Niemeyer.

Kiparsky, P. (1979). Metrical Structure Assignment is Cyclic. *Linguistic Inquiry*, 10 (3), 421–441.

Ladefoged, P. (1982). *A Course in Phonetics*. New York: HBJ.

Ladefoged, P. (1993). *A Course in Phonetics*. New York: HBJ.

Lass, R. (1991). *Phonology: An Introduction to Basic Concepts*. Cambridge: Cambridge University Press.

Linn, Y. H. (2011). Affricates. In: Van Oostendorp, M., C.J. Ewen, E. Hume & K. Rice (eds.), *The Blackwell Companion to Phonology*, vol. I (367–390). London: Wiley-Blackwell.

Lombardi, L. (1990). The Nonlinear Organization of the Affricate. *Natural Language & Linguistic Theory*, vol. VIII, 375–425.

Marković, M., & Jakovljević, B. (2012). Some Controversies about /v/ in Serbian, Transfer in English and Other Related Issues. In: Paunović, T. & B. Čubrović (eds.), *Exploring English Phonetics* (13–30). Newcastle upon Tyne: Cambridge Scholars Publishing.

Morelli, F. (1999). *The Phonotactics and Phonology of Obstruent Clusters in Optimality Theory* (Doctoral dissertation). College Park: University of Maryland.

Parker, S. G. (2002). *Quantifying the Sonority Hierarchy* (Doctoral dissertation). Amherst: University of Massachusetts.

Petrović, D., & Gudurić, S. (2010). *Fonologija srpskoga jezika*. Beograd: Institut za Srpski Jezik SANU.

Roach, P. (2009). *English Phonetics and Phonology: A Practical Course*. 4th edition. Cambridge: Cambridge University Press.

Selkirk, E. (1984). On the Major Class Features and Syllable Theory. In: Aronoff, M. & R. T. Oehrle (eds.), *Language Sound Structure* (107–136). Cambridge, Massachusetts: MIT Press.

Steriade, D. (1982). *Greek Prosodies and the Nature of Syllabification* (Doctoral dissertation). Cambridge: Massachusetts Institute of Technology.

Subotić, Lj., Sredojević, D., & Bjelaković, I. (2012). *Fonetika i fonologija: ortoepska i ortografska norma standardnog srpskog jezika*. Novi Sad: Filozofski fakultet.

Škarić, I. (1991). Fonetika hrvatskoga književnog jezika. U: Babić, S. i dr. (ur.), *Povijesni pregled, glasovi i oblici hrvatskoga književnog jezika* (61–378). Zagreb: HAZU i Globus.

Živanović, A. (2019). A Comparison of Coda Clusters in English and Serbian. U: Gudurić, S. & B. Radić Bojanić (ur.), *Jezici i kulture u vremenu i prostoru* VIII/1. *Tematski zbornik* (197–208). Novi Sad: Filozofski fakultet.

ALEKSANDAR M. ŽIVANOVIĆ

KONSONANTSKI NIZOVI U NASTUPU U ENGLESKOM I SRPSKOM

Rezime: Cilj ovog rada jeste poređenje konsonantskih nizova u nastupu u engleskom i srpskom pomoću teorijskog okvira koji koristi pojam sonornosti. Prema Principu sleda sonornosti (Kiparsky, 1979; Selkirk, 1984; Clements, 1990), konsonantski nizovi mogu se klasifikovati u tri grupe – osnovne nizove, nizove obrnute sonornosti i nizove jednake sonornosti. Osnovni nizovi predstavljaju najbolji tip nizova jer u njima sonornost opada prema margini sloga. U nizovima obrnute sonornosti sonornost raste, dok u nizovima jednake sonornosti oba segmenta imaju iste vrednosti. Klasifikacija početnih nizova u engleskom i srpskom pokazuje da srpski poseduje veći broj mogućih nizova u sve tri grupe. Najveći broj kombinacija u oba jezika predstavlja osnovne nizove. Afrikate su produktivniji segmenti u srpskom, pošto se javljaju u pet mogućih konsonantskih grupa, dok u engleskom ne postoji nijedna mogućnost. Takođe, plozivi su zastupljeniji u srpskom nego u engleskom. Frikativi predstavljaju najčešću grupu glasova; ovi segmenti mogu se naći u sve tri grupe nizova u oba jezika. Disperzija sonornosti korišćena je sa ciljem određivanja kompleksnosti poluslogova. Rang kompleksnosti ukazuje na tendenciju složenijih struktura da se u jeziku pojavljuju ređe, dok se jednostavnije strukture mogu naći u većem broju reči.

Ključne reči: konsonantski nizovi, nastup, engleski, srpski, sonornost, poluslogovi.

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