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EDITORIAL PREFACE

The Department of English Language and Literature, Faculty of Philology, University of Belgrade, is pleased to dedicate the 12th volume of the Belgrade BELLS journal to Professor Boris Hlebec on the occasion of his 75th birthday. The idea for a festschrift was born from many conversations with Professor Hlebec's former students, mentees, and colleagues as a surprise for the honouree. This volume is a varied collection of 12 original linguistic studies written by scholars whose linguistic interests intersect with those of Professor Hlebec and is intended as a gift from his former students. The papers are preceded by the honouree's curriculum vitae and bibliography.

The first three papers explore understudied topics in English phonetics, but also offer some insight into second language acquisition from the viewpoint of the Serbian native speaker. **Maja Marković** (University of Novi Sad) investigates the voicing issues of English final obstruents in the production of native speakers of Serbian. Several temporal features were measured: the duration of the preceding vowel, the duration of the final consonant, and the duration of glottal pulses in the obstruent. The results of a production experiment show that the study participants have not fully acquired the word-final voicing phonetic realization typical of English L1 speakers.

Tatjana Paunović (University of Niš) explores the L2 prosodic characteristics of Serbian EFL students' spontaneous speech in relation to the three linguistic intonation systems (tonality, tonicity and tone). The findings show specific properties of L2 speech within all three systems and indicate the ways the prosody of Serbian EFL students may be improved.

In a similar vein, **Biljana Čubrović** (University of Belgrade) studies the production of English intonation phrases and the common deviations in pitch contours as realized by Serbian speakers of English. Auditory and acoustic analyses show that most L2 speakers resist dramatic pitch changes, a characteristic that also brings about an unintended attitude in the Serbian EFL speaker.

In his article, **Tvrtko Prčić** (University of Novi Sad) discusses the distinctive properties of English lexical affixes and proposes a model that would enable the characterization of all affixes in English and other comparable languages. Alongside its theoretical orientation, this paper also addresses some possible improvements the implementation of the model may bring to lexicographic and pedagogical practices.

Gordana Dimković Telebaković (University of Belgrade) analyzes a group of English terminological compound lexemes in the field of telecommunications and traffic with respect to their intrinsic meanings so as to find the best Serbian translation equivalents. To this aim, the author has developed a semantico-morphological approach facilitating the establishment of several dozens of translation patterns.

Katarina Rasulić (University of Belgrade) studies antonymy in the context of cognitive linguistics. The cognitive potential of the lexical-semantic relation of antonymy is discussed from the perspective of dynamic meaning construction, as realized through ten pairs of English gradable adjectives. The focus of this paper is on the substitutability of such antonyms in idioms.

Dragana Čarapić (University of Montenegro) provides an analysis of the descriptive adjective *pale* and its Serbian equivalent (*bled*) with the application of Hlebec's collocational method. Based on the interpretation of collocations found in two big corpora of English and Serbian, the study reveals the similarities and differences between the two contrasted languages, which clearly point to the differences in their grammatical systems.

Jasmina Dražić (University of Novi Sad) looks into the role of collocations formed with the Serbian adjectives *slab* (Eng. 'weak') and *loš* (Eng. 'bad') as outlined in Boris Hlebec's *Comprehensive Serbian-English Dictionary*. One of the objectives of this study is an evaluation of the outcome of Hlebec's collocational approach at work and a comparison with the collocations found in a Serbian monolingual dictionary and a corpus of written Serbian.

In the next article, **Marija Milojković** (University of Belgrade) examines two rival translations of Shakespeare's Sonnet 129 provided by Hlebec in the contextual prosodic theoretical framework. The author provides possible explanations for the reasoning why one of the translation versions is more plausible to a native speaker of Serbian.

Vesna Bulatović (University of Montenegro) discusses different ways of translating the lexical realizations of the grammatical category of

aspect into English from the standpoint of several Serbo-Croatian-English dictionaries. The study identifies several types of lexical means used to express aspectual dichotomy in English.

In his paper, **Dalibor Kesić** (University of Banja Luka) provides an explanation of how the translator's political and ideological views or ethnicity can affect a translation. The author uses examples such as *The Republic of Srpska / Republika Srpska* or *Ukraine / the Ukraine* as illustrations of how different renderings of a country's or entity's name can convey different attitudes towards their perceived statehoods.

The paper written by **Nenad Tomović** (University of Belgrade) offers an overview of a 19th century translation into English of *Baš Čelik*, a popular Serbian folk tale, by Elodie Lawton Mijatović. The author uses the modern classification of translation techniques and procedures to analyse the translation and concludes that the quality of Mijatović's translation is very high, even by modern standards.

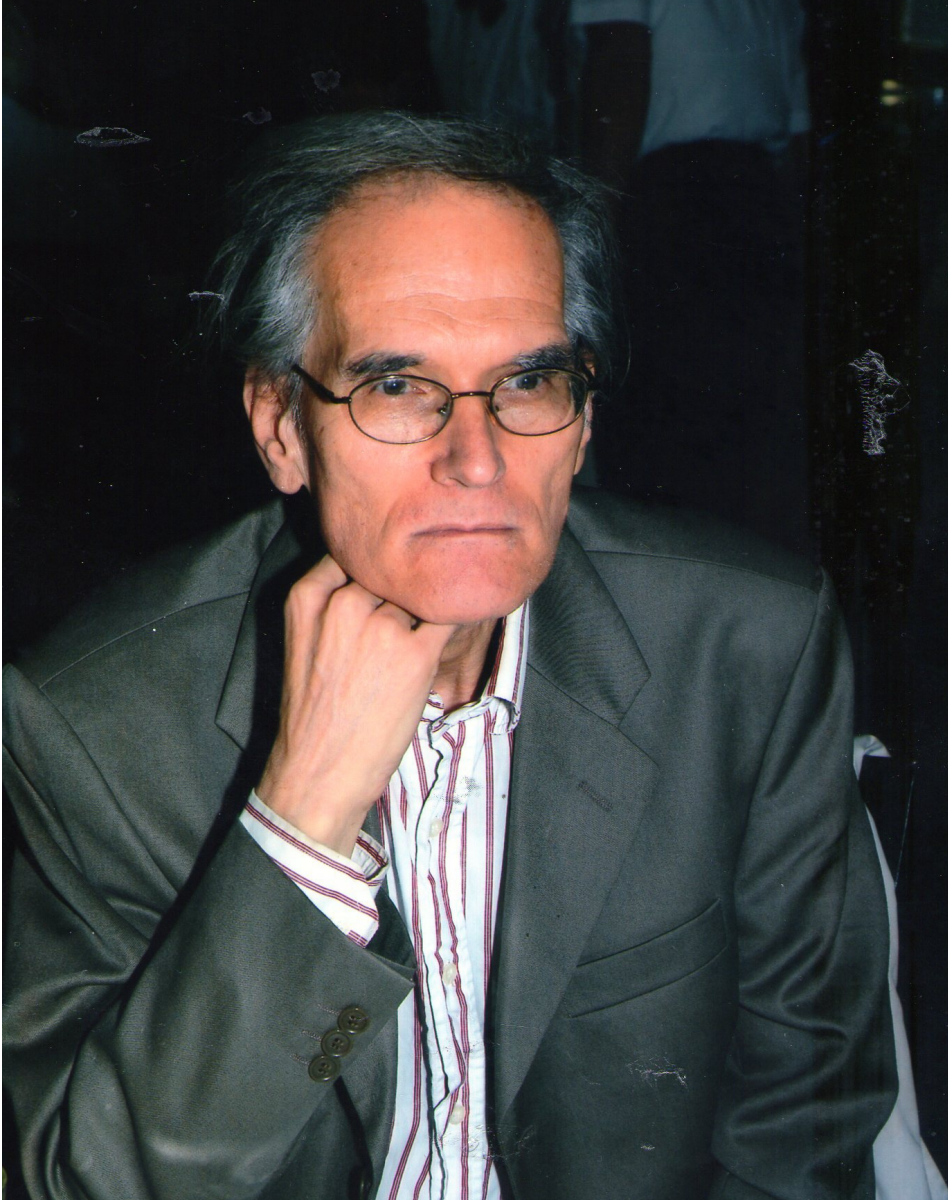
The fact that these topics cover a wide range of subjects is a reflection of Professor Hlebec's scientific versatility and his extraordinary eagerness to explore each and every corner of linguistics as a whole. Not only has he managed to delve into various subfields of English and Serbian, but he has also successfully shared his comprehensive knowledge with numerous students and academics. Although retired, he has never ceased his linguistic exploration. Professor Hlebec is still writing papers, helping other academics and PhD candidates with their linguistic journeys and is planning to embark on new ones of his own.

This festschrift is a tribute to Professor Boris Hlebec on his 75th birthday and a humble token of gratitude to our dear teacher, whose academic contribution and commitment deserve to be cherished and honoured.

We would like to express our gratitude to all of the authors for their excellent articles as well as to the reviewing team for their constructive feedback. Special thanks go to our proof readers, Ana Tomović and Clare McGinn Zubac, for their assistance in the preparation of the manuscripts for publication, as well as to Bojana Gledić for her help with the translation of our honouree's biography.

Belgrade, 25 August 2020

*Biljana Čubrović
Nenad Tomović*



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THE HONOUREE'S CURRICULUM VITAE AND BIBLIOGRAPHY**

Boris F. Hlebec
Retired Full Professor at the Faculty of Philology,
University of Belgrade

Boris Hlebec was born in Belgrade on August 4th, 1945. After attending the “Njegoš” elementary school in Belgrade and passing the senior-level secondary school exam in the Third Belgrade Grammar School (which nowadays bears the name “Sveti Sava” [“Saint Sava”]), a difficult decision needed to be made – a choice between the Academy of Fine Arts and the Faculty of Philology. Taking into account his talent for painting (his father’s profession was that of an arranger-decorator) and flair for foreign languages, this was not an easy decision to make. In 1964, he opted for studying English language and literature at the Faculty of Philology in Belgrade, where he graduated in 1968. Shortly before his graduation, having taken note of his success during his undergraduate studies, Professor Ljiljana Mihailović, author of several well-known grammar books and textbooks, asked him whether he would be interested in applying for the position of

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** Prepared by Biljana Čubrović, translated into English by Bojana D. Gledić. The editors would like to express their gratitude to Professor Boris Hlebec for providing all the data from his professional life.

teaching assistant at the Department of English Language and Literature, one that was about to be announced. As for painting, he continued to pursue that as an amateur painter, especially following his retirement.

Wishing to get to know the language and culture of Great Britain on a first-hand basis, in 1968 Hlebec took up a position as a book seller at Foyles, a large bookstore in London, for a period of six months. He also had a short teaching experience at the Philological High School of Belgrade, as a substitute teacher for a period of one month. The following year, he was sent to Sisak for compulsory military service. He spent the last three months of service at the Military Academy in Belgrade, as an English language translator.

In 1970, together with Mladen Mihajlović, Boris Hlebec was accepted for the position of trainee teaching assistant at the English Department of the Faculty of Philology in Belgrade. In 1973 he completed his MA, thus becoming a teaching assistant. The title of his MA thesis was “Uporedna semantička analiza imenica i prideva na Langlandovom tekstu *The Vision of William concerning Piers the Plowman* i njegovim prevodima na moderni engleski jezik” [“Comparative Semantic Analysis of Nouns and Adjectives in Langland’s text *The Vision of William concerning Piers the Plowman* and Its Translations into Modern English”]. He obtained his PhD in 1979 having defended his thesis titled “Kontrastivna analiza prideva sa značenjem jedne dimenzije u savremenom engleskom i srpskohrvatskom jeziku” [“Contrastive Analysis of One-Dimension Adjectives in Contemporary English and Serbo-Croatian”]. He was promoted to the position of assistant professor in 1980, associate professor in 1990, and he became a full professor in 1992. He taught translation theory, translation techniques and procedures, and the history, phonetics and semantics of the English language to students at the English Department in Belgrade, through lectures and practice classes, as well as the morphology of the English language as a substitute teacher for one year. He taught the following courses at undergraduate level: *English Phonetics*, *English Semantics*, *Translation Theory*, *Translation Techniques and Procedures* and *English Morphology*, as well as lectures and practice classes in *History of English* in the following academic years: 1970/71, 1971/72, 1972/73, 1973/74, 1974/75, 1975/76, 1976/77, 1977/78, 1978/79, 1983/84, and 1995/96. He held courses in translation theory at the graduate specialist studies level at the Faculty of Philology in Belgrade in 1991/92 and 1992/93, and in 2011 and 2012 he taught courses at the PhD studies level concerning his novel collocational approach to semantic definitions.

Boris Hlebec taught English part-time at the College of Defectology in 1971/72 and 1972/73, the Institute of Tourism of the Faculty of Sciences in the 1972/73 – 1975/76 period, English phonetics at the Faculty of Philology (the Kragujevac location) in the 1998/99 – 2002/03 period, as well as at the graduate studies level of the Faculty of Philosophy in Novi Sad in 1995/96 and 2001. In 2010, he delivered lectures in English phonetics at a private higher-education institution in Bijeljina for one semester. He held public lectures at Kolarac People's University, the Institute for Foreign Languages in Jovanova Street, the Centre for Teachers' Advanced Training, the Applied Linguistics Association of Serbia, the British Yugoslav Society, the city branch of the Federation of Foreign Language and Literature Societies and the winter school for foreign language teachers. He provided mentoring for a total of 16 MA and PhD theses.

In the summer of 1986, Hlebec spent time at London University through a British Council grant with the aim of using the library there. After this trip, he also visited London several more times as a tourist. As a member of The Linguistic Society of Europe he presented papers at conferences in Ohrid in 1986 and Freiburg in 1988. He held a lecture on the formation of binominal compounds and phrases in Serbo-Croatian in Subotica in 1995.

Boris Hlebec held some very important functions during his career. He was vice-dean of the Faculty of Philology in Belgrade in the summer of 1998, a participant in the design of the Draft Curricula of educational-pedagogical activities in the cultural-linguistic professional field for the English language and translation technique in 1985, a member of the Organisational Board of the 12th congress of the FIT (Fédération Internationale des Traducteurs/International Federation of Translators) held in Belgrade in 1988, vice-president of the Federation of Foreign Language and Literature Societies in 1994/95, a member of the editorial team of the *Živi jezici* [Живи језици] journal in 1994/95 and 1995/96, president of the Professional Council for Philological Sciences of the University of Belgrade in 1998 and a member of the editorial team of the *Prevodilac* [Преводилац] journal in 2005/06 and 2006/07.

In 1977, Boris Hlebec was awarded the "BIGZ" prize for his translation of Tennyson's poem *Ulysses* (published in issue 30 of the *Mostovi* [Мостови] journal), and in 1984 the "Miloš N. Đurić" award for his rhymed translation of *The Canterbury Tales*. In 1987 and 2007 he received an award plaque from Zavod za udžbenike (Publishing House for Textbooks) for his long-term

contribution to the creation of textbooks. He received a scroll of honour for his active contribution in the advancement of the translation activities and work of the Association of Scientific and Technical Translators of Serbia, as well as a scroll of honour for his contribution to the founding of the Faculty of Philology and Arts in Kragujevac. At the 17th international book salon at the Novi Sad Fair in 2011, a special prize was awarded to the Publishing House for Textbooks for innovation, high standard and precision with regards to *Enciklopedijski srpsko-engleski rečnik* [Енциклопедијски српско-енглески речник/ *A Comprehensive Serbian-English Dictionary*] and Hlebec, as the author, received special recognition from the publisher on May 30th, 2011.

In the course of forty years of active work at the Faculty of Philology and ten years spent in retirement, Boris Hlebec has published over 70 scientific articles in his home country and abroad, 22 books and 23 book reviews and has written a total of 56 critical reviews. The articles and book reviews encompass the translation studies, semantics, grammar, contrastive analysis, as well as history, lexicology and phonetics of English and Serbian. In addition to the former Yugoslavia, Hlebec's work has also been published in Poland (*Studia Anglica Posnaniensia* in 1986, 2003, 2008, 2012 and 2015, *Papers and Studies in Contrastive Linguistics* in 1983, *Przegląd Wschodnioeuropejski* in 2017), the USA (*Folia Slavica* in 1986, *Language* in 1988), Austria (*Grazer Linguistische Studien* in 1987, *Grazer Linguistische Monographien* in 1995), the Republic of Srpska (*Filolog* [Филолог] in 2011, 2013, 2014, 2015 and 2018), Belgium (*Babel* in 1989 and 2020), the Netherlands (*Lingua* in 1984 and 1985), Italy (*Ponto-Baltica* in 1997) and Georgia (*Bulletin of the Georgian National Academy of Sciences* in 2014).

The textbooks Boris Hlebec has authored include: *Opšta načela prevođenja* [Општа начела превођења/ *General Principles of Translation*] (currently the textbook for the Translation Theory course for students at the English Department of the Faculty of Philology in Belgrade, two editions in print and one electronic), *Prevodilačke tehnike i postupci* [Преводачке технике и поступци/ *Translation Techniques and Procedures*] (currently the textbook for the Translation Techniques and Procedures course for students at the English Department of the Faculty of Philology in Belgrade, two editions), *A Textbook of English Phonology* (four editions), *English Accent and Intonation* (currently the textbook for the English Phonetics course for students at the English Department of the Faculty of Philology

in Belgrade, two editions), *English Semantics* and *English Semantics for University Students* (currently the textbook for the English Semantics course for students at the English Department of the Faculty of Philology in Belgrade, two editions in print and one electronic). He prepared the grammar sections in the elementary-school level English-learning textbook titled *Enjoying English. Engleski jezik 7* [*Enjoying English. Енглески језик 7/ Enjoying English. English Language 7*].

Boris Hlebec is the author of an English grammar for high schools (five editions), another one for elementary schools (three editions) and the following dictionaries: *Osnovni srpsko-engleski i englesko-srpski rečnik* [*Основни српско-енглески и енглеско-српски речник/ Basic Serbian-English and English-Serbian Dictionary*] (two editions), *Englesko-srpski i srpsko-engleski rečnik slenga* [*Енглеско-српски и српско-енглески речник сленга/ An English-Serbian and Serbian-English Dictionary of Slang*] (three editions), *Enciklopedijski srpsko-engleski rečnik* [*Енциклопедијски српско-енглески речник/ A Comprehensive Serbian-English Dictionary*], *Standardni srpsko-engleski rečnik* [*Стандардни српско-енглески речник/ Standard Serbian-English Dictionary*], *Srpsko-engleski rečnik lažnih parova* [*Српско-енглески речник лажних парова/ A Serbian-English Dictionary of False Friends*] and a collocations dictionary titled *Connect Your Words*. Hlebec also published the handbooks titled *Engleski za perfekcioniste* [*Енглески за перфекционисте/ English for Perfectionists*] and *Turski za dembele. Turcizam za turizam* [*Турски за дембеле. Турцизам за туризам/ Turkish for Lazybones. Loanwords for Long Vacations*]. This last booklet comprises a collection of current Turkish loanwords in Serbian. For the needs of students tackling the history of English he put together a glossary to accompany *Selections from the Fourteenth Century* by Ksenija Anastasijević. He was also a collaborator in the production of Morton Benson's *Englesko-srpskohrvatski rečnik* [*English-Serbo-Croatian Dictionary*].

In 1990, the Institut für Sprachwissenschaft der Universität Graz in Graz published Hlebec's monography on the aspect of verbs and grammatical tenses in Serbian and English titled *Aspects, Phases and Tenses in English and Serbo-Croatian*.

In the last fifteen years Boris Hlebec has been devoting more time to Indo-European comparative studies, etymology and deciphering ancient inscriptions. The result of this work are the following books: *O starini južnih Slovena. Poreklo imenica jabuka i kruška* [*О старини јужних Словена. Порекло именица јабука и крушка/ On the Ancient Origin of the South Slavs*].

Origins of the Nouns Apple and Pear], *Srpsko-engleski rečnik etimoloških parova* [Српско-енглески речник етимолошких парова/ *Serbian-English Dictionary of Etymological Pairs*] and *Vinčanski kod* [Винчански код/ *The Vinča Code*]. He has recently finished work on *Vinčanski koreni pisama* [Винчански корени писама/ *The Vinča Roots of Scripts*].

Hlebec's versatility, associativity, and originality have produced an impressively diverse list of bibliographical references. His original ideas stem from his early days as an award-winning poetry translator and lexicographer to the development of new linguistic ideas in the realm of modern language studies. His innovative collocational method based on Firth's ideas helps uncover meaning on the basis of word sequences and may be applied to different languages. English phonetics and the illusive intonational meanings have been enriched by Hlebec's association of the attitude of the speaker with varying degrees of temperature – a welcome and fresh addition to the phonetic ideas of renowned British phoneticians O'Connor and Arnold and Gimson. His more recent meticulous work on deciphering the old Vinča inscriptions as an inspiration to phonetic alphabets will undoubtedly get more traction in the years to come.

Professor Hlebec is always remembered by generations of his students as a knowledgeable, approachable and helpful professor, and by his colleagues as an unassuming, but highly original and prolific linguist.

Bibliography

Books

- Хлебец, Б. (1989). *Општа начела превођења*. Београд: Научна књига, 220 pgs.; (2009) Београд: Београдска књига, 208 pgs. (currently the textbook for the Translation Theory course for students at the English Department of the Faculty of Philology in Belgrade).
- Хлебец, В. (1990). *Aspects, Phases and Tenses in English and Serbo-Croatian*. Graz: Institut für Sprachwissenschaft der Universität Graz, 190 pgs.
- Хлебец, Б. (1991, 1994, 1995, 1999, 2003). *Граматика енглеског језика за средње школе*. Београд: Завод за уџбенике, 248 pgs.
- Хлебец, В. (1995, 1998, 2002, 2004). *A Textbook of English Phonology*. Београд: Требник, 113 pgs.

- Хлебец, Б. (1997). *Енглеско-српски речник лажних парова*. Београд: Требник, 128 pgs.
- Нлебес, В. (1998). *Connect Your Words. A Dictionary of Collocations*. Београд: Требник, 156 pgs.
- Хлебец, Б. (2000, 2001, 2002). *Граматика енглеског језика за основну школу*. Београд: Завод за уџбенике, 208 pgs.
- Хлебец, Б. (2003, 2012). *Основни српско-енглески и енглеско-српски речник са енглеском и српском граматиком (Basic Serbian-English and English-Serbian Dictionary with Notes on Serbian/English Grammar)*. Београд: Завод за уџбенике, 1404 pgs.
- Хлебец, Б. (2004, 2006, 2012). *Енглеско-српски и српско-енглески речник сленга (An English-Serbian and Serbian-English Dictionary of Slang)*. Београд: Београдска књига; Београд: Београдска књига/Службени гласник, 254 pgs.
- Хлебец, Б., К. Ковачевић и Џ. Пендлбери (2005). *Enjoying English. Енглески језик 7*. Београд: Завод за уџбенике.
- Хлебец, Б. (2005). *О старини јужних Словена. Порекло именица јабука и крушка*. Београд: Пешић и синови, 108 pgs.
- Хлебец, Б. (2006). *Стандардни српско-енглески речник (Standard Serbian-English Dictionary)*. Београд: Завод за уџбенике, 1255 pgs.
- Нлебес, В. (2007). *English Semantics*. Београд: Чигоја, 227 pgs.
- Хлебец, Б. (2009). *Преводилачке технике и поступци*. Београд: ЕВГ, 80 pgs. (currently the textbook for the Translation Techniques and Procedures course for students at the English Department of the Faculty of Philology in Belgrade).
- Нлебес, В. (2010). *English Semantics for University Students*. Београд: Чигоја, 192 pgs. (currently the textbook for the English Semantics course for students at the English Department of the Faculty of Philology in Belgrade).
- Хлебец, Б. (2010). *Српско-енглески речник етимолошких парова*. Београд: Београдска књига, 173 pgs.
- Хлебец, Б. (2010). *Енциклопедијски српско-енглески речник (A Comprehensive Serbian-English Dictionary)*. Београд: Завод за уџбенике, 1318 pgs. (in 2011, at the 17th international book salon at the Novi Sad Fair, a special prize was awarded to the publisher for innovation, high standards and precision, and the author received special recognition from the publisher on May 30th, 2011).

- Hlebec, B. (2010). *English Accent and Intonation*. Београд: Чигоја, 66 pgs. (currently the textbook for the English Phonetics course for students at the English Department of the Faculty of Philology in Belgrade).
- Хлебец, Б. (2011). *Енглески за перфекционисте*. Београд: Завод за уџбенике, 159 pgs.
- Хлебец, Б. (2015). *Турски за дембеле. Турцизам за туризам*. Београд: Нова научна књига, 66 pgs.
- Хлебец, Б. (2017). *Винчански код*. Београд: Чигоја штампа, 268 pgs.
- Hlebec, B. (2019). *A Collocational Approach to Semantic Definitions*. Фокус – Форум за интеркултурну комуникацију. E-book. <http://www.komunikacijaiakultura.org/E-books/Boris_Hlebec.pdf>.

Articles

- Хлебец, Б. (1974). Однос значења, обличких промена и композибилности именица и придева у енглеском језику. *Анали Филолошког факултета*, 11, 431–445 (article written on the basis of the author's MA thesis titled "Comparative Semantic Analysis of Nouns and Adjectives in Langland's text *The Vision of William concerning Piers the Plowman* and Its Translations into Modern English").
- Hlebec, B. (1975). Određenost u engleskom i srpskohrvatskom jeziku – jedan pokušaj objašnjenja. *Živi jezici*, 17(1–4), 55–70.
- Hlebec, B. (1976). Kvantifikacione implikacije u rečenici i sintagmi. *Suvremena lingvistika*, 13–14, 49–54.
- Хлебец, Б. (1978). Придевско-именичка еквиваленција. *Мостови*, 34, 97–107.
- Hlebec, B. (1981). Glagolski oblici u novinskim naslovima na engleskom i srpskohrvatskom jeziku. *Živi jezici*, 23(1–4), 16–21.
- Хлебец, Б. (1981). Фонетика у настави страних језика. *Педагогија*, 2, 193–220.
- Хлебец, Б. (1981). Српскохрватски преводи наслова књижевних дела на енглеском језику. *Филолошки преглед*, 19(1–4), 45–52.
- Hlebec, B. (1983). A contrastive study of one-dimension adjectives in English and Serbo-Croatian. *Papers and Studies in Contrastive Linguistics*, 16, Poznań, 73–82.
- Хлебец, Б. (1983). Дефинисање дословности и кореспонденције и утврђивање њиховог односа. *Мостови*, 55(3), 107–114.

- Hlebec, B. (1983). A lexico-semantic study of English one-dimension adjectives. *Анали Филолошког факултета*, 15, 243–280.
- Hlebec, B. (1984). Prevođenje i kontrastivna analiza. *Prevodilac*, 1, 27–33.
- Хлебец, Б. (1986). Читалац као фактор у превођењу. *Мостови*, 67(3), 196–203.
- Hlebec, B. (1986). Serbo-Croatian correspondents of the articles in English. *Folia Slavica*, 8(1), 29–50.
- Hlebec, B. (1986). Sources of shared polysemy in English spatial adjectives. *Studia Anglica Posnaniensia*, 18, 205–222.
- Хлебец, Б. (1987). Став према изворнику као фактор у превођењу. *Преводац*, 1, 17–27.
- Hlebec, B. (1987). Le lecteur comme facteur dans la traduction. *Мостови*, 70(2), 162–171.
- Хлебец, Б. (1987). Превођење Шекспировог сонета 129 на српскохрватски језик. *Научни састанак слависта у Вукове дане*, 16(3), 129–136.
- Hlebec, B. (1987). Unmarkedness of antonymous adjectives and affective meaning. *Grazer Linguistische Studien*, 28, 19–24.
- Хлебец, Б. (1988). Називи за боје у Српском рјечнику. *Научни састанак слависта у Вукове дане*, 17, 145–152.
- Hlebec, B. (1989). Factors and steps in translating. *Babel*, 35(3), 129–141.
- Хлебец, Б. (1989). Преношење стила и поетске функције у превођењу. *Књижевно превођење: теорија и историја*, 61–67.
- Хлебец, Б. (1990). Један поглед на примену лингвистичких достигнућа у настави страних језика. *Живи језици*, 32(1–4), 7–13.
- Хлебец, Б. (1991). Лексичка неподударност и проблеми превођења. *Преводац*, 1–2, 21–29.
- Хлебец, Б. (1992). Проблеми полисемије. *Научни састанак слависта у Вукове дане*, 22(2), 33–36.
- Хлебец, Б. (1992–1993). Суштина значења енглеске интонације са доказима на основу лексикографске грађе. *Живи језици*, 34–35 (1–4), 68–75.
- Хлебец, Б. (1995). Ризница речи. Енглеске превртљиве именице. *Glossa*, 1(1), 9–12.
- Hlebec, B. (1995). The meaning of the indefinite article with uncountables in English. In: D. W. Sornig et al. (eds.), *Linguistics with a Human Face. Festschrift für Norman Denison zum 70. Geburtstag*. Graz: Grazer Linguistische Monographien 10, 157–161.
- Хлебец, Б. (1995). Придевски називи за боје у српском и енглеском. *Знамен*, 1(1), 37–47.

- Хлебец, Б. (1995). Ризница речи. Још једна прегршт превртљивих именица. *Glossa*, 1(3), 11–15.
- Hlebec, B. (1996). A solution to the problem of word meaning presentation. *Studies of and about Language [Istraživanja jezika i oko jezika: zbornik radova posvećen profesoru Naumu Dimitrijeviću]*. Beograd, 185–190.
- Hlebec, B. (1996). The meaning of English unchanged-plural nouns. *Glossa*, 2(2–3), 29–34.
- Хлебец, Б. (1996). Принципи формирања биноминалних сложеница и синтагми у српском језику. *О лексичким позајмљеницама*. Суботица/Београд: Градска библиотека Суботица/Институт за српски језик САНУ, 139–145.
- Хлебец, Б. (1996). Прилог разумевању значења речце *се*. *Српски језик*, 1(1–2), 65–69.
- Хлебец, Б. (1998). Главни значењски типови двочланих глагола са партикулом *up* у енглеском језику. *Пујеч*, 4(2), 3–7.
- Hlebec, B. (1998). English adverbs morphologically identical to adjectives in opposition with their *-ly* counterparts. *Филолошки преглед*, 25(1), 105–114.
- Хлебец, Б. (1998). Придевске изведенице у значењу боје. *Српски језик*, 3(1–2), 323–334.
- Хлебец, Б. (1999). Богаћење лексике ономотопејским и фонестезијским речима у настави енглеског језика. *Зборник радова Владимиру Секулићу у част*. Подгорица: Институт за стране језике, Универзитет Црне Горе, 35–40.
- Хлебец, Б. (2001). Једно виђење акценатског система глаголских облика. *Српски језик*, 6(1–2), 399–410.
- Хлебец, Б. (2002). Лексичко-семантичка анализа српских придева са значењем једне димензије. *Српски језик*, 7(1–2), 213–236.
- Хлебец, Б. (2003). Генитив уз именице у значењу просторија. *Српски језик*, 8(1–2), 259–265.
- Hlebec, B. (2003). Connectivity and indirect connection in English. *Studia Anglica Posnaniensia*, 39, 113–120.
- Хлебец, Б. (2005). Винаверови преводи Поових песама. *Преводилац*, 54(3–4), 27–47.
- Хлебец, Б. (2005). Варијанте вокатива именица мушког рода на сугласник. *Језик данас*, 21–22, 15–18.
- Hlebec, B. (2006). Partitivity in English and Serbian. In: K. Rasulić and I. Trbojević- Milošević (eds.), *ELLSII 75 Proceedings: English Language and*

- Literature Studies: Interfaces and Integrations*, vol. 1. Beograd: Filološki fakultet, 219–224.
- Хлебец, Б. (2006). Реификација именице *опасност*. *Научни састанак слависта у Вукове дане*, 35(1), 235–242.
- Хлебец, Б. (2006). Појам породичне сличности у лексикологији. *Когнитивнолингвистичка проучавања српског језика*. Београд: САНУ, 373–386.
- Хлебец, Б. (2007). Фонолошка анализа гласовних омашки. *Српски језик*, 12(1–2), 113–129.
- Хлебец, Б. (2008). Колокацијска метода семантичке анализе (на примеру именице *пажња*). *Семантичка проучавања српског језика. Српски језик у светлу савремених лингвистичких теорија*, vol. 2. Београд: САНУ, 65–79.
- Хлебец, Б. (2008). Предикативни инструментал у светлу колокацијске анализе. *Јужнословенски филолог*, 64, 535–550. doi: 10.2298/JFI0864535H
- Hlebec, B. (2008). Collocations with *old*, *young* and *new* and their Serbian correspondents. In: K. Rasulić and I. Trbojević-Milošević (eds.), *ELLSSAC Proceedings*, vol. 1, Beograd: Filološki fakultet, 171–192.
- Hlebec, B. (2008). General attitudinal meanings in RP intonation. *Studia Anglica Posnaniensia*, 44, 275–295.
- Хлебец, Б. (2009). Називи за снег у ескимском, енглеском и српском језику. *Српски језик*, 14(1–2), 135–141.
- Hlebec, B. (2011). The portrait of *wild* (in the collocational technique). *Филолог*, 3, 121–130.
- Hlebec, B. (2011). Semantic exploitations into possession. *Komunikacija i kultura*, 2, 13–38.
- Hlebec, B. (2012). Where boys, girls and children come from. *Studia Anglica Posnaniensia*, 47(2–3), 59–67.
- Хлебец, Б. (2012). Стилска адаптација експресивних интенција. In: A. Đurović (ed.) *Freiheit und Verantwortung – Ethik und Moral in der Translation*. Београд: Филолошки факултет, 11–20.
- Hlebec, B. (2012). The seme 'strong' in lexicological definitions. *Belgrade BELLS*, 4, 7–25.
- Hlebec, B. (2013). *It not as we know it*. *Филолог*, 8, 37–47.
- Hlebec, B. (2014). The origin of *cuprum*, *bakar* and *var*. *Bulletin of the Georgian National Academy of Sciences*, 1, 132–141.

- Хлебец, Б. (2014). О текстуалном понављању језичког садржаја. *Српски језик*, 19, 85–103.
- Хлебец, Б. (2014). Место декодирања древних текстова у теорији превођења. *Преводилац*, 72(3–4), 56–63.
- Нлебес, В. (2014). The origin of the letter T. *Филолог*, 10, 23–30.
- Нлебес, В. (2015). Defining an adjective by means of its grammatical collocators. *Филолог*, 11, 21–25.
- Нлебес, В. (2015). Lexical definitions of some performative verbs. *Studia Anglica Posnaniensis*, 50(1), 27–44. doi: 10.1515/stap-2015-0015
- Хлебец, Б. (2016). Контрастивна анализа перформатива и његових српских кореспондената. *Лексикологија и лексикографија у светлу савремених приступа*. Београд: Институт за српски језик САНУ, 493–514.
- Хлебец, Б. (2017). Апликација и превођење. *Преводилац*, 77, 1–2, 50–62.
- Нлебес, В. (2018). Thracian reading of the Lemnos stele. *Филолог*, 17, 217–241.
- Нлебес, В. (2018). Serbian-English and English-Serbian dictionaries in Serbia. In: S. Marković (ed.), *British-Serbian Relations from the 18th to the 21st Centuries*. Београд: Факултет политичких наука, 375–382.
- Хлебец, Б. (2018). Шта нам казује повест слова Ж. *Преводилац*, 80, 16–28.
- Хлебец, Б. (2019). Тајно порекло слова Б. *Преводилац*, 81, 21–32.
- Нлебес, В. (2019). Dictionaries and translation. *Babel*, 65(6), special issue, 841–851. <https://doi.org/10.1075/babel.00130.hle>
- Хлебец, Б. (2019). Предвидљивост сложених термина. *Преводилац*, 82(3–4), 15–28.

Book reviews

- J. Windsor Lewis. *A Concise Pronouncing Dictionary of British and American English*, published in: *English Language Teaching Information*, II, 5, 1972.
- Десанка Петковић. *Речник енглеског језика*, published in: *Живи језици*, 22(1–4), 1980.
- Владимир Секулић. *Лингвистика и учење страних језика*, published in: *Живи језици*, 24(1–2), 1982.
- Tom McArthur. *Longman Lexicon of Contemporary English*, published in: *Живи језици*, 25(1–4), 1983.

- Bent Conrad. *Referring and Non-referring Phrases. A Study in the Use of the Gerund and Infinitive*, published in: *Lingua*, 64(2–3), 1984.
- Thomas T. Ballmer & Manfred Pinkel (eds.). *Approaching Vagueness*, published in: *Lingua*, 66(2–3), 1985.
- Ivan Klajn. *O funkciji i prirodi zamenica*, published in: *Language*, 64(1), 1988.
- Book of Proceedings *Терминологија – Начела, нормирање, усаглашавање рада*, published in: *Мостови*, 78, 1989.
- Сава Бабић. *Превесеји*, published in: *Руковат*, 4, 1990.
- М. Бенсон, Е. Бенсон, Р. Илсон. *Комбинаторни речник енглеског језика*, published in: *Преводилац*, 4, 1990.
- J. C. Wells. *Longman Pronunciation Dictionary*, published in: *Живи језици*, 23(1–4), 1991.
- Иван Клајн. *Речник језичких недоумица*, published in: *Политика*, August 22nd 1992.
- Твртко Прћић. *Транскрипциони речник енглеских личних имена*, published in: *Борба*, January 28th 1993.
- Дејвид Кристал. *Кембричка енциклопедија језика*, published in: *Наша борба*, October 10th 1996.
- М. В. Милосављевић & Б. Милосављевић. *Енглеско-српски фразеолошки речник*, published in: *Политика*, January 18th 1996.
- Твртко Прћић. *Семантика и прагматика речи*, published in: *Наша борба*, December 25th 1997.
- Твртко Прћић. *Нови транскрипциони речник енглеских личних имена*, published in: *Наша борба*, May 30th-31st 1998.
- Милка Ивић. *О зеленом коњу. Нови лингвистички огледи*, published in: *Proto-Baltica*, 7, 1997.
- Институт за стране језике Београд. *Енглеско-српски и српско-енглески речник са граматицом*, published in: *Glossa*, 4(3), 1998.
- Живорад Ковачевић. *Српско-енглески фразеолошки речник и Енглеско-српски фразеолошки речник*, published in: *Политика*, December 14th 2002.
- Биљана Чубровић. *Фонолошка структура новијих француских позајмљеница у савременом енглеском језику*, published in: *Mons Aurens*, 14, 2006.
- Милосав Чаркић. *On Poetic Language*, published in: *Стил*, 9, 2010.
- Milosav Čarkić. *Models of Rhyme*, published in: *Przeglad Wschodnioeuropejski*, 8(2), 2017.

Translations

- Mihailo V. Popović. (1970). Social conditions and the possibilities of education of the young people in Yugoslavia. *Sociologija, selected articles 1959–1969*, 239–258.
- Ruža Petrović. (1970). Ethnically mixed marriages in Yugoslavia. *Sociologija, selected articles 1959–1969*, 185–200.
- Group of authors. (1972). *Антропологија данас*. Београд: Вук Караџић, xv + 966 pgs. (in collaboration with Olga Đekić, translated 24 articles with a total of 305 pages).
- Eric Grønseth. (1973). Скица научног оквира за животворну политику према породици. *Социологија*, 3–4, 427–441.
- Clio Presvelou. (1973). Утицај идеологије на обликовање политике према породици. *Социологија*, 3–4, 477–485.
- William Dyson. (1973). Политика друштва према савременој породици у високо развијеним земљама запада. *Социологија*, 3–4, 513–523.
- Pierre de Bie. (1973). Неке друштвене одреднице политике према породици у шест земаља европске економске заједнице. *Социологија*, 3–4, 503–511.
- Reuben Hill. (1973). Породица као потенцијални регулатор становништва. *Социологија*, 3–4, 565–568.
- Reuben Hill. (1973). Теорија модерних система и породица: суочавање. *Социологија*, 3–4, 587–607.
- Five poems by Thomas Hardy. (1973). *Мостови*, 13, 35–37.
- Едвард Сапир. (1974). Језик и средина. *Култура*, 25, 33–46.
- Ајнар Хауген. (1974). Дијалект, језик, нација. *Култура*, 25, 74–88.
- Валтер Таули. (1974). Практична лингвистика. Теорија језичког планирања. *Култура*, 25, 99–103.
- Слока Реј. (1974). Стандардизација језика. *Култура*, 25, 89–98.
- Џошуа Фишман. (1974). Социологија језика. *Култура*, 25, 104–115.
- Ханс Блуменфелд. (1977). Модерна метропола. *Култура*, 39, 57–71.
- „Делоска декларација”. (1977). *Култура*, 39, 234–237.
- „Сваки-човек”. (1979). *Из енглеске средњовековне књижевности*. Иванка Ковачевић (ed.), Београд: Научна књига, 145–151.
- Волас Ламберт. (1980). Социјална психологија двојезичности. *Трећи програм радио-Београда*, 44, 369–392.
- Роџер Браун. (1980). Развој језика у деце. *Трећи програм Радио Београда*, 44, 327–336.

- Џејмс Џенкинс. (1980). Језик и меморија. *Трећи програм Радио Београда*, 44, 316–326.
- Џорџ Милер. (1980). Психоллингвисти. *Трећи програм Радио Београда*, 44, 298–316.
- Џонатан Калер. (1980). *Сосир, оснивач модерне лингвистике*. Београд: БИГЗ, 150 pgs.
- Херберт Пилх. (1982). Лингвистичко виђење афазије. *Језик и мозак*. Наум Димитријевић (ed.), Бања Лука: Глас, 30–44.
- Брендан Ма. (1982). Језик и психопатологија. *Језик и мозак*. Наум Димитријевић (ed.), Бања Лука: Глас, 75–82.
- Џефри Чосер. (1983). *Кантерберијске приче I–II*. G. Chaucer, *The Canterbury Tales*; rhymed translation; awarded the “Miloš N. Đurić” prize in 1984, Београд: Српска књижевна задруга, 255 + 297 pgs.
- Едмунд Лич. (1983). *Култура и комуникација*. Београд: Просвета, 157 pgs.
- Шекспиров сонет 129. (1987). *Међународни састанак слависта у Вукове дане*, 16(3), 129–136.
- Енциклопедијски речник модерне лингвистике*. (1988). Београд: Нолит, 426 pgs. (with Ivan Klajn).
- Five poems for children in Vinka Trifunović' *The Wreath of Happiness* (Винка Трифуновић. (1993). *Венац среће* (translation into English)).
- Дејвид Кристал. (1996). *Кембричка енциклопедија језика*. Београд: Нолит, 123–175, 436–446.
- Three poems by Thomas Hardy. *50 година Института за стране језике*, 2003, 283–286.
- Винка Трифуновић. (2009). *Христово васкресење – Christ's Resurrection* (children's poems, translation into English).
- Six poems by Thomas Hardy. (2009). *Поезија*, 45–48.
- Four poems by Thomas Hardy. (2010). *Мостови*, 147, 169–171.
- One poem by Thomas Hardy with back translation. (1999). *Vienna English Working Papers*, 8(1), 4.
- Томас Харди. (2010). *Песме*. Београд: Паидеиа, 160 pgs.
- Минијатуре из ризнице англо-америчког песништва. Мала антологија англо-америчке поезије*. (2015). Београд: Завод за уџбенике, 144 pgs.

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PHONETIC FEATURE INTERPRETATION IN SECOND LANGUAGE PHONOLOGY: THE ACQUISITION OF THE FINAL OBSTRUENT VOICING CONTRAST

Abstract

Although languages may share certain phonological features, their phonetic realizations can be variable. The classical example is the difference in VOT as the underlying factor of the binary distinction in voicing. In this paper, we examine the voicing contrast of English final obstruents (plosives and fricatives) in the production of native speakers of Serbian. The paper reports the results of a production experiment, in which 14 relatively proficient speakers of English as L2 read eight monosyllabic words (minimal pairs) inside frame sentences. Although both English and Serbian contrast final voiced and voiceless obstruents, the results indicate that L2 speakers in our study have not fully mastered the phonetic realization of word-final voicing in English, but greatly retain the phonetic realization of voicing typical of their L1.

Key words: voicing, obstruents, pre-fortis clipping

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1. Introduction

“Foreign accent” is the term that subsumes various deviations in the pronunciation of learners of a foreign language (L2). As has been well documented in numerous research studies, it often stems from the differences between the phonology of the learners’ native language (L1) and that of the target language. The tendency of L2 learners to use the phonetic and phonological features and patterns from their L1 while acquiring L2 is often referred to as ‘transfer’, the term originally proposed by Selinker (1969). Transfer is easily recognized with L2 sounds or contrasts which are non-existent in L1, such as the sounds /θ/ and /ð/, or the contrasts /e/ and /æ/ in English, or /u/, /y/ and /i/ in French. For the learners whose native language does not have these sounds or contrasts, acquiring English or French phonology would involve learning the new sounds and acquiring the new contrasts, or forming new categories, alongside the more familiar ones. The failure to do so often leads to substitutions or misinterpretations by learners.

A different situation occurs if the same phonological contrast exists in two languages. Although it may appear as the same, a contrast may be realized in alternative ways, but the learners will often assume that it functions in the same way in L1 and L2. Such is the difference in the realization of voiced and voiceless pairs of obstruents in English and Serbian, which is dealt with in this study. Although both English and Serbian have the distinction of voiced and voiceless stops, fricatives and affricates in all positions in the word, their phonetic realization involves different articulatory strategies, and hence different acoustic and auditory features in the two languages. This research focuses on the strategies of producing English word-final obstruents in minimal pairs, where one word ends in a voiced, and the other in a voiceless obstruent. The classes of obstruents investigated in this study are stops and fricatives.

The results of the research are interpreted within the framework of Flege’s Speech Learning Model (SLM; Flege 1995), in particular, in relation to hypothesis 6, which states that a phonetic category established for an L2 sound may be based on different phonetic features, or feature weights, from the features used by native speakers. The present research also looks into the other hypotheses and postulates outlined in the same study.

2. Voicing feature in English and Serbian obstruents

Voicing feature generally involves the presence or absence of vocal fold vibration during the articulation of a sound, referred to as the system of laryngeal features. Most obstruent sounds in the two languages studied in this paper maintain a binary contrast, namely [+/- voice].¹ However, the system of laryngeal features in English and Serbian is considerably different. The most broadly studied class of sounds in this respect are stop sounds, or plosives, in the word initial position. While English voiceless stops are typically aspirated in the stressed position, they are unaspirated in Serbian. On the other hand, word initial Serbian voiced stops are produced with pre-voicing – vocal folds vibrate during the closure phase of stop production, while in English initial voiced stops, vocal fold vibration starts only after the release phase. Jansen (2004) terms languages such as English ‘aspirating languages’, while Serbian belongs to the group of ‘voicing languages’. This phonetic distinction in the realization of the laryngeal features is related to the contrast in Voice Onset Time (VOT), established by Lisker and Abramson (1964). In terms of VOT, the contrast of word initial stops in Serbian is that between pre-voiced stops, with negative VOT values (voiced), and short-lag stops, where voicing begins shortly following the release (voiceless) (Čubrović 2011, Jakovljević 2012, Jerotijević Tišma 2017). English, on the other hand, has the contrast between short-lag (voiced) and long-lag (voiceless) stops. The lag in VOT in English voiceless stops is accompanied by a breathy sound following the release phase, known as aspiration.

An interesting aspect of voicing in all obstruents is that while voicelessness is relatively stable, voicing is rather variable, depending on the distribution of obstruents in the word. Under specific circumstances, voiced obstruents undergo the process of devoicing, i.e. they are phonetically voiceless. English obstruents are said to be partially voiced in word initial position, due to the relatively delayed VOT, fully voiced in the intervocalic position, but are completely devoiced in the word-final or pre-fortis position (Cruttenden 2014). The results of the study on a number of acoustic correlates of final obstruent devoicing in American English reported by Dmitrieva (2014) show that devoicing is not the same in all obstruents. While lenis stops and affricates are accompanied by a short

¹ With the exception of the fricative /h/ in English, which has no voiced counterpart, and the Serbian fricative /x/ and affricate /ts/, which also lack the voiced equivalent.

period of voicing in the word-final position, lenis fricatives are produced as completely voiceless.

While devoicing in English has been extensively studied, no systematic research has been done on devoicing in Serbian. According to Petrović and Gudurić (2010) and Bakran (1994), phonologically voiced obstruents retain some degree of phonetic voicing word-finally in Serbian and Croatian. However, the mechanism of devoicing has not been systematically studied in Serbian, and we therefore believe that this study may shed some light on this phenomenon.

3. Final obstruents

3.1. Pre-fortis clipping

Word-final position, which is the focus of this research, is particularly vulnerable to a number of consonant features. Stop sounds in this position can be optionally unreleased, while the contrast in phonetic voicing is suspended in all final obstruents. However, phonological contrast between voiced and voiceless consonants is still retained both in English and Serbian. Since English final voiced obstruents are voiced only phonologically, a different contrast and another set of terms may be more appropriate, i.e. the contrast between fortis (strong, phonologically voiceless) and lenis (weak, phonologically voiced) obstruents.

The question that inevitably arises here is how the contrast between fortis and lenis word-final consonants is achieved, since most of the phonetic contrast is erased in this position. As has long been known, fortis consonants have the property of shortening, or clipping the vowel preceding them, and the information on the vocalic duration acts as a much more reliable acoustic cue to the listener on the nature of the final consonant (House and Fairbanks 1953, Denes 1955, House 1961). The reduction of vowel duration before voiceless consonants is a universal tendency of all languages (Chen 1970), but is more marked in some languages than others. English exhibits a very strong tendency towards this kind of reduction, often referred to as pre-fortis clipping (term introduced by Wells 1990). According to Wiik (1965), long vowels can be twice longer in open syllables or in front of voiced (lenis) obstruents or sonorants than when followed by a voiceless consonant at the same speaking rate. From

the point of view of perception, this difference acts as the major auditory cue facilitating the discrimination between the final consonants (Collins and Mees 2005: 51; Cruttenden 2014: 206; Roach 1998: 33; Yavas 2006: 58). Obviously, English elevates the universal phonetic property of vowel clipping to a higher level in the phonological system, so that it has been ‘phonologized’, to use the term proposed by Kohler (1984), in order to convey the distinction in voicing.

3.2. Other characteristics of voicing in final obstruents

Leaving the vowel duration aside, one might (wrongly) assume that the English final voiced obstruents and their voiceless pairs do not differ whatsoever. However, this is not the case, since fortis consonants tend to be more prominent than the lenis ones under the same speaking rate and at comparable intensity. This prominence is primarily reflected in the temporal features of final obstruents. Final fortis fricatives and affricates are characterized by a significantly longer duration than their lenis equivalents (Denes 1955; Cole and Cooper 1975), while final fortis stops are characterized by a longer occlusion phase than their lenis equivalents (Lisker 1957; Port 1979). Thus the duration of the fortis/lenis consonant is inversely related to the duration of the preceding vowel, and it was found that the ratio between the duration of the vowel and the duration of the consonant is the main auditory signal facilitating the recognition of the contrast for native speakers of English (Derr and Massaro 1980; Flege and Hillenbrand 1986).

3.3. Final obstruents in Serbian

Although Serbian has not been studied as extensively as English, it is known that final obstruents are not completely devoiced (Petrović and Gudurić 2010: 104–105, Bakran 1996: 84). This means that the friction in lenis fricatives or the occlusion phase of final lenis stops may be accompanied by vocal fold vibration either for its whole duration, or for a certain percentage of its duration. The study by Marković and Jakovljević (2016), which deals with the acquisition of pre-fortis clipping in English by native speakers of English, shows that Serbian also exhibits duration reduction before voiceless obstruents. The reduction is more marked with long vowels than with short ones, but much less marked than in English.

To our knowledge, no study has been conducted on the duration of the final obstruents in Serbian, or the ratio between the vowel and consonant duration in relation to consonant voicing and its significance for the perception of consonants.

In addition to vowel duration and the presence of voicing in the final fricative, it is also known that the final voiceless fricative in Serbian tends to be pronounced with higher intensity, and that the intensity peak is concentrated around the central portion of the fricative (Jerotijević Tišma 2017 and references therein).

A typical distinction between the final /s/ and /z/ in Serbian is seen in Figure 1, which shows the pronunciation of the words *bos* and *knez* by one of the subjects of the present study. The vowels of both words are phonologically long.²

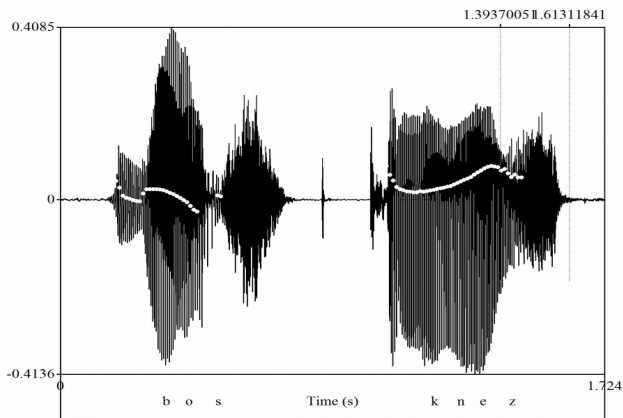


Figure 1. The waveform of the Serbian words *bos* and *knez*

The duration of the vowel in the word *bos* in Fig. 1 is 205ms, and of that in *knez* is 254ms, the duration of the voiceless fricative /s/ is 242ms, and of the voiced /z/ it is 214ms. Obviously, Serbian also exhibits the tendency towards reducing the duration of the vowel before voiceless fricative, and towards longer duration of voiceless fricatives. The white dots in Figure 1 indicate the presence of voicing, which continues into the voiced /z/

² Serbian vowel duration is traditionally related to pitch accents, which can be long falling, long rising, short falling or short rising. Monosyllabic words can only have falling pitch accent, so the words analyzed here both have long falling accents.

for approximately 30% of the duration of friction. Another feature that distinguishes the voiceless from the voiced fricative in Serbian is related to their energy level and distribution. In terms of maximum intensity level, it can be seen that the voiceless fricative has somewhat higher maximum, but the more striking difference between them is that the peak of energy is concentrated around the mid portion of the voiceless /s/, but evenly distributed during the voiced /z/.

Figure 2 shows the difference between the voiceless and voiced pair of stops /t/ and /d/ in the words *pet* and *bled* (both with long falling accent), also pronounced by one of the subjects of this study.

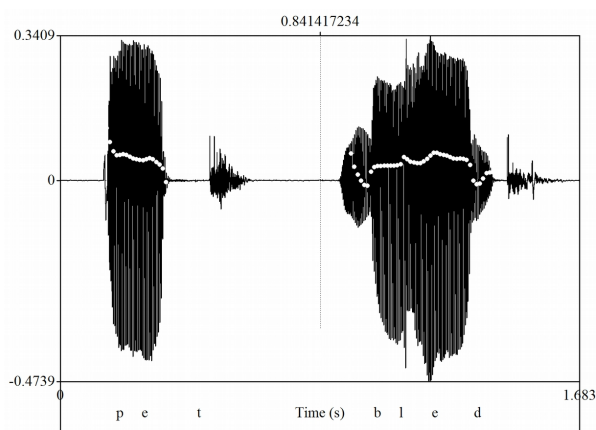


Figure 2. The waveform of the Serbian words *pet* and *bled*

The duration of the vowel preceding the voiceless stop /t/ is 184ms, while the same vowel lasts for 219ms before the voiced stop /d/. The duration of occlusion in /t/ is 147ms, and in /d/ it lasts for 116ms. The white dots in Fig. 2 show the presence of vocal fold vibration, which goes well into the occlusion phase and lasts for 81ms (70% of occlusion duration).

To sum up, Serbian exhibits some phonetic similarities and some differences in the realization of final fricatives and stops when compared to English. The features they share are the duration of the vowel preceding the voiceless/voiced consonant, the duration of the voiced/voiceless fricative and occlusion in stops, and consequently the ratio in the duration of the vowel and voiceless/voiced obstruent. Yet, all of these features are much more marked in English than in Serbian and are therefore perceptually the most salient for the distinction between final fortis and lenis consonants.

The two languages differ in the presence/absence of voicing in the final voiced obstruent. While Serbian retains a period of voicing in the final voiced obstruent, English has no phonetic voicing in the final lenis obstruent. It is probable that the English durational characteristics have been exaggerated in order to compensate for the lack of the phonetic distinction in voicing.

Acknowledging that the temporal relations of the vowel and final consonant act as the major signal for distinguishing between the voicing contrast in English raises the question of the acquisition of this property by L2 learners whose native language does not share the same mechanism.

4. Previous research in final obstruent acquisition

In this section we shall give a brief overview of studies on the acquisition of final obstruents relevant for our research. Several studies have dealt with the acquisition of the final obstruent acquisition by learners whose L1 neutralises voicing contrast in the word-final position. Among those, McAllister (2007) investigated the realization of the English /s/-/z/ contrast in a production study of speakers of Swedish. This study was based on the production of 17 speakers of Swedish, relatively proficient in English. The results indicate that the voiced fricative is rather poorly acquired, and that even the most successful speakers did not employ the same articulatory/acoustic mechanisms as those typical of native speakers' pronunciation. Another study, which investigated the perception and production of the word-final voicing contrast by German learners of English, was conducted by Smith et al. (2009). It also showed that the German speakers produced fewer and less robust acoustic cues to word-final voicing than English speakers. Several studies were conducted on the acquisition of English final obstruent contrasts by speakers of Czech, another language without final voicing contrast. The results reported in Fejlová (2013) and in Skarnitzl & Šturm (2016) show that the Czech speakers did not sufficiently exploit duration to cue the identity of the word-final obstruent. The study by Skarnitzl and Šturm (2014) showed that the Czech subjects of their research tended to produce both the fortis and lenis obstruents without any phonetic voicing. In the study on the acquisition of the final /t/-/d/ contrast by speakers of Chinese, English and Spanish, it was found that native Chinese speakers of English, most of whom were inexperienced in English, could more accurately distinguish between voiced and voiceless

stop consonants in word-initial than in word-final position (Flege et al. 1992).

The studies dealing with the acquisition of English consonants by learners whose first language is Serbian are of relatively recent date. A comprehensive study by Jerotijević Tišma (2017) deals with the general acquisition of all English consonants by native speakers of Serbian in all positions in the word and in different speaking styles/contexts. It included several perception and production tasks and tested 72 students of English at University of Kragujevac. The results, including those related to the word-final position, point to a high level of transfer from the learners' L1, manifested as substitutions and assimilation of target sounds to the categories of L1. The author also found that the learners were generally successful in differentiating phonological differences, but not the subtle phonetic ones. The studies by Čubrović (2011, 2012) and Jakovljević (2012, 2014) dealt with the distinction in VOT in the acquisition of fortis and lenis plosives by Serbian speakers. Marković and Jakovljević (2016) report on the results of a study of pre-fortis clipping of English diphthongs in the production of Serbian learners. The results point to partial, but generally insufficient level of attainment of this temporal feature before fortis obstruents.

5. Present study

5.1. Hypotheses

The goal of the present study was to investigate how native speakers of Serbian acquire several phonetic parameters that underlie the voicing contrast in English, in particular, vowel duration, the duration of the final fricative/occlusion of stop consonants and the duration of voicing in the final obstruent.

Based on the previous research on some of the above parameters, we hypothesized that native speakers of Serbian at relatively high levels of proficiency in English may not generally have acquired at least some of the phonetic exponents of the voicing contrast in L2, but resort to the more familiar cues of their L1. The hypothesis of our research is of interest in relation to Flege's Speech Learning Model (SLM, Flege 1995) in several respects. Firstly, our study tests the 'feature' hypothesis (hypothesis 6),

which states that an L2 phonetic category formation may be blocked if listeners do not discern a mismatch in the phonetic features used to signal a contrast in L1 and L2, i.e. if the learner's representation is based on different phonetic features, or feature weights (Flege 1995: 239). Relevant to our study are also hypotheses 2 and 3, which state that a new phonetic category can be established for an L2 sound if it differs phonetically from the closest L1 sound. If the perceived phonetic similarity is not significant, an L2 sound is more likely to become identified with an equivalent L1 sound, which is the implication of hypothesis 3. In line with these, we also hypothesize that the similarity between the L1 and L2 contrast in phonological voicing will hinder the acquisition of the L2 contrast, and that it will be more or less identified with the contrast typical of the learners' L1.

The goal of the study was to test whether and to what extent advanced learners of English have mastered the above-mentioned phonetic exponents of the phonological distinction of voicing in their interlanguage and discuss some implications for foreign language phonological acquisition.

5.2. Participants and procedure

The participants of this study were 14 first year students who were recorded in the soundproof studio at the Faculty of Philosophy, University of Novi Sad. The students participated in the study on a voluntary basis, and none of them reported any hearing impairment or speech defect. All of them had learned English for at least eight years prior to the study. Materials used for this research were monosyllabic minimal pairs containing a diphthong in the nucleus and an obstruent in the coda.³ The words selected for this study were *mace*, *maize*, *pace*, *pays*, *height*, *hide*, *tight* and *tide*. Target minimal pairs were placed within frame sentences, and both words occurred in the second and third stressed positions (W1 and W2), but were followed by another stressed word (*Did you say W1, W2 or W3?* or *I said W1, W2 and W3.*). Since the target words were presented as parts of lists, all participants read them with a short break before the next word. This ensured that

³ Although the participants' native language, Serbian, does not contain diphthongs, we opted for diphthongs for two reasons: firstly, since the durational differences in the pre-fortis and pre-lenis environments are generally more marked in long vowels, especially diphthongs, and secondly, because our previous research showed the highest degree of acquisition of this durational difference in diphthongs among our participants, especially the ones analyzed here /eɪ/ and /aɪ/ (Marković 2012; Marković and Jakovljević 2016).

potential voicing due to the medial (intervocalic) position should not occur. The second and third stressed positions were taken for the even amount of stress, and the final position was not taken into consideration because of the marked final lengthening of both the vowel and consonant, which would render invalid results for this study. The same sentences were read by a male native speaker of Standard British English, whose recordings were used as a control.

The recordings were analysed using Praat software for speech analysis (Boersma and Weenink 2011). The analysis included the measurements of vowel duration, the duration of friction for the fricatives /s/ and /z/, the duration of occlusion for the stops /t/ and /d/, and the duration of glottal pulses (voicing) during friction/occlusion. In the segmentation of fricatives, we followed the procedures recommended by Kent and Read (1992) and Peterson and Lehiste (1960). We also checked the distribution of energy in the fricative pair, but did not include the numerical data of this parameter in this study. The obtained data were statistically analysed for the mean values of duration, standard deviations and ratio between the duration of vowels and consonants. T-test was conducted to determine the statistical significance of difference between the relevant sets of data. The data were also qualitatively compared to samples of minimal pairs in Serbian, produced by the same participants.

6. Results

The overall results of duration measurements are shown in Table 1. The data therein show mean duration (in milliseconds) of the vowel preceding the final fortis/lenis fricative or stop, the duration of the fricatives, the duration of the occlusion phase in stops and the duration of voicing in the final obstruent during friction or occlusion. It also contains the information on standard deviations from the mean duration values in the subjects' production. The grey shaded fields show the duration values in the material read by the control native speaker.

	[-V] fricative		[+V] fricative			[-V] stop		[+V] stop		
	V	C	V	C	voicing	V	occlusion	V	occlusion	voicing
Dur (ms)										
L	255.3	196.3	290.8	185.2	52.9	252.7	106.5	306.1	89.6	53.9
SD	41.3	44.4	43.1	34.8	24.1	34.6	30.8	31.5	32.8	30.4
NS	193	271	360	175	0	204	75	374	34	11

Table 1. Duration of vowels (V), final consonants (C), occlusion and voicing in fortis ([-V]) and lenis ([+V]) environments. L = learners, NS = native speaker

6.1. Duration of vowels

While the control native speaker consistently pronounces the vowel before all of the fortis consonants with remarkably shorter duration than before the lenis ones, the learners are far less consistent.⁴ The ratio of the pre-lenis to pre-fortis mean vowel duration of the native speaker is 1.85, while that of the learners is only 1.18. The results of vowel duration measurements are shown in the graph in Figure 3.

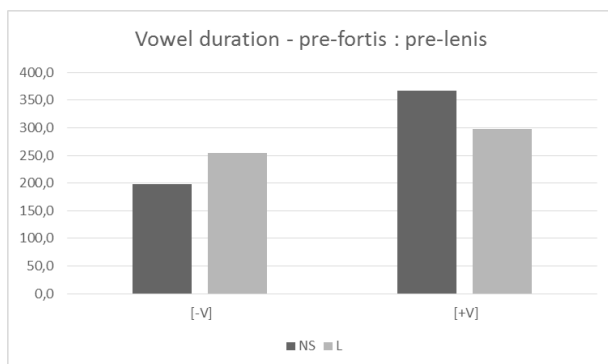


Figure 3. Vowel duration before lenis and fortis obstruents

The results of the t-test conducted show that the learners tend to produce longer vowels before lenis than fortis consonants ($p < 0.01$), although the variability among their duration values and ratios between pre-fortis and pre-lenis duration is remarkable, as can be seen from the data on standard deviations (Table 1). The standard deviation in the ratio between pre-lenis and pre-fortis duration of the learners' vowels is 0.17. Notably, only one of the learners (subject 10) has the duration ratio of pre-fortis and pre-lenis vowels comparable to that of the control speaker in front of the final fricative pair (1.73), and one before the final stop pair (subject 9, ratio 1.61). Four learners produced shorter vowels in the pre-lenis environment, three of whom did so before the final lenis fricative, and one before the lenis stop. Upon the exclusion of the values obtained by the speakers who failed to produce adequate durations, the ratios of the other speakers of

⁴ The values obtained for the native speaker were expected, since they are in line with the findings well documented in the literature and in previous research. We therefore assume that the data obtained in our study are relevant, although they rely on the pronunciation of a single native speaker.

pre-lenis and pre-fortis vowel duration are somewhat higher than in the learners' L1, i.e. Serbian (c.f. Sovilj-Nikić 2007; Jakovljević 2012, 2014; Marković and Jakovljević 2016).

Comparing the duration of vowels before fricatives and before stops, the overall results indicate somewhat lesser variability in the duration values before fortis and lenis stops and their ratios than before fricatives. However, t-test showed no statistically significant difference of the vocalic duration in the two environments ($p > 0.05$).

6.2. Duration of final fricatives

The duration of English final [-V]/[+V] fricatives is inversely related to the duration of the preceding vowel. In other words, word-final fortis fricatives have significantly longer duration than the lenis ones. The duration of the final fortis fricative /s/ pronounced by our control speaker is 271ms, while that of the lenis fricative /z/ is 175ms, the ratio between the fortis and lenis being 1.55. The mean duration of /s/ in the production of our subjects is 196ms, whereas that of /z/ is 185ms, with the mean ratio 1.06 between them. With the exclusion of two subjects who pronounced the fortis and the lenis fricative with the duration ratio comparable to that of the control native speaker (subjects 3 and 10), no other subjects exhibited the tendency typical of native speakers of English. T-test showed no significance between the duration of the final fortis and lenis fricatives in the production of our subjects ($p > 0.05$). This finding was unexpected, since the subjects' L1 also has the tendency of longer voiceless fricatives. The reason may be the fact that the difference in consonant duration is not so marked in the learners' L1 as in L2, and compared to vowel duration, it is not as audible.

McAllister (2007 and references therein) states that the ratio between the duration of the vowel and that of the consonant can be taken as the main signal by which English native speakers recognize the contrast between word-final voiced and voiceless fricative. Our study showed that the ratio between the duration of the vowel and the fortis fricative /s/ produced by the control speaker is 0.7 (193ms : 271ms), while that of the vowel and the following lenis fricative /z/ is 2.1 (360ms : 175ms). The mean ratio of the duration of the vowel and the fortis fricative in our subjects' production is 1.3 (SD=0.4, 255.3ms : 196.ms), and that of the vowel and lenis consonant is 1.6 (SD=0.3, 290ms : 185.2ms). T-test

again showed no significance in the two duration ratios in our subject's production ($p > 0.05$).

6.3. Duration of occlusion

With word-final stop sounds, the control native speaker had significantly longer occlusion phase in the production of fortis stops than the lenis ones (mean duration 75ms : 34ms). The data on the mean duration of the subjects' occlusion phase (Table 1) show a similar tendency, although the difference between fortis and lenis stop occlusion duration is not as prominent as in the native speaker's production (106.5ms : 89.6ms). Although several learners (subjects 6, 11 and 12) have a similar ratio between the fortis and lenis stop occlusion to that of the control speaker, the other subjects have highly inconsistent results. The comparison of the two sets (fortis and lenis occlusion duration) shows statistical significance at the level $p < 0.05$, but not at $p < 0.01$ ($p = 0.01834$). Another notable difference between the native speaker's pronunciation and that of the learners is that the occlusion phase is generally longer in the learners' production in all stop consonants. This may be due to the overall slower speech tempo of foreign speakers, although it was not the case with the duration of the final fricatives analyzed. Similar results were found by Tišma-Jerotijević (2017).

6.4. Duration of voicing

English phonologically voiced obstruents are generally characterized by a tendency of devoicing in the word-final position. The data of our study show a complete lack of glottal pulses in the control speaker's production of the final fricative /z/ (voicing duration = 0, Table 1). In contrast, all the subjects of our study pronounced /z/ accompanied by a period of voicing, which on average lasts for 52.9ms (29% of the duration of the fricative). The duration of voicing is also highly variable among the subjects, ranging from 14% to 66% of fricative duration.

The devoicing process is not as marked with the final stop sound /d/ in the pronunciation of the control native speaker. Our data show that the control speaker's occlusion phase is accompanied by a short period of voicing (11ms, or 33% of occlusion). In the production of our subjects, word-final /d/ has a significantly longer duration of voicing in the occlusion

phase than produced by the native speaker. The mean duration of voicing in the subjects' pronunciation of /d/ was 53.9ms, or 63% of the duration of occlusion. Four learners (subjects 1, 3, 4 and 9) even pronounced the lenis stop with voicing throughout the occlusion phase. One of the subjects pronounced /d/ with a very brief period of voicing (7%), but failed to produce the vowel before /t/ and /d/ differently, and as a result, the words *tight* and *tide* were completely indistinguishable.

7. Discussion and concluding remarks

English is a language in which voicing contrast of obstruents is not neutralized in the final position, but has a strong tendency of devoicing of lenis obstruents. Serbian similarly retains the contrast in voicing in the final position, and also has lesser marked voicing features in the phonologically voiced final obstruents than in other positions, complying with the universal tendency of all languages. However, 'voicing' is a general term which subsumes different phonetic features, and does not straightforwardly refer to the activity of the vocal folds. Final position is peculiar in that the voicing contrast has at least three phonetic features that combine into the single phonological feature referred to as 'voicing'. The ones we looked into in this study are the temporal features, involving the duration of the preceding vowel, the duration of the final consonant, and the duration of glottal pulses (voicing) in the obstruent. In addition to these, the difference may be expressed in terms of intensity, either as the intensity level or intensity distribution. Although intensity was not analyzed in this study, we noticed that it may also have contributed to the distinction between voiced and voiceless fricative pair /s/-/z/ in our subjects' production. Figure 4 shows the pairs *maize-mace* produced by subject 2 (a) and *pays-pace* produced by the control speaker (b).

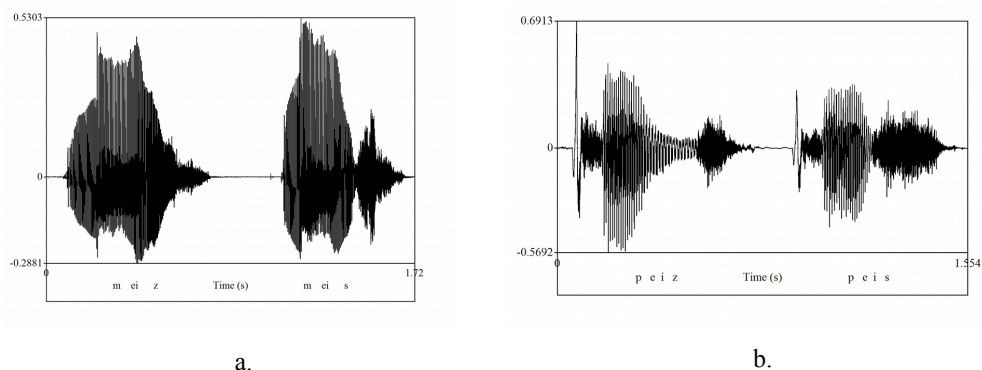


Figure 4. The waveform of the words *mace* and *maize* pronounced by a learner (a) and *pays* and *pace* pronounced by the control native speaker

The image shows that the main difference between the fortis and lenis fricative sound in the learner's production is in the intensity level, where the voiceless fricative has a markedly higher amplitude, and the concentration of energy is around the mid portion of friction.⁵ In the pair of words produced by the native speaker, the energy of the voiceless fricative is not significantly higher, and is distributed evenly for the whole duration of friction. The main distinction in the native speaker's production is achieved by the difference in duration, the fortis /s/ being much longer than the lenis /z/. Since the intensity features noticed in our study were hugely variable and even speaker specific, we decided to exclude these data from the analysis and return to those in a future, more extensive study of intensity. Yet, intensity cannot be completely disregarded as another phonetic distinction of voicing in the two languages analyzed.

Returning to the temporal features as a dominant phonetic exponent of the voicing contrast, our results strongly indicate that they are not fully acquired by our subjects, but are overall transferred from the learners' L1. Although we did not conduct a systematic analysis of the same phonetic features in Serbian, it is known from previous studies that Serbian also exhibits duration reduction of vowels preceding voiceless consonants (Sovilj-Nikić 2007, Marković 2012, Marković and Jakovljević 2016).

⁵ The same tendency of energy distribution of Serbian speakers was noticed in the research of Tišma Jerotijević, who attributes the difference between distributed energy in English fricatives and concentrated energy peaks in the Serbian ones to the difference in the place of articulation in the two languages.

Despite the variability that our subjects exhibited, none of them had acquired all the phonetic features typical of the native speaker's pronunciation. As was noted earlier, subject 10 had the ratio between the duration of the vowel before the fortis and lenis fricative approximately the same as the native speaker. Since vowel duration is probably the most significant auditory cue of the voicing contrast, this subject's pronunciation sounded the most native-like. However, the same subject had the longest period of voicing in the lenis fricative /z/, which indicates that he acquired only some of the phonetic features relevant for the distinction. Similar results were found by McAllister (2007), whose best sounding subjects also had a significant voicing period in the final lenis fricative, and their success to produce a native-like sounding contrast was due to the rearranged temporal patterns in the vowels alone.

Vowels preceding fortis and lenis final stops exhibit the same durational patterns as before fricatives. We noticed, however, that the ratio between the fortis and lenis occlusion phase in the production of our control speaker was not as consistently high as in the fricative pair. In addition, it was observed that the native speaker also had a period of voicing in the occlusion phase of the final lenis stop. Although literature on English states simply that final stops are devoiced, it appears that the devoicing is not as complete as in fricatives. Our study corroborated the similar findings of the study of final obstruent devoicing in American English reported by Dmitrieva (2014), who found that final lenis fricatives are completely devoiced, unlike final lenis stops. Still, the voicing period during the occlusion phase in the production of our control speaker is significantly shorter than that of the subjects, who again resort to voicing as the main distinguisher between /t/ and /d/. The results show that even four subjects retain voicing throughout the occlusion phase of /d/, while the others on average have a much higher percentage of voicing duration than was found in the native speaker's pronunciation.

To return to our initial hypotheses, we can conclude that they have been mainly confirmed in this study. First, the results show that the learners have mainly retained the phonetic features of the voicing contrast typical of their L1, and that the existence of the voicing contrast in Serbian blocked the acquisition of the phonetic features typical of L2, resulting in the identification of the contrast with that of the learners' L1, which is in line with Flege's hypothesis 6. The most prominent phonetic feature of the voicing contrast, i.e. the duration of the preceding vowel, is by far

the best acquired one, as far as our results indicate. In other words, the subjects had more marked difference in the duration of the pre-lenis and pre-fortis vowel than is typical in their L1. This corroborates Flege's (1995) hypotheses 2 and 3, which states that the greater the perceived phonetic dissimilarity in an L1 and L2 contrast or category, the more likely it is to be earlier acquired by learners. Statistical analysis showed that the other phonetic characteristics, such as the duration of the final consonant (or occlusion) and the presence of voicing in the final lenis obstruent is mainly transferred from the learners' L1.

Finally, since some of the phonetic features in our subjects' production approximate those of native speakers', we can conclude that the acquisition of a complex contrast, involving multiple phonetic features, is not an all-or-nothing scenario, but probably shows the evolving character of L2 phonological acquisition.

This small-scale study revealed the necessity of further exploration not only in the field of second language phonological acquisition, but also of more extensive studies of voicing features both in Serbian and in English. Even though Serbian has been understudied in the issues of voicing at this moment, it appears that different English dialects should also be researched in more detail to come up with more precise descriptions of final voicing distinctions in this language.

References

- Bakran, J. (1996). *Zvučna slika hrvatskoga govora*. Zagreb: Ibis grafika.
- Boersma, P. and D. Weenink (2011). *Praat: doing phonetics by computer* (Version 5.2.28). (28 June 2011) <<http://www.praat.org>>.
- Chen, M. (1970). Vowel length variation as a function of the voicing of the consonant environment. *Phonetica*, 22, 129–159.
- Cole R. A. and W. E. Cooper (1975). Perception of voicing in English affricates and fricatives. *Journal of the Acoustical Society of America*, 59, 1280–1287.
- Collins, B. and I. M. Mees (2005). *Practical Phonetics and Phonology*. London: Routledge.
- Cruttenden, A. (2014). *Gimson's Pronunciation of English*. London: Edward Arnold.

- Čubrović, B. (2011). Voice Onset Time in Serbian and Serbian English. *ELOPE: English Language Overseas Perspectives and Enquiries*, 8(1), 9–18.
- Čubrović, B. (2012). The Evolution of a Phonetic Phenomenon: The Case of Voice Onset Time in Serbian Intermediate EFL Learners. In: T. Paunović & B. Čubrović (eds.), *Exploring English Phonetics*, Newcastle upon Tyne: Cambridge Scholars Publishing, 47–55.
- Denes, P. (1955). Effect of duration on the perception of voicing. *Journal of the Acoustical Society of America*, 27, 761–764.
- Derr, M. A. and D. W. Massaro (1980). The contribution of vowel duration, f₀ contour, and frication duration as cues to the /juz/-/jus/ distinction. *Perception & Psychophysics*, 27, 51–59.
- Dmitrieva, O. (2014). Final voicing and devoicing in American English. *Journal of the Acoustical Society of America*, 136(4), 2174–2174.
- Fejlová, D. (2013). Pre-fortis shortening in fluent read speech: A comparison of Czech and native speakers of English. *AUC Philologica 1/2014, Phonetica Pragensia XIII*, 101–112.
- Flege, J. E. (1995). Second language speech learning: Theory, findings and problems. In: W. Strange (ed.), *Speech perception and linguistic experience: Issues in cross-language speech research*. Timonium MD: York Press, 233–277.
- Flege, J. E. and J. Hillenbrand (1986). Differential use of temporal cues to the [s-z] contrast by native and non-native speakers of English. *Journal of the Acoustical Society of America*, 79, 508–517.
- Flege, J. E., M. J. Munro and L. Skelton (1992). Production of the word-final English /t/-/d/ contrast by native speakers of English, Mandarin, and Spanish. *Journal of the Acoustical Society of America*, 92, 128–43.
- House, A. S. (1961). On vowel duration. *Journal of the Acoustical Society of America*, 33, 1174–1178.
- House, A. S. and G. Fairbanks (1953). The influence of consonantal environment upon the secondary acoustical characteristics of vowels. *Journal of the Acoustical Society of America*, 25, 105–113.
- Jakovljević, B. (2012). VOT Transfer in Production of English Stops by Serbian Native Speakers. In: T. Paunović, T. & B. Čubrović (eds.), *Exploring English Phonetics*, Newcastle upon Tyne: Cambridge Scholars Publishing, 31–46.
- Jakovljević, B. (2014). The strength of articulation of the members of the voice contrast in English and Serbian. In: S. Guduruć (ed.), *Jezici i kulture u vremenu i prostoru 3*. Novi Sad: Filozofski fakultet, 481–489.

- Jansen, W. (2004). *Laryngeal Contrast and Phonetic Voicing: A Laboratory Phonology Approach to English, Hungarian, and Dutch*. PhD dissertation. University of Groningen.
- Jerotijević Tišma, D. (2017). *Percepcija i produkcija konsonantskog sistema u englesko-srpskoj međujezičkoj fonologiji*. Doktorska disertacija. FILUM, Univerzitet u Kragujevcu.
- Kent, R. D. and C. Read (1992). *The Acoustic Analysis of Speech*. San Diego: Singular Publishing.
- Kohler, K. J. (1984). Phonetic Explanation in Phonology: The Feature Fortis/Lenis. *Phonetica*, 41(3), 150–74.
- Lisker, L. (1957). Closure duration and the intervocalic voiced-voiceless distinction in English. *Language*, 33, 42–49.
- Lisker, L. and A. S. Abramson (1964). A cross-language study of voicing in initial stops: Acoustical measurements. *Word*, 20, 348–422.
- Marković, M. (2012). *Usporedna proučavanja vokala engleskog i srpskog jezika: između univerzalnog i specifičnog*. Novi Sad: Filozofski fakultet.
- Marković, M. and B. Jakovljević (2016). Acquiring vocalic quantity and quality in L2: The Acquisition of vowel clipping in English by Advanced Serbian Learners. *Zbornik Matice srpske za filologiju i lingvistiku*, LIX/2, 97–108.
- McAllister, R. (2007). Strategies for realization of L2-categories. English /s/-/z/. In O. S. Bohn & M. J. Munro (eds.), *Language experience in second language speech learning. In honor of James Emil Flege*. Amsterdam: John Benjamins, 153–166.
- Peterson, G. E. and I. Lehiste (1960). Duration of syllable nuclei in English. *The Journal of the Acoustical Society of America*, 32(6), 693–703.
- Petrović, D. i S. Gudurić (2010). *Fonologija srpskoga jezika*. Beograd: Institut za srpski jezik SANU.
- Port, R. F. (1979). The influence of tempo on stop closure duration as a cue for voicing and place. *Journal of Phonetics*, 7, 45–56.
- Roach, P. (2008). *English Phonetics and Phonology: A Practical Course*. Cambridge: CUP.
- Selinker, L. (1969). Language transfer. *General Linguistics*, 9, 67–92.
- Skarnitzl, R. and P. Šturm (2014). Assimilation of voicing in Czech speakers of English: The effect of the degree of accentedness. *Research in Language* 12(2), 199–208.
- Skarnitzl, R. and P. Šturm (2016). Pre-fortis shortening in Czech English: A production and reaction-time study. *Research in Language*, 14, 1–14.

- Smith, B. L., R. Hayes-Harb, M. Bruss and A. Harker (2009). Production and perception of voicing and devoicing in similar German and English word pairs by native speakers of German. *Journal of Phonetics*, 37, 257–275.
- Sovilj-Nikić, S. (2007). *Trajanje vokala kao jedan od prozodijskih elemenata u sintezi govora na srpskom jeziku*. Magistarska teza. Novi Sad: Fakultet tehničkih nauka, Univerzitet u Novom Sadu.
- Wells, J. C. (1990). Syllabification and Allophony. (20 October 2015) <<http://www.phon.ucl.ac.uk/home/wells/syllabif.htm>>.
- Wiik, K. (1965). *Finnish and English vowels*. Turku: Turku University.
- Yavas, M. (2006). *Applied English Phonology*. Oxford: Blackwell.

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ИНТЕРПРЕТАЦИЈА ФОНЕТСКИХ ОБЕЛЕЖЈА У ФОНОЛОГИЈИ СТРАНОГ ЈЕЗИКА: УСВАЈАЊЕ КОНТРАСТА ОБЕЗВУЧЕНИХ ФИНАЛНИХ ОПСТРУЕНАТА

Сажетак

Иако различити језици могу имати иста релевантна фонолошка обележја, њихове фонетске реализације се могу међусобно разликовати. Типичан пример јесте разлика у времену наступа звучности (ВОТ), фактору који одређује бинарну опозицију између звучних и безвучних консонаната. У овом раду бавимо се

опозицијом звучних и беззвучних опструената (пловива и фрикатива) у финалној позицији у изговору енглеских речи код изворних говорника српског језика. У раду се саопштавају резултати експеримента продукције, у ком је 14 говорника који уче енглески језик као страни изговарало осам једносложних речи (минималних парова) у реченичном оквиру. Иако и енглески и српски језик имају контраст између звучних и беззвучних опструената у финалној позицији у речи, резултати показују да испитаници нису у потпуности овладали фонетским карактеристикама овог контраста у енглеском, већ у великој мери примењују карактеристике типичне за њихов матерњи језик.

Кључне речи: звучност, опструенти, скраћивање пред беззвучним опструентима

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EFL STUDENTS' SPONTANEOUS SPEECH: TONALITY, TONICITY, AND TONE**

Abstract

The present study offers a quantitative and acoustic analysis of a corpus of spontaneous speech produced by Serbian EFL students, in terms of intonation unit organization (tonality), nucleus placement (tonicity), and the realization of nuclear pitch contours (tone). The results show that, regarding tonality, the participants' spontaneous speech was characterized by numerous interruptions and hesitations, with comparatively few complete IUs. Regarding tonicity, the nucleus was almost invariably placed in the default position (the last stressed syllable). And in terms of tone, quite different nuclear pitch contours were produced in sentence-internal (continuing) and sentence-final intonation units, although in both structural positions the participants used both falling and rising contours. The phonetic parameters of pitch height, span, slope, alignment, duration, and intensity all proved to be relevant for these distinctions.

Key words: Serbian EFL, nuclear pitch contour, spontaneous speech, tonicity, tonality, tone

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1. Introduction

In foreign-language (L2) speech, intonation can be a source of difficulty, leading to possible miscommunications, or even to evoking unwanted interpretations, attributions and attitudes in the interlocutor. Problems can occur with *tonality* – the organization of utterances into intonation units, *tonicity* – expressing prominence within units, and *tone* – the realization of pitch movement on the nuclear tone (Halliday 1967, 1970; Wells 2006). With speakers of English as a foreign language (EFL), problems have been documented in prominence placement, in the realization of pitch movement, as well as in the overall phonetic properties of intonation contours (Mennen 2007: 55), including particularly the pitch range (Mennen et al. 2012), but also other gradient properties (Grice and Bauman 2007), e.g. pitch peak alignment (Graham and Post 2018).

However, despite a growing interest in investigating L2 prosody, and the mounting body of evidence about the properties of EFL students' interlanguage intonation, there are still very few studies that would include learners' use of prosody in relatively spontaneous oral production and not only in carefully controlled tasks, such as reading. On the other hand, there is some evidence that EFL speakers' intonation may be quite different in these two situations, especially in educational contexts. Therefore, the present study aimed to investigate how Serbian EFL learners organize their spontaneous speech into intonation units (IU), how they locate nuclear prominence within IUs, and how the nuclear accent is realized in complete IUs. The study focused particularly on the phonetic properties of pitch movement, pitch range, pitch slope, tone alignment, and intensity in the realization of nuclear accent contours.

2. Previous research

Empirical research has found similar problematic areas with EFL speakers of different first-language (L1) backgrounds. For instance, Jensen (2009) found that Danish EFL students did not distinguish the nucleus position from the first pre-nuclear accented syllable. Ramirez-Verdugo found that Spanish EFL speakers, in addition to commonly placing the nuclear prominence on the last stressed word in the intonation unit in all contexts, also produced inappropriate pitch movement in the nuclear position

(Ramirez Vergugo 2002, 2006; Ramirez Verdugo and Trillo 2005). Busà and Urbani (2011) found that Northern German EFL speakers produced a remarkably narrower pitch range than L1 (British) English speakers, and notably less pitch variation (Busà and Urbani 2011: 381). Similarly, investigating the types of tones, the pitch range of individual tones, and the pitch range of whole tunes in the production of 11 Slovene EFL speakers, Komar (2005) found that the participants used a narrower pitch range on the falling tones and, compared to L1 English speakers, a considerably smaller step up in pitch from the end of the pre-tonic segment to the beginning of the fall (Komar 2005: 3).

Whether EFL speakers' prosodic properties can be attributed to L1 transfer has also been a matter of concern, since EFL learners' interlanguage often shows properties that cannot be straightforwardly related to either L2 or L1. For instance, Toivanen (2003) investigated the intonation of 12 Finnish EFL students, acting out a pre-written conversational dialogue. Focusing on the phonetic properties of pitch movement, the study showed that the participants did make a distinction between falling and rising contours, but had problems using rising tones for "informational and/or pragmatic 'openness'", e.g. continuation, and used mostly falling tones in statements (Toivanen 2003: 168). Toivanen and Waaramaa (2005) observed a similar tendency of Finnish EFL speakers to use predominantly falling tones, often with a 'breathy voice quality' and a creak (Toivanen and Waaramaa 2005:181). Toivanen links such findings to the fact that "standard Finnish intonation is almost exclusively characterized by falling tones" (Toivanen 2003: 167).

However, investigating the influence of L1 Greek in EFL learners' prosody, Kainada and Lengeris (2015) reach a somewhat different conclusion. Observing the performance of 8 Greek EFL learners (4 male, 4 female), in reading tasks with polar questions and a written text, compared to corresponding samples of L1 (British) English from Grabe and colleagues' IViE corpus (Grabe et al.2001, in Kainada and Lengeris 2015: 274), the authors point out that EFL learners' prosodic properties differed from L1 English with respect to speech rate (slower in EFL), pitch span (narrower in EFL) and pitch level (lower in EFL). Moreover, not only was the Greek EFL speakers' pitch span in L2 English narrower than L1 English speakers', but it was also narrower than their pitch span in L1 Greek (Kainada and Lengeris 2015: 279), so this property could not be ascribed to L1 influence.

With Serbian EFL learners, several relevant research studies offer a number of comparable findings, despite their different aims, different participant groups, and methodologies applied. For instance, Marković (2011) compared Serbian EFL speaker's prosodic properties of pitch range, main stress, and tunes to L1 (British) English speech. In a reading task with declarative sentences from a narrative text, 15 university EFL students exhibited a remarkably narrower pitch range, different prosodic cues used for the main stress, and significantly different tunes than in L1 English (Marković 2011: 244). Also, while L1 English speakers used either a falling tone or a fall-rise as a signal of incompleteness or continuation, the participants mostly used a rising tone at the right IU boundary for continuation, which the author ascribes to L1 transfer (Marković 2011: 247). Lastly, the findings showed that the main stress had a lower pitch, a shorter duration and lower intensity in EFL speaker's production (Marković 2011: 248).

In Nikolić's study (2019), 6 Serbian EFL students' discourse-intonation features used in a dialogue-reading task were compared to those produced by 2 L1 (American) English speakers. The findings showed that EFL speakers produced a significantly narrower pitch range in all the investigated contexts, although they used finality and continuation signals appropriately, i.e. slight rises or falls for continuation, and falling tones (often followed by a laryngeal creak) for finality. Similarly, Paunović (2013) found that, in a discourse reading task, 4 Serbian EFL speakers and 4 L1 (British) English speakers signaled finality (of discourse topic) by a falling pitch, commonly followed by a laryngeal creak and a notable drop in intensity.

Paunović and Savić (2008) examined how 15 Serbian EFL students (10 female, 5 male) used intonation in a reading task, focusing on nuclear accent placement, direction of pitch change, and key or pitch range at transition points. The participants used appropriate falling tones or flat low tones for finality, and moderate rises or mid-level tones and slight falls for continuation (Paunović and Savić 2008: 71). However, the overall pitch range for different kinds of discourse (narrative/dialogue) was a problem for many participants, and all the signals were used notably less consistently in the dialogue than in the narrative.

Paunović (2019) investigated the prosodic signals of utterance-level information structure, i.e. the distinctions between broad, narrow and contrastive focus in L1 English, L1 Serbian and Serbian EFL. The participants were 4 male speakers of L1 (British) English and 4 male Serbian EFL students. In reading tasks, the EFL participants' intonation

showed hybrid properties between their L2 and the specific variety of their L1 (the Prizren-Južna Morava dialect). Notably, the nuclear pitch range was significantly narrower in EFL students' production compared to L1 English, not due to low F0 maximum, but rather to higher F0 minimum values, transferred from L1 Serbian (Paunović 2019: 230).

Lastly, Paunović (2015) used both reading and speaking (retelling) tasks (semi-spontaneous speech, Markham and Hazan 2002) to investigate Serbian EFL students' pitch height and pitch range used to signal phrasing, information structure, and interactive functions. The findings showed that the 6 participants (3 male, 3 female) used pitch-related cues appropriately to signal unit boundaries and prosodic prominence, but that their pitch range was rather narrow, especially in reading dialogues. Overall, the participants used a narrower, and slightly higher pitch range in speaking than in reading (Paunović 2015: 89). An important finding was that in the speaking task the participants frequently used final rising tones instead of the expected falls. This could be, as suggested by Hirschberg (2002), interpreted as a signal of the participants' insecurity and lack of confidence (Paunović 2015: 90). However, in the light of more recent findings (Paunović, forthcoming), this increasing tendency to use a rising tone as a finality signal may also be a novel pragmatic and sociolinguistic property of EFL students' speech, similar to tendencies observed in different varieties of L1 English.

As shown in this summary, Serbian EFL learners have demonstrated several problems in their interlanguage intonation, the most commonly observed one being a narrow pitch range, but also the realization of the nuclear and post-nuclear pitch movement. However, only two of the described studies included elicitation tasks with semi-spontaneous speech in addition to reading, so the investigation of EFL students' spontaneous speech may show intonational properties different than the ones described in previous research.

3. Present study

The aim of the study was to analyse a collected corpus of spontaneous speech by Serbian EFL speakers in order to observe: 1. how the participants structured or 'packed' their speech into IUs (tonality); 2. how they located nuclear pitch accents within IUs (tonicity); and 3. how they melodically realised the nuclear accents (tones), in terms of the acoustic cues of pitch

(F0) movement, pitch range, pitch slope, tone alignment, intensity, and duration.

3.1. Methodology and procedures

The speech corpus was produced by 3 female and 2 male Serbian EFL speakers (mean age 21), 3rd year students at the English Department of the Faculty of Philosophy, University of Niš (CEFR C1 level). The recordings were made in a ‘natural environment’ (Llisterri 1992: 2), during an oral session in the course *Intercultural communicative competence*, in January 2018. The students were required to deliver a short (5-7 min.) expository talk on a topic they have researched for their final essays in the course. In this sense, the students’ talks, though not interactive and conversational but rather careful and consultative in style (Joos 1968; Labov 1972), can still be considered spontaneous and not pre-rehearsed speech, since they were ‘unscripted’ (Llisterri 1992:19). In addition, each talk was followed by a short discussion among the students, who could ask for clarification, express disagreement, or comment on any aspect of the talk. The discussion parts were also recorded and included in the corpus for analysis.

Source	Gender	Min.	Words
Speaker 1	F	9.20	1,532
Speaker 2	F	6.50	912
Speaker 3	M	12.30	1,838
Speaker 4	F	12.00	1,576
Speaker 5	M	6.25	756
		47.1	6,614
Discussion 1	F, M	4.30	470
Discussion 2	F, M	3.20	370
Discussion 3	F, M	1.20	178
Discussion 4	F, M	2.00	105
		11.17	1,123
		58.27	7,737

Table 1. The structure of the spontaneous speech corpus

The recorded materials consisted of 58.27 minutes of students' speech, 47.10 min. of individual students' talks and 11.17 min. of discussions. Transcribed verbatim, with marked pauses, interruptions, and repetitions, the corpus consisted of 7,737 words, 6,614 in students' individual talks, and 1,123 in group discussions (Table 1).

Since students' talks were expository, they can be regarded as primarily exemplifying the textual metafunctions (Halliday 1994: 35-36), related to expressing the relevance status of information "as perceived by the speaker" (Ramirez Verdugo 2002: 119), and the speech function of giving information (Halliday 1970: 51). In the discussion parts of the corpus, the speech functions of demanding information were also relevant, as well as suggestions.

3.2. Analyses

The corpus was analysed in three steps. Firstly, using the transcriptions and the auditory and visual inspection of the recordings, IUs were identified in each participant's speech. IU boundaries were identified by relying on the 'external' and 'internal' phonetic criteria (pauses, anacrusis, pitch level and direction of unaccented syllables, final lengthening – Cruttenden 1997: 32–35), as well as on the syntactic, semantic and contextual clues. In cases of ambiguity ('intonational sandhi'), we opted for the more complex analysis into two IUs (Cruttenden 1997: 36). All the repetitions, and all the IUs that were incomplete – interrupted, unfinished, or in any way 'broken' – were excluded from further analysis. The complete IUs were classified and coded with respect to their syntactic position, as sentence-final or non-final (continuing), and for the type of syntactic structure they belonged to. Errors of grammar and use that did not affect the structure of the IU were ignored (e.g. **three dimension; *reflect to the whole family*).

Secondly, complete IUs were analysed for their internal structure, in the traditional British school model (Cruttenden 1997; Halliday 1967; Wells 2006), and the location of the nuclear prominence identified. Following this theoretical description, in addition to the nuclear syllable, the syllables following it (the tail) and stretching up to the right edge of the IU were also treated as potentially relevant for the realisation of the nuclear tone and coded for analysis. The identified nuclear accents were classified with respect to their overall pitch direction into two broad groups – falls and rises (Wells 2006). Complex tones, fall-rises and rise-falls, were treated as

varieties of rises and falls respectively, but were coded for this information in a separate variable, and their component pitch movements measured separately in the acoustic analysis.

Thirdly, the acoustic analysis was performed in *Praat* (6.0.31, Boersma & Weenink, 1992-2010) with the settings of 400Hz pitch ceiling, 50Hz pitch floor, which proved appropriate for both female and male speakers. The total of 127 IUs showing a clear pitch contour throughout were selected for the acoustic analysis. F0 contours were visually inspected for octave errors and pitch halvings and the beginning of each nuclear tone movement was located manually. The measurements were taken for: F0/ pitch maximum, minimum, mean (in Hz); intensity maximum, minimum, and mean (in dB); and the duration of the pitch movement from its beginning to end (in seconds). If an overall falling contour was preceded by an identifiable rise within the nucleus, or the rising contour was preceded by a fall, the duration of that tone component was measured separately. From these measurements, the pitch range (span, excursion) of the nuclear tone was calculated (in Hz and semitones, ST), and the pitch slope was calculated as the pitch span (in ST) divided by the duration of the pitch movement. Tone alignment (the onset of the rising or falling movement) was also coded as a categorical variable – as early if it started during the nuclear syllable, immediate if it started on the post-nuclear syllable, and as late if it occurred further away from the nucleus towards the right edge of the IU.

The obtained data were statistically analysed by the SPSS software package (IBM, v.20). Upon testing the normality of data distribution, non-parametric tests were applied: Spearman's rank correlations for the relatedness of variables, Kruskal-Wallis tests to compare the means of the phonetic parameters (tested variables) in different nuclear tones (the grouping variable), and Mann-Whitney U tests to compare variable means in pairs. Standard deviations (SD) were reported where relevant.

4. Results

With respect to *tonality*, i.e. how the participants structured their speech into IUs, the analysis showed that a relatively big corpus of spontaneous speech yielded a notably small number of complete and analysable IUs, confirming Cruttenden's observation (1997: 29) that in natural conditions spontaneous speech is commonly characterized by abundant hesitations,

interruptions, false beginnings, self-corrections, repetitions, and, in fact, a very small proportion of complete and uninterrupted sentences. Of the complete IUs, 75% came from students' talks, and 25% from the discussions; all the complete IUs were part of declarative statements, 80 (63 %) IUs occurring in sentence-final positions, and 47 (37%) as sentence-internal (continuing). Male and female participants contributed relatively equally, with 54% IUs produced by female and 46% by male participants. The complete IUs contained from 2 to 8 words (average 4.26).

Regarding *tonicity*, in the analysed IUs, the nuclear accent was placed on the last stressed syllable in a vast majority of cases, in 97% of IUs, while only in 4 (3%) IUs the nucleus was on the penultimate stressed word (*gender pay-gap in Hollywood; and he managed to make 82 million; and general adaptation for the long term; carry a positive connotation*). The words bearing the nuclear accent varied in their syllable structure: in 24% of the IUs there were no post-nuclear syllables, in 43% the nucleus was followed by one syllable, in 30% by two syllables, in 3% there were three or four post-nuclear syllables, and only one IU (cited above) had 6 syllables following the nuclear one.

Finally, with respect to *tone*, the overall falling pitch contour was found in 78% and rising movement in 22% of the IUs. Of the falling nuclear accents, 61% were found in sentence-final IUs, but as many as 39 % in sentence-internal IUs. Of the rising nuclear accents, only 30% were found sentence-internally, and as many as 70% in undoubtedly sentence-final positions. To further explore the possible relatedness of nuclear accent realization as a rise or a fall and the structural context in which the nucleus occurred, the IUs were re-coded for further statistical analysis into four types of nuclear tone realizations (cf, the examples in the Appendix):

1. nuclear falls in sentence-final IUs,
2. nuclear falls in continuative IUs,
3. nuclear rises in continuative IUs, and
4. nuclear rises in sentence-final IUs.

Then the measured acoustic properties were compared for these four nuclear types to explore possible differences in their phonetic realization. Also, the variables of post-nuclear syllable number, tone alignment, and type of discourse (talk or discussion) were included in further statistical analysis as potentially relevant for the realization of these four types of nuclear pitch contours.

4.1. Nuclear accent realizations: Final and continuative falls and rises

Correlations were found between the four nuclear accent types and almost all of the measured parameters (all $p < .000$) – strong for the F0 maximum ($r_s = .658^{**}$), minimum ($r_s = .618^{**}$), and mean ($r_s = .674^{**}$), moderate for the pitch range in ST ($r_s = -.352^{**}$), and the pitch slope ($r_s = -.245^{**}$), and weaker for intensity maximum ($r_s = .188^*$) and mean ($r_s = .275^{**}$), indicating that all these parameters were different in the four nuclear realizations. A strong correlation was also found for tone alignment ($r_s = .507^{**}$, $p < .000$), and a somewhat weaker one for the duration of the pitch movement ($r_s = -.208^*$, $p < .019$), but not for the type of discourse or the number of post-nuclear syllables. Since the four types of nuclear realizations were assigned nominal values that increased from final falls, via continuation falls and continuation rises to sentence-final rises, the positive correlations suggested, for instance, that rising nuclear tones could have higher F0 values, and a later alignment. Conversely, the negative correlation indicated that the duration of the pitch movement could be shorter in rises than in falls.

Therefore, the four nuclear accent types were compared (Kruskal-Wallis test) for their mean values of the measured acoustic properties. Statistically significant differences were found for the F0 maximum, minimum, and mean, the pitch range and pitch slope, and for the intensity maximum, minimum and mean, while pitch movement duration only approached statistical significance. This is summed up in Table 2, which shows the Chi-square for these variables. The means and standard deviations (with confidence intervals) for all the measured parameters in the four different nuclear accent realizations are shown in Table 3.

	F0			Range		Slope		Intensity		
	Max	Min	Mean	Hz	ST	Dur.	ST/s	Max	Min	Mean
Chi-Square	56.56	63.46	57.87	54.49	61.06	7.50	65.12	14.70	10.74	20.93
df	3	3	3	3	3	3	3	3	3	3
Asymp. Sig.	.000	.000	.000	.000	.000	.058	.000	.002	.013	.000
a. Kruskal Wallis Test										
b. Grouping Variable: NUC type										

Table 2. Means comparison (Kruskal-Wallis) for the pitch and intensity variables in the four types of nuclear accent realizations

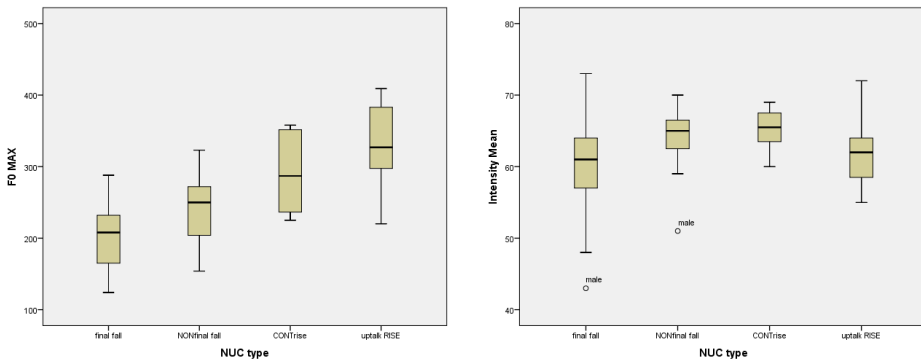
The comparison of mean values showed two different patterns. On the one hand, the mean values of F0 maximum and mean were higher in the rising than in the falling tones irrespective of the structural position they occurred in. This is illustrated in Graph 1 – Left, which shows boxplots of normality for F0 maximum. On the other hand, both continuation contours had higher mean values for F0 minimum than both final contours, irrespective of the pitch movement direction. Intensity means showed a similar pattern – a noticeable drop in intensity accompanied both final contours, irrespective of the movement direction, while both continuation contours kept higher intensity parameters. This is illustrated in Graph 1 – Right, which shows boxplots of normality distribution for Intensity maximum.

		Mean	Std. Dev.	95% Confidence Interval for Mean	
				Lower Bound	Upper Bound
F0 Max	Final fall	199.89	44.44	188.50	211.27
	Cont. fall	241.03	41.87	227.45	254.60
	Cont. rise	291.63	56.61	244.29	338.96
	Final rise	331.00	56.50	303.77	358.23

F0 Min	Final fall	85.33	35.08	76.34	94.31
	Cont. fall	175.62	43.92	161.38	189.85
	Cont. rise	163.38	26.09	141.57	185.18
	Final rise	155.68	54.19	129.57	181.80
F0 Mean	Final fall	149.48	36.76	140.06	158.89
	Cont. fall	206.38	40.15	193.37	219.40
	Cont. rise	227.25	41.69	192.40	262.10
	Final rise	248.00	54.76	221.61	274.39
Range Hz	Final fall	115.70	43.34	104.60	126.81
	Cont. fall	65.41	27.44	56.51	74.31
	Cont. rise	128.25	45.93	89.85	166.65
	Final rise	175.32	63.23	144.84	205.79
Range ST	Final fall	15.50	5.50	14.09	16.91
	Cont. fall	5.85	3.33	4.77	6.93
	Cont. rise	9.95	2.93	7.50	12.40
	Final rise	13.96	6.52	10.82	17.10
Duration of pitch movement	Final fall	.399	.148	.361	.437
	Cont. fall	.380	.114	.343	.417
	Cont. rise	.345	.074	.283	.406
	Final rise	.316	.127	.255	.378

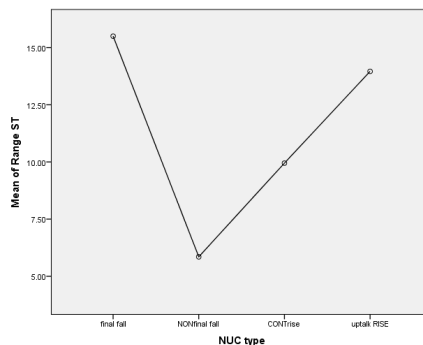
Slope ST/sec.	Final fall	42.53	19.84	37.45	47.61
	Cont. fall	15.56	8.12	12.93	18.19
	Cont. rise	29.19	7.94	22.55	35.83
	Final rise	46.34	18.93	37.22	55.47
Intensity Max	Final fall	64.61	6.75	62.88	66.33
	Cont. fall	68.90	3.58	67.74	70.06
	Cont. rise	68.50	2.67	66.27	70.73
	Final rise	67.11	9.24	62.65	71.56
Intensity Min	Final fall	48.92	7.59	46.98	50.86
	Cont. fall	51.92	6.26	49.89	53.95
	Cont. rise	55.75	7.59	49.40	62.10
	Final rise	48.21	4.67	45.96	50.46
Intensity Mean	Final fall	59.97	6.05	58.42	61.52
	Cont. fall	64.23	3.45	63.11	65.35
	Cont. rise	65.25	3.01	62.73	67.77
	Final rise	62.00	4.40	59.88	64.12

Table 3. Means of the measured phonetic parameters in the four types of nuclear accent realizations

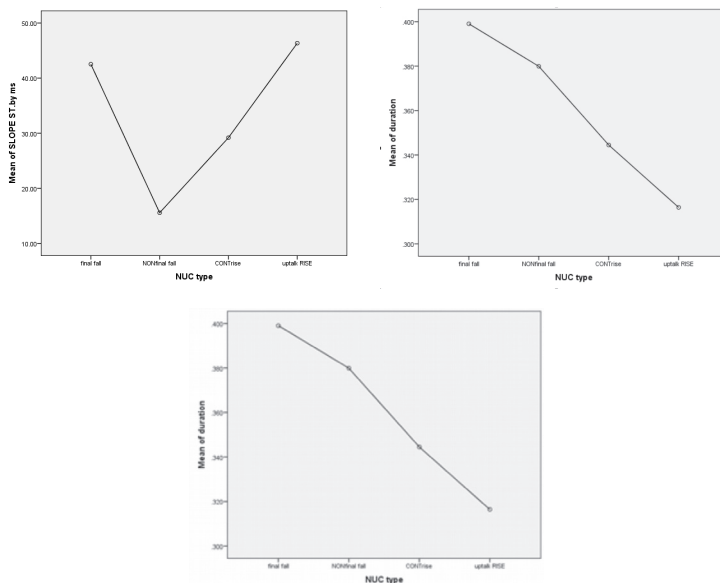


Graph 1. Left: Normality boxplots of the parameters FO maximum for the four types of nuclear accent realizations; Right – Normality boxplots of Intensity mean

The mean pitch range in ST was also notably wider in both final contours, whether falling or rising, and remarkably narrower in both continuation contours, particularly in continuation falls. This is illustrated by Graph 2, which shows the plotted means of the pitch range in ST. It should also be noted that the pitch range difference between the means of final falls and final rises was much smaller than 3 ST, and thus irrelevant (Nootboom 1997: 645). The pitch slope was also notably steeper in both final contours and shallower in both continuation contours, with continuation falls showing the ‘mildest’ and the shallowest pitch contour. This is illustrated in Graph 3 – Left, which shows the plotted means of the pitch slope in the four types of nuclear accent realizations.



Graph 2. Plotted means of the nuclear pitch range in ST in four nuclear accent realizations



Graph 3. Left: Plotted means of the pitch slope in the four types of nuclear accent realizations; Right: Plotted means of the nuclear pitch movement duration in the four types of nuclear accent realizations

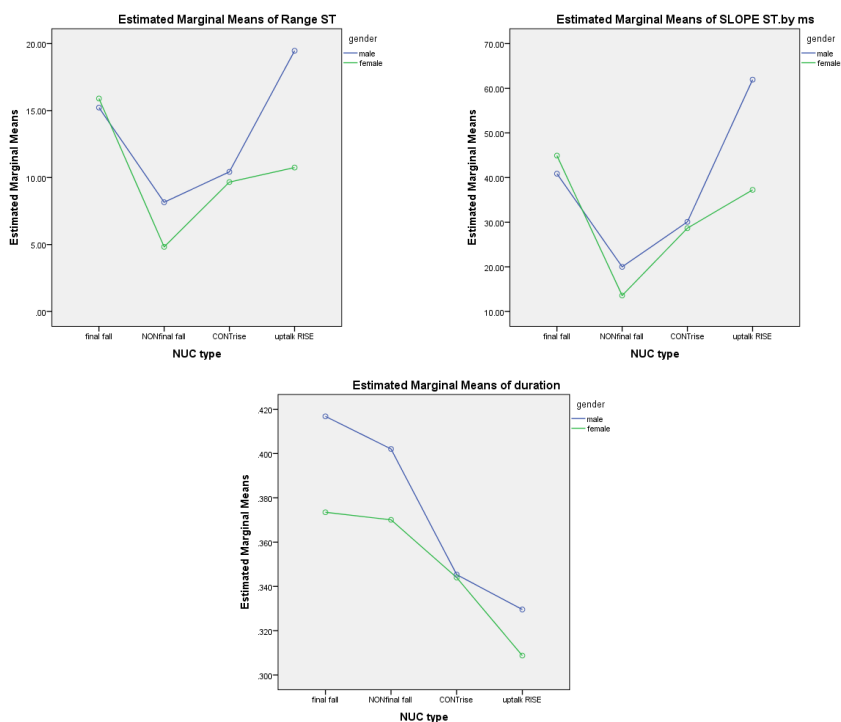
However, the parameter of pitch movement duration, like F0 maximum, was more sensitive to the nuclear pitch movement direction than to the structural position. Although this parameter did not show a clear statistical significance, means and mean ranks comparisons suggested that falling contours – whether final or not – had a longer duration, while the pitch movement in the rises was shorter. Still, the structural position did show some influence, since continuation falls were shorter than final falls, and continuation rises were not as short as final rises, which were the shortest. This is illustrated in Graph 2 – Right, which shows the means of the nuclear pitch movement duration in the four types of nuclear accent realizations.

This observation is further supported by the finding that final rises were more commonly preceded by a falling portion of the nuclear tone before the rise. Of the IUs with the post-nuclear (immediate or late) onset of the primary tone movement (18% of all the IUs analysed), 97% were found in rising contours, and 70% of these were actually in sentence-final IUs. Additionally, the duration of the falling component preceding

the nuclear rise was longer in final rises (mean=.138sec, StD=.107) than in continuation rises (mean=.111sec, StD=.088). This was partially supported by the Mann-Whitney comparison of continuing and final nuclear rises. Although statistically significant differences were found between them only for the intensity parameters ($p < .050$) and the pitch slope ($p < .019$), the mean rank comparisons did indicate that in addition to having higher F0 maximum and mean, a lower F0 minimum, a wider pitch range, a shorter duration and a steeper slope, the final nuclear rises also had a longer duration of the falling portion of the nuclear contour before the rise, compared to continuation rises.

4.2. Gender differences and similarities

Overall, female participants produced more rising nuclear tones than male participants. While the distribution of falling tones was balanced (52% by female and 48% by male speakers), of the IUs with rising nuclear accents 63% were produced by female and 37% by male participants. In addition, a significant correlation was found between the type of nucleus and gender ($r_s = .226^*$, $p < .011$), suggesting that the four nuclear contours were not realized in the same way by female and male participants. Indeed, mean rank comparisons (Mann-Whitney U test) for the variable of gender showed significant differences (all $p = .000$) between female and male participants in the values of F0 maximum, minimum and mean (higher with females), the nuclear pitch range in ST (surprisingly, wider in male participants), and the steepness of the pitch slope (steeper with males).



Graph 4. Estimated marginal means compared in female and male participants for: Upper Left – Pitch range in ST; Upper Right – Pitch slope; Lower Central – The duration of the nuclear pitch movement

However, despite these differences, the comparison of correlation coefficients across genders showed that within either group the same variables correlated with the four nuclear categories, suggesting that both male and female participants produced the four different nuclear tone realizations with specific phonetic properties.

This interpretation was also supported by the Two-way between-groups (Univariate) analysis of variance, which indeed showed some interaction of the variables of gender and nucleus type, but still showed the main influence of the type of nuclear pitch realization, i.e. that both male and female participants distinguished between the four different types of nuclear pitch contours. This is illustrated in Graph 4, which shows the estimated marginal means for female and male participants in the four types of nuclear contours for the pitch range in ST (upper left), pitch slope

(upper right), and the duration of pitch movement (lower central). The interaction of the two variables is obvious, but the patterns of distinguishing between the four nuclear pitch contours are still generally similar in male and female participants.

5. Discussion

The presented results show that this corpus of spontaneous speech shared some characteristics with EFL students' oral performance described in previous research, but it also showed some peculiar properties.

Concerning *tonality*, the main characteristic of the corpus was a disproportionally small number of complete IUs, and a great number of interruptions, hesitations, repetitions and incomplete structures, even though the participants talked on well-researched and familiar topics. Similar findings were reported in Paunović (2015) for the task involving semi-spontaneous speech: long pauses, hesitations, filled pauses, and broken pitch contours. This is described as a common property of spontaneous speech in general (Cruttenden 1997), but in the present study it might have been enhanced by the stress and anxiety that commonly accompany students' oral performance in formal educational contexts. Therefore, further research should also focus on EFL students' spontaneous production in more relaxed communicative situations, where their interlanguage intonation may show different tonality properties.

With respect to *tonicity*, in line with the findings of some previous research (e.g. Ramirez-Vergugo 2002, 2006), an important property of the participants' spontaneous speech was that nuclear pitch accents were almost invariably located in the default nuclear position, with just a few exceptions. This could be ascribed to the expository and informative nature of the discourse produced, so further research should focus on more interactive and conversational communicative situations that would elicit other types of discourse, too.

Concerning *tone*, i.e. the melodic realisation of the nuclear accents, our EFL participants did not comply with the traditional expectation of associating falling contours with 'closed' ('non-continuative') and rising contours with 'open' ('continuative') meanings (Cruttenden 1997: 163). They produced both falling and rising nuclear tones in both types of structural contexts, final and non-final, but with different pitch contours.

These findings differ from Marković (2011), where Serbian EFL speakers signalled continuation mainly by rising tones at the right IU boundary, and also from Paunović (2015), where continuation was signalled mostly by rising tones, too. However, they are partly similar to the findings in Paunović and Savić (2008: 71), where EFL speakers used falling tones for finality, or flat tones with a low key, and used moderate rises or slight falls for continuation.

An important finding in this study was that some of the phonetic parameters were more closely related to the direction of pitch movement, while others were more sensitive to the structural context in which the nuclear tone was realized. The parameters more closely linked to pitch direction included: the *pitch height*, since both continuing and final rises reached higher F0 maxima than both falls; the *duration of pitch movement*, as both rises were shorter than falls; and *tone alignment*, since it was later for rises than for falls. The parameters that showed more context sensitivity included: *intensity*, since final contours had lower intensity irrespective of pitch direction; the *F0 minimum*, since both final contours involved lower pitch minima than either of the continuing contours; the *pitch range in ST*, since it was wider in both final nuclear contours; and the *pitch slope*, which in both final rises and falls was steeper than in either of the continuing contours.

Another important finding was the fact that the nuclear pitch range, especially in sentence-final IUs, was not nearly as narrow as reported in previous research. For instance, Busà and Urbani (2011: 381), Komar (2005), Mennen et al (2012), and Kainada and Lengeris (2015) all point out that their participants' pitch range in L2 English was notably narrower than L1 English speakers'. With Serbian EFL speakers, a narrow pitch range was frequently reported, too (Marković 2011; Nikolić 2019; Paunović and Savić 2008; Paunović 2019).

However, a comparison of the nuclear pitch range (in ST) observed in the present study to some previous findings with Serbian EFL speakers shows important differences. For instance, Paunović (2013) found that the highest nuclear pitch range mean was 8.0 ST (in discourse-topic initial IUs), followed by 7.4 ST (in topic-final IUs). Similarly, in Paunović (2019), the widest mean pitch span (realized on the nuclear *and* post-nuclear syllable) was 9.9 ST (in contrastive-focus IUs), followed by 8.9 ST (in narrow-focus IUs) and 6.2 ST (in broad-focus IUs). In both these studies, the nuclear tones investigated were falls, and both studies used reading

tasks for elicitation. In Paunović (forthcoming), rising nuclear contours were investigated, with an elicitation task that involved pre-rehearsed (semi-spontaneous) speech, and the widest mean pitch range observed was 8.3 ST. Compared to all these findings, the mean values of the nuclear pitch range in the present study were indeed remarkably higher, especially in the sentence-final IUs – 15.50 ST for final falls and 13.96 ST for final rises. Even the mean value of the pitch range in continuation rises (9.95 ST) in the present study was, if not higher, then at least on a par with the means reported by previous studies, for instance, in discourse-topic initial IUs (Paunović 2013) and even under contrastive stress Paunović (2019).

This finding is important because it suggests that the narrower pitch range observed in the oral production of EFL speakers in much previous research might have resulted from the type of elicitation task – it might have reflected the properties of the participants' *reading skill* rather than those of their interlanguage intonation. If the EFL speakers in the present study produced notably wider nuclear pitch ranges even in expository and informative spontaneous speech, it could be expected that they may produce even wider pitch ranges in more conversational and interactional communicative situations, so this is an important direction for further research.

Summing up the phonetic properties of the four types of nuclear contour realizations, it can be said that the final falls were characterized by the lowest pitch – maximum, mean, and, particularly minimum – and that they often ended in a creak (in over 30% of occurrences), as also observed in several previous studies (Nikolić 2019; Paunović 2015). Continuative falls had the narrowest pitch range and the mildest or shallowest pitch slope.

Continuative rises started with a moderate onset (F0 minimum), not as low as the onset of final rises, and reached a notably narrower pitch range than final rises. Their slope was moderate, too, about 60% of the final rise slope, and about twice as steep as that of continuation falls.

Finally, the rises that were used in sentence-final IUs exhibited very peculiar properties – they reached the highest F0 maximum, had a wide pitch range, and – due to their shortest duration – also had the steepest slope of all the nuclear contours. The onset of the final rise was characterized by late alignment much more often than any other nuclear contour, and was preceded by a fall more often than continuation rises, with a longer duration of this fall.

This kind of rising nuclear contour, found in sentence-final structural contexts, was not reported in previous studies in which reading elicitation

tasks were used, which indicates that this rising contour is typical of spontaneous speech rather than other kinds of oral production. Only the studies that involved semi-spontaneous speech (e.g. Paunović 2015) found that rises were used 'instead of falls' in the sentence-final contexts, but described them as 'inappropriate' (Paunović 2015:82), echoing the frequently expressed view that final falls indicate certainty and authority while rises voice uncertainty and deference (cf. Ramirez-Verdugo 2002: 120; Hirschberg 2002). However, in a more recent study (Paunović, forthcoming), the rising pitch contours found in declarative-sentence final IUs (referred to as *uptalk*) are described as a distinct finality signal, deliberately used by the EFL students in pre-rehearsed semi-spontaneous speech, and different from continuation-signalling rises. Uptalk rises exhibited distinct phonetic properties – a large pitch excursion, a steep rise slope, and a high rise peak (Paunović, forthcoming), much like the nuclear rising contours found in the sentence-final IUs in the present study. This finding is very important, because it points to a possible development of a novel prosodic device in EFL students' intonation in spontaneous speech, which undoubtedly requires much further research.

6. Conclusion

The prosody of spontaneous speech is not widely researched, for several reasons. They include not only technical difficulties and ethical concerns, but also methodological problems with analysing spontaneous speech corpora. In the present study, the rather traditional concepts of tonality, tonicity and tone provided a very useful framework for analysis, facilitating the description and classification of the observed characteristics of EFL students' intonation in spontaneous speech. The findings showed that EFL students' speech exhibited specific properties at all the three levels. The most important ones included abundant disruptions at the level of tonality, a preference for the default nuclear position at the level of tonicity, and a number of specific properties at the level of tone realization. An important tone property was a wider nuclear pitch range than in other kinds of oral production; another was the use of four distinct nuclear pitch contours, resulting from the interaction of pitch movement direction – falling, rising – and the structural contexts in which the nuclear accents were realized – final or non-final. Each of these nuclear contours was characterized by

a distinct combination of the phonetic properties of pitch height, range, slope, alignment, duration and intensity.

This study was limited to a specific type of discourse (expository, informative), a rather careful speech style, and a small number of participants, and these limitations clearly highlight the necessary lines of further research. It should include a broader variety of communicative situations and discourse types in which some different intonational properties of spontaneous speech may emerge. Lastly, a better insight into EFL students' spontaneous speech intonation would undoubtedly be offered by a comparative study of their L1 Serbian spontaneous speech.

References

- Boersma, P. and D. Weenink (2013). Praat: Doing phonetics by computer (Version 5.2.04, 1992–2010) [Computer software]. (11 November 2017) <<http://www.praat.org>>.
- Busà, G. M. and M. Urbani (2011). A cross-linguistic analysis of pitch range in English L1 and L2. In: W. S. Lee and E. Zee (eds.), *Proceedings of the 17th International Congress of Phonetic Sciences (ICPhS XVII)*, Hong Kong: University of Hong Kong, 380–383.
- Cruttenden, A. (1986¹, 1997²). *Intonation*. Cambridge: Cambridge University Press.
- Grabe, E. et al. (2001). Modelling intonational variation in English: The IViE system. In: S. Puppel and G. Demenko (eds.), *Prosody 2000*, Poznan: Adam Mickiewicz University, 51–57.
- Grice, M. and S. Bauman (2007). An introduction to intonation – functions and models. In: J. Trouvain and U. Gut (eds.), *Non-Native Prosody: Phonetic Description and Teaching Practice*, Berlin/New York: Mouton de Gruyter, 25–51.
- Halliday, M. A. K. (1967). *Intonation and grammar in British English*. The Hague: Mouton.
- Halliday, M. A. K. (1970). *A course in spoken English: Intonation*. London: Oxford University Press.
- Halliday, M. A. K. (1994). *An introduction to functional grammar*. London: Arnold.
- Hirschberg, J. (2002). The Pragmatics of Intonational Meaning. In: B. Bel and I. Marlien (eds.), *Proceedings of Speech Prosody 2002*, Aix-en-Provence Laboratoire Parole et Langage, Université de Provence, 65–68.

- Jensen, C. (2009). Prominence relations in British English – A contrastive perspective. *English Studies*, 90(1), 78–99.
- Joos, M. (1968). The isolation of styles. In: J. A. Fishman (ed.), *Readings in the Sociology of Language*. The Hague: Mouton, 185–191.
- Kainada, E. and A. Lengeris (2015). Native language influences on the production of second-language prosody. *Journal of the International Phonetic Association*, 45(3), 269–287.
- Komar, S. (2005). The impact of tones and pitch range on the expression of attitudes in Slovene speakers of English. In: *Proceedings of Phonetics Teaching and Learning Conference 2005 (PTLC)*, London: University College London, 1–4.
- Labov, W. (1972). The Isolation of Contextual Styles. In: W. Labov, *Sociolinguistic Patterns*, Philadelphia: University of Pennsylvania Press, 70–109.
- Llisterri, J. (1992). Speaking styles in speech research, *ELSNET/ESCA/SALT Workshop on Integrating Speech and Natural Language*. Dublin, Ireland, 15-17 July 1992. (3 October 2013) <http://liceu.uab.es/~joaquim/publicacions/SpeakingStyles_92.pdf>.
- Markham, D. and V. Hazan (2002). Speech, Hearing and Language: Work in progress. In: D. Markham and V. Hazan (eds.), *UCL Speaker database* (Vol. 14), London: UCL, 1–17.
- Marković, M. (2011). Acquiring second language prosody: Fundamental frequency. *English language and Anglophone literatures Today (ELALT)* (Novi Sad, 19 March 2011), 238–249. (14 August 2018) <http://elalt.info/elalt_I.pdf#page=238>.
- Mennen, I. (2007). Phonological and phonetic influences in non-native Intonation. In: J. Trouvain and U. Gut (eds.), *Non-Native Prosody: Phonetic Description and Teaching Practice*, Berlin/New York: Mouton de Gruyter, 53–76.
- Mennen, I. et al. (2012). Cross-language difference in f0 range: a comparative study of English and German. *Journal of the Acoustical Society of America*, 131(3), 2249–2260.
- Nikolić, D. (2019). Tone and Break Index (TOBI) theoretical framework applications with EFL speakers. Presented at the Conference *Language, Literature, Theory*, April 2019, Faculty of Philosophy, University of Niš, Serbia. (21 September 2019) <https://www.researchgate.net/publication/332707667_Dusan_Nikolic-JKT2018-TONE_AND_

BREAK-INDEX_TOBI_THEORETICAL_FRAMEWORK_APPLICATIONS_WITH_EFL_SPEAKERS>.

- Nooteboom, S. (1997). The prosody of speech: melody and rhythm. *The Handbook of Phonetic Sciences*, 5, 640–673. (22 January 2011) <<https://www.phil.uu.nl/tst/2012/Werk/PROSTEM.pdf>>.
- Paunović, T. (2013). Beginnings, endings, and the in-betweens: Prosodic signals of discourse topic in English and Serbian. In: B. Čubrović and T. Paunović (eds.), *Focus on English Phonetics*, Newcastle: Cambridge Scholars, 191–213.
- Paunović, T. (2015). Pitch height and pitch range in Serbian EFL students' reading and speaking tasks. *Nasledje*, 32, 73–95.
- Paunović, T. (2019). Focus on focus: Prosodic signals of utterance-level information structure in L1 Serbian, L1 English, and Serbian L2 English. *Zbornik Matice srpske za filologiju i lingvistiku*, LXII/2, 213–238.
- Paunović, T. (forthcoming). The elephant in the room: *Uptalk* in EFL Students' Classroom Speech. Under review.
- Paunović, T. and M. Savić (2008). Discourse intonation-Making it work. *ELOPE: English Language Overseas Perspectives and Enquiries*, 5(1–2), 57–75.
- Ramirez Verdugo, D. (2002). Non-native interlanguage intonation systems. A study based on a computerized corpus of Spanish learners of English. *ICAME Journal*, 26, 115–32.
- Ramirez Verdugo, D. (2006). Prosodic realization of focus in the discourse of Spanish learners and English native speakers. *Estudios Ingleses de la Universidad Complutense*, Vol. 14, 9–32.
- Ramirez Verdugo, D. and J. R. Trillo (2005). The pragmatic function of intonation in L2 discourse: English tag questions used by Spanish speakers. *Intercultural Pragmatics*, 2(2), 151–168.
- Toivanen, J. (2003). Tone choice in the English intonation of proficient non-native speakers. *Phonum*, 9, 165–168.
- Toivanen, J. and T. Waaramaa (2005). Tone choice and voice quality of dispreferred turns in the English of Finns. *Logopedics Phoniatrics Vocology*, 30(3–4), 181–184.
- Wells, J. C. (2006). *English Intonation: An Introduction*. Cambridge: Cambridge University Press.

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Appendix

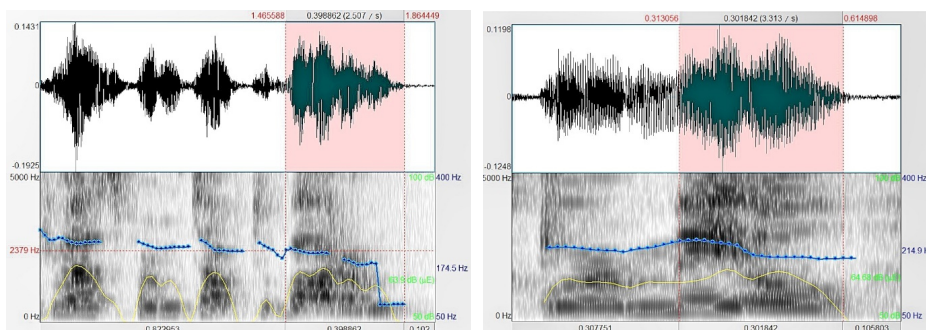


Figure 1. Left: Spectrogram of the IU [*dressed from top to bottom.*] illustrating a final fall by a female speaker. Right – Spectrogram of the IU [*you're male,*] illustrating a continuation fall by a female speaker. The words bearing the nuclear accent are highlighted.

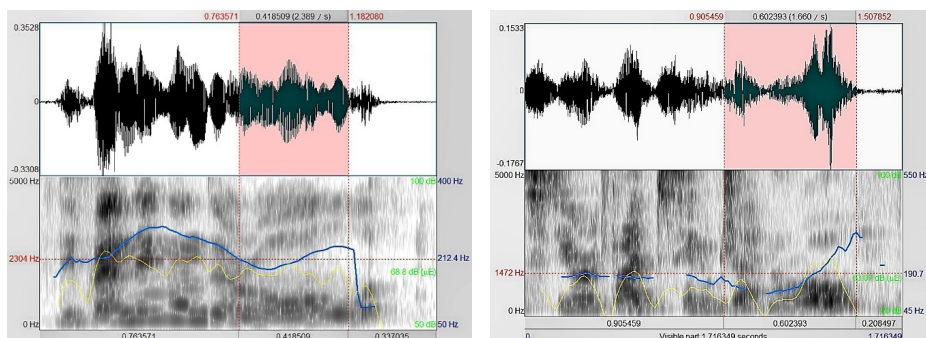


Figure 2. Left: Spectrogram of the IU [*depending on the role, <er>*] illustrating a continuation rise by a female speaker. Right: Spectrogram of the IU [*stereotypes in general.*] illustrating a final rise by a male speaker. The words bearing the nuclear accent are highlighted.

Татјана Пауновић

ТОНАЛНОСТ, ТОНИЧНОСТ, ТОН: ИНТОНАЦИЈА У СПОНТАНОМ ГОВОРУ СТУДЕНАТА ЕНГЛЕСКОГ КАО СТРАНОГ ЈЕЗИКА

Сажетак

У овом раду представљена је квантитативна и акустичка анализа корпуса спонтаног говора српских студената енглеског као страног језика, у погледу: организације интонацијских целина (тоналност), избора нуклеуса (тонићност), и реализације нуклеарних тонских контура (тон). Резултати су показали да, у домену тоналности, спонтани говор испитаника карактеришу испрекиданост, застоји и бројне паузе, као и релативно мали број комплетних и завршених интонацијских целина. У домену тонићности, нуклеус се, готово без изузетка, налазио у подразумеваној (дифолт) позицији, на последњем наглашеном слогу интонацијске целине. У домену реализације тона, различите тонске контуре реализоване су у две кључне позиције – у интонацијским целинама које се налазе на крају реченице, и онима унутар реченице. У обе ове структурне позиције испитаници су користили како силазне тако и узлазне тонске контуре, али су се оне битно разликовале по акустичким својствима. Сви кључни фонетски параметри – висина тона, тонски опсег, нагиб кретања тона, поравнање тона, као и трајање и интензитет – показали су се значајним за сигнализирање интонацијских дистинкција.

Кључне речи: српски ученици енглеског као страног језика, нуклеарне тонске контуре, спонтани говор, тоналност, тонићност, тон

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ACQUISITION OF ENGLISH PITCH CONTOURS IN SERBIAN SPEAKERS OF ENGLISH

Abstract

This paper deals with the production of English intonation phrases (IPs) and the common deviations in pitch contours in a group of sixty-eight L2 speakers of English. Five English nuclear types with varying prenuclear patterns are explored (High-Fall (HF), Low-Fall (LF), Low-Rise (LR), Fall-Rise (FR) and Rise-Fall (RF)) and evaluated auditorily. Acoustic analysis identified the common errors in L2 English intonation contours and accounted for some of the underlying reasons. Serbian speakers of English devoid English intonation phrases of their characteristic extensive pitch modulations that define the L1 English intonation. This is manifested as the following: flattening of the high head or high prehead (LF, LR), levelling of the rising tail (LR, FR), and difficulty producing multiple pitch dives and pitch climbs in a single intonation phrase. Pitch modulations are easier to produce on a single syllable than on a string of syllables (FR).

Key words: English intonation phrase, pitch contour, pitch modulation, Serbian EFL learners, L2 prosodic errors

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1. Introduction

Even though prosody is one of the first components of language acquired by children during L1 acquisition, we still need to gain a deeper understanding as to how both L1 and L2 prosodic systems are developed, realized and manifested. L2 prosody researchers have been making strides in the right direction recently, as linguists keep pointing out the importance of variations in pitch, duration, and intensity that are used to express both linguistic and attitudinal meanings. If phonetics and pronunciation have been the Cinderella of linguistics, then intonation assumes the role of the Cinderella of phonetics. Chun (2002: 82–83) duly points out:

If our goals in teaching pronunciation are that students attain “near-native” and “socially acceptable” pronunciation, however, then teaching suprasegmentals (stress, rhythm and intonation) will be an important complement to the teaching of segmentals (the consonants and vowels of old-style pronunciation teaching).

This paper deals with the acquisition of English intonation phrases from the perspective of Serbian EFL speakers. More specifically, it will look into the most common errors in intonation contours, both nuclear and prenuclear, in the case of advanced EFL speakers of English, all first-year students of English Department, Faculty of Philology, University of Belgrade.

2. Previous research

Errors and deviations from English L1 prosody observed in the production of English intonation of L2 speakers of different language backgrounds appear similar in prosodic research studies. In order to enable cross-linguistic comparisons of intonation, Mennen (2015) has more recently proposed *L2 Intonation Learning Theory* (LILt), that is built on Ladd (1996). Mennen (2015: 173) recognizes four dimensions in her theoretical framework: ‘systemic’, ‘realizational’, ‘semantic’ and ‘frequency’. The systemic (or phonological) dimension concerns “typological similarities or differences in the inventory of structural phonological elements (such as pitch accents, accentual phrases, prosodic words and boundary phenomena” (Mennen 2015: 174), and accounts for how such elements are utilized systemically

and how they are combined in any given language. The realizational or phonetic dimension outlines how phonological elements of intonation are realized phonetically, e.g. the shape or slope in a rising tone – whether it is shallow or steep, or alignment of tones with segments in utterances. Next, the semantic dimension deals with the meaning conveyed by using a pitch contour. Finally, Mennen (2015: 175) proposes a new dimension that is termed the ‘frequency dimension’ that looks at the “similarities and differences in the frequency of use of the language’s inventory and distribution of intonation primitives.” One such example is provided by Nayan and Setter (2016: 295), who claim that a fall and a fall-rise are the two basic and most frequently used tones in Southern British Standard (SBS).

The English intonation system is characterized by refined pitch contrasts. Various linguistic aspects of pitch change seem perceptually relevant for L1 speakers of English: direction of pitch change (a rise, a fall, a fall-rise, as the most common nuclear tones), the range of pitch change (especially within the head, i.e. the difference between high and low levels), but also the promptness of pitch change (abrupt or gradual change in the transition from one element of an IP to another). All these aspects co-occur in English IPs so as to relay both linguistic information and attitudinal meaning. Some prosodic studies of L2 intonation of English demonstrate that neglecting pitch contrasts may bring about monotony in L2 (Mitrofanova 2012: 290). I will now provide an overview of intonation studies of English as L2 and discuss the most relevant areas of prosodic research.

English intonation has often been studied from a cross-linguistic perspective, offering insight into the unknown territories of L2 prosody. It has been shown that various groups of L2 speakers of English speak this language employing a narrower pitch range compared to L1 speakers of English (Backman 1979; Jenner 1976; Komar 2005a, 2005b; Mennen et al. 2007; Busà and Urbani 2011). Mennen (2007: 64) claims that there is “strong anecdotal evidence that people perceive differences between for example English and German – with English sounding higher and having more pitch variation than German (which is believed to be spoken with a relatively low and flat pitch).”

Backman (1979) investigates the errors in intonation contours of Venezuelan Spanish male speakers with American control speakers in several sentence types such as yes/no questions, wh-questions, and declaratives. The study shows that Spanish EFL speakers have most difficulty with the

following aspects of English prosody: pitch range is too narrow, prominence placement occurs too far to the left, and unstressed syllables are realized too low (Backman 1979: 239).

Jenner (1976: 182) studies the interlanguage of Dutch speakers of English and concludes that “the overall maximum pitch range appears to be narrower in Dutch than in English.” Perceptually, an interlanguage speaker sounds “ ‘dull’ and ‘subdued’ ” (Jenner 1976: 186) and their attitudinal meaning seems obscured.

More recent studies show that various groups of L2 speakers of English have a narrower pitch range and less pitch variation. To this aim, Komar (2005a, 2005b) finds that the falling tones are produced in a much narrower pitch range in Slovene speakers of English, compared to L1 speakers of English. Mennen et al. (2007) studies the pitch ranges of German speakers of English only to find evidence for a wider pitch span, but not pitch level in L1 speakers of English; Busà and Urbani (2011: 383) investigate the speech sample of Italian speakers of English in comparison to L1 speakers of American English and find that Italian speakers have “overall higher pitch levels and narrower ranges than those produced by the Americans. In addition, the Italians’ pitch shows overall less variation than the Americans’ ”. Paunović (2015: 73) investigates the intonation features of English in Serbian L2 speakers and finds that her study participants use “a narrower, mid-level pitch range in speaking, as well as inappropriate, rising pitch contours.”

Alignment, as a temporal relation within the string of segments in an IP (Mennen 2007: 57) is another relevant parameter. L1 temporal prosodic patterns or misalignment of peaks and valleys in the production of L2 English intonation present themselves as a frequent source of phonetic error in L2 prosody. Mennen (2007: 59–60) elaborates on examples given in Backman (1979) and ascribes some errors of Venezuelan Spanish speakers to temporal misalignment:

visual inspection of some of the sample contours presented in her paper, suggests that the Spanish learners tend to have an earlier alignment of rise-falls in their L2 American English. In their utterances the F0 reaches its peak very early (*before* the accented syllable), and falls just before and during the beginning of the accented syllable. This may have caused the American judges to conclude that the stress was placed incorrectly (too early), since Americans would expect the falling pitch to occur much later.

Incorrect pitch movement may result in L2 intonation sounding unnatural. Examples of pitch contours given in Mennen (2015: 174) best describe this phenomenon: shape or slope of pitch accents may vary – “shallow or steep rising or falling pitch accents, pitch accents with a clear peak versus flat or plateau pitch accents.”

The attitudinal meaning of intonation is another important aspect that may become blurred in L2 intonation due to the use of unusual pitch contours. O’Connor and Arnold (1973) offer sets of adjectives to describe the attitude of the speaker as part of their rich drill-oriented material. Hlebec (2010: 49) develops his own attitudinal system conveyed by intonation tunes used in English:

[...] the pitch of the nuclear tone tells of the speaker’s emotions, higher tones express those emotions that associate with higher temperature, such as excitement, while lower tones convey emotions that associate with lower temperature, such as, for example, caution.

Wells (2006: 216, 218) discusses general meanings of tones (falls are often associated with definitiveness), but they also have additional meanings (a high fall involves a greater degree of emotional involvement). All in all, a lower and less dramatic pitch used in L2 intonation contours implies a negative attitude, which may not have been intended by the speaker.

Recurrent prosodic issues revolving around L2 speakers of English are scalar in nature like a narrower pitch range, but are also reflected in misalignment of pitch peaks or valleys. Serbian speakers generally sound flat, which Paunović (2015) confirms. However, I would like to investigate further why this is the case by looking at most frequently used pitch contours in English as L2. To this aim, a total of 680 IPs were recorded and analyzed with the means of acoustic and auditory analysis.

3. Methodology

An oral assignment was given to sixty-eight first-year students of English Department, Faculty of Philology, University of Belgrade, enrolled in 2019/2020, where they were asked to record 10 anatomically different IPs in the form of 5 short dialogues (each turn had one IP). All informants

were registered for the English Phonetics 2 course, having had a semester of English Phonetics 1 (segmental articulatory phonetics) in the previous semester. English Phonetics 2 involves 30 hours of teaching, distributed into roughly three months, half of which are devoted to the basics of English intonation according to the tenets of the British School. The textbook used for extensive in-class and home practice is Wells (2006). Students had 60 minutes to practice and record the 10 IPs in a stress-free home setting. Each IP was fully annotated for intonation and was recorded twice by every student. Only the second attempt was evaluated. Imitations were judged by one listener, a trained phonetician, on a 10-point scale (1 being the lowest, and 10 the highest score). The evaluation included both the assessment of prenuclear and nuclear patterns.

All students had been given explicit instruction about pitch contours used in English for all the constituting elements of an IP (prehead, head, nucleus, and tail), and their attitudinal meanings in SBS. Students were familiarized with most pitch contours and were able to grasp the nature of scaling (pitch changes) and timing of the pitch trajectory in British intonation phrases. Practical exercises in class and at home were based on both auditory and visual feedback¹, the latter being proven to effectively help L2 learners improve prosodic aspects of English as L2 (Bot 1983; Estebas-Vilaplana 2017). Interlinear representations provided in Wells (2006) were implemented in class alongside with auditory input, which students readily accepted as a supplementary form of explanation. Furthermore, Praat (Boersma and Weenink 2020) pitch tracking tool was made available to students who wished to improve their English intonation.

4. Discussion

The production of five nuclear tones was tested in the oral assignment task: High-Fall (HF), Low-Fall (LF), Low-Rise (LR), Fall-Rise (FR) and Rise-Fall (RF), combined with other elements of an English IP. Judging from classroom experience, complex pitch contours, FR and RF, pose some difficulty for a Serbian EFL student in practice sessions. This hypothesis will be tested, alongside with the common prosodic errors of simple

¹ For a detailed overview of teaching prosody with the help of audio-visual feedback, see Chun 2002.

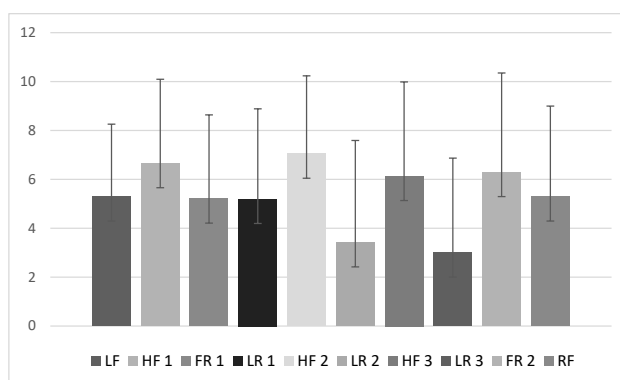
nuclear tones (HF, LF and LR). Descriptive statistics data will be provided first, followed by a detailed analysis of each individual intonation phrase recorded by students.

Table 1 displays mean values with standard deviations for the 10 IPs for 68 students who participated in the oral assignment task.

Nucleus	LF	HF 1	FR 1	LR 1	HF 2	LR 2	HF 3	LR 3	FR 2	RF
Mean grade	5.29	6.65	5.20	5.19	7.04	3.41	6.13	3.00	6.29	5.29
SD	2.96	3.43	3.42	3.68	3.18	4.17	3.85	3.86	4.05	3.70

Table 1. Mean scores for each IP with standard deviations

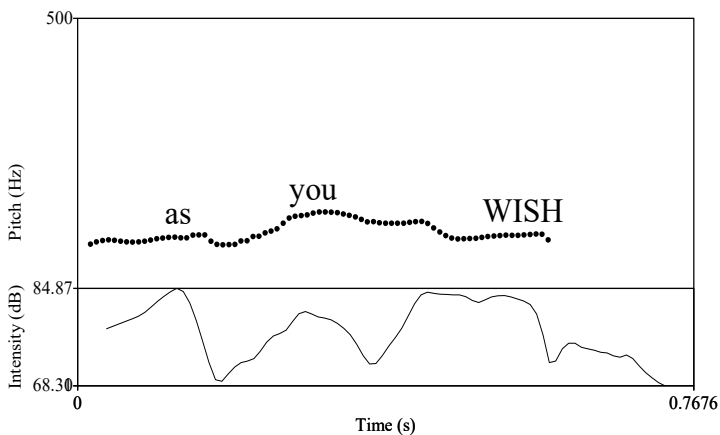
The same data is presented visually in Graph 1 below:



Graph 1. Mean scores for each IP with standard deviations

The success rate of the three IPs with high-falling nuclei came back the highest. Students were presented with varying prenuclear patterns before the high-falling nuclei: (1) low prehead + HF 1, (2) high head + HF 2, and (3) rising head + HF 3. Judging by the numerical results shown in Table 1, the more dramatic pitch movement in an IP, the lower the IP success rate in the production task. In other words, extensive modulations of pitch over a short period of time yielded lower scores. Thus, the success rate gradually decreased from HF 2 (7.04) to HF 1 (6.65) to HF 3 (6.13) with standard deviations typically very high for all three (3.18, 3.43 and 3.85, respectively).

On the other end of the spectrum, the production of the three low-rising nuclei IPs seemed most challenging for students. The IPs with LR nuclei had different prenuclear pitch contour scenarios: (1) high head + LR 1, (2) low head + LR 2, and (3) high prehead + LR 3. Descriptive statistics data implies similar assumptions as for the IPs with High-Falls. The most dramatic pitch jump described as scenario (3) above achieves most emphasis by combining the high prehead with a low-rising nucleus. The production score was the lowest in this case, 3.00 (SD 3.86). Following the hypothesis about the abrupt pitch changes that result in low production scores, scenario (2) should not raise difficulties due to a similar pitch level in the head and the nucleus. However, students produced this IP with a pitch contour that deviates from the given notation. A plausible explanation for this is that students analyzed this IP semantically and pronounced it using the prosodic habits of L1. Auditory analysis indicates that in these cases most students produced the IP with a mid-pitch *level* nuclear tone, rather than with a characteristic rise. Graph 2 shows an example of a relatively flat pitch contour throughout the IP, where the onset (beginning of head) is 'as', and the nucleus is capitalized (WISH)². The pitch floor is set to 100 Hz with the pitch ceiling at 500 Hz for this female speaker and is used consistently in all graphs below:

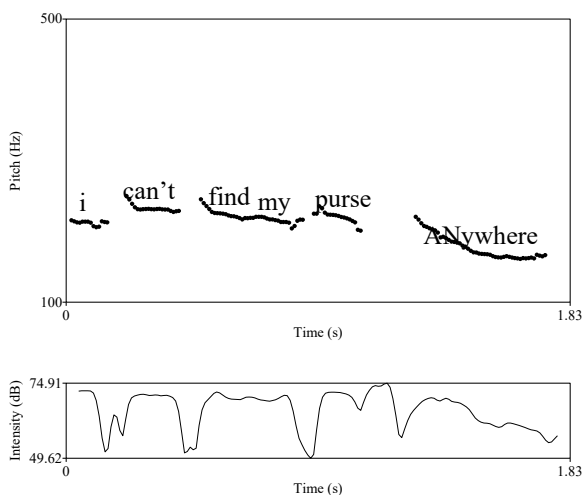


Graph 2. Pitch and intensity contours for LR 2, female speaker

² For greater emphasis, nuclear syllables are capitalized in all graphs.

The mean success rate for LR 2 is 3.41 with a very high standard deviation (4.17). Finally, students' production of LR 1 (high head + LR) rated highest with the mean score of 5.19 (SD 3.68). The success rate may be attributed to one of the prosodic universals that relates to the rising question intonation shared by both Serbian as L1 and English as L2. Santiago and Delais-Roussarie (2015: 245) argue that this universal rising intonation contour is "activated by speakers when they start learning and speaking a foreign language."

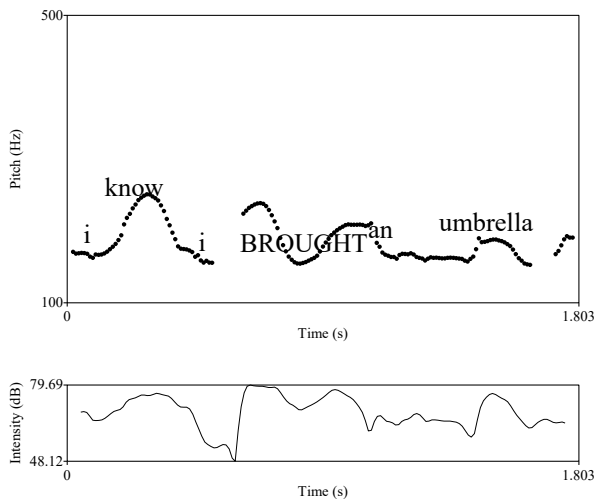
The IP with a low-falling nucleus yielded an unexpectedly low score, 5.29 (SD 2.96). A dramatic pitch fall from a high head to a low-falling nucleus in this IP created problems for students. A sample pitch contour in Graph 3 below shows the lag in the onset of a low tone necessary for the realization of the LF. Due to this delay, the low-falling nucleus is produced on a pitch higher than desirable, conveying a markedly different attitudinal meaning in English. This is shown in Graph 3. Furthermore, an absence of a significant pitch change from a low prehead (*I*) to the onset (*can't*) influences an inadequate L2 prosodic performance. The entire L2 pitch contour, lacking in abrupt pitch changes characteristic of SBS prosody, fails to convey the intended attitude.



Graph 3. Pitch and intensity contours for LF, female speaker

The fall-rise intonation contours are present in two IPs in the oral assessment task, and their mean scores are 5.20 (SD 3.42) and 6.29 (SD 4.05) for FR 1 and FR 2, respectively. Both IPs contain a low prehead, a characteristic falling head, and the FR nucleus. They differ in the realization of the FR nuclear tone by the number of syllables in the tail: (1) FR 1 + 4 syllables in the tail, and (2) FR 2 + zero syllable in the tail.

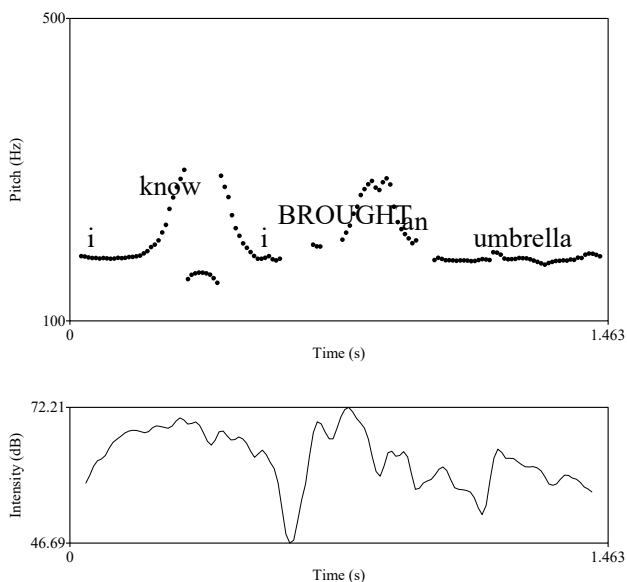
FR 1 productions show two error patterns in Serbian EFL speakers. Firstly, the fall-rise should not be realized exclusively on the nuclear syllable if there is a tail following. The pitch contour expected in such a case is described by Wells (2006: 23) as follows: “the rising part takes place towards the end of the tail and extends up to the last syllable of the IP.” The tail in FR 1 contains four syllables (*an um.brel.la*), and the rising part begins on the second syllable of *umbrella* (as was marked in the original task). However, the L2 FR contour is limited to the nuclear syllable, an example of which is displayed in Graph 4.



Graph 4. Pitch and intensity contours for FR 1, female speaker

Secondly, in some realizations of FR 1, the characteristic utterance-final rise in pitch is missing. This is clearly seen in the pitch contour given in Graph 5, which shows a relatively flat, low-level tail, in place of an intended rising tail. Verdugo (2006) points to a similar overuse of a falling contour (instead of rising and fall-rising tones) in Spanish speakers of English, especially before intonation training. Serbian speakers similarly

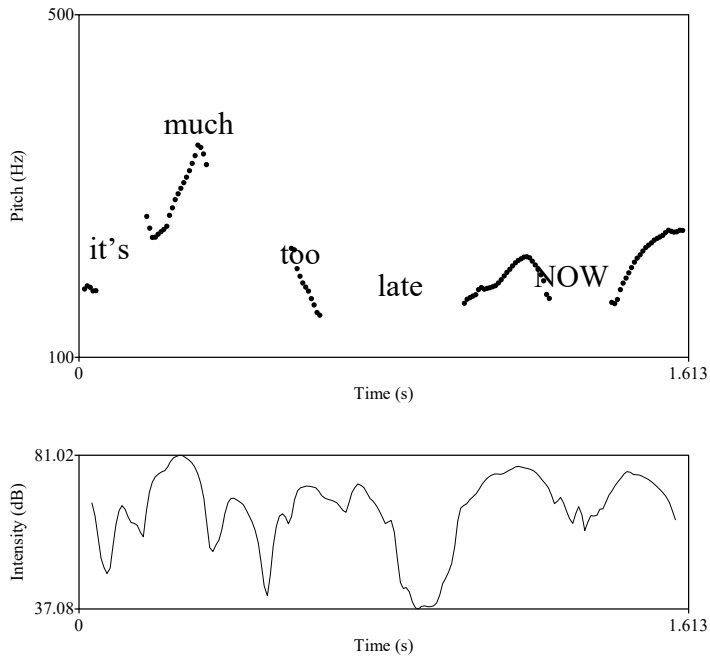
are not accustomed to a fall-rise and seem to readily replace it with a final fall.



Graph 5. Pitch and intensity contours for FR 1, female speaker

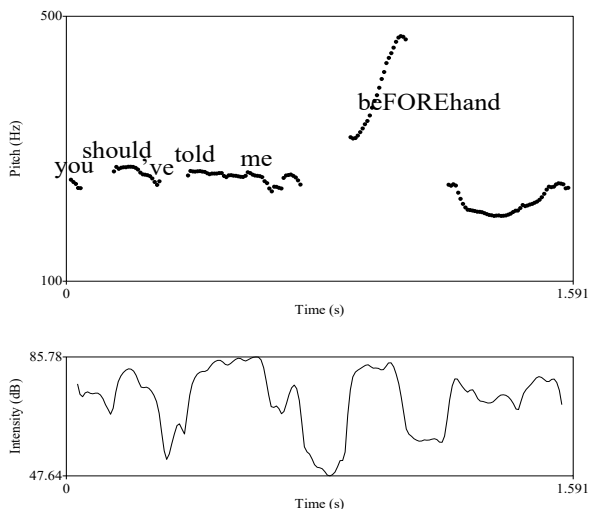
FR 2 exhibited an overall better success rate due to the fact that most students were able to perform the falling-rising tone on the final syllable only (see Graph 6). Most errors made in FR 2 intonation phrase relate to the delayed rise which was ousted due to the lack of time. Such IPs were generally perceived as falls, a tone comparable to a flat tail represented in Graph 5.

A more successful production of FR 2 may be attributed to the fact that most students have acquired the fall-rising contour, but extending it to the syllables in the tail remains a challenge. Graph 4 and Graph 6 are speech samples of the same female speaker.



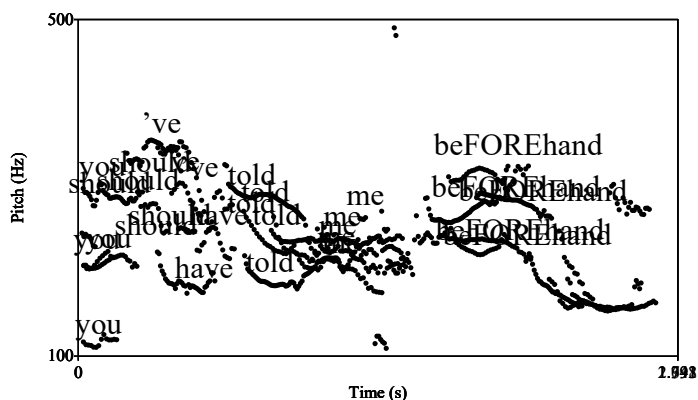
Graph 6. Pitch and intensity contours for FR 2, female speaker

The last nuclear tone to be analyzed is RF. L2 prosodic contours of the IPs with rise-fall nuclei mostly manifest a lack of expressiveness due to the absence of substantial pitch movement from the low prehead to the high head in preparation for a rise-fall. This observation is in line with the main hypothesis of this paper that Serbian L2 speakers of English find it difficult to carry out dramatic changes throughout an English IP. Graph 7 illustrates this claim where the pitch level remains constant in the prehead (*you should have*) and head (*told me be-*). However, the pitch contour of the RF itself was rightly produced.



Graph 7. Pitch and intensity contours for RF, female speaker

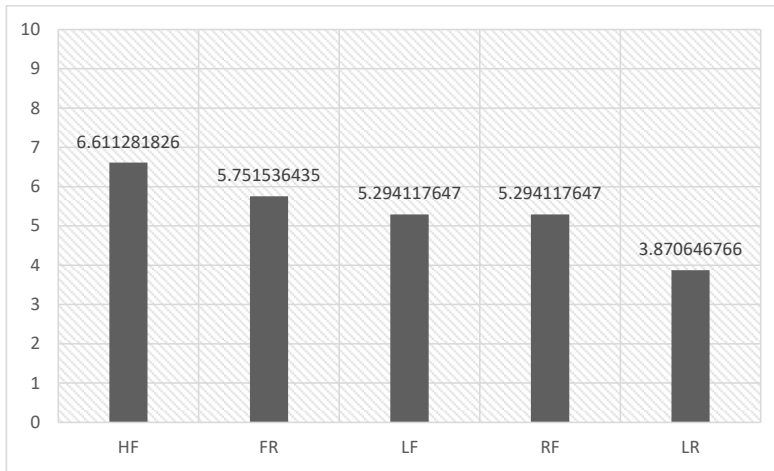
Auditory analysis also shows that many students resort to another mechanism to reserve more time to prepare for a rise-falling nucleus. A slower tempo seemed to help attain the complex RF pitch contour. On the whole, students were generally able to manipulate the RF nuclear pitch movement so that it resembles the one produced by L1 speakers of English. Sample pitch contours for 6 students are mapped in Graph 8 to illustrate some change in the pitch direction on the nucleus and the tail.



Graph 8. Pitch and intensity contours for RF, 6 random female speakers

5. Conclusion

After extensive training and assessment, Serbian EFL learners seem to have acquired some intonation phrases (with their corresponding constituents) better than other intonation phrases. Graph 9 displays a cumulative success rate for the IPs investigated in this paper, from the most accomplished ones to those with somewhat lower scores. High-Fall is the nuclear tone that students had most success with, followed by Fall-Rise, Low-Fall, Rise-Fall and Low-Rise. The numerical data presented in Graph 9 provides a general idea about which nuclear tones call for more attention.



Graph 9. Average scores for each nuclear tone

However, auditory analysis called for acoustic analysis that further resulted in identifying recurrent patterns in the English intonation of Serbian EFL learners. Firstly, substantial and dramatic changes in the pitch contour were the biggest stumbling block to attaining L1 prosody of English with its intended attitudinal meanings. Simple nuclei (i.e. falling and rising) will be elaborated on first. High falling nuclei whose pre-nuclear and nuclear patterns agree in pitch (e.g. high head + HF) are the least demanding, e.g. HF 2. Low-level tails that are found after falling nuclei in English generally do not pose difficulty to Serbian speakers of English.

A relative lack of success in pronouncing low-rising nuclei may also be explained away by the extensive modulations in pitch that are counter-intuitive to Serbian speakers of English. Furthermore, when IP constituents

were shorter and students had less time to modulate the pitch, the success rate was lower. Therefore, a monosyllabic high prehead + LR 3 yielded a lower score than a 3-syllable high head + LR 1. The characteristic rising head after low-rising nuclei often underwent pitch levelling.

The IP with a LF, analyzed in this study, is also characterized by a substantial change in the pitch level (high head + LF), hence a relatively low success rate.

Finally, this study shows that complex nuclear tones, FR and RF, may be learned, improved and polished with extensive practice. However, the prosodic habit of extending the pitch movement to the syllables other than the nucleus remains a difficult task for advanced Serbian learners of English. For instance, IPs with word-final FR had a better outcome than those that had a tail that was affected by the fall-rising contour in the shape of a rising tail.

One of the main findings of this study is that Serbian EFL speakers resist dramatic pitch peaks and valleys crucial to acquiring the English prosody. Due to the lack of such pitch modulations, Serbian speakers tend to sound somewhat dull and nonexpressive. Serbian speakers are not alone in this phonetic habit. Mitrofanova (2012: 280) rightfully points out that Russian speakers also struggle with very refined pitch contrasts that L1 speakers of English use, and rely more on intensity.

The results of the current study may point an English teacher in the right direction as to where to start and how to proceed with the teaching of the intricacies of English intonation.

References

- Backman, N. (1979). Intonation Errors in Second-Language Pronunciation of Eight Spanish-Speaking Adults Learning English. *Interlanguage Studies Bulletin*, 4(2), 239–265.
- Boersma, P. and D. Weenink. (2020). *Praat: Doing Phonetics by Computer* (Version 6.1.16). (20 June 2020) <<http://www.fon.hum.uva.nl/praat/>>.
- Bot, K. de (1983). Visual Feedback of Intonation I: Effectiveness and Induced Practice Behavior. *Language and Speech*, 26(4), 331–350.
- Busà, M. G. and M. Urbani (2011). A Cross Linguistic Analysis of Pitch Range in English L1 and L2. *Proceedings of ICPHS XVII*, Hong Kong, 17–21 August 2011, 380–383.

- Chun, D. M. (2002). *Discourse Intonation in L2: From Theory and Research to Practice*. John Benjamins Publishing Company. doi: 10.1075/lllt.1
- Estebas-Vilaplana, E. (2017). The Teaching and Learning of L2 English Intonation in a Distance Education Environment: TL_ToBI vs. the Traditional Models. *Linguistica*, 57(1), 73–91. doi: 10.4312/linguistica.57.1.73-91
- Hlebec, B. (2010). *English Accent and Intonation*. Belgrade: Čigoja štampa.
- Jenner, B. R. A. (1976). Interlanguage and Foreign Accent. *Interlanguage Studies Bulletin*, Vol. 1, No. 2/3 (September 1976), 166–195.
- Komar, S. (2005a). The Impact of Tones and Pitch Range on the Expression of Attitudes in Slovene Speakers of English. In: J. A. Maidment (ed.), *PTLC 2005 Proceedings*, London: University College London. (11 November 2019) <https://www.ucl.ac.uk/drupal/site_pals/sites/pals/files/migrated-files/proceedings_2005.html>.
- Komar, S. (2005b). Unenthusiastic Europeans or Affected English: the Impact of Intonation on the Overall Make-up of Speech. *ELOPE: English Language Overseas Perspectives and Enquiries*, 2(1–2), 35–44. doi: 10.4312/elope.2.1-2.35-44
- Ladd, D. R. 1996. *Intonational phonology*. Cambridge: Cambridge University Press.
- Mennen, I. 2007. Phonological and phonetic influences in non-native intonation. In: J. Trouvain and U. Gut (eds.), *Non-Native Prosody: Phonetic Descriptions and Teaching Practice*, Berlin: Mouton De Gruyter, 53–76.
- Mennen, I., F. Schaeffler and G. Docherty (2007). Pitching it Differently: A Comparison of the Pitch Ranges of German and English Speakers. *Proceedings of ICPhS XVI*, Saarbrücken, 6–10 August 2007, 1769–1772.
- Mennen, I. (2015). Beyond Segments: Towards a L2 Intonation Learning Theory. In: E. Delais-Roussarie et al. (eds.), *Prosody and Language in Contact, Prosody, Phonology and Phonetics*, Berlin/Heidelberg: Springer-Verlag, 171–188. doi: 10.1007/978-3-662-45168-7_9
- Mitrofanova, Y. (2012). Raising EFL students' awareness of English intonation functioning. *Language Awareness*, 21(3), 279–291. doi: 10.1080/09658416.2011.609621
- Nayan, N. M. and J. Setter (2016). Malay English intonation: The Cooperative Rise. *English World-Wide*, 37(3), 293–322. doi: 10.1075/eww.37.3.03mat

- O'Connor, J. D. and G. F. Arnold (1973). *Intonation of Colloquial English. A Practical Handbook*. 2nd edition. London: Longman.
- Paunović, T. V. (2015). Pitch Height and Pitch Range in Serbian EFL Students' Reading and Speaking Tasks. *Nasledje*, 32, 73–92.
- Ramírez Verdugo, D. (2006). A Study of Intonation Awareness and Learning in Non-native Speakers of English. *Language Awareness*, 15(3), 141–159. doi: 10.2167/la404.0
- Santiago, F. and E. Delais-Roussarie (2015). The Acquisition of Question Intonation by Mexican Spanish Learners of French. In: E. Delais-Roussarie et al. (eds.), *Prosody and Language in Contact: L2 Acquisition, Attrition and Languages in Multilingual Situations*, Berlin: Springer, 243–270. doi: 10.1007/978-3-662-45168-7
- Uldall, E. 1960. Attitudinal Meanings Conveyed by Intonation Contours. *Language and Speech*, 3(4), 223–234.
- Wells, J. C. (2006). *English Intonation: An Introduction*. Cambridge: Cambridge University Press.

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УСВАЈАЊЕ ИНТОНАЦИЈСКИХ КОНТУРА ЕНГЛЕСКОГ ЈЕЗИКА КОД ГОВОРНИКА СРПСКОГ ЈЕЗИКА

Сажетак

Предмет проучавања овог рада је продукција енглеске интонацијске фразе и идентификација најчешћих проблема у реализацији интонацијских контура енглеског код шездесет-осам напредних говорника енглеског језика чији је матерњи језик српски. Аудитивном евалуацијом обухваћено је пет типова нуклеуса (енг. High-Fall, Low-Fall, Low-Rise, Fall-Rise, Rise-Fall) у комбинацији са различитим преднуклеарним обрасцима. Акустичком анализом висине тона идентификовани су најчешћи пропусти у интонацијским контурама енглеске интонацијске фразе и понуђена објашњења таквих прозодијских појава у енглеском као страном језику. Драматичне промене у висини тона, карактеристичне за енглеску интонацијску фразу, често су одсутне код српских говорника. Основне манифестације Л2

прозодије говорника српског могу се описати на следећи начин: недовољна висина тона код високе главе или високог предглавља (LF, LR), заравњење растућег остатка (LR, FR), као и потешкоће при реализацији вишеструких и наглих промена висине тона у интонацијској фрази. Српским говорницима лакше је да изврше модулацију висине тона на једном слогу него на низу слогова (FR).

Кључне речи: енглеска интонацијска фраза, интонацијска контура, модулација висине тона, српски говорници енглеског језика, прозодијске грешке у Л2

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DISTINCTIVE PROPERTIES OF ENGLISH LEXICAL AFFIXES: AN OVERALL VIEW**

Abstract

This paper deals with determining distinctive properties of English lexical affixes, i.e. derivational prefixes, like *un-*, in *untie*, and suffixes, like *-ish*, in *childish*. Its main aim is to establish a set of synchronically relevant affixal properties that will make it possible, firstly, to offer a characterization of all affixes and, secondly, to ensure their appropriate lexicological, lexicographic and pedagogical treatment. The discussion will be organized in the following way: in Section 1, some scene-setting remarks will be made; in Section 2, theoretical explanations regarding the nature and status of affixes will be given; in Section 3, two sets of properties, essential and relational, stemming from prefixal and suffixal forms, functions, meanings and uses, will be identified, described and illustrated; and in Section 4, a summary of the main results of the paper alongside their possible implications will be offered.

Key words: affixes, lexical, prefixes, suffixes, derivational, English, distinctive properties

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1. Opening remarks

In this paper an attempt will be made to catalogue the entire set of distinctive properties of English lexical affixes, so as to provide an overall view of the properties that determine the unique identity of each individual lexical affix in English and, at the same time, their interrelations with other affixes. The determination of distinctive affixal properties takes into account all levels of linguistic analysis as well as the paradigmatic and syntagmatic axes of relationships between linguistic units. In this way, an identity card, as it were, of every affix can be put together, allowing insights not only into single affixes but also into networks of several, mutually linked, affixes, when such networks exist.

The model to be proposed is intended to achieve three principal objectives: firstly, from a lexicological angle, to help build up a descriptively complete picture of all lexical affixes in English and, *mutatis mutandis*, other comparable languages; secondly, from a lexicographic angle, to help draw up a blueprint for the representation of affixes in dictionaries, general-purpose and, more importantly, specialized ones, devoted to affixes; and thirdly, from a pedagogical angle, to help teach lexical affixes to students, especially EFL university students.

The discussion will be organized into three sections, as follows: in Section 2, theoretical concepts regarding the nature and status of English lexical affixes will be defined; two types of distinctive affixal properties, essential and relational, will be introduced, elaborated and exemplified in Section 3; and in Section 4, after an overview of the main results of the paper, possible implications of the proposal presented herein will be briefly assessed.

2. Theoretical considerations

The theoretical groundwork espoused here is the Marchandean sign-oriented approach to word formation (Marchand 1969, originally 1960), with its roots in Saussurean structuralism (de Saussure 1916), whereby the morpheme is conceived as a triad of form, content and function. Hence, the status of affix is accorded only to those phoneme sequences which are fully-fledged morphemes in present-day English, in that **a particular phonological form is systematically associated with at least**

one particular content and one particular function, irrespective of the affix's origin; for example, *re-* in *rewrite* is a prefix, but not in the synchronically monomorphemic *receive*, and *-ness* in *happiness* is a suffix, but not in the synchronically monomorphemic *harness*. The term 'affix' will be used as a superordinate for the terms 'prefix' and 'suffix', to refer to bound elements like *re-* and *-ness*, respectively. In its prototypical manifestation, an affix has the following features (cf. Warren 1990): it is a bound lexical closed-set morpheme, which attaches to the beginning of a free – simple, complex or compound – base (when prefix) or to the end of a free base (when suffix), in order to formally and semantically modify that base and which in the process displays a greater or less degree of productivity.

In addition and in contradistinction to the more or less closed set of affixes, the English lexicon also contains an open, and expanding, set of combining forms – initial, like *morpho-* and *jazzo-* (known as initial combining forms, or ICFs), and final, like *-logy* and *-phile* (known as final combining forms, or FCFs), which, between them, create words like *morpho-* + *-logy* > *morphology* and *jazzo-* + *-phile* > *jazzophile*. Even though ICFs and FCFs are bound morphs and hence resemble prefixes and suffixes, they, unlike affixes, have full lexical meaning and hence resemble bases; also unlike prefixes and suffixes, ICFs and FCFs can cooccur in words, and, lastly, they display productivity in a significantly different way from affixes. As can be inferred from this short comparison, combining forms and affixes, in spite of appearing at first sight similar (so much so that they are treated as one broad category, particularly in some authoritative and highly respected general-purpose and specialized dictionaries of English, the titles of which will purposely not be revealed), they are markedly dissimilar in certain key respects. This calls for establishing a different set of distinctive properties for combining forms, which will adequately reflect their individuality and bring out clearly the similarities and differences between themselves and affixes (for more detailed accounts of combining forms, their types and distinctive properties, in comparison with those of affixes, see Bauer 1983; Bauer and Huddleston 2002; Lalić Krstin 2016; Prčić 2005, 2008; Quirk, et al. 1985, and the references therein). Because constituting distinct categories, albeit both delimited by fuzzy borders, that at the edges touch and sometimes even overlap with each other, combining forms lie beyond the scope of the present paper, whose focus remains on affixes (as systematically distinguished from combining forms and inventoried in Prčić 2005, 2008).

To round off setting the theoretical scene, two observations concerning the nature of affixes need yet to be made (cf. Prčić 1999a). Firstly, affixes have a **contributory role** in word formation and hence affixal properties should be construed mainly in terms of what they contribute graphologically, phonologically, morphosyntactically, semantically and stylistically to the properties of the base, in deriving a (new) morphologically complex word – either a prefixation or a suffixation. Concrete contributions can be ascertained by answering the two complementary questions in this example: what does the suffix *-ship* specifically contribute to the base *friend* in the word *friendship* and, as a result, what specific modifications does the base *friend* undergo through the agency of the suffix *-ship* in the word *friendship*?

Secondly, affixal properties represent a systematic and predictable contribution in form, content and function to any eligible base. Concrete contributions are considered **word-independent**, because the same set of modifications are involved in all words derived from a class of bases – and this only on condition that such words are compositional formations, i.e. morphologically and semantically analysable, and, for this reason, predictable; for example, the prefix *re-*, in the sense ‘again’, in words like *readjust*, *reappear*, *re-elect*, *reread*, *revisit*. However, in words going through, or having gone through, the process of idiomatization, certain gradual changes in form and/or content may in time take place, or have already taken place, within words as wholes. All such in-word modifications, pertaining to alterations of original properties of both affixes and bases, are non-systematic and unpredictable, and therefore are considered **word-dependent**, because they have developed uniquely within particular words and do not exist outside them; for example, the prefix *re-*, ‘again’, in the idiomatization *rewrite*, which means ‘write again in a better way’ and not purely ‘write again’. Due to the working of idiomatization, the morphological and semantic analysability of words affected in this way progressively decrease, their compositionality is blurring and their predictability is lessening (for more extensive accounts of idiomatization, or lexicalization, as it is also known, see Bauer 1983; Bauer and Huddleston 2002; Hohenhaus 2005; Lieber and Štekauer 2014; Lipka 2002; Prčić 2001, 2016; Quirk, et al. 1985).

In accordance with the import of these two observations, a well-founded description of affixal properties should clearly reflect their contributory role and their systematic contribution to the base, and leave the effects of idiomatization to the description of individual words.

3. A survey of distinctive properties of English affixes

Distinctive properties of any lexical unit, affixes included, define that unit's identity, its place in the lexicon and its relationship with other comparable lexical units in that lexicon. In attempting to fully catalogue affixal distinctive properties, provision must first be made for individual form- and content-based behavioural traits of an affix – this set of properties will be called here 'essential properties'; a second, supplementary, set of properties, called here 'relational properties', takes into consideration paradigmatic and syntagmatic relations between individual affixes.

The two sets of distinctive properties of English affixes will be discussed and exemplified in the coming subsections.

3.1. Essential properties

Essential properties are inherent to all affixes, i.e. prefixes and suffixes, they comprise the identifying features of an affix in isolation, its contribution to a base, or a class of bases, and reflect the affix's individuality. Involved in determining the nature of these properties are all levels of linguistic analysis, viz. graphology, phonology, morphosyntax, semantics and stylistics, which yield six essential properties altogether (their account here draws in part on the argumentation in Prčić 1999a).

- (1) **Spelling** – in the domain of graphology / orthography, this property captures the realization of an affix in writing. What the affix contributes graphologically to bases consists in the letter-and-mark sequence that represents it in isolation (e.g. *-ship*) and within words (*friendship*); and also, where applicable, variants of the sequence (*-ize/-ise*), orthographic changes to the base, like dropping of a silent final *-e* before a suffix (*driv[e] + -er > driver*), or vacillation between dropping and non-dropping of a silent final *-e* before a suffix (*lov[e] + -able > lovable vs love + -able > loveable*), or indication of prefix/base hyphenation to distinguish an unanalysable homograph from an analysable one (*recover vs re-cover*).
- (2) **Pronunciation** – in the domain of phonology, this property captures the realization of an affix in speech. What the affix contributes phonologically to bases consists in the sound sequence that represents it in isolation (e.g. /ʃɪp/) and within words (/ˈfrendʃɪp/); and also, mostly concerning suffixes, the influence

of the affix on the stress pattern of the word (cf. Jones 2006; Wells 2008), which may either remain unchanged, with stress-neutral suffixes (*-ship*: /^(l)frend > 'frendʃɪp/), or it may shift, with stress-imposing suffixes, either by falling on the suffix itself (*-ese*: /dʒə'pæn > ,dʒæpə'niz/), or on the penultimate syllable (*-ic*: /'ætəm > ə'tɒmɪk/), or on the antepenultimate syllable (*-ity*: /kri'etɪv > ,kri:er'tɪvɪ/).

- (3) **Attachability** – in the domains of morphosyntax and semantics, this property captures the ability of an affix to attach to a base, or a class of bases, of a certain part of speech, and to derive words of a certain part of speech (cf. Bauer 1983; Bauer and Huddleston 2002; Quirk, et al. 1985). What the affix contributes morphosyntactically to bases consists in the actual part of speech of the derived word, which may be either the same as that of the base, with class-maintaining affixes (e.g. *dis-* + *connect_v* > *disconnect_v*), or different from that of the base, with class-changing affixes (*develop_v* + *-ment* > *development_n*); and also, where necessary, subcategorizations of the base, mostly semantically and/or pragmatically conditioned, like transitivity of verbal bases to which the suffix *-able*, in the sense 'that can be', typically attaches (*wash_{v/tr}* + *-able*).
- (4) **Meaning** – in the domain of semantics, this property captures the descriptive meaning of an affix (cf. Prčić 2016). What the affix contributes semantically to bases consists in a small set of diagnostic features, specified within a brief definition, well-balanced between generality and specificity (e.g. *re-* means 'again, repetition', as in *reread*; *-ish* means 'around, approximately', as in *sixish*); and also, where applicable, an indication of synonymy and antonymy of affixes (cf. Cruse 2010; Murphy 2003; Prčić 2016), in appropriately worded comparable definitions (synonymy: *-er*, 'agent', as in *producer* vs *-or*, 'agent', as in *director*; antonymy: *hyper-*, 'above normal', as in *hypertension* vs *hypo-*, 'below normal', as in *hypotension*).
- (5) **Associative Meaning** – in the domain of stylistics, this property captures the associative meaning of an affix (cf. Prčić 2016). What the affix contributes stylistically to bases, where applicable, consists in restrictions on the word's range of application and includes, most notably, dialect (e.g. *-ize*, as in *modernize*: world-wide English vs *-ise*, as in *modernise*: British English), register (*-ide*,

as in *chloride*: chemistry), formality (-*er*, in *adviser*: neutral vs -*or*, in *advisor*: formal).

- (6) **Productivity** – in the domains of morphosyntax and semantics, this property captures the ability of an affix to be synchronically used in the derivation of new words (cf. Bauer 1983, 2001; Bauer, Lieber and Plag 2014; Kastovsky 1986; Lieber and Štekauer 2014; Plag 1999; Prčić 1999b). What the affix contributes to bases in this respect consists in its relative position on a three-zone scale of productivity, spanning high ↔ restricted ↔ low degrees, with affixes in the high zone having greater likelihood of being chosen as input units for new words (e.g. -*er* deriving agent and/or instrument nouns from dynamic verbs, like *play*_v + -*er* > *player*_n: high productivity; -*th* deriving abstract nouns from adjectives, like *warm*_{adj} + -*th* > *warmth*_n: low productivity).

When the affix under scrutiny is polyfunctional, in that several distinct functions and related or unrelated meanings are associated with a single form, as is the case with the prefix *un-* in the words *unhappy*, *unrest*, *untie*, *unsaddle*, and with the suffix -*ish* in the words *childish*, *yellowish*, *fiftyish*, *Finnish*, properties (3)–(6) need to be specified for each function separately.

3.2. Relational properties

Unlike essential properties, which are evident in all affixes, relational properties manifest themselves only in some prefixes and suffixes, only when certain content- and/or form-based conditions are met, they comprise the interacting features of an affix with another or others, and reflect the affix's companionability. Involved in determining the nature of these properties are paradigmatic and syntagmatic relations established, or establishable, between affixes.

In paradigmatic relations, the focus is on interaffixal sense relations, which yield two relational properties.

- (7) **Interaffixal Synonymy** – in the domains of semantics and pragmatics, this property captures the fact that at least two affixes share the same descriptive meanings and morphosyntactic functions, and, as a result, are liable to derive synonymous words when attached to the same base (e.g. -*er*, -*or*, -*ant*, -*ee*, in *cohabiter*, *cohabitor*, *cohabitant*, *cohabitee*) and hence to enter into rivalry

(or, competition) in the process of derivation of new words (cf. Bauer, Lieber and Plag 2014; Kastovsky 1982, 1986; Prčić 1999b). The relationship of this kind develops either between prefixes (e.g. *un-*, in *undress*, *de-*, in *destabilize*, and *dis-*, in *disconnect*, all three of them in the sense ‘to reverse’), or between suffixes (e.g. *-ness*, in *happiness*, *-ity*, in *curiosity*, *-th*, in *width*, all three of them in the sense ‘state of’), or between prefixes and suffixes (e.g. the prefix *en-*, in *enlarge*, and the suffixes *-ize*, in *normalize*, *-ify*, in *purify* and *-en*, in *widen*, all four of them in the sense ‘to make’).

- (8) **Interaffixal Antonymy** – in the domains of semantics and pragmatics, this property captures the fact that two affixes have opposite descriptive meanings but the same functions, and, as a result, are liable to derive antonymous words when attached to the same base. The relationship of this kind develops mostly between prefixes (e.g. *over-* and *under-*, in *overcook* and *undercook*, in the sense ‘more than necessary’ and ‘less than necessary’, respectively), and, less often, between suffixes (e.g. *-er* and *-ee*, in *interviewer* and *interviewee*, in the sense ‘agent’ and ‘patient’, respectively).

It may be as well to point out here that the relations of both interaffixal synonymy and antonymy, just as ordinary lexical sense relations, exist exclusively between individual meanings (and functions) of affixes and not across the whole spectrum of meanings; for example, the prefix *un-*, in *undress*, is synonymous with *de-*, in *destabilize*, and *dis-*, in *disconnect*, only when it means ‘to reverse’, but when it means ‘not’, in *unhappy*, it is synonymous with *in-*, in *inexpensive*, *dis-*, in *dissimilar*, *non-*, in *non-addictive*, and *a-*, in *atypical*.

In syntagmatic relations, on the other hand, the focus is on interaffixal preferences, which also yield two relational properties.

- (9) **Cooccurring** – in the domains of morphosyntax and semantics, this property captures the fact that two affixes systematically cooccur in words, because an affix tends to attract another affix in derived words (cf. Bauer, Lieber and Plag 2014). The relationship of this kind develops in two ways: firstly, mostly between suffixes (e.g. to derive an action noun, the suffix *-ation* is typically attracted by the suffixes *-ize*, as in *industrialization*, *-ify*, as in *purification*, and *-ate*, as in *hyphenation*; in the latter case, *-ation* overlaps with *-ate*), with some suffixes attracting at least two synonymous suffixes, hence open to rivalry (e.g. the nominal

suffixes *-ness* and *-ity*, of varying degrees of frequency, are both attracted by some adjectival bases in *-al*, as in *grammaticalness* and *grammaticality*).

And secondly, this relationship develops between suffixes and prefixes (e.g. to derive a negative adjective, the prefix *un-* is typically attracted by the suffix *-able*, as in *uneatable*, whereas the prefix *in-* is typically attracted by the suffix *-ible*, as in *inaccessible*), with some suffixes attracting at least two synonymous prefixes, hence also open to rivalry (e.g. the negative adjectival prefixes *un-* and *a-*, of varying degrees of frequency, are both attracted by some adjectival bases in *-al*, as in *untypical* and *atypical*). Moreover, this relationship is recursive in nature, especially with certain sets of cooccurring suffixes, among which intersuffixal chain attraction has developed, as in *developmentally*, with three suffixes, and *organizationally*, with four suffixes.

- (10) **Correlationing** – in the domain of morphosyntax and semantics, this property captures the fact that two affixes systematically correlate in words, because an affix tends to regularly replace another affix in derived words. The relationship of this kind develops between suffixes (e.g. to derive a human noun, the suffix *-ism*, in the sense of ‘a system of theory, methodology or practice’ is replaced with the suffix *-ist*, in the sense of ‘an adherent of a system of theory, methodology or practice’, as in *structural[ism]* > *structuralist*; in some cases, *-ism*, or *-ist*, is replaced with the suffix *-ize*, in the sense of ‘to follow a system of theory, methodology or practice’, to derive an action verb, as in *terror[ism]* / *terror[ist]* > *terrorize*).

Some suffixes can be replaced with two synonymous suffixes, hence open to rivalry (e.g. the nominal suffixes *-ance* and *-ancy*, and *-ence* and *-ency*, of varying degrees of frequency, can replace the *-ant* and *-ent* in some adjectival bases, as in *elegant* > *elegance*, *elegancy* and *corpulent* > *corpulence*, *corpulency*), with some suffixes replaced by their bound allomorphs before a new derivation takes place (e.g. the adjectival suffixes *-able* and *-ible* are replaced by their bound allomorphs before the nominal suffix *-ity* attaches, as in *desirable*: *desirabil-* + *-ity* > *desirability* and *flexible*: *flexibil-* + *-ity* > *flexibility*).

Once again at this place, it will be reiterated that with polyfunctional affixes, where several distinct functions and related or unrelated meanings coincide in a single form, properties (7)–(10), where applicable, need to be specified for each function separately.

4. Summing up and looking ahead

In this paper, a model has been put forward with the intention of affording an overall view of distinctive properties of English lexical affixes. Distinctive properties have been organized around two sets: the one, inherent to all affixes and reflecting their individuality, contains essential properties and comprises Spelling, Pronunciation, Attachability, Meaning, Associative Meaning and Productivity; and the other set, manifest only in some affixes and reflecting their companionability, contains relational properties and comprises Interaffixal Synonymy, Interaffixal Antonymy, Cooccurring and Correlating. By providing all the required elements for each affix's identity card and thus helping to build up a descriptively complete picture of all lexical affixes in English and, *mutatis mutandis*, other comparable languages, the first, lexicological, principal objective of the three stated in the introduction, has hopefully been fulfilled.

Closely connected with this one is the second, lexicographically relevant, objective – helping to draw up a blueprint for the representation of affixes in dictionaries, general-purpose and, more importantly, specialized ones, devoted to affixes. By and large, in the treatment of affixes in general-purpose dictionaries, there is ample room for improvement, both in terms of the quality and quantity of the information included. More specifically, as demonstrated in a critical assessment of the system of coverage of two prefixes, *dis-* and *pro-*, and two suffixes, *-ish* and *-or*, in the then current, 1995, editions of four English pedagogical dictionaries – *Oxford Advanced Learner's Dictionary of Current English*, *Longman Dictionary of Contemporary English*, *Collins COBUILD English Dictionary*, and *Cambridge International Dictionary of English*, inconsistencies are found in presenting information on affixes, as no firm system for dealing with either affixal forms or meanings is discernible (cf. Prčić 1999a). The properties provided are almost invariably essentials, whereas relationals are quite a rarity and only in the shape of paradigmatic relations. Twenty years after this analysis, a new look into the now current editions of the 'big four', joined, in the meantime, by the 'fabulous fifth', *Macmillan English Dictionary for Advanced Learners*, surprisingly enough, shows hardly any emendations. The conclusion reached two decades ago, that "the 'big four', on the whole, portray affixes as nothing more than poor relations of words and phrases" (Prčić 1999a: 274), sadly remains valid today – and for no apparent reason.

Affixes are much less poor relations in specialized dictionaries devoted to English lexical affixes and their properties, notably the following: *Ologies and Isms. A Dictionary of Word Beginnings and Endings* (Quinion 2002), *Affixes. The Building Blocks of English* (Quinion 2008), *Word Parts Dictionary. Standard and Reverse Listings of Prefixes, Suffixes, and Combining Forms* (Sheehan 2000), *Collins COBUILD English Guides 2: Word Formation* (Sinclair 1991) and *A Dictionary of English Affixes. Their Function and Meaning* (Stein 2007). With their strengths and weaknesses, each of these is a usable and reliable guide to affixal properties. Unfortunately, here again, in some there are inconsistencies in presentation and/or shortcomings in organization, especially in the choice of properties and the manner in which they are described. A much-needed comparative analysis of the theory, methodology and practice behind this quintet of dictionaries would warrant a separate critical review, incorporating a yes, a qualified yes and a no recommendation for EFL students' use.

And finally, the third of the objectives formulated earlier is pedagogically oriented in that it is about helping to teach lexical affixes to EFL university students. Tailored primarily for courses in lexical morphology and/or word formation, a new method for handling efficiently the systems of English lexical prefixes and suffixes needs to be worked out. It would have to build around three key components: firstly, the affixal identity card approach, presented above, as a target entity; secondly, the available dictionaries of affixes, mentioned above, as a (re)source entity; and thirdly, the compensatory materials and activities designed to narrow, if not to bridge, the delicate gap between the requirements of the target entity and the provisions of the (re)source entities. However, the topic of 'interim measures' and their implementation, despite its significance, is outside the scope of the present paper and it definitely calls for, and merits, further exploration and elaboration in a separate research paper.

References

- Bauer, L. (1983). *English Word-Formation*. Cambridge: Cambridge University Press.
- Bauer, L. (2001). *Morphological Productivity*. Cambridge: Cambridge University Press.
- Bauer, L. and R. Huddleston (2002). Lexical Word Formation. In: R. Huddleston and G. K. Pullum (eds.), *The Cambridge Grammar of the English Language*, Cambridge: Cambridge University Press, 1621–1721.

- Bauer, L., R. Lieber and I. Plag (eds.) (2014). *The Oxford Reference Guide to English Morphology*. Oxford: Oxford University Press.
- Cruse, A. (2010). *Meaning in Language. An Introduction to Semantics and Pragmatics*. 3rd edition. Oxford: Oxford University Press.
- Hohenhaus, P. (2005). Lexicalisation and Institutionalisation. In: P. Štekauer and R. Lieber (eds.), *Handbook of English Word-Formation*, Dordrecht: Springer, 353–373.
- Jones, D. (2006). *Cambridge English Pronouncing Dictionary*, edited by P. Roach, J. Hartman and J. Setter. 17th edition. Cambridge: Cambridge University Press.
- Kastovsky, D. (1982). Word-Formation: a Functional View. *Folia Linguistica*, 16, 181–198.
- Kastovsky, D. (1986). The Problem of Productivity in Word Formation. *Linguistics*, 24, 585–600.
- Lalić Krstin, G. (2016). *Morfemizacija krnjih leksičkih osnova u savremenom engleskom jeziku. Leksikološki i leksikografski aspekti* [Morphemization of Truncated Lexical Bases in Present-Day English. Lexicological and Lexicographic Aspects]. PhD dissertation. Faculty of Philosophy, University of Novi Sad.
- Lieber, R. and P. Štekauer (eds.). (2014). *The Oxford Handbook of Derivational Morphology*. Oxford: Oxford University Press.
- Lipka, L. (2002). *English Lexicology. Lexical Structure, Word Semantics, and Word-Formation*. 3rd edition. Tübingen: Gunter Narr.
- Marchand, H. (1969). *The Categories and Types of Present-Day English Word-Formation*. 2nd, completely revised and enlarged edition. München: C. H. Beck'sche Verlagsbuchhandlung.
- Murphy, M. L. (2003). *Semantic Relations and the Lexicon. Antonymy, Synonymy, and Other Paradigms*. Cambridge: Cambridge University Press.
- Plag, I. (1999). *Morphological Productivity. Structural Constraints in English Derivation*. Berlin/New York: Mouton de Gruyter.
- Prčić, T. (1999a). The Treatment of Affixes in the 'Big Four' EFL Dictionaries. *International Journal of Lexicography*, 12/4, 263–279.
- Prčić, T. (1999b). Productivity of Competing Affixes: the Case of Agentive Suffixes in English. *Linguistica e Filologia*, 9, 125–134.
- Prčić, T. (2001). Interpreting Morphologically Complex Lexemes Revisited. In: E. Németh T. and K. Bibok (eds.), *Pragmatics and the Flexibility of Word Meaning*, Oxford: Elsevier, 225–244.

- Prčić, T. (2005). Prefixes vs Initial Combining Forms in English: a Lexicographic Perspective. *International Journal of Lexicography*, 18/3, 313–334.
- Prčić, T. (2008). Suffixes vs Final Combining Forms in English: a Lexicographic Perspective. *International Journal of Lexicography*, 21/1, 1–22.
- Prčić, T. (2016). *Semantika i pragmatika reči*. 3., elektronsko, izdanje [Semantics and Pragmatics of the Word. 3rd, digital, edition]. Novi Sad: Filozofski fakultet. (30 January 2019) <<http://digitalna.ff.uns.ac.rs/sadrzaj/2016/978-86-6065-356-9>>.
- Quinion, M. (2002). *Ologies and Isms. A Dictionary of Word Beginnings and Endings*. Oxford: Oxford University Press.
- Quinion, M. (2008). *Affixes. The Building Blocks of English*. (30 January 2019) <<http://www.affixes.org/>>.
- Quirk, R., et al. (1985). *A Comprehensive Grammar of the English Language*. London/New York: Longman.
- Saussure, F. de (1916). *Cours de linguistique générale*. Paris: Payot.
- Sheehan, M. J. (2000). *Word Parts Dictionary. Standard and Reverse Listings of Prefixes, Suffixes, and Combining Forms*. Jefferson/London: McFarland.
- Sinclair, J. (ed.) (1991). *Collins COBUILD English Guides 2: Word Formation*. London: HarperCollins Publishers.
- Stein, G. (2007). *A Dictionary of English Affixes. Their Function and Meaning*. Munich: Lincom Europa.
- Warren, B. (1990). The Importance of Combining Forms. In: W. U. Dressler, et al. (eds.), *Contemporary Morphology*, Berlin/New York: Mouton de Gruyter, 111–132.
- Wells, J. C. (2008). *Longman Pronunciation Dictionary*. 3rd edition. Harlow: Pearson Education.

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ДИСТИНКТИВНА СВОЈСТВА ЕНГЛЕСКИХ ЛЕКСИЧКИХ АФИКСА:
ЈЕДАН СВЕОБУХВАТАН ПОГЛЕД

Сажетак

Овај рад бави се одређивањем дистинктивних својстава енглеских лексичких афикса, тј. деривационих префикса, попут *in-*, у *untie* [= *одвезати*, *развезати*], и суфикса, попут *-ish*, у *childish* [= *детињаст*]. Његов главни циљ јесте да се успостави скуп синхронно релевантних афиксалних својстава која ће омогућити, прво, да се изврши карактеризација свих афикса и, друго, да се обезбеди њихова примерена лексиколошка, лексикографска и педагошка обрада. Расправа је организована на следећи начин: у Одељку 1 дато је неколико уводних напомена; у Одељку 2 пружена су теоријска објашњења у вези с природом и статусом афикса; у Одељку 3 наведена су, описана и илустрована два скупа својстава, основних и односних, која проистичу из форми, функција, значења и употреба префикса и суфикса; и у Одељку 4 понуђен је кратак преглед најважнијих резултата овог рада заједно с њиховим могућим импликацијама.

Кључне речи: афикси, лексички, префикси, суфикси, деривациони, енглески језик, дистинктивна својства

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ENGLISH TERMINOLOGICAL COMPOUND LEXEMES, THEIR SERBIAN EQUIVALENTS AND TRANSLATION PATTERNS**

Abstract

The aim of this article is to precisely express the semantics of 82 English compound lexemes in Serbian as reflected in transport and traffic engineering. To achieve this aim, we develop a semantico-morphological translation method, which helps the establishment of translation patterns. The 34 patterns adopted here reveal the order in which English constituents can be translated, display the exact number of components contained in the English terminological compound lexemes and their Serbian translation equivalents under consideration, and show how specific meanings of the English compound terms are morphologically transformed into Serbian. The translation patterns may have theoretical and practical implications. The study is intended as a potential contribution to the standardization of terminological compound lexemes in the Serbian language.

Key words: a semantico-morphological translation approach, translation patterns, English specific compound lexemes, Serbian equivalents, transport and traffic engineering

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1. Introduction

The English language has the capacity for forming multiword expressions. Compound lexemes (i.e. compound nouns, compounds or phrase compound lexemes), phrasal verbs, idioms and collocations are considered multiword expressions.

In this article, we deal with the semantics and morphological structure of contemporary English terminological compound lexemes as used in various fields of transport and traffic engineering. English scientific and technical writing contains a great number of terminological compound lexemes. They are created daily in specialized settings as a result of rapid developments in different professions and sciences. It is therefore understandable why linguists analyze compound terms. Translators are also tempted by these lexical items, which often make them work hard to produce good translations in different languages. Similarly, teachers and learners also find them difficult to teach and learn.

A compound lexeme (Lyons 1977) or a multiword expression (Sag et al. 2002) can be defined as “[...] a lexical unit consisting of more than one base and functioning both grammatically and semantically as a single word [...] in English” (Quirk et al. 1985: 1567). Huddleston and Pullum (2002: 1647) claim that binominal endocentric compounds which do not contain verbal elements are the most productive type of English word formation. In contrast, Klajn (2002: 15) maintains that compounds have low productivity in Slavic languages, i.e. in Serbian (see Dimković-Telebaković 2014a: 116). If a grammatical category is typical of one language and untypical of another, investigations into the process of translating meanings and finding the appropriate forms in the target language are always challenging and interesting. To reveal what is actually going on in the two structures under discussion, we set translation patterns by adopting a new method named a semantico-morphological translation approach.

2. Method and corpus

The semantico-morphological translation method was introduced at the Faculty of Transport and Traffic Engineering in Belgrade in 2013 to help my students find ways to achieve Serbian translation equivalents. This approach focuses on the meaning of an English compound lexeme that is to be transferred to the target language. This semantic transfer from one language

to another requires the use of an adequate morphological structure in the Serbian language. Being aware of the fact that different parts of speech can be contained in an English compound lexeme, the student learns that almost any element can be the starting point in the translation process, and that “[...] (s)he then can take any direction – forwards or backwards, forwards and backwards, and backwards and forwards – through the compound structure being translated. It is assumed that these movements form certain patterns” (Dimković-Telebaković 2015a: 146).

The corpus is built from 82 English terminological compound lexemes, having two, three, four, five, six or seven elements, and their Serbian translation equivalents, containing up to twelve constituents. The morphological composition of the compound lexical units analyzed is not considered in detail in this paper (this aspect is discussed in Dimković-Telebaković 2013a: 51–58; Dimković-Telebaković 2014b: 10–16, for instance), as the focus here is to establish translation patterns which show how the semantic transfer from one language to another is realized. English compound terms are mainly created by primary formation, while Serbian terms are formed as the most appropriate translation equivalents of their English lexical units. The terms examined in this paper are in use in telecommunications and postal traffic, air and road traffic, waterways and railways transport and traffic engineering, as well as in logistics (intermodal transport /combined transport). The English terminological compound lexemes under scrutiny have been chosen from the *English-Serbian Dictionary*, which forms part of the textbook *English in Transport and Traffic Engineering* (Dimković-Telebaković 2015b: 369–410), from the specialized texts contained in the textbook *Testovi, zadaci i teme iz engleskog jezika* (Dimković-Telebaković 2015c), from the textbook *English Grammar for Transport and Traffic Engineers* (Dimković-Telebaković 2018), and from the *English-Serbian Dictionary of Road Traffic Engineering* (Fišer-Popović et al. 1992). In order to set various types of translation patterns, we considered English compound lexemes of different composition.

3. Analysis and discussion


In this section of the paper, we analyze English specialized compound lexical units with different numbers of constituents, and their corresponding Serbian equivalents. The translation patterns set here show the exact order in which the components appear in the two structures.

3.1. Two-element English terminological compound lexemes, their equivalents in Serbian and translation patterns

We now present some of the translation patterns developed between two-component English compound lexemes and their Serbian equivalents as reflected in the fields of transport and traffic engineering.

The first translation pattern (1 2 → 1) is established in those cases when two elements in English result in one element in Serbian. The examples given in pattern I illustrate that the components of English compound lexemes can be written as one word, e. g. *cableway*, *cutoff*, *interchange*, or as two separate words, e. g. *shock absorber*, *sparking plug*, *taxiing up*, or as two words hyphenated, e. g. *tow-boat*, *station-wagon*, *drop-off*. These compound lexemes also reveal that two nouns, a verb and a noun, or a verb and a particle, or a gerund and a noun, or a gerund and a particle, or a prefix and a noun can be joined together. The Serbian equivalents for the English terms in pattern I are as follows: “žičara”, “amortizer”, “potiskivač”, “karavan”, “prečica”, “smanjenje”, “svećica”, “rulanje”, “pretovar” or “petlja” (AmE).

I

	$1 \quad 2 \quad 1$	$1 \quad 2 \rightarrow 1$
<i>cableway</i>	= žičara	
<i>shock absorber</i>	= amortizer	
<i>tow-boat</i>	= potiskivač	
<i>station-wagon</i>	= karavan	
<i>cutoff</i>	= prečica	
<i>drop-off</i>	= smanjenje	
<i>sparking plug</i>	= svećica	
<i>taxiing up</i>	= rulanje	
<i>interchange</i>	= pretovar; petlja	

The second pattern (1 2 → 1 2) is developed when the same number of elements occurs in the two languages. We translate the first component first and then work forwards in pattern II. The combination of an adjective and a noun in English is illustrated by *capital equipment*, *international service*, *articulated vehicle* and *automated storage*. Their Serbian translation equivalents are “glavna oprema”, “međunarodni saobraćaj”, “zglobno vozilo” and “automatsko skladištenje”, respectively. These examples show total congruity, since the constituents comprising the compound lexemes are the same word class and are ordered in the same way. The examples *braking distance*, *leading edge*, *loading base* and *cooling system* illustrate that a gerund and a noun are joined, which results in the translation combination of an adjective and a noun in Serbian (“zaustavni put”, “napadni ugao”, “utovarni front” and “rashladni sistem”). The compound lexemes, made up of two nouns (e. g. *cargo hold*, *copper pair* and *cockpit*), or a noun and a gerund (e. g. *axle loading*), and their Serbian equivalents “tovarni prostor”, “bakarna parica”, “pilotska kabina” and “osovinsko opterećenje”, respectively, demonstrate that English nouns in compounds can be translated into Serbian as adjectives. It is of importance to point out that the ESP/EAP student should learn that this is a characteristic of the target language – Serbian (see Dimković-Telebaković 2013a: 56). The last example in pattern II, *undercarriage* → “stajni trap”, shows that even prepositions in English compound lexemes can be translated as adjectives.

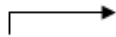
II



1	2	1	2	1 2 → 1 2
<i>capital equipment</i>	=	<i>glavna oprema</i>		
<i>international service</i>	=	<i>međunarodni saobraćaj</i>		
<i>articulated vehicle</i>	=	<i>zglobno vozilo</i>		
<i>automated storage</i>	=	<i>automatsko skladištenje</i>		
<i>braking distance</i>	=	<i>zaustavni put</i>		
<i>leading edge</i>	=	<i>napadni ugao</i>		
<i>loading base</i>	=	<i>utovarni front</i>		
<i>cooling system</i>	=	<i>rashladni sistem</i>		
<i>cargo hold</i>	=	<i>tovarni prostor</i>		
<i>copper pair</i>	=	<i>bakarna parica</i>		
<i>cockpit</i>	=	<i>pilotska kabina</i>		
<i>axle loading</i>	=	<i>osovinsko opterećenje</i>		
<i>undercarriage</i>	=	<i>stajni trap</i>		

We have just seen that the translation process in patterns I and II starts from the first component in the English compound units and moves forwards. The same direction is preserved through the lexical units in the third translation pattern (1 2 3 → 1 2 3), which contains one more component in Serbian than in English, as shown in III. The semantics of compound lexemes causes the introduction of additional elements in Serbian, the nouns “frekvencije”, “razgovor” and “letenja”, which are designated by a smaller number (3) in pattern III.

III



1 2 3 1 2 3 1 2 3 → 1 2 3

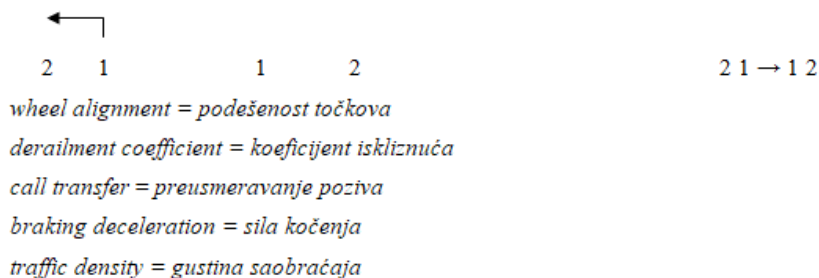
Doppler shift = Dopleterovo pomeranje frekvencije

live telephone = direktni telefonski razgovor

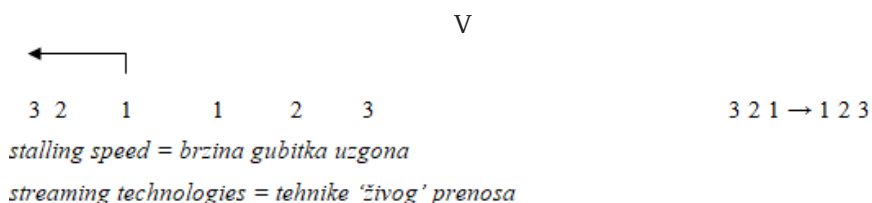
approach control = prilazna kontrola letenja

The examples given in pattern IV show that equivalents in Serbian can be obtained if we begin from the second element in a two-element English compound unit, and then work backwards. Pattern IV also illustrates that the components of the lexemes are mirrored in the two languages. In other words, the head word *alignment* (“podešenost”) is followed by the modifying word *wheel* (“točkova”), which appears in the genitive in Serbian, and the whole pattern has the form of 2 1 → 1 2. The examples *derailment coefficient* → “koeficijent iskliznuća”, *call transfer* → “preusmeravanje poziva”, *braking deceleration* → “sila kočnja” and *traffic density* → “gustina saobraćaja” have the same patterning, where we start at the end (from the head word) and then work backwards (to the modifier). The modifying word is used in the genitive case in Serbian in all these cases. The examples in this pattern illustrate partial congruity, because the elements in the two structures are the same word class, but are ordered differently.

IV



Pattern V (3 2 1 → 1 2 3) shows how two elements in an English compound lexical unit can result in three elements in Serbian.



In the case of VI (2 3 1 → 1 2 3), the translation process also starts from the second element in the sequence, i. e. *link* → “veza”, *clearance* → “dozvola”, *tank* → “rezervoar” and *draught* → “gaz”, moves backwards to the inserted components “ka”, “za” “bez” and “s”, designated as (2), and continues forwards to the first elements (*down*, *taxi*, *fuel*, *light* and *load*) in the English compounds, as shown below. The compound lexeme *down-link* can be translated as “veza prema dole”. In order to express the meaning of this compound lexical unit more precisely, we suggest the Serbian equivalent “veza ka Zemlji”. Our previous investigations of English compound lexemes and their equivalents in Serbian (Dimković Telebaković 2013b: 359–401; Dimković Telebaković 2017a: 101–124) show that the head word is frequently followed by prepositional phrases in Serbian translations of English compound terms. Pattern VI provides examples “ka Zemlji”, “za rulanje”, “za gorivo”, “bez tereta” and “s teretom”, which also point to this conclusion. The last example in VI illustrates that the head word *reduction* is followed by the modifiers “cene karata”, of which the noun “cene” (2) is the inserted element. The modifying words appear here in the genitive form.

VI



2 3 1 1 2 3

2 3 1 → 1 2 3

down-link = *veza ka Zemlji*

taxi clearance = *dozvola za rulanje*

fuel tank = *rezervoar za gorivo*

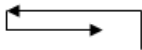
light-draught = *gaz bez tereta*

load-draught = *gaz s teretom*

fare reduction = *smanjenje cene karata*

Pattern VII (2 $\overline{3\ 4}$ | 1 → 1 2 $\overline{3\ 4}$ |) and pattern VIII (3 4 $\overline{1\ 2}$ | → $\overline{1\ 2}$ | 3 4) demonstrate that two elements in English compound lexemes can result in four elements in Serbian. To express the meanings of the English compound lexical units more clearly, the preposition “za” (2) and the noun “motora” (4) are added in VII, as well as the adjective “pešački” (1) and the preposition “sa” (3) in VIII. The examples in patterns VII and VIII also confirm what has already been said about prepositional phrases in the paragraph above.

VII



2 $\overline{3\ 4}$ 1 1 2 $\overline{3\ 4}$

$\overline{2\ 3\ 4}$ 1 → 1 2 $\overline{3\ 4}$

ignition switch = *prekidač za paljenje motora*

VIII



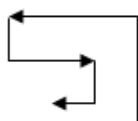
3 4 $\overline{1\ 2}$ $\overline{1\ 2}$ 3 4

$\overline{3\ 4\ 1\ 2}$ → $\overline{1\ 2}$ 3 4

Pelican crossing = *pešački prelaz sa semaforima*

In pattern IX, two English constituents result in five elements in Serbian. In order to obtain the exact translation equivalent, one begins from the head word *device*, works backwards, introduces the preposition “za” (2), works forwards to (4), and then backwards again to reach (5). The acronym *ATC* (Automatic Train Control) is viewed as one unit, and the patterning obtained is 2 3 5 4 1 → 1 2 3 4 5.

IX



2 3 5 4 1 1 2 3 4 5 2 3 5 4 1 → 1 2 3 4 5

ATC device = uređaj za automatsko vođenje voza

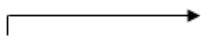
Based on the analysis carried out so far, it is possible to claim that two-element English compound units end up in Serbian as one-component lexemes if the compounds in English are written as one word, or as two separate words, or if they are hyphenated, and in two- or multi-element units if the English compounds are written as two separate words, or when hyphenated. The ideal translation of an English compound is one word, and such solutions are the most appropriate Serbian lexemes for standardization. The analysis also suggests that the use of prepositional phrases in Serbian translation equivalents is a characteristic of Serbian, as shown by patterns VI, VII, VIII and IX. Patterns IV and V, and the examples “Doplerovo pomeranje frekvencije” and “prilazna kontrola letenja” in III, however, illustrate that the modifying word in two-element English compound lexemes can also appear in the genitive case in Serbian equivalents, which points to the fact that the two languages are structurally different.

3.2. English specialized compound units containing three components, their Serbian equivalents and translation patterns

Patterns X and XI demonstrate that the translation of three-element English terminological compound lexemes can begin from the first component in the sequence. The result of this process is either three morphological

elements in Serbian, as in pattern X (1 2 3 → 1 2 3), or two components, as in pattern XI ($\overline{1\ 2}3 \rightarrow \overline{1\ 2}3$). The examples in pattern X confirm our earlier claim that nouns in English compound terms are often translated as adjectives in Serbian, as illustrated by *navigation* → “navigacioni”, *telecommunications* → “telekomunikacione”, *-seas* → “-morski” and *-cast* → “-difuzni”. The hyphenated words in X and XI (e. g. *double-stack*, *head-on* and *rear-end*) are translated as one word, as adjectives, since they have one meaning as a whole. Their translations are “dvospratni”, “čeonni”, and “lančani”.

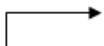
X



1	2	3		1	2	3		1 2 3 → 1 2 3
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electronic navigation aids = *elektronska navigaciona sredstva*
digital telecommunications links = *digitalne komunikacione veze*
overseas traffic = *prekomorski saobraćaj*
broadcast system = *radiodifuzni sistem*
double-stack train = *dvospratni voz*

XI

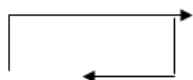


$\overline{1\ 2}$	$\overline{1\ 2}$	3		$\overline{1\ 2}$	$\overline{1\ 2}$	3		$\overline{1\ 2}\ 3 \rightarrow \overline{1\ 2}\ 3$
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head-on collision = *čeonni sudar*
rear-end collision = *lančani sudar*
inland transport = *unutrašnji transport*
lineside signals = *pružna signalizacija*
cross sectional area = *poprečni presek*

In pattern XII, we also start from the first element, then translate the third component in the sequence, and end up with the translation of the second element. Pattern XII (1 3 2 → 1 2 3) is illustrated in the following way:

XII



1 3 2 1 2 3 132 → 123

Centralised Traffic Control = *centralizovano upravljanje saobraćajem*

Patterns XIII and XIV contain additional elements. In XIII (4 3 2 1 → 1 2 3 4), the preposition “za”, designated by a smaller number (2), appears in “oprema za rukovanje materijalom”, and the prepositions “u” (3) and “na” (3), and the nouns “mašinovođe” (5) and “zgrade” (5) emerge in XIV. In pattern XIV, *display* and *equipment* are transformed into “instrumentalna tabla” in Serbian, whereas *car park* becomes “parkiralište”, which ends up in the following patterning: 5 4 3 $\overline{1\ 2}$ → $\overline{1\ 2}$ 3 4 5. The translation in these two patterns begins from the head words *equipment*, *display* *equipment*, and *car park*, and then the translation of the modifiers follows. The modifying words here have the form of prepositional phrases.

XIII



4 3 2 1 1 2 3 4 4321 → 1234

material handling equipment = *oprema za rukovanje materijalom*

XIV



5 4 3 $\overline{1\ 2}$ $\overline{1\ 2}$ 3 4 5

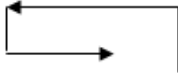
cab display equipment = *instrumentalna tabla u kabini mašinovođe*

roof car park = *parkiralište na krovu zgrade*

543 $\overline{1\ 2}$ → $\overline{1\ 2}$ 345

Pattern XV (2 3 1 → 1 2 3) shows that the head words (e. g. *routes*, *electronics* and *unbundling*) are the starting point for the translation. The first and second components (the modifying words) in the given English compound lexical units are then translated. In order to be able to precisely translate *local loop unbundling* into Serbian, one should be familiar with the context in which the term is used. The examples in XV illustrate that all the modifiers are translated into the genitive in Serbian.

XV



2 3 1

1 2 3

2 3 1 → 1 2 3

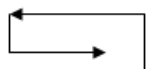
medium-haul routes = letovi srednjeg dometa

high-frequency electronics = elektronika visokih učestalosti

local loop unbundling = rasnopljavanje bakarnih petlji

In pattern XVI (2 3 4 1 → 1 2 3 4), the order in which we translate the compound lexeme *non-propelled barge* is the same as in the previous pattern. The difference between patterns XV and XVI lies in the number of constituents. While XV contains three elements in Serbian, XVI has four elements, as the nouns “pogona” (4) and “broda” (4) are added to clearly convey the meanings of the compounds under discussion. The modifying words “bez sopstvenog pogona” is a prepositional phrase, whereas the noun “broda” is used in the genitive, which confirms our earlier claim that these morphological forms are typically employed in Serbian translation equivalents. The compound lexeme *turn-round time* is translated as “vreme utovara/istovara broda”. The translation result points to the fact that the constituents contained in the compound lexeme are translated as a whole. Some other examples of this kind are as follows: *honeycombing* and its Serbian translation equivalent “prazan skladišni prostor”, or *cut and cover tunnel* → “tunel građen otvorenim iskopom”. These examples also demonstrate that the meanings of the elements in the English compound lexemes do not pattern with the meanings of the individual components in the Serbian translation equivalents, which shows that the process of translation from one language into another is realized based on the meaning of the compound lexeme as a whole, as determined by the specialized context in which the lexical unit is used. This conclusion leads us to question Zgusta’s claim that the semantic criterion is not the main criterion for multiword lexical units (cf. Zgusta 1971: 144–148).

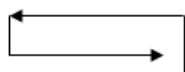
XVI



2 3 4 1 1 2 3 4 2 3 4 1 → 1 2 3 4
non-propelled barge = *barža bez sopstvenog pogona*
turn-round time = *vreme utovara/istovara broda*

The translation process in pattern XVII begins from the head word (*fiber*), moves backwards through the English structure to the inserted preposition “s” (2), and then continues forwards to the noun “signala” (5), which is also introduced.

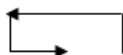
XVII



2 3 4 5 1 1 2 3 4 5 2 3 4 5 1 → 1 2 3 4 5
low attenuation fiber = *vlakno s malim slabljenjem signala*

In pattern XVIII (2 3 4 5 6 1 → 1 2 3 4 5 6), there are three components added in the Serbian equivalent, and they are (2 3 4), i.e. (“s prenosom u”). The head word *systems* is translated first, then the additional words are introduced, and finally the central constituent is translated, so that three components in English (ADJ + N + N) result in six elements in Serbian (N + PP + PP).

XVIII



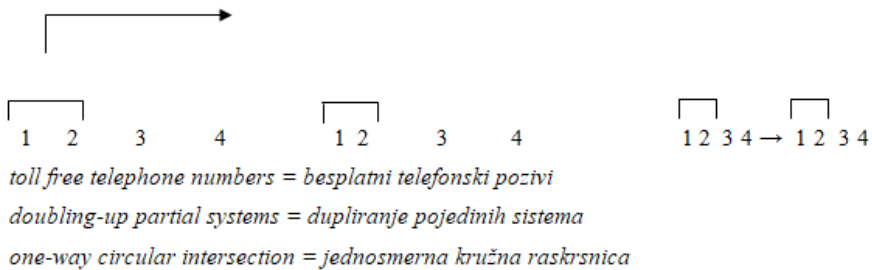
2 3 4 5 6 1 1 2 3 4 5 6 2 3 4 5 6 1 → 1 2 3 4 5 6
broadband systems = *sistemi s prenosom u širokom opsegu*

The examples provided in patterns X and XI illustrate that nouns and hyphenated words in English compound terms are translated as adjectives in Serbian. The examples in Section 3.2 confirm that the modifiers in English compound lexemes are typically translated into Serbian as a genitive or a prepositional phrase, and follow the head word(s).

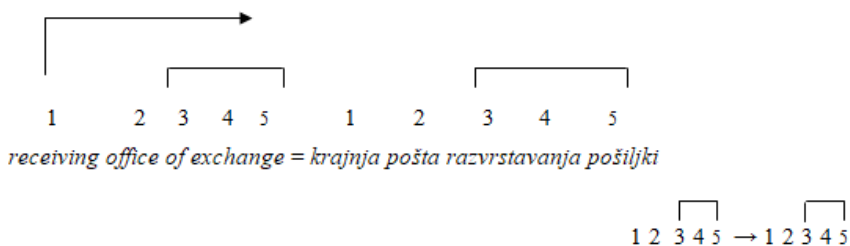
3.3. Four-element English terminological compound lexemes, their Serbian equivalents and translation patterns

In patterns XIX and XX, we start from the beginning of the English structures. In XIX, the first two elements *toll free*, *doubling-up* and *one-way* result in one word “*besplatni*”, “*dupliranje*” and “*jednosmerna*”, whereas in XX, the last two components of *exchange* are translated into Serbian as two words “*razvrstavanja pošiljki*”, where the element “*pošiljki*” (5) has been added. The reasons for this outcome are the meanings of the English compound lexemes as a whole. These examples show that literal translations of the components contained in the lexical units analyzed do not provide exact translations.

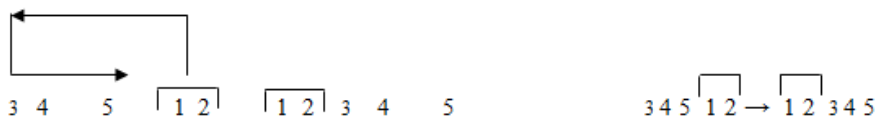
XIX



XX



XXV



four-engined aircraft = letilica s četiri motora

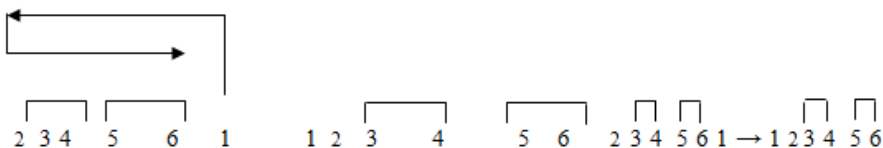
two-lane carriageway = kolovoz s dve trake



long-haul telecommunication systems = telekomunikacioni sistemi za velika rastojanja

In pattern XXVI, the translation direction is the same as in the previous pattern. The preposition “s” (2) has been inserted into the Serbian translation to exactly express the meaning of the English compound lexeme *dual carriageway road*, and the corresponding Serbian equivalent obtained is “put s dva razdvojena kolovoza”.

XXVI



dual carriageway road = put s dva razdvojena kolovoza

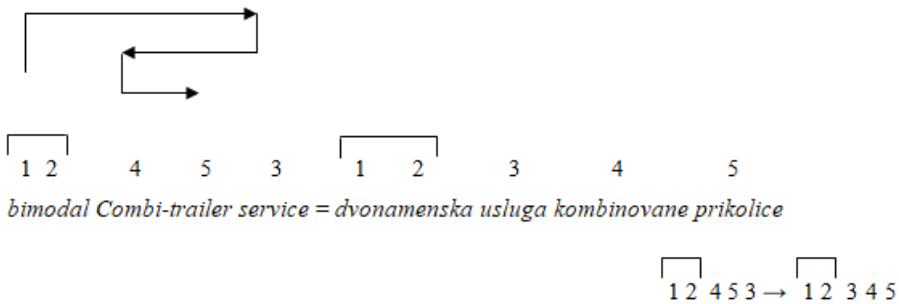
The examples in patterns XXV and XXVI show that numbers are also incorporated into English compound lexical units and their Serbian equivalents, together with nouns, adjectives and prepositions. Patterns XX and XXI illustrate that the modifying words in English compound lexical units can be translated as the genitive in Serbian, whereas patterns XXII, XXIII, XXIV, XXV and XXVI confirm that prepositional phrases are also used in Serbian translation equivalents as morphological translation forms for the modifiers in English.

3.4. English specialized compound units containing five constituents, their Serbian equivalents and translation patterns

The patterns presented in Section 3.4 demonstrate that the more elements an English specialized compound lexical unit has, the more heterogeneous the Serbian equivalents are. The examples provided here show that it is not easy to translate phrasal compound lexemes.

Pattern XXVII illustrates the order in which the constituents in *bimodal Combi-trailer service* are translated into Serbian to obtain “*dvonamenska usluga kombinovane prikolice*”. The translation of the head words *bimodal service* is followed by the genitive “*kombinovane prikolice*”, the modifying words, as shown below.

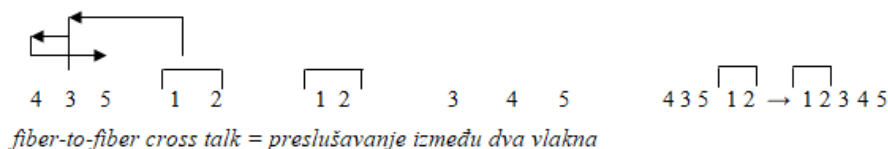
XXVII



In pattern XXVIII, we start from the head words *cross talk* → “*preslušavanje*”, work backwards to the preposition *to* (3) → “*između*”, continue to (4), which is translated as “*dva*”, and reach (5), translated as the expected “*vlakno*”. This example proves that special translation skills are required for phrasal compound lexemes. Hlebec (2009: 183) uses the term ‘the contrastive competence of the translator’ to explain what the translator should know in order to be able to translate competently from one language to another. *Fiber-to-fiber cross talk* → “*preslušavanje između dva vlakna*” is a good example which shows that linguists should be linguistically competent in the two languages (the language from which they translate and the language into which the terms are translated), should be familiar with the basics of the disciplines involved in their translations, and should cooperate with telecommunications traffic engineers in order to be able

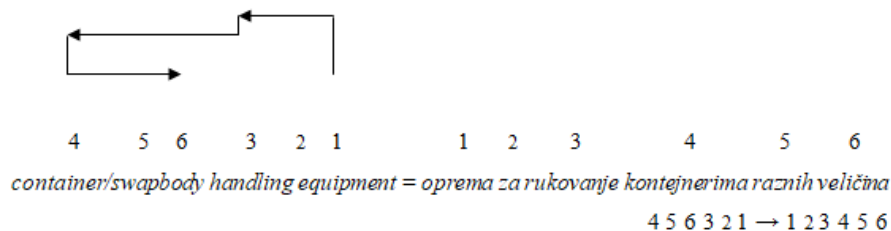
to understand and translate the English phrasal compound lexeme in question. In other words, the collaboration between experts of different profiles is necessary to create Serbian terms which can be standardized.

XXVIII



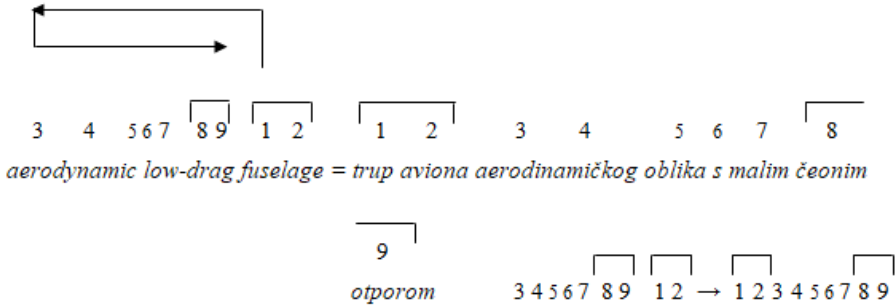
The translation direction is the same in patterns XXVIII and XXIX, but the number of constituents differs, as does their patterning. The translation of the English modifying words in pattern XXIX results in the prepositional phrase “za rukovanje kontejnerima raznih veličina”. It is significant to say that the meaning of the lexeme *swapbody* in XXIX is different from the meaning it has in General English when it is a primary lexical unit. The shift in meaning occurs when the lexeme is used in logistics, i.e., when it functions as a secondary lexical unit (see Cruse 1986: 79–80).

XXIX



In pattern XXX, one begins from the head word *fuselage* → “trup aviona”, moves to *aerodynamic* (3 4 – “aerodinamičkog”), introduces the noun “oblika” (5) and the preposition “s” (6), translates *low* → “malim” (7), and ends with “čeonim otporom” (8 9 – *drag*).

XXX

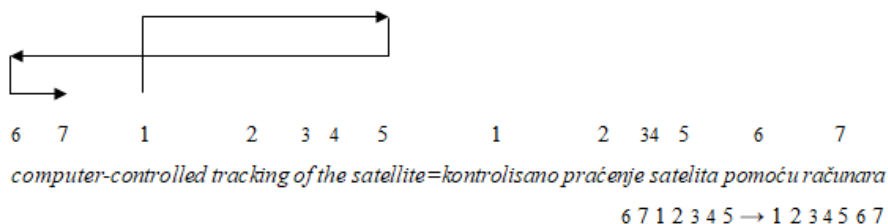


The analysis and discussion of patterns XXVII to XXX show that the modifiers in the English compound lexemes considered are either translated as prepositional phrases or a genitive in Serbian, and that English five-component complex terms result in up to nine-element Serbian equivalents.

3.5. Six-element English terminological compound lexemes, their Serbian equivalents and translation patterns

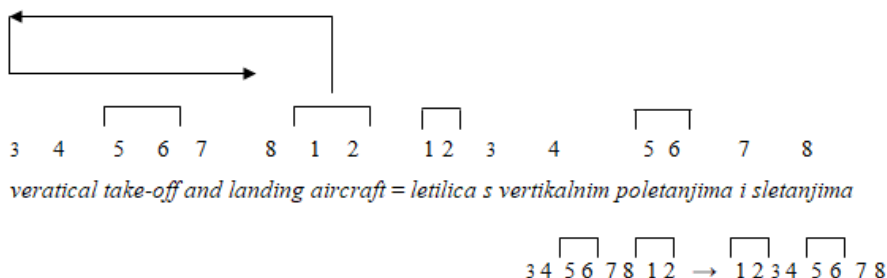
Pattern XXXI (6 7 1 2 3 4 5 → 1 2 3 4 5 6 7) illustrates how six elements, making up an English compound lexeme, can become five components in its corresponding Serbian translation equivalent. To obtain this patterning, one starts from the second element *controlled*, works forwards to *satellite* (5), then backwards to (6), i.e. the inserted component “pomoću”, and finally forwards to (7) *computer*. This example shows that English compound lexemes can comprise prepositions and articles (e. g. *of* and *the*). The components *of* and *the* are omitted in the Serbian equivalent, since Serbian does not have articles, and *of*, as a grammatical element, appears in Serbian in the genitive form – “satelita”.

XXXI



In pattern XXXII, the head word *aircraft* is translated first, then the preposition “s” (3) is introduced and the modifying words *vertical take-off and landing* are translated into the prepositional phrase “s vertikalnim poletanjima i sletanjima”. This pattern also illustrates that conjunctions can appear in both English compound terms and their Serbian equivalents.

XXXII



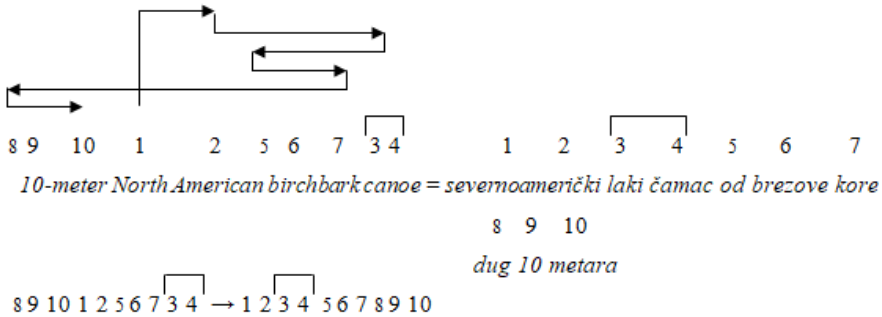
To sum up the results in this section, we can say that pattern XXXI illustrates that it is possible to omit some elements in Serbian equivalents which are contained in English compound lexemes, and that pattern XXXII shows that conjunctions can emerge in both English terminological compound lexical units and their Serbian translations.

3.6. English specialized compound units containing seven components, their Serbian equivalents and translation patterns

Pattern XXXIII (8 9 10 1 2 5 6 7 [3 4] → 1 2 [3 4] 5 6 7 8 9 10) illustrates that two elements are inserted into the structure below, the preposition “od” (5) and the adjective “dug” (8), and that the translation process

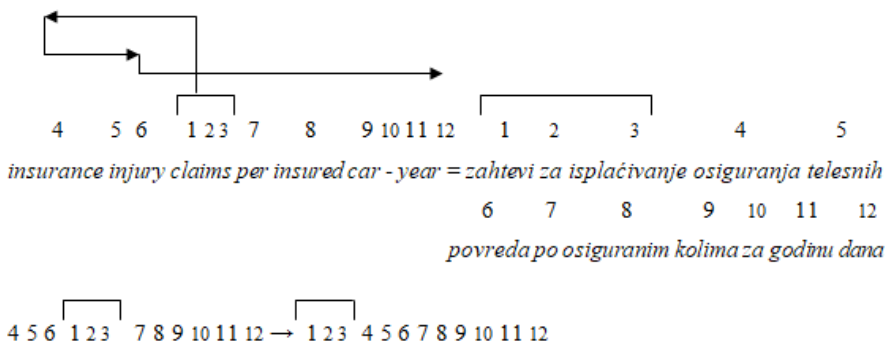
begins from the third element *North*, continues forwards to *canoe* (3 4), then moves backwards to “od” (5) and reaches *birchbark* (6 7) by working forwards, and finally changes direction backwards to (8) in order to end with *meter* (10).

XXXIII



In pattern XXXIV, a seven-element English compound lexical unit is transformed into a twelve-component Serbian equivalent. The following elements are inserted: “za isplaćivanje” (2 3), “za” (10) and “dana” (12). The translation begins from *claims*, moves backwards to *insurance* (4), then forwards to (5 6), and on to (12).

XXXIV



The last two examples illustrate how complicated it can be to find the corresponding Serbian equivalents. They also show that additional elements

in Serbian equivalents are normally prepositions, nouns and adjectives, or their combinations.

4. Conclusions

The purpose of this study was to determine the meanings of 82 English terminological compound lexemes as used in the fields of telecommunications and postal traffic, air and road traffic, railways and waterways transport and traffic engineering, as well as logistics (combined transport), and to create adequate Serbian translation equivalents. To achieve this aim, we developed a semantico-morphological translation approach. By employing this method, 34 translation patterns have been established. These patterns illustrate possible movements through the English compound structures, containing up to 7 constituents, and identify the corresponding Serbian equivalents with up to 12 constituents. The translation patterns set show that almost each element comprised in the English specialized multiword lexemes can be the starting point in translation with the exception of prepositions and conjunctions, that the number of components in the target equivalents can differ from or be equal to the number of English units, that the order of constituents in the English compound terms and their Serbian equivalents can considerably vary, and that the two languages differ structurally in most cases. If the constituents of compound lexemes in English and Serbian are not the same word class, they are said to be incongruent (e. g. *turn-round time* → “vreme utovara/istovara broda”). In cases when the structures in the two languages are equally represented, such as in the ADJ + N structure, for example, their elements have total congruity (e. g. *articulated vehicle* → “zglobno vozilo”), whereas the components of the N + N structure and the N + N + N structure are partially congruent (e. g. *derailment coefficient* → “koeficijent iskliznuća”, and *Centralised Traffic Control* → “centralizovano upravljanje saobraćajem”), since the elements in the two structures are the same word class, but are ordered differently.

The findings reveal that Serbian equivalents frequently comprise additional elements, which are typically prepositions, nouns, or adjectives, or their combinations, whose occurrence is caused by the semantics of English specialized compound lexemes and the structural characteristics of the Serbian language. It has also been found that some elements can be omitted in the process of translation (see pattern XXXI). The results

suggest that the translation process usually starts from the head word(s) and all the other constituents contained within a structure are the modifiers. Translation pattern XXXII, for instance, shows that *aircraft* is the head word and all the other components (*vertical take-off and landing*) of the compound term *vertical take-off and landing aircraft* make up the modifying words. This compound lexical unit and its Serbian equivalent “letilica s vertikalnim poletanjem i sletanjem” also demonstrate that both English specialized compound lexemes and their equivalents in Serbian can contain conjunctions (e.g. *and* and “i”). Thus, the examples provided in this article illustrate that nouns, gerunds, adjectives, verbs, numerals, prepositions, conjunctions, articles and particles can be contained in English compound lexical units. The corresponding Serbian equivalents, on the other hand, do not comprise verbs, or of course articles. In Serbian, the head word can be followed by a genitive or a prepositional phrase, that is, it can be postmodified, or an adjective can precede the head word of a compound, i.e., the head word can be premodified by an adjective. Our earlier explorations show that relative clauses and sentences are also used in Serbian equivalent terminological lexemes, which is named descriptive semantization (see Dimković-Telebaković 2014b: 11). This feature of the Serbian language requires close attention when it comes to the standardization of Serbian terms in different fields (see Dimković Telebaković 2017b). It is evident that the patterns developed in this article reveal a diversity of structure in the two languages considered. These differences between the two languages cause difficulties. The English language expresses meanings in a concise way, which is achieved by using compound lexical units, specifically phrasal compound lexemes. Being a language of a different type, Serbian normally uses different linguistic devices to convey the same meaning, as illustrated here.

The translation patterns established may have theoretical and practical implications, because they may help design strategies for translating terminological compound lexemes and create appropriate translation equivalents, may contribute to the development of a translation theory, and may facilitate teaching and learning English specialized compound lexemes. It is believed that these patterns are also applicable to compound lexical units used in General English, as well as in other disciplines besides traffic engineering.

It would be useful if English occupational and scientific practitioners helped their students understand how sequences of English compound lexeme constituents can be transformed into corresponding Serbian equivalents, directed their students towards finding solutions which make sense in the target language, and taught them that compound terms are not translated word for word, but that the meaning is translated, which should be expressed in Serbian by adequate forms.

The semantico-morphological translation method is being developed at the Faculty of Transport and Traffic Engineering in Belgrade particularly in the master's programme *English in Transport and Traffic Engineering Science and Profession*. The results achieved in practice encourage further investigations. Moreover, having in mind the fact that the number of compound lexemes is constantly growing in English and that they cause problems in both theory and practice, future explorations of the issues associated with the topic discussed here seem to be necessary and inevitable.

The analysis concludes that when translating English specialized compound lexemes one should take into consideration their meanings as the most prominent feature and try to find forms in Serbian which can convey them precisely. The same starting procedure can be proposed for standardizing terms in different disciplines. It is essential to convince authorities of the need for experts from various fields to be involved in the process of creating Serbian terms and standardizing them.

Finally, it is also of importance to point out that polysemous and synonymous lexical units, Anglicisms and inadequate translations of English compound terms, and terminological gaps and principles of translating and standardizing traffic engineering compound lexical units are not considered in this paper. They are examined in our previously published articles (see References below).

References

- Cruse, D. A. (1986). *Lexical Semantics*. Cambridge: Cambridge University Press.
- Dimković-Telebaković, G. (2013a). Engleske složene lekseme i njihovi srpski ekvivalenti u oblasti drumskog saobraćaja. In: G. Dimković-Telebaković (ed.), *Foreign Language in Transport and Traffic Engineering Profession and Science – Strani jezik u saobraćajnoj struci i nauci*,

- Belgrade: University of Belgrade, Faculty of Transport and Traffic Engineering, 49–70. (10 November 2018) <http://www.sf.bg.ac.rs/images/download/dokumenta/Foreign_Language_in_transport_and_traffic_engineering_profession_and_science.pdf>.
- Dimković-Telebaković, G. (2013b). *Studies on English and Serbian Language*. Belgrade: Svet knjige.
- Dimković-Telebaković, G. (2014a). Prevođenje engleskih specijalizovanih složenih leksema na srpski jezik i njihovi prevodni obrasci. In: T. Prčić et al. (eds.), *Engleski jezik i anglofone književnosti u teoriji i praksi*, Zbornik u čast Draginji Pervaz – *English Language and Anglophone Literatures in Theory and Practice, Festschrift in Honour of Draginja Pervaz*, Novi Sad: Filozofski fakultet, Univerzitet u Novom Sadu, 115–124.
- Dimković-Telebaković, G. (2014b). The Dynamics of English Terminological Compound Lexemes and Their Serbian Equivalentents. *Romanian Journal of English Studies*, 11(1), 9–20.
- Dimković-Telebaković, G. (2015a). Teaching and Learning English Specialised Compound Lexemes. In: V. Cakeljić et al. (eds.), *Book of Proceedings, III International Conference Language for Specific Purposes: Past, Present, Future*, 26–27 September 2014, Belgrade: Faculty of Organizational Sciences, 145–152.
- Dimković-Telebaković, G. (2017a). *English and Serbian Language in Contact*. Belgrade: Svet knjige.
- Dimković-Telebaković, G. (2017b). Standardizovanje saobraćajne terminologije u srpskom jeziku. In: M. Kovačević and J. Petković (eds.), *Srpski jezik, književnost, umetnost*, knj. I, (*Srpski jezik u komunikativnoj funkciji*, Kragujevac: Filološko-umetnički fakultet, 103–112.
- Hlebec, B. (2009). *Opšta načela prevođenja*. Beograd: Beogradska knjiga.
- Huddleston, R. and G. K. Pullum (2002). *The Cambridge Grammar of the English Language*. Cambridge: Cambridge University Press.
- Klajn, I. (2002). *Tvorba reči u savremenom srpskom jeziku. Prvi deo. Slaganje i prefiksacija*. Beograd: Zavod za udžbenike i nastavna sredstva/Institut za srpski jezik SANU; Novi Sad: Matica srpska.
- Lyons, J. (1977). *Semantics*. Cambridge: Cambridge University Press.
- Quirk, R. et al. (1985). *A Comprehensive Grammar of the English Language*. London /New York: Longman.
- Sag, I. A. et al. (2002). Multiword Expressions: A Pain in the Neck for NLP. In: *Proceedings of the Computational Linguistics and Intelligent Text*

Processing: Third International Conference: CICLing / 2002, Lecture Notes in Computer Science, 2276, Springer, 1–15.
Zgusta, L. (1971). *Manual of Lexicography*. The Hague/Paris: Mouton.

Sources

- Dimković-Telebaković, G. (2015b). *English in Transport and Traffic Engineering*. 6th edition. Beograd: Univerzitet u Beogradu, Saobraćajni fakultet.
- Dimković-Telebaković, G. (2015c). *Testovi, zadaci i teme iz engleskog jezika*. 6th edition. Beograd: Univerzitet u Beogradu, Saobraćajni fakultet.
- Dimković-Telebaković, G. (2018). *English Grammar for Transport and Traffic Engineers*. Beograd: Univerzitet u Beogradu, Saobraćajni fakultet.
- Fišer-Popović, A., V. Mijušković and J. Radoš (1992). *English-Serbian Dictionary of Road Traffic Engineering, Englesko-srpski rečnik drumskog saobraćaja*. Drugo izdanje. Beograd: Savremena administracija.

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ЕНГЛЕСКЕ ТЕРМИНОЛОШКЕ СЛОЖЕНЕ ЛЕКСЕМЕ, ЊИХОВИ
ЕКВИВАЛЕНТИ У СРПСКОМ ЈЕЗИКУ И ПРЕВОДНИ ОБРАСЦИ

Сажетак

Циљ рада је да се у српском језику тачно изрази значење 82 енглеске сложене лексеме које су у употреби у саобраћајном инжењерству. Како би овај циљ био остварен, коришћена је семантичко-морфолошка преводна метода. Она помаже да се установе преводни обрасци. Добијена су 34 обрасца, који откривају редослед превођења конституената у енглеским лексичким јединицама, приказују тачан број елемената у саставу анализираних терминолошких сложених лексема и њихових преводних еквивалената, и показују како се одређена значења енглеских сложених термина морфолошки изражавају у српском језику. Преводни обрасци могу имати теоријске и практичне импликације. Резултати истраживања могу помоћи при

стандардизовању термилошких лексема у српском језику и у настави енглеског језика науке и струке.

Кључне речи: семантичко-морфолошка преводна метода, преводни обрасци, енглеске специјализоване сложене лексеме, еквиваленти у српском језику, саобраћајно инжењерство

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HIGH EXPECTATIONS AND LOW BLOWS: ANTONYMY AND DYNAMIC MEANING CONSTRUCTION**

Abstract

This paper, set against the theoretical background of cognitive linguistics, explores the cognitive potential of the lexical-semantic relation of antonymy from the perspective of dynamic meaning construction. Ten pairs of English canonical antonyms (*high/low, long/short, broad/narrow, deep/shallow, thick/thin, heavy/light, hard/soft, large/small, fast/slow, hot/cold*) are examined with respect to the ways in which the relation of meaning oppositeness holding between their members is dynamically activated under semantic extension, paradigmatically and syntagmatically, in semantically creative instances of use. The analysis highlights the following aspects of such dynamic meaning construction: (i) the availability of dormant antonym senses for context-induced activation (e.g. *shallow trouble*); (ii) the modifiability of idiomatic expressions through antonym substitution (e.g. *The bigger they come, the harder they fall* > *The bigger they come, the softer they fall*); (iii) the syntagmatic co-occurrence of antonyms whose extended senses belong to different conceptual domains (e.g. *High hopes in low places*). The theoretical considerations pertain to the cognitive entrenchment of antonymy as a powerful trigger of dynamic meaning construction.

Key words: antonymy, semantic extension, dynamic meaning construction, cognitive linguistics

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** To Prof. Boris Hlebec, whose pioneering work in the field of lexical semantics at the English Department, Faculty of Philology, University of Belgrade, provides lasting inspiration for many generations of students and scholars.

1. Introduction

Antonymy is arguably the most extensively studied lexical semantic relation – and for good reasons, which can be summarized by Lyons’s (1977: 277) observation that “antonymy reflects or determines what appears to be a general human tendency to categorize experience in terms of dichotomous contrast”. The cognitive salience of antonymy has long been evident in psycholinguistic research, which shows, among other things, that a word with an opposite meaning is the most common response in free word association tasks, that antonym pairs are identified at a faster rate than word pairs related in other ways, and that the ability to match opposites develops earlier in childhood than is the case with other semantic relations (cf. Deese 1965, Postman and Keppel 1970, Herrmann et al. 1979, Gross, Fischer and Miller 1989, Landis, Herrmann and Chaffin 1987). Parallely, linguistic treatments of antonymy appear to increase in number and scope, shifting from structuralist and logical-semantic perspectives to cognitively and pragmatically oriented usage-based accounts, and opening up new lines of research (cf. Lyons 1977, Lehrer 1985, 2002, Cruse 1986, 2004, Justeson and Katz 1991, 1992, Mettinger 1994, Cruse and Togia 1995, Fellbaum 1995, Willners 2001, Jones 2002, Murphy 2003, 2010, Croft and Cruse 2004, Paradis and Willners 2011, Jones et al. 2012, Kostić 2013, Rasulić 2016).

This paper explores the cognitive potential of antonymy from the perspective of dynamic meaning construction. Set against the theoretical background of cognitive linguistics, the analysis integrates insights pertaining to the dynamic construal approach to meaning, conceptual mechanisms underlying semantic extension, constructional architecture of the language, and antonym co-occurrence in discourse. Specifically, ten pairs of English canonical antonyms (*high/low*, *long/short*, *broad/narrow*, *deep/shallow*, *thick/thin*, *heavy/light*, *hard/soft*, *large/small*, *fast/slow*, *hot/cold*) are examined with respect to the ways in which the relation of semantic oppositeness holding between their members is dynamically activated under semantic extension, both paradigmatically and syntagmatically, in semantically creative instances of use. The paper is structured as follows: the theoretical and methodological coordinates are provided in Sections 2 and 3, the results of the analysis are presented and discussed in Section 4, and the global findings and implications for further research are summarized in the concluding Section 5.

2. Antonymy and semantic extension from a cognitive-linguistic perspective

To begin with, it is worth recalling Ullmann's (1957: 117) oft-quoted dictum that "polysemy is the pivot of semantic analysis". This is also valid with respect to antonymy, since, like other paradigmatic lexical semantic relations, antonymy actually relates some, not necessarily all senses of one lexeme to another.¹ Hence, for instance, a single lexeme can (and often does) have more than one antonym corresponding to its different senses (e.g. *hard* : *soft* (*mattress*) / *easy* (*task*) / *light* (*blow*) / *mild* (*winter*)), and sometimes it is even possible for different senses of the same lexeme to be opposite to each other (e.g. *a fast car* : *a fast grip*).

The point of interest here is the aspect of antonymy–polysemy interface which concerns asymmetries in the extended senses of the two members of an antonym pair. Namely, it is not uncommon for one member of an antonym pair to have richer semantic extension than the other (for instance, *high*, *deep*, *fast* are more polysemous than their counterparts *low*, *shallow*, *slow*). Thereby, as observed by Lehrer (2002), and illustrated by her example in (1), the antonym relation holding between the basic and frequent senses of two lexical items can be contextually extended to senses lacking in one pair member.

(1) *He traded in his hot car for a cold one.*

The extended sense of *hot* 'illegally acquired' is illustrative of the asymmetry in the semantic extension of antonym pair members, since it is not paralleled by the corresponding conventionalized opposite extended sense of *cold*. But when *cold* is directly contrasted with this particular sense of *hot*

¹ Cf. Lyons's (1977) term *paradigmatic sense relations*, where *sense* pertains to the aspect of lexical meaning which relates a linguistic expression to other expressions in the language system, while *denotation* relates a linguistic expression to a set of potential referents in the external world. Cruse (1986: 76) introduces the term *lexical unit* for "the union of a lexical form and a single sense" and characterizes a lexeme as "a family of lexical units", emphasizing that semantic relations hold between lexical units, not between lexemes. Although paradigmatic lexical semantic (sense) relations are often discussed with regard to the primary senses of the lexemes involved, their intertwinedness with multiple senses of lexical items always needs to be kept in sight. Generally, the more senses of two lexemes are related in a particular way, the stronger the given lexical semantic relation between them; and vice versa, the more polysemous a lexeme is, the less likely it is that a particular semantic relation will hold for all of its senses (for further considerations regarding the interface between polysemy and paradigmatic lexical semantic relations, cf. Rasulić 2016).

in context, as in (1), *cold* is effortlessly interpreted as ‘legally acquired’, due to the projection of the antonym relation.

This phenomenon is in line with the cognitive-linguistic approach to meaning, which explicitly acknowledges the encyclopedic nature of meaning, the dynamic interaction between semantic and conceptual structure, the pervasiveness of polysemy, and the principles of prototypicality and gradience in linguistic categories (for a comprehensive overview, cf. Geeraerts and Cuyckens 2010). A variant thereof which is of particular relevance for the study of antonymy is the dynamic construal approach to meaning, proposed by Croft and Cruse (2004: 97), who argue that “neither meanings nor structural relations are specified in the lexicon, but are construed ‘on-line’, in actual situations of use”. On this view, lexical semantic relations in general and antonymy in particular are treated as conceptual and contextual construals, rather than as fixed structural relations between particular linguistic items. Paradis (2011) further elaborates the dynamic construal approach to antonymy, based on textual and psycholinguistic data. She argues that “antonymy is a binary construal of comparison in which the contentful dimension is divided by a bounded configuration” (Paradis 2011: 41), i.e. that form-meaning pairings are construed as antonyms when they are used in binary contrast in discourse, whereby antonym construals range from highly conventionalized ones (e.g. *neither good nor bad*) to strongly contextually motivated ones (e.g. *I prefer calm waters to flowing waters*), with the former perceived as better antonym pairings than the latter.

The gradient nature of goodness of antonym pairings, verified in psycholinguistic research (Hermann et al. 1979), is reflected in Murphy’s (2003) notion of antonym canonicity as the degree to which antonyms are semantically related (based on the principle of minimal difference) and conventionalized in language as antonym pairs without reference to context. In a discussion related to the projection of antonym relation to extended senses illustrated by the example (1) (*He traded in his hot car for a cold one*), Murphy (2003: 34) notes that “the stability of some such antonym pairs across senses and contexts is evidence that those antonymic pairings are canonical”.²

² Cf. also Paradis, Willners and Jones (2009), who combine corpus-linguistic and experimental methodology and find that canonical antonyms can be diagnosed through textual co-occurrence, individual goodness-of-opposition ratings, and elicitation evidence.

Within cognitive linguistics, lexical semantic extension is generally viewed as one of the multifaceted (linguistic and extra-linguistic) manifestations of the underlying conceptual mapping mechanisms, the most prominent of which are conceptual metaphor and metonymy (as expounded in the seminal account by Lakoff and Johnson 1980; see also Lakoff 1993, Panther and Radden 1999, Kövecses 2002). In brief, conceptual metaphor involves mapping across different domains, whereby a target domain is conceptualized in terms of a source domain (e.g. MORE IS UP, INTENSITY IS HEAT, IMPORTANCE IS SIZE), and conceptual metonymy involves mapping within a single domain, whereby one concept serves as a vehicle to mentally access a target concept within the same domain (e.g. BODY PART FOR PERSON, AUTHOR FOR HIS WORK, TIME/PLACE FOR EVENT).

With regard to metaphorical semantic extension, Deignan (2005: 169–192) examined paradigmatic sense relations in source and target domains using the Bank of English corpus data. For antonymy in particular, she analyzed English terms from the source domains of TEMPERATURE and LIGHT/DARKNESS, and found that the antonym relation is not consistently mapped in the target domains. The established inconsistencies pertain to different conceptual or linguistic aspects of metaphorical extension, such as different target domains (e.g. most metaphorical uses of *light* are associated with knowledge, while most metaphorical uses of *dark* are associated with unhappiness), collocational preferences highlighting different aspects of a target domain (e.g. both *hot* and *cold* extend their meanings to the sexual domain, but *hot* tends to collocate with words referring to texts and images, meaning ‘sexually explicit’, while *cold* rather collocates with words referring to people, meaning ‘uninterested in sex’), uneven distribution across word classes (e.g. metaphorical *light* tends to be nominal, while metaphorical *dark* tends to be adjectival), etc. In contrast to such inconsistencies in temperature and light/darkness metaphors, Deignan (2005) found that semantic relations do get preserved in cases of metaphorical mappings ARGUMENT IS WAR and COMPLEX ABSTRACT SYSTEMS ARE PLANTS. Approaching the issue of the consistence of semantic relations in source and target domains from the standpoint of the nature of mappings, she concluded that the observed differences may be accounted for in terms of whether the mapping involved is pure metaphor (as is the case with war and plant metaphors) or metonymy-based metaphor (as is the case with temperature and light/darkness metaphors).

In this paper, the issue of (in)consistence of antonym relation under asymmetric semantic extension will be addressed from the dynamic construal standpoint, with the aim to explore the projectability and activatability of antonym relation in semantically creative instances of use.³

3. Scope of analysis

The antonym pairs selected for analysis include the following gradable adjectives: *high/low*, *long/short*, *broad/narrow*, *deep/shallow*, *thick/thin*, *heavy/light*, *hard/soft*, *large/small*, *fast/slow*, *hot/cold*. They belong to canonical antonyms and are also representative of the central variety of antonymy (variously termed in the pertinent literature as ‘scalar antonymy’, ‘gradable antonymy’, ‘contrary antonymy’, ‘antonymy proper’ or just ‘antonymy’), which is typical of gradable adjectives and involves the partitioning of the underlying semantic dimension in a more-less fashion, with a neutral middle ground in between, so that antonym pair members yield unilateral negative entailments (e.g. *If something is high, then it is not low; If something is not high, it is not necessarily low – it may be neither high nor low*).⁴

With respect to Cruse and Togia’s (1995) and Croft and Cruse’s (2004: 169–185) cognitive-linguistic treatment of antonymy based on the image schema of *SCALE*, the selected antonym pairs belong to both monoscalar

³ The notion of semantic creativity is broadly understood as the capacity of speakers to produce semantic content beyond the ordinary and conventional, as is the case with humour, irony, metaphors, and other higher-order language products which involve the activation and processing of multiple alternative meanings (cf. Kennet, Anaki and Faust (2014); for a comprehensive survey of different perspectives on the relationship between language and creativity, see Jones R. (2016)).

⁴ Notably, Lyons (1977) and Cruse (1986) reserve the term *antonymy* only for this central type of semantic oppositeness, treating instances of other types (complementary, relational etc.) more broadly as *opposites*. For the broader use of the term *antonymy* with reference to different types of meaning oppositeness, and the varying terminological solutions, cf. e.g. Kempson 1977, Leech 1981, Palmer 1981, Murphy 2003, Geeraerts 2010, Hlebec 2010, Rasulić 2016. Here it should also be emphasized that the lexical semantic relation of antonymy, although found across different word classes, is particularly characteristic of adjectives, as amply evidenced not only in the theoretical-descriptive literature but also in psycholinguistic and corpus-linguistic research (e.g. Deese 1965, Fellbaum 1998, Jones et al. 2012).

(e.g. *high/low*) and biscalar (e.g. *hot/cold*) systems.⁵ Thereby the selection reflects the predominance of the former type, in which the term highlighting the upper part of the underlying scale yields a neutral *how*-question and both members yield neutral comparatives (e.g. *How high is it? >>It may be high or low, or neither* vs. *How low is it? >> It is low; X is higher than Y, but both are low : X is lower than Y, but both are high*), as opposed to the latter type, in which both members yield questions and comparatives committed to one part of the scale (e.g. *How hot is it? >> It is hot : How cold is it? >>It is cold; X is hotter than Y >> Both X and Y are hot : X is colder than Y >> Both X and Y are cold*).

Furthermore, and particularly importantly for the present analysis, all the selected adjectives are notably polysemous, with the antonym pair members manifesting asymmetries in semantic extension and collocational preferences, as indicated in (1) above and further illustrated in (2):

(2) *For example, we say 'deep trouble' but 'shallow trouble' is not acceptable.*

(Peter Watkins (2005): *Learning to Teach English*, Delta Publishing, p. 41)

The analysis consists of three parts. The first two parts deal with the paradigmatic projectability of antonym relation under semantic extension, and the third part deals with the syntagmatic co-occurrence of antonyms in senses belonging to different conceptual domains. Throughout the analysis, the antonym pair members which denote the upper part of the underlying scales serve as the starting point, since they generally tend to manifest richer semantic extension than their counterparts (as evident from the pertinent lexicographic resources, both in the number of listed senses and in the number of idiomatic expressions in which antonym pair members occur). The applicability of the findings in the opposite direction is tested using one monoscalar and one biscalar antonym pair (*low/high* and *cold/hot* respectively).

The analysis is qualitative. The data has been collected through Internet (Google) search, featuring examples attested in actual language

⁵ This treatment largely relates to the broader notions of markedness and polarity (cf. Lyons 1977, Bolinger 1977, Lehrer 1985, Cruse 1986, Rasulić 2016), but it brings the cognitively motivated scalar properties to the foreground, as particularly transpires in Cruse and Togia's (1995) and Croft and Cruse's (2004) terminological distinction between *supra* and *sub* antonym pair members in monoscalar systems.

use.⁶ The lexicographic resources used for semantic glossing include the following: *Oxford English Dictionary* (<http://www.oed.com/>), *Merriam-Webster Dictionary* (<https://www.merriam-webster.com/>), and *The Free Dictionary by Farlex* (<https://www.thefreedictionary.com/>).

The first part of the analysis examines the projection of antonym relation to extended senses which are ‘missing’ in one of the antonym pair members. Specifically, the analysis focuses on the asymmetrically extended senses of the antonym pair members listed in (3), whereby the semantic extension asymmetries have been established with a view to the pertinent theoretical-descriptive accounts provided by Hlebec (1979) /dimensional adjectives/, Rasulić (2004) /verticality adjectives/ and Rasulić (2015) /temperature adjectives/, and taking into account the fact that collocations constitute an important source of information for determining the semantic content of a word, as particularly demonstrated in the collocational method developed by Hlebec (1998, 2008, 2010).

- (3) *high priest* : ? *low priest*
long guess : ? *short guess*
broad humour : ? *narrow humour*
deep trouble : ? *shallow trouble*
thick accent : ? *thin accent*
heavy with child : ? *light with child*
hard life : ? *soft life*
large view : ? *small view*
fast woman : ? *slow woman*
hot battle : ? *cold battle*
low cunning : ? *high cunning*
cold statistics : ? *hot statistics*

The second part of the analysis is concerned with the projection of antonym relation with regard to the modifiability of idiomatic expressions. This aspect is included since idiomatic expressions are generally characterized by a high degree of conventionalization, lexico-syntactic fixedness and non-compositional semantic unity (cf. Mel’čuk 1995,

⁶ For the benefits and shortcomings of web-based corpus research into linguistic phenomena, see e.g. Kilgarriff and Grefenstette (2003), and, with respect to antonymy, Jones et al. (2007). Given the qualitative nature of the present analysis, the web-based research proves beneficial insofar that it provides insight into infrequent but nevertheless noteworthy instances of semantically creative language use.

Moon 1998, Gries 2008), which makes them a particularly good testing ground for the projectability of antonym relation. Corpus linguistics has shown that the “so-called ‘fixed phrases’ are not in fact fixed” (Sinclair 1996: 83), and the issue of phraseological variability has been addressed within different theoretical frameworks (e.g. Moon 1998, Wray 2002, Philip 2008), including cognitive linguistics (e.g. Langlotz 2006, Rasulić 2010). Examining this phenomenon from the perspective of construction grammar (Goldberg 2006), a cognitive-linguistic theory which postulates the constructional architecture of language in terms of idiosyncratic form-meaning correspondences, Rasulić (2010) found that the so-called fixed expressions manifest inherent constructional dynamism that is variously exploited to create novel meanings, whereby a noticeable aspect of constructional variation involves lexical substitution triggered by semantic oppositeness (ranging from antonymy between the replaced and the novel element to the contrast conditioned by the overall meaning of the host expression), as illustrated by the examples in (4):

- (4) *First come, last served* (< *First come, first served*)
Once bitten, never shy (< *Once bitten, twice shy*)

The focus here is on the substitutability of antonyms in idiom modification. The analysis includes the idiomatic expressions listed in (5). In terms of Fillmore, Kay and O’Connor’s (1988) classification, which is widely acknowledged in the pertinent cognitive-linguistic literature, all of them belong to substantive (lexically filled) idioms, but differ with respect to degrees of non-compositionality (cf. *as honest as the day is long* /encoding, i.e. interpretable based on the knowledge of constituent lexical meanings and grammar, but not predictable/ : *pull a fast one* /decoding, i.e. uninterpretable regardless of the knowledge of constituent lexical meanings and grammar, hence also unpredictable/), and conformity to general syntactic rules (cf. *pull a fast one* /grammatical/ : *by and large* /extragrammatical/).

- (5) *(as) high as a kite*
(as) honest as the day is long
in broad daylight
go off the deep end
(as) thick as thieves
make heavy weather of something
The bigger they come, the harder they fall

by and large
pull a fast one
go like hot cakes
low blow
give someone the cold shoulder

Finally, the third part of the analysis involves the syntagmatic axis. This aspect is included because ample evidence from corpus linguistics (cf. Justeson and Katz 1991, 1992, Mettinger 1994, Fellbaum 1995, Willners 2001, Jones 2002, Jones et al. 2012, Kostić 2013) shows that, in addition to the paradigmatic relatedness, antonyms manifest noteworthy syntagmatic affinity, readily attracting each other in text/discourse, whereby “antonyms not only co-occur significantly more often in the same sentence than chance predicts, but also significantly more often than other semantically related word pairs such as synonyms or hyponyms” (Jones et al. 2012: 26).⁷ The focus is on the syntagmatic co-occurrence of antonyms under semantic extension, i.e. on the co-occurrence of their extended senses which belong to different conceptual domains, as illustrated in (6), where the coordinated senses of *high* and *low* are motivated by metaphorical mappings of the vertical dimension into abstract target domains of intensity and morality respectively.

- (6) *She tells a fascinating tale [...] of high expectations and low blows.*
(<https://ethanjonesbooks.wordpress.com/2013/03/20/deadly-stakes-by-j-a-jance/>)

In this regard, the following extended senses and the corresponding collocational combinations of the pertinent antonym pair members are taken into account:

- (7) *high hopes...*
long odds...
broad minds...

⁷ Thereby converging corpus evidence shows that antonyms tend to co-occur in characteristic lexico-grammatical frames, serving different discourse functions. The two most prominent categories elaborated in the above-mentioned studies include (i) coordinated (inclusive) antonymy, which covers the whole semantic dimension along which the antonym pair contrasts and neutralizes the opposition, typically occurring in conjunctive or disjunctive combinations (e.g. *(both) X and Y*, *(either/whether) X or Y*), and (ii) ancillary antonymy, which highlights or creates another contrast within a sentence, typically in a parallel syntactic structure (e.g. *Success makes men proud; failure makes them wise*).

deep secrets...
thick accent...
heavy heart...
hard evidence...
large role...
fast minds...
hot topics...
low budget...
cold reality...

4. Results and discussion

4.1. Dormant antonym sense activation

In all the instances examined, the paradigmatic antonym relation turns out to be projectable in order to activate an extended sense which is not commonly featured by one pair member (here referred to as ‘dormant sense’), as shown in Table 1.

Ex.	Asymmetrically extended senses	Dormant antonym sense activation
(8)	high priest 'chief priest / chief exponent of a doctrine or an art' : ? low priest	Traditionally, only two priests ever went into the innermost sanctuary. <i>They were the High Priest and the other priest who wasn't high.</i> They had been there for years, and took turns at being the high one. ... They were playing Cripple Mr. Onion on the high altar.. "Now", said the High Priest, "What was the stake?" "Two pebbles", said the low priest . (Terry Pratchett: <i>Reaper Man</i> , 2007, EPub Edition, HarperCollins e-books. https://www.ebooks.com/en-rs/305454/reaper-man/pratchett-terry/)
(9)	long guess 'extending beyond what is known' : ? short guess	If, for a problem <i>p</i> , we can generate a " short guess " and check the guess efficiently, then <i>p</i> belongs to the class NP (Gopalakrishnan, G.L. (2006): <i>Computation Engineering: Applied Automata Theory and Logic</i> . New York: Springer. https://books.google.rs/books?isbn=0387325204)

(10)	broad humour 'coarse, indecent' : ? narrow humour	It's the kind of <i>broad humour</i> that's just narrow enough to be funny. (https://hookedonfilmwa.wordpress.com/tag/madison-iseman/)
(11)	deep trouble 'very intense or extreme' : ? shallow trouble	„You have to love life when you're in really <i>deep trouble</i> ,” said poet Robin Blaser. So what about if, on the other hand, you're in only shallow trouble ? (https://www.freewillastrology.com/horoscopes/20080731.html)
(12)	thick accent 'strongly marked/distinct' : ? thin accent	His <i>accent</i> was thin , but not unnoticeable. (https://www.fanfiction.net/s/1740767/1/Devil-May-Not-Cry)
(13)	heavy with child 'pregnant, esp. approaching parturition' : ? light with child	Amongst the flock was Frau Mary who was light with child ... (http://www.h5hashers.org.uk/words/oldWords/2014/1237.htm)
(14)	hard life 'difficult to bear/causing suffering' : ? soft life	Why do I sometimes wish I had a <i>hard life</i> ? ... [To] prove to people you can survive a <i>hard life</i> as easily as you have survived your “soft” life . (https://www.quora.com/Why-do-I-sometimes-wish-I-had-a-hard-life)
(15)	large view 'comprehensive/wide-ranging' : ? small view	On this subject we have to take a <i>large view</i> , but in all parties there are some who take a small view . (https://hansard.parliament.uk/commons/1924-02-22/debates/034c037a-5584-4604-a93c-8bed181a02f6/OrdersOfTheDay)
(16)	fast woman 'sexually promiscuous' : ? slow woman	...speaking as a slow woman (as opposed to a “ <i>fast woman</i> ”, I guess!), I don't tend to be surrounded by men... (https://forums.runnersworld.co.uk/discussion/104143/bupa-great-south-run/p9)
(17)	hot battle 'fierce, intense' : ? cold battle	Seems like there's going to be a battle between Nivix and Sonic... It's <i>not a hot battle</i> , it's like a cold battle ... (https://www.deviantart.com/nivixthelucario/art/Hedgehog-Rumble-751918247)

(18)	low cunning 'unscrupulous/ morally reprehensible' : ? high cunning	You hear a lot about <i>low cunning</i> but very little about high cunning . That's because high cunning is perpetrated by people so above suspicion that you don't even notice it. (Guy Browning: How to... be cunning, <i>The Guardian</i> , 19 July 2008 https://www.theguardian.com/lifeandstyle/2008/jul/19/healthandwellbeing5)
(19)	cold statistics 'objective/not affected by emotion': : ? hot statistics	Fixed recurring data and temporary ' hot ' statistics (Bodelsson et al. (2012): Research library statistics: For whom and for what purpose? In: <i>New Trends in Qualitative and Quantitative Methods in Libraries</i> (eds. A. Katsirikou, C. Skiadas), 315–322. https://books.google.rs/books?isbn=9814350303)

Table 1. Instances of dormant antonym sense activation

Namely, despite the conventionalized asymmetry of semantic extension and the corresponding asymmetry in collocational combinations of the observed antonym pair members, the projection of the cognitively entrenched antonym relation proves to be context-inducible for the purpose of highlighting direct contrast in particular instances of use, activating in one antonym pair member a dormant sense which may not be specified in the lexicon but is nevertheless available for dynamic on-line construal. As can be seen in examples (18) and (19), included to check whether the antonym relation can be projected from both the upper and the lower end of the underlying scales, this kind of sense activation is possible in both directions.

Thereby, the activation of a dormant antonym sense can be (and often is) triggered by the explicit mention of its conventionalized counterpart within a proximal context, including but not limited to the same syntagmatic sequence (ex. 8, 10, 11, 14, 15, 16, 17, 18), which bears additional witness to the aforementioned tendency of antonyms to co-occur in discourse. At the same time, dormant antonym senses can also be activated without such immediate contextual triggering (ex. 9, 12, 13, 19). The spontaneous use of hedging markers (ex. 17) or quotation marks (ex. 9, 14, 19) signals the speaker's/writer's awareness of the unusualness of dormant sense activation. Highlighting the availability of the dormant antonym pole for versatile context-induced activation under semantic extension, these findings provide additional insight into the cognitive potential of antonymy for dynamic meaning construction.

4.2. Idiom modification through antonym substitution

The cognitively entrenched antonym relation also turns out to be readily projectable when it comes to the modification of idiomatic expressions. As shown in Table 2, modification through antonym substitution has been verified for all the idiomatic expressions examined (across their varying degrees of semantic non-compositionality and syntactic conformity, and in both directions of the underlying scales).

Ex.	Idiomatic expression	Modification through antonym substitution
(20)	as high as a kite 'very excited/ strongly affected by alcohol or drugs'	Apparently he was on 'downer' drugs at the time. He was " as low as a kite ", paramedics claim. (https://twitter.com/YouHadOneJOB/status/11011-81503726182400)
(21)	as honest as the day is long 'very honest'	There are five refineries in Colombia apparently. I'm sure government officials are as honest as the day is short . (https://uk.advfn.com/stock-market/london/amerisur-AMER/share-chat?page=3861&xref=chatnav_i_3_b)
(22)	in broad daylight 'openly, when anyone can see it'	[News headline:] Man threatened shop staff with a knife <i>in broad daylight</i> . [Comment:] It could be worse, it could have been in narrow daylight or worse again in the dark! (https://www.thejournal.ie/http://www.thejournal.ie/man-threatened-shop-knife-armagh-1472370-May2014/?embedpost=1472370&width=300&height=460)
(23)	go off the deep end 'be irrationally carried away/become unduly excited or angry'	I often say to those concerned about <i>going off the deep end</i> , "Have you considered what happens to those who go off the shallow end ? (http://www.dwillard.org/articles/individual/wide-awake)
(24)	(as) thick as thieves 'having a close, intimate friendship or alliance'	Hi! We're Matt and Hannah, also known as Thin As Thieves . (https://www.youtube.com/channel/UC3qVFdQV-BHEy0oY9-pYoGew/about?disable_polymer=1)
(25)	make heavy weather of something 'make something seem more difficult than it really is'	Celtic made light weather of the first qualifying round of the Champions League [...] (https://www.ihateceltic.com/brendan-rodgers-remains-optimistic-over-moussa-dembele%E2%80%99s-injury)

(26)	The bigger they come, the harder they fall 'those who are important/powerful/influential lose more when they fail'	The bigger they come, the softer they fall: The size of pharma companies and how vigorously they are prosecuted (http://hcrenewal.blogspot.com/2014/11/the-bigger-they-come-softer-they-fall.html)
(27)	by and large 'generally, on the whole'	New York Apartment Interior Design: A New Apartment Interior By and Small (http://cremafriends.com/portfolio/)
(28)	pull a fast one 'trick someone/engage in a deceitful practice'	But when it came to the House Rules Committee, Minority Leader Frank Dermody, D-Oakmont, who fears shrinkage even more than George Costanza did, <i>pulled a fast one</i> . Or, more accurately, he pulled a slow one . This process has gone on longer than even PennDOT projects, and Mr. Dermody aimed to delay it further by amending the bill. (https://www.post-gazette.com/opinion/brian-oneill/2018/09/30/Six-reps-turn-tail-to-deny-you-a-vote-on-the-size-of-our-Legislature/stories/201809300131)
(29)	go like hot cakes 'sell very quickly'	The Hot Fudge Brownie one <i>went like hot cakes</i> and the Hot Cake Sticky one went like cold cakes . (https://www.lodgefarmholidaybarns.co.uk/2014/07/30/summer-sundays-are-for-ice-cream/)
(30)	low blow 'unscrupulous attack/insult'	– Anybody who gives such a <i>low blow</i> cannot be serious about his political career if he still has it. – Who cares, <i>low blow</i> or high blow – as long as the intention is to bring about justice? (https://sloone.wordpress.com/2007/07/05/indeed-well-done-tian-chua/)
(31)	give somebody the cold shoulder 'ignore somebody/treat somebody in a deliberately unfriendly way'	See a model giving the hot shoulder at the Christian Dior 2011 Resort show this weekend. (https://www.glamour.com/story/32-sexy-new-tops-how-to-show-s)

Table 2. Instances of idiom modification through antonym substitution

Thereby, antonym substitution usually involves directly opposed senses of antonym pair members, with the meaning of the modified expression standing in contrast to the overall idiomatic meaning of the host expression, as, for instance, in (29), where both *hot* and *cold* evoke temperature senses, and *go like hot cakes* ‘sell very quickly’ is transformed into *go like cold cakes* ‘sell very slowly’. But it may also be the case that the antonym substitute brings in a sense which is actually not directly opposed to the sense of its counterpart in the host expression, as, for instance, in (31), where *cold* in *give someone the cold shoulder* ‘ignore somebody/treat somebody in a deliberately unfriendly way’ evokes the ‘emotionally detached’ sense (whose direct opposite is featured by *warm*, not *hot*), while *hot* in the modified expression *give someone the hot shoulder* evokes the ‘sexually attractive’ sense and is paired with the basic concrete sense of *shoulder* (with reference to models wearing sexy off-the-shoulder tops in a fashion show). As a result, the meaning of the modified expression does not actually stand in direct contrast to the overall idiomatic meaning of the host expression, but reflects a more complex dynamic construal, which involves the projection of the cognitively entrenched antonym relation under asymmetric semantic extension and the interplay between linguistic and encyclopedic knowledge as well as between literal and figurative interpretation.⁸

On the whole, the fact that antonymy is actively exploited in idiom modification in versatile ways provides additional evidence into the cognitive salience of this lexical-semantic relation and its rich potential for dynamic meaning construction. Modification through antonym substitution may be triggered by the explicit mention of the original idiomatic expression in the surrounding context (which is in line with the aforementioned tendency of antonyms to co-occur in discourse), as in (22, 23, 28, 29, 30). But even without such explicit mention, the original idiomatic expression is paradigmatically discernible based on the stored linguistic knowledge, and the modified expression cannot be fully understood without mental reference to the original one. From the broader perspective of idiom modifiability, the data presented here corroborate the previously discussed

⁸ Here it should be noted that direct contrast to the overall idiomatic meaning of *give someone the cold shoulder* is also achievable through antonym substitution, whereby the pertinent antonym sense is provided by *warm* instead of *hot*, as in the following illustrative example: *Of an Oxford character known for his false geniality, Bowra remarked that at their last meeting the man gave him “the warm shoulder”* (<https://www.weeklystandard.com/joseph-epstein/the-oxford-man>).

cognitive-linguistic findings concerning the constructional productivity of idiosyncratic form-meaning pairings, with fresh insight into the special role of antonymy in this regard.

4.3. Syntagmatic co-occurrence of antonyms whose senses belong to different conceptual domains

Finally, with particular regard to the syntagmatic dimension, the third part of the analysis highlights the tendency of canonical antonyms to co-occur in syntagmatic sequences not only in the directly opposite senses but also in the senses which belong to different conceptual domains, as shown in Table 3.

Ex.	Co-occurring antonyms	Senses of co-occurring antonyms
(32)	High hopes in low places (Song title by <i>End of Green</i>)	high 'intense' low 'socially inferior'
(33)	Long odds for short hitters at <i>Augusta National</i> (Associated Press, April 4, 2007 https://www.golfchannel.com/article/associated-press/long-odds-short-hitters-augusta-national)	long 'reflecting a low level of probability' short 'covering a small distance'
(34)	Broad minds and narrow perspectives (VP Digital, December 1, 2015 https://thevoiceslu.com/2015/12/broad-minds-and-narrow-perspectives/)	broad 'liberal, tolerant' narrow 'limited in scope'
(35)	Deep secrets, shallow relationships (Blog Post <i>STEEVAK Stuff and Stuff</i> , https://steevak.com/ , September 21, 2006)	deep 'unknown, obscure' shallow 'superficial, weak'

(36)	<p><i>Mr Del Prete might conceivably play a street Arab, but in a sophisticated role, with his thick accent and thin talent, he has as much charm as a broomstick with a smile painted on it.</i> (Chris Tookey's <i>Movie Film Review Database</i>: "At Long Last Love" /1975/: John Simon, <i>National Review</i> http://www.movie-film-review.com/devfilm.asp?rtype=3&id=890)</p>	<p>thick 'strongly marked, distinct' thin 'lacking substance or quality'</p>
(37)	<p><i>With a heavy heart and light wallet, I said goodbye to Italy the next morning.</i> (Blog Post <i>A Tepid Reception</i>, https://tepidreception.wordpress.com/, June 20, 2010)</p>	<p>heavy 'characterized by severe pain or suffering' light 'carrying little or no content/money'</p>
(38)	<p><i>Salisbury incident report: Hard evidence for soft minds</i> (By Tyler Durden, <i>Zero Hedge</i>, March 30, 2018 https://www.zerohedge.com/)</p>	<p>hard 'reliable, factual' soft 'susceptible to influence'</p>
(39)	<p><i>Why your business relationships may hinge on the large role of small talk</i> (https://www.getabstract.com/en/channels/small-talk/1359)</p>	<p>large 'important, influential' small 'casual, trivial'</p>
(40)	<p><i>Cities should be filled with fast minds and slow streets.</i> (https://www.cyburbia.org/forums/threads/should-cities-convert-one-way-streets-to-two-way.16076/)</p>	<p>fast 'mentally alert' slow 'characterized by lack of speed'</p>
(41)	<p><i>Hot topics and cold reactions in rugby league</i> (https://www.theroar.com.au/-2011/07/15/hot-topics-and-cold-reactions/)</p>	<p>hot 'of great and immediate interest' cold 'reserved, unfriendly'</p>
(42)	<p><i>Hope you guys like the low budget but high spirit of our birthday surprise...</i> (https://www.picdove.com/profile/zpin22)</p>	<p>low 'small in amount' high 'filled with joy and excitement'</p>

(43)	<p><i>Cold reality of a hot investment</i> (June Arney, The Baltimore Sun, 25 October 2005 https://www.baltimoresun.com/news/bs-xpm-2005-10-25-0510250084-story.html)</p>	<p><i>cold</i> ‘objective’ <i>hot</i> ‘currently popular’</p>
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Table 3. Instances of co-occurring antonyms whose senses belong to different conceptual domains

Concurring with the previously discussed corpus-linguistic evidence of the syntagmatic affinity of antonyms, these findings provide further insight into the cognitive entrenchment of antonymy and its potential for dynamic meaning construction under semantic extension. Namely, the analysis shows that canonical antonyms readily attract each other across different conceptual domains, including the ones in which the extended senses of antonym pair members diverge asymmetrically (as, for instance, in (36): *his thick (?thin) accent and thin (?thick) talent*). The semantic extension profiled in the attested examples is predominantly metaphorical, but it may also involve concrete domains and metonymic mappings, as in (33), where the ‘covering a small distance’ sense of *short* in *short hitters* involves the metonymic transfer from an action-related property to the person involved in the action. With regard to metaphorical extension, the data presented here are akin to the notions of topic-triggered and situationally-triggered metaphors discussed by Koller (2004) and Semino (2008), adding the aspect of antonymy-triggered co-occurrence of metaphors in syntagmatic sequences.

As for the syntactic patterning, the analyzed sample, although small, suggests that the syntagmatically related antonyms whose senses belong to different conceptual domains may occur in syntactic frames beyond the characteristic ones identified in corpus-linguistic studies, especially including prepositionally related noun phrases, as in (32, 33, 38, 39, 43).

At this point it should also be noted that the examples in this and in the previous two parts of the analysis have been attested in different areas of language use, including journalistic, literary and academic writing, as well as everyday communication – which also highlights the readiness with which the cognitive potential of antonymy is exploited for dynamic meaning construction. Unsurprisingly, the syntagmatic co-occurrence of antonyms whose senses belong to different conceptual domains features prominently

in journalistic writing, especially in headlines, where this kind of dynamic meaning construal serves as a particular eye-catching strategy.

5. Summary and concluding remarks

Exploring different ways in which the lexical-semantic relation of antonymy lends itself to semantically creative exploitation in natural language use, this paper highlights the cognitive potential of antonymy for dynamic meaning construction, with particular regard to the sustainability of antonymy under asymmetric semantic extension. The findings reveal the proneness of canonical antonymy to be dynamically activated under semantic extension in the following respects: (i) the cognitively entrenched paradigmatic antonym relation is readily projectable to activate an extended sense which is generally not featured by one antonym pair member (with or without immediate contextual triggering by the explicit mention of the conventionalized counterpart sense); (ii) the cognitively entrenched paradigmatic antonym relation is readily exploited in idiom modification (with or without immediate contextual triggering by the explicit mention of the original idiomatic expression); (iii) canonical antonyms readily co-occur in discourse in their extended senses which belong to different conceptual domains. The versatile exploitation of the cognitive potential of antonymy in dynamic meaning construction also transpires from the fact that the attested linguistic data belong to different registers and genres, including journalistic, literary and academic writing, as well as everyday communication.

The analysis focuses on the English language, but its findings may be applicable cross-linguistically. With particular regard to the contrastive perspective, the findings may also find application in the fields of foreign language teaching and translation studies. With regard to the broader perspective of language–conceptualization interface, this paper may serve as a useful indicator for further interdisciplinary dialogue related to the study of lexical-semantic relations and the intricate interplay of language, cognition and creativity.

References

- Bolinger, D. (1977). *Meaning and Form*. London: Longman.
- Croft, W. and D. A. Cruse (2004). *Cognitive Linguistics*. Cambridge: Cambridge University Press.
- Cruse, D. A. (1986). *Lexical Semantics*. Cambridge: Cambridge University Press.
- Cruse, D. A. (2004). *Meaning in Language: An Introduction to Semantics and Pragmatics*. 2nd edition. Oxford: Oxford University Press.
- Cruse, D. A. and P. Togia (1995). Towards a cognitive model of antonymy. *Lexicology*, 1, 113–141.
- Deese, J. (1965). *The Structure of Associations in Language and Thought*. Baltimore, MD: The Johns Hopkins Press.
- Deignan, A. (2005). *Metaphor and Corpus Linguistics*. Amsterdam/Philadelphia: John Benjamins.
- Fellbaum, C. (1995). Co-occurrence and antonymy. *International Journal of Lexicography*, 8, 281–303.
- Fellbaum, C. (ed.) (1998). *WordNet: An Electronic Lexical Database* (with a preface by George Miller). Cambridge, MA: MIT Press.
- Fillmore, C., P. Kay and M. C. O'Connor (1988). Regularity and idiomaticity in grammatical constructions: The case of *let alone*. *Language*, 64, 501–538.
- Geeraerts, D. (2010). *Theories of Lexical Semantics*. Oxford: Oxford University Press.
- Geeraerts, D. and H. Cuyckens (2010). *The Oxford Handbook of Cognitive Linguistics*. Oxford: Oxford University Press.
- Goldberg, A. (2006). *Constructions at Work. The Nature of Generalization in Language*. Oxford/New York: Oxford University Press.
- Gries, S. T. (2008). Phraseology and linguistic theory: A brief survey. In: S. Granger and F. Meunier (eds.), *Phraseology: An Interdisciplinary Perspective*, Amsterdam/Philadelphia: John Benjamins, 3–25.
- Gross, D., U. Fischer and G. A. Miller (1988). Antonymy and the representation of adjectival meanings. *Cognitive Science Laboratory Report 13*, Dept. of Psychology, Princeton University.
- Herrmann, D. J., R. Chaffin, G. Conti, D. Peters and P. H. Robbins (1979). Comprehension of antonymy and the generality of categorization models. *Journal of Experimental Psychology: Human Learning and Memory*, 5, 585–597.
- Hlebec, B. (1979). Kontrastivna analiza prideva sa značenjem jedne dimenzije u savremenom engleskom i srpskohrvatskom jeziku. Doktorska disertacija. Filološki fakultet, Univerzitet u Beogradu.

- Hlebec, B. (1998). *Connect Your Words*. Belgrade: Trebnik.
- Hlebec, B. (2008). Kolokacijska metoda semantičke analize (na primeru imenice *pažnja*). U: M. Radovanović i P. Piper (ur.), *Semantička proučavanja srpskog jezika*, Beograd: SANU, 65–75.
- Hlebec, B. (2010). *English Semantics for University Students*. 2nd edition. Belgrade: Čigoja.
- Jones, S. (2002). *Antonymy: A Corpus-Based Perspective*. London: Routledge.
- Jones, S., C. Paradis, M. L. Murphy and C. Willners (2007). Googling for ‘opposites’: A web-based study of antonym canonicity. *Corpora*, 2(2), 129–154.
- Jones, S., M. L. Murphy, C. Paradis and C. Willners (2012). *Antonyms in English: Construals, Constructions and Canonicity*. Cambridge: Cambridge University Press.
- Jones, R. H. (ed.) (2016). *The Routledge Handbook of Language and Creativity*. Abingdon/New York: Routledge.
- Justeson, J. S. and S. M. Katz (1991). Co-occurrences of antonymous adjectives and their contexts. *Computational Linguistics*, 17, 1–19.
- Justeson, J. S. and S. M. Katz (1992). Redefining antonymy: The textual structure of a semantic relation. *Literary and Linguistic Computing*, 7, 176–184.
- Kempson, R. M. (1977). *Semantic Theory*. Cambridge: Cambridge University Press.
- Kennet, Y. N., D. Anaki and M. Faust (2014). Investigating the structure of semantic networks in low and high creative persons. *Frontiers in Human Neuroscience*, 8, 407. doi: 10.3389/fnhum.2014.00407
- Kilgarriff, A. and G. Grefenstette (2003). Introduction to the special issue on the Web as corpus. *Computational Linguistics*, 29(3), 333–347.
- Koller, V. (2004). Businesswomen and war metaphors: ‘possessive, jealous and pugnacious?’. *Journal of Sociolinguistics*, 8/1, 3–22.
- Kostić, N. (2013). *Antonimija u diskursu: semantičko-pragmatička analiza*. Podgorica: Univerzitet Crne Gore.
- Kövecses, Z. (2002) *Metaphor: A Practical Introduction*. Oxford/New York: Oxford University Press.
- Lakoff, G. (1993). The contemporary theory of metaphor. In: A. Ortony (ed.), *Metaphor and Thought*, 2nd edition, Cambridge: Cambridge University Press, 202–251.
- Lakoff, G. and M. Johnson (1980). *Metaphors We Live By*. Chicago: Chicago University Press.

- Landis, T., D. Herrmann and R. Chaffin (1987). Development differences in the comprehension of semantic relations. *Zeitschrift für Psychologie*, 195(2), 129–139.
- Langlotz, A. (2006). *Idiomatic Creativity: A Cognitive-linguistic Model of Idiom Representation and Idiom-variation in English*. Amsterdam/Philadelphia: John Benjamins.
- Leech, G. (1981). *Semantics: The Study of Meaning*. 2nd edition. Harmondsworth: Penguin Books.
- Lehrer, A. (1985). Markedness and antonymy. *Linguistics*, 21, 397–429.
- Lehrer, A. (2002). Paradigmatic relations of exclusion and opposition I: Gradable antonymy and complementarity. In: D. A. Cruse, F. Hundsnurher, M. Job and P. R. Lutzeier (eds.), *Handbook of Lexicology*, Berlin: de Gruyter, 498–508.
- Lyons, J. (1977). *Semantics*, Vol. 1. Cambridge: Cambridge University Press.
- Mel'čuk, I.A. (1995). Phrasemes in language and phraseology in linguistics. In: M. Everaert, E.-J. van der Linden, A. Schenk and R. Schreuder (eds.), *Idioms: Structural and Psychological Perspectives*, Hillsdale, NJ: Lawrence Erlbaum, 167–232.
- Mettinger, A. (1994). *Aspects of Semantic Opposition in English*. Oxford: Clarendon Press.
- Moon, R. (1998). *Fixed Expressions and Idioms in English: A Corpus-Based Approach*. Oxford: Oxford University Press.
- Murphy, M. L. (2003). *Semantic Relations and the Lexicon: Antonymy, Synonymy and Other Paradigms*. Cambridge: Cambridge University Press.
- Murphy, M. L. (2010). *Lexical Meaning*. Cambridge: Cambridge University Press.
- Palmer, F. R. (1981). *Semantics*. 2nd edition. Cambridge: Cambridge University Press.
- Panther, K.-U. and G. Radden (eds.) (1999). *Metonymy in Language and Thought*. Amsterdam/ Philadelphia: John Benjamins.
- Paradis, C. (2011). A dynamic construal approach to antonymy. In: E. Kitis, N. Lavidas, N. Topintzi, and T. Tsangalidis (eds.), *Selected Papers from the 19th Symposium for Theoretical and Applied Linguistics*, Thessaloniki: Aristotle University, 34–42.
- Paradis, C. and C. Willners (2011). Antonymy: From convention to meaning-making. *Review of Cognitive Linguistics*, 9(2), 367–391.

- Paradis, C., C. Willners and S. Jones (2009). Good and bad opposites: Using textual and experimental techniques to measure antonym canonicity. *The Mental Lexicon*, 4(3), 380–429.
- Philip, G. (2008). Reassessing the canon: ‘Fixed phrases’ in general reference corpora. In: S. Granger and F. Meunier (eds.), *Phraseology: An Interdisciplinary Perspective*, Amsterdam/Philadelphia: John Benjamins, 95–108.
- Postman, L. and G. Keppel (1970). *Norms of Word Association*. New York: Academic Press.
- Rasulić, K. (2004). *Jezik i prostorno iskustvo*. Beograd: Filološki fakultet.
- Rasulić, K. (2010). *Long time, no buzz: Fixed expressions as constructional frames*. *CogniTextes*, Vol. 5, *Grammaires en Construction(s)/Grammars in Construction(s)*, AFLiCo 3 special issue (eds. P. Grea and G. Desagulier). doi.org/10.4000/cognitextes.356
- Rasulić, K. (2015). What’s hot and what’s not in English and Serbian: A contrastive view on the semantic extensions of temperature adjectives. In: M. Koptjevskaja Tamm (ed.), *The Linguistics of Temperature*, Amsterdam: John Benjamins, 254–299.
- Rasulić, K. (2016). *Exploring Semantic Relations*. Belgrade: Faculty of Philology.
- Semino, E. (2008). *Metaphor in Discourse*. Cambridge: Cambridge University Press.
- Sinclair, J.M. (1996). The search for units of meaning. *TEXTUS IX* (1), 71–106.
- Ullmann, S. (1957). *The Principles of Semantics*. 2nd edition. New York: Philosophical Library.
- Willners, C. (2001). *Antonyms in Context*. Lund: Lund University.
- Wray, A. (2002). *Formulaic Language and the Lexicon*. Cambridge: Cambridge University Press.

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ВИСОКА ОЧЕКИВАЊА И НИСКИ УДАРЦИ: АНТОНИМИЈА И ДИНАМИЧКО
ГРАЂЕЊЕ ЗНАЧЕЊА

Сажетак

У раду се, на теоријској подлози когнитивне лингвистике, разматра когнитивни потенцијал лексичко-семантичке релације антонимије из перспективе динамичког грађења значења. Десет парова каноничких антонима у енглеском језику (*high/low, long/short, broad/narrow, deep/shallow, thick/thin, heavy/light, hard/soft, large/small, fast/slow, hot/cold*) испитано је са становишта начина на које се однос супротности значења њихових чланова динамички активира при семантичком проширењу, парадигматски и синтагматски, у семантички иновативним случајевима употребе. Анализа осветљава следеће видове динамичког грађења значења у којима антонимија служи као окидач: (1) доступност успаваних антонимских значења за активацију у контексту (нпр. *shallow trouble*); (2) могућност модификације идиоматских израза заменом члана антонимског пара (нпр. *The bigger they come, the harder they fall > The bigger they come, the softer they fall*); (3) заједничко синтагматско јављање антонима у проширеним значењима која припадају различитим појмовним доменима (нпр. *High hopes in low places*). Теоријска разматрања тичу се когнитивне утврђености антонимије као моћног окидача динамичког грађења значења.

Кључне речи: антонимија, семантичко проширење, динамичко грађење значења, когнитивна лингвистика

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NEAR SYNONYMY ANALYSIS OF THE DESCRIPTIVE ADJECTIVE *PALE* IN ENGLISH AND *bled, -a, -o* IN SERBIAN

Abstract

Within the extensive scientific research on descriptive adjectives and their near synonyms, we noticed the prevailing idiomatic meaning of the adjectives analyzed here. In this paper, we will apply contrastive analysis of the descriptive adjective *bled, -a, -o* in Serbian and descriptive adjective *pale* as well as their near synonyms in English and Serbian in order to prove the presence of the aforementioned descriptive adjectives' prevailing idiomatic meaning in both languages. The results of the analysis indicate that the semantic (and grammatical) aspects of words are reflected onto and within their collocational framework. Furthermore, it is expected that the collocational framework of the adjective *bled, -a, -o* in Serbian will change depending upon the grammatical gender implied (masculine, feminine, neuter), as well as on the sequence of its near synonyms. The same changes are not expected to occur in English due to its lack of grammatical gender. The methodology of the research comprises the frequency of the primary and idiomatic meaning analyses of the descriptive adjective *bled, -a, -o*, and its near synonyms based on the framework of the Contemporary Serbian language electronic corpus (Faculty of Mathematics, University of Belgrade), and the descriptive adjective *pale* and its near synonyms analyzed on the British National Corpus data (BNC) and the Words Bank: English database.

Key words: descriptive adjective, near synonyms, idiomatic meaning, grammatical gender, the most frequent collocational framework

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1. Introduction

The main purpose of this paper is to provide a specific method of near-synonymy analysis of the selected descriptive adjectives through their use, analysed within the most frequent collocational framework. The most frequent collocational framework refers to the most frequent nominal collocations of the node word (the chosen descriptive adjective and its near-synonyms).

After analyzing the first ten synonyms (extracted from the dictionaries of synonyms)¹ through their co-occurrences within the most frequent nominal collocations (corpus-based analysis) of the node word, four synonyms were considered to be near synonyms of the selected descriptive adjective.

Words are rather close in meaning, similar but not identical, not completely interchangeable varying in their nuances of denotation, connotation, implication, emphasis or register (DiMarco, Hirst and Stede 1993). These words are called near-synonyms (or plesionyms) (Cruse 1986).

Cruse (1986: 270) claims that “natural languages abhor absolute synonyms just as nature abhors vacuum”, as the meanings of words are constantly changing. Clark (1992: 271) displays her principle of contrast, stating that “every two forms contrast in meaning”, supporting the previous contention related to the natural elimination of absolute synonymy in languages.

Cruse (1986) differentiates cognitive synonyms and plesionyms; cognitive synonyms are words that, when inter-substituted in a sentence, preserve its truth conditions but may change the expressive meaning, style or register of the sentence (e.g. *violin* : *fiddle*; *misty* : *foggy*) (Edmonds and Hirst 2002: 115–116).

However, Edmonds and Hirst (2002) oppose such coarse-grained definitions of plesionyms and cognitive synonyms, claiming that definitions of near-synonymy that do not take granularity into account are insufficient. Having taken granularity into account, we can create a much more useful definition of near-synonymy, because we can now characterize the difference between essential and peripheral aspects of meaning (Edmonds and Hirst 2002: 117).

¹ Ćosić 2008 and Words Bank: English database.

Murphy states that synonymy and similarity are firstly described from the author's meta-lexical perspective, thus being considered "a relation between our conceptualizations of words, rather than between their lexical entries [in the mental lexicon]" (Murphy 2003: 134). She claims a synonym ensemble "includes only word-concepts that have all the same contextually relevant properties, but differ in form" (Murphy 2003: 134).

Though collocations can often be unexpected, they are of the utmost importance regarding the lexical structure of the language and therefore they tend to be recurrent. Sinclair (1991: 170) defined collocations as "the occurrence of two or more words within a short space of each other in a text" and suggested a span of four to five words on either side of the node (Sinclair 1966: 105–106). Sinclair advocated a *statistically oriented approach* in the mid 1960s, as he was the first to regard computer-based corpora as a very useful tool for analysing collocations (Sinclair 1966: 428). While pointing out drawbacks of the introspective approach he stated that "patterns perceived by a trained linguist examining a text are unreliable and usually extremely tentative" (Sinclair 1966: 413).

Consequently, a great number of synonymy analyses are context-dependent, being focused on collecting data on contextual factors that substantially differentiate semantic nuances among words sharing a similar denotation, as well as on objective factors that determine which word within a group is selected for a certain context. This line of scientific research represents a complete reversal of the traditional introspective approach and such concepts as the synonymy span of use (Zgusta 1971).

2. Methodology and goals

The majority of semanticists claim that absolute synonymy is rare, while in the opinion of certain linguists it is in fact non-existent (Quine (1951); Palmer (1976: 59)). Hence, it is possible to conduct research into near synonymy within their collocational framework.

The corpus of the analysis consists of the descriptive adjective *bled*, *-a*, *-o* in Serbian and the descriptive adjective *pale* in English. The results of the analysis should prove the starting hypothesis of this paper claiming that the collocational framework is a better generator of the precise meaning of a word than its denotation. Accordingly, these results will indicate findings that the semantic (and grammatical) aspects of words are reflected onto

and within their own collocational framework. Furthermore, it is expected that the collocational framework of the adjective *bled*, *-a*, *-o* in Serbian will change depending on the grammatical gender implied (masculine, feminine, neuter), as well as the sequence of its near synonyms. Consequently, it is claimed that there are inflectional selectional differences among synonyms in a morphologically rich language such as Serbian. These findings are in accordance with the cognitive approach to meaning where it is deemed to be a fluid category prone to changes and adjustments in every utterance and written record supplied. Therefore, the idiosyncrasies of these two contrasted languages will be indicated in relation to the presence of grammatical gender in Serbian and its lack in English.

The methodological diversity of this approach features the use of the collocational method (Hlebec 2008a; Hlebec 2008b; Hlebec 2008c; Hlebec 2011; Hlebec 2012), followed by a componential analysis of the collocates of the extracted descriptive adjectives and, then, as the final step of the research, applying contrastive analysis. The very process of contrasting (or analysing) presupposes the comparison of nominal collocates of descriptive adjectives, not the comparison of descriptive adjectives in isolation.

This approach is, though only partially, in accordance with the collocational method originally applied by Hlebec (2011). Hlebec (2011: 122) elaborates the specificity of the collocational approach through the analysis of the descriptive adjective *wild*.

We have to emphasize that there are certain differences regarding the collocational method we have devised for the purposes of this paper compared to the collocational method originally presented by Hlebec. Namely, in his collocational method, Hlebec insists on an exhaustive polysemantic account of the lexeme analysed whereas we have focused only on the most frequent collocational framework of the lexeme which, to a certain extent, restricts the number of possible meanings of the lexeme under analysis.

As one of the precursors of the collocational approach to semantic word analysis, Palmer (1976: 76) quotes Firth, who claims: “you shall know the word by the company it keeps” (Firth 1957: 11) emphasizing the importance of the collocational framework to word analysis.

The process of contrasting (or analysing) presupposes the comparison of nominal collocates of descriptive adjectives, not the comparison of descriptive adjectives in isolation. For the analysis of synonyms within the most frequent collocational framework electronic dictionaries and

electronic databases are used, such as the corpus of the contemporary Serbian language, Faculty of Mathematics, University of Belgrade, the British National Corpus (BNC) and the Words Bank: English database.

A great number of researchers have used the Internet as a corpus for analysis. Inkpen (2004) used the Internet as a corpus when devising the statistical model for near synonymy choice. Grefenstette (1999) used the web for machine translation analysis; Kilgariff (2001) analysed different noises by using web data; Mihalcea and Moldovan (1999) as well as Agirre and Martinez (2000) used the web as an additional source for analysing nuances in meaning among different words; Resnik (1999) used the web for bilingual texts' analysis. Keller and Lapata (2003) showed that web data are aligned with other relevant corpus data.

While relying on the usage-based semantics and applying corpus-driven semantic analysis a specific corpus-driven semantic methodology has been devised in this investigation in an attempt to answer the questions: "How can highly similar lexemes be differentiated from each other and how can their similarity be measured?" These are the same questions made by Divjak (2010) at the beginning of the near-synonymy research within which a clustered model for near-synonymy was presented. Divjak and Gries (Divjak 2006; Divjak and Gries 2006, Divjak and Gries 2008) tagged 87 variables (morphosyntactic, syntactic and semantic) in order to establish the behavioural profiles of Russian verbs meaning try and calculate the "distances" among near-synonyms.

Synonyms have been the focus of attention in the use of behavioural profiles (Atkins 1987; Hanks 1996), which can combine a variety of types of information, not limited to collocational and syntactic preferences. Geeraerts (1998) pioneered synonymy research in cognitive linguistics, comparing 19th century uses of two Dutch verbs meaning destroy. Geeraerts' study incorporates collocational, constructional, semantic and metaphorical data and uses corpus data to corroborate introspective analyses found in synonym dictionaries.

Glynn (2011) carried out a case study in polysemy. This study introduces quantitative corpus methods for Cognitive Linguistics whose usage-based model permits conceptual analysis based on corpus data. By assuming that grammar is a result of repeated use (entrenchment), one can examine patterns of use in large amounts of language in order to 'map' its grammar (conceptual structure). Examining the English lexeme *hassle*,

the case study presents one method for such analysis and applies it to the interaction of morpho-syntactic and lexical semantics (2011: 185).

The aim of our research is to show the dominant presence of the idiomatic meaning of the contrasted descriptive adjectives and their near synonyms in English and Serbian. Furthermore, it is expected that the collocational framework of the adjective *bled*, *-a*, *-o* in Serbian will change with the grammatical gender implied (masculine, feminine, neuter), as will the sequence of its near synonyms. Consequently, we claim that there are inflectional selectional differences among synonyms in a morphologically rich language such as Serbian. On the other hand, our results show that the same changes do not occur within the analysis applied to the English language, due to its lack of grammatical gender.

In the end we expect that the results of the analysis will shed light on grammatical gender in Serbian as an influential generator of the extensions of meaning.

3. Analysis of descriptive adjective and their near synonyms in Serbian: the descriptive adjective *bled*, *-a*, *-o*

The following four synonyms can be considered to be the near synonyms of the descriptive adjective *bled*: *bledunjav*, *anemičan*, *beskrvan*, *avetinjski*, after having analyzed the first ten synonyms (extracted from the dictionary of synonyms: *Rečnik sinonima*, Pavle Ćosić et al. (2008: 293)) through their co-occurrences within the most frequent nominal collocations of the node word *bled*.

The most frequent four collocates of the descriptive adjective *bled* analysed on the corpus data of the Contemporary Serbian language of the Faculty of Mathematics in Belgrade

	<i>Utisak</i>	<i>Čovek</i>	<i>Primer</i>	<i>Izgovor</i>	
Descriptive adjective	Concordance number of the collocates analysed on the corpus data of Google Search				Total number of concordances for the given examples
<i>Bled</i>	626	740	4	4	1374
Near-synonymy samples of the adjective <i>bled</i>					
<i>Anemičan</i>	3	1	/		4
<i>Beskrvan</i>	/	3	/	/	3
<i>Bledunjav</i>	193	9	/	/	202
<i>Avetinjski</i>	2	/	/	/	2

Table 1. Near-synonymy samples of the adjective *bled*

Sun, Huang and Liu (2011) in their near synonymy analysis point out that it is enough to extract four collocations in order to avoid all existent collocations' analysis entirely. Consequently, we have decided to restrict the analysis to four most frequent collocations, thus trying to get as valid results as possible.

Piits (2013) confirms the hypothesis that the existence of mutual collocations of the selected node words implies the following semantic relations: synonymy, antonymy, hyperonymy. Using the Estonian language corpus analysis, they collected 30 most frequent words left and right from the node word by applying the WordSmith Tools programme. Hence, we have analysed collocations to the right side from the node word as we focused on descriptive adjective analysis.

The next step was the frequency analysis of the four most recurrent collocates of the adjective *bled* (*~utisak*, *~čovek*, *~primer*, *~izgovor*) which was carried out within the collocational framework of the suggested near

synonyms (*bledunjav*, *anemičan*, *beskrvan*, *avetinjski*) (see Table 1). Having examined the results, we can conclude that the near synonyms of the adjective *bled* are: *bledunjav* (202), *anemičan* (4), *beskrvan* (3), *avetinjski* (2).² The semantic component of the seme *bled* is *weak, insufficient* with three collocates having an idiomatic meaning (*utisak*, *primer*, *izgovor*) (Eng. *~impression*, *~example*, *~excuse*,) and one nominal collocate having a concrete meaning (*čovjek*) (Eng. *man*) referring to *being whitish in complexion*.

The most frequent four collocates of the descriptive adjective *bleda* analysed on the corpus data of the Contemporary Serbian language of the Faculty of Mathematics in Belgrade

	<i>Senka</i>	<i>Kopija</i>	<i>Svetlost</i>	<i>Slika</i>	
Descriptive adjective	Concordance number of the collocates analysed on the corpus data of Google Search				Total number of concordances for the given examples
<i>Bleda</i>	6560	38100	1660	25300	71620
Near-synonymy samples of the adjective <i>bleda</i>					
<i>Anemična</i>	/	111	4	9	124
<i>Beskrvna</i>	1	3	1	5	10
<i>Bledunjava</i>	/	/	6	10	16
<i>Avetinjska</i>	1	3	/	5	9

Table 2. Near-synonymy samples of the adjective *bleda*

The third stage of the research includes frequency analysis of the four most recurrent collocates of the adjective *bleda* (*~senka*, *~kopija*, *~svetlost*, *~slika*) (Eng. *~shadow*, *~copy*, *~light*, *~picture*) within the collocational framework of the suggested near synonyms (*bledunjava*, *anemična*,

² Taken from www.google.com pages from Serbia (2 December 2013).

avetinjska, beskrvna) (see table 2). The results of the analysis suggest that the near synonyms of the adjective *bleda* are: *anemična* (124), *bledunjava* (16), *beskrvna* (10), *avetinjska* (9).³ The mutual semantic content of the seme *bleda* would be *weak, insufficient* (Table 2).

The most frequent four collocates of the descriptive adjective *bledo* analysed on the corpus data of the Contemporary Serbian language of the Faculty of Mathematics in Belgrade

	<i>Lice</i>	<i>Čelo</i>	<i>Svetlo</i>	<i>Dete</i>	
Descriptive adjective	Concordance number of the collocates analysed on the corpus data of Google Search				Total number of concordances for the given examples
<i>Bledo</i>	17100	1120	4460	323	23003
Near-synonymy samples of the adjective <i>bleda</i>					
<i>Anemično</i>	637	1	1	2	641
<i>Beskrvno</i>	10	/	3	109	122
<i>Bledunjava</i>	154	/	5	/	159
<i>Avetinjsko</i>	328	3	3	/	334

Table 3. Near-synonymy samples of the adjective *bledo*

The final stage of the research involves frequency analysis of the four most recurrent collocates of the adjective *bledo* (*~lice, ~čelo, ~svetlo, ~dete*) (*~face, ~forehead, ~light, ~child*) within the collocational framework of the suggested near synonyms (*bledunjava, beskrvno, avetinjsko, anemično*) (see Table 3). The results of the analysis suggest that the near synonyms of the adjective *bledo* are: *anemično* (641), *avetinjsko* (334), *bledunjava* (159),

³ Taken from *www.google.com pages from Serbia* (2 December 2013).

beskrvno (122).⁴ The overall semantic content of the seme *bledo* would be (*~lice, ~čelo, ~svetlo, ~dete*) (Table 3).

3.1. Analysis of the descriptive adjective *pale* in English

The most frequent four collocates of the descriptive adjective *pale* analysed on the corpus data of following website: www.justtheword.com

	<i>Face</i>	<i>Skin</i>	<i>Eye</i>	<i>Light</i>	
Descriptive adjective	Concordance number of the collocates analysed on the corpus data of Google Search				Total number of concordances for the given examples
<i>Pale</i>	289	255	141	100	785
Near-synonymy samples of the adjective <i>bleda</i>					
<i>Ashen</i>	48	31	1	2	82
<i>Pallid</i>	25	11	/	7	43
<i>Livid</i>	6	21	1	3	31
<i>Wan</i>	14	/	1	6	21

Table 4. Near-synonymy samples of the adjective *pale*

A frequency analysis of the four most recurrent collocates of the adjective *pale* (*face, skin, eye, light*) was carried out within the collocational framework of the suggested near synonyms (*ashen, pallid, livid, wan*) (see Table 4). The results of the analysis suggest that the near synonyms of the adjective *pale* are: *ashen* (82), *pallid* (43), *livid* (31), and *wan* (21)⁵. The implied semantic content of the seme *pale* would be *weak (light), being whitish in complexion (face, skin) and having a light hue of a colour (eye)* (*face, skin, eye, light*) (Table 4).

⁴ Taken from www.google.com pages from Serbia (2 December 2013).

⁵ Taken from www.WordBanksOnline.com: *English* (2 December 2013).

3.2. Componential analysis

Further research comprises of the componential analysis of the descriptive adjective *bled*, -a, -o and its near synonyms *anemičan*, -a, -o, *beskrvan*, -a, -o, *bledunjav*, -a, -o, *avetinjski*, -a, -o. Throughout this analysis we intend to distinguish the semantic features of the abovementioned adjective and its near synonyms, which is why we have analyzed them in the selected collocational framework (the most frequent collocates of the adjective *bled*, -a, -o are as follows: *utisak*, *primer*, *čovek*, *izgovor*, *senka*, *kopija*, *svetlost*, *slika*, *lice*, *čelo*, *svetlo*, *dete*).

Componential analysis includes the descriptive adjective *pale*, as well as its near synonyms: *ashen*, *pallid*, *livid*, *wan*. The descriptive adjective *pale* and its near synonyms have been analyzed in the collocational framework of the adjective *pale* (*face*, *skin*, *eye*, *light*).

3.3. Contrastive analysis

In the process of contrastive analysis application we have undertaken a comparison of the semantic features of the adjective *bled*, -a, -o and its near synonyms (*bledunjav*, *anemičan*, *beskrvan*, *avetinjski*) according to the frequency of their most recurrent collocates (*utisak*, *čovek*, *primer*, *izgovor*, *senka*, *kopija*, *svetlost*, *slika*, *lice*, *čelo*, *svetlo*, *dan*); (*impression*, *man*, *example*, *excuse*, *shadow*, *copy*, *light*, *picture*, *face*, *forehead*, *day*).

3.4. The most frequent semantic features of the adjective *bled*, -a, -o in Serbian and the adjective *pale* in English

The most frequent semantic features of the adjective *bled*, -a, -o in Serbian and the adjective *pale* in English as well as their near synonyms analyzed in the range of their most frequent collocates, are:

- a) the most frequent semantic components of the adjective *bled* and its near synonyms (*bledunjav*, *anemičan*, *beskrvan*, *avetinjski*) analysed in the following collocational framework (*dan*, *način*, *primer*, *izgled*)

[+MALE±ANIMATE±ADULT]

[+SLAB] 7: Eng. [+WEAK] 7

- b) the most frequent semantic components of the adjective *bleda* and its near synonyms (*bledunjava*, *anemična*, *beskrvna*, *avetinjska*) analysed within the given collocational framework (*senka*, *kopija*, *svetlost*, *slika*):
[-MALE±ANIMATE±ADULT]
[+SLABA] 9: Eng. [+WEAK] 7
- c) the most frequent semantic components of the adjective *bledo* and its near synonyms (*bledunjava*, *anemično*, *beskrvno*, *avetinjsko*) analysed in the range of the following collocates (*lice*, *čelo*, *svetlo*, *dete*) :
[±MALE±ANIMATE±ADULT]
[+NEDOVOLJNA PROKRVLJENOST] 12 : Eng. [+LACKING BLOOD] 12
- d) the most frequent semantic components of the adjective *pale* and its near synonyms (*ashen*, *pallid*, *livid*, *wan*) analyzed in the following collocational framework: *face*, *skin*, *eye*, *light*.
[-MALE±ANIMATE±ADULT]
[+MODRO] 3: Eng. [+LIVID] 3

At the same time, the most frequent semantic components of the adjective *bled*, *-a*, *-o* in Serbian and the adjective *pale* in English are as follows:

[-MALE±ANIMATE±ADULT]
[+NEDOVOLJNA PROKRVLJENOST] : Eng. [+LACKING BLOOD]
[+SLABO]: Eng. [+WEAK]

Further analysis includes the most frequent collocates of the descriptive adjective *pale* near synonyms collected from the British National Corpus (112,181,015) (Table 5). Their common collocates have been written in bold letters:

ASHEN	FACE (11)	COLOUR (2)	CHEEK (1)	COMPLEXION (1)
PALLID	COMPLEXION (7)	CHEEK (5)	HUE (2)	WHITE (2)
LIVID	BRUISE (3)	SCAR (2)	SCRATCH (2)	FURY (2)
WAN	SMILE (15)	SUNLIGHT (1)	GHOST (1)	HUMOUR (1)
PALE	FACE (166)	GREEN (77)	SKIN (57)	COLOUR (50)

Table 5. The most frequent collocates of the descriptive adjective *pale* near synonyms collected from the British National Corpus (112,181,015)

The common collocates of the descriptive adjective *pale* near synonyms (Table 5) are:

ashen/pale face
ashen/pallid cheek
ashen/pallid complexion

Out of the most frequent collocates of the descriptive adjective *pale* and its near synonyms, the following ones have a transferred meaning (Table 5):

ashen colour
pallid hue/white
livid bruise/scar/scratch/fury
wan smile/sunlight/ghost/humour
pale green/colour

A similar analysis has been carried out regarding the most frequent collocates of the near synonym *bled*, *-a*, *-o* (*bledunjav*, *-a*, *-o*, *anemičan*, *-a*, *-o*, *beskrvan*, *-a*, *-o*, *avetinjski*, *-a*, *-o*) endorsing the corpus data of the Contemporary Serbian language, Faculty of Mathematics, University of Belgrade (113,000,000) (Table 6).

BLEDUNJAV	TRAG (1)	SJAJ (1)	NAČIN (1)	/
ANEMIČAN	RAST (1)	/	/	/
BESKRVAN	/	/	/	/
AVETINJSKI	SVET (1)	PROPLANAK (1)		
BLED	UTISAK (11)	ČOVEK (5)	PRIMER (1)	IZGOVOR (1)
BLEDUNJAVA	SVETLOST (2)	SLOVA (1)	PEĆ (1)	FIGURINA (1)
ANEMIČNA	OSOBA (1)	KAMPANJA (1)	IGRA (1)	/
BESKRVNA	ŽRTVA (14)	/	/	/
AVETINJSKA	SVETLOST (3)	FIGURA (3)	PUSTOŠ (2)	MUZIKA (1)

BLEDA	KOPIJA (23)	SLIKA (11)	SENKA (10)	SVETLOST (10)
BLEDUNJAVO	ZELENILO (1)	SUNCE (1)	LICE (1)	/
ANEMIČNO	DRUŠTVO (1)	/	/	/
BESKRVNO	TELO (1)	LICE (2)	/	/
AVETINJSKO	LICE (1)	PRIVIDENJE (1)	BLEDILO (1)	POREKLO (1)
BLEDO	LICE (51)	ČELO (7)	SVETLO (3)	DETE (1)

Table 6. The most frequent collocates of the near synonym *bled*, -a, -o (*bledunjav*, -a, -o, *anemičan*, -a, -o, *beskrvan*, -a, -o, *avetinjski*, -a, -o) endorsing the corpus data of the Contemporary Serbian language, Faculty of Mathematics, University of Belgrade (113,000,000)

The common collocates of the descriptive adjective *bled*, -a, -o near synonyms are (Table 6):

bledunjava/avetinjska/bleda svetlost (Eng. *pale/ghostly/pale light*)
bledunjavo/beskrvno/avetinjsko/bledo lice (Eng. *pale/bloodless/ghostly/pale face*)

Among the most frequent collocates, the following ones have transferred meaning: (26) (see Table 6):

bledunjav trag/način (Eng. *pale trace/way*)
anemičan rast (Eng. *anemic growth*)
avetinjski svet/proplanak (Eng. *ghostly world/glade*)
bled utisak/primer/izgovor (Eng. *pale impression/example/excuse*)
bledunjava svetlost/figurina (Eng. *pale light/figurine*)
anemična kampanja/igra (Eng. *anemic campaign/play*)
avetinjska svetlost/figura/pustoš/muzika (Eng. *unearthly glow/figures/havoc/music*)
bleda kopija/senka/svetlost (Eng. *pale copy/shadow/light*)
bledunjavo zelenilo/sunce (Eng. *pale greenery/sun*)
anemično društvo (Eng. *anemic company*)
avetinjsko priviđenje/bljedilo/poreklo (Eng. *ghostly apparition/pale/sourcing*)
bledo svetlo (Eng. *pale light*)

The stated samples of collocates indicate a metaphorical and metonymic meaning extension of the adjective *bled*, -a, -o and its near synonyms when analysed in the most frequent collocational framework.

Metaphor and metonymy are significant sources of extension of meaning (Szathmáry 2001). Metaphorical extensions of meaning have been researched by Persson (1989) in his analysis of differences in meaning between the near synonyms *deep* and *profound*. It has been concluded that these adjectives have different meaning when analysed in different collocational frameworks. *Deep* collocates with the words expressing affection, conviction, feelings, sorrow, satisfaction, regrets and the like, whereas *profound* collocates with the words expressing distaste, failure, influence and so on. Bearing in mind their metaphorical meaning, they may imply either position on the one hand or depth on the other. Only *deep* contains the metaphor of position, while depth can be expressed by both terms.

4. Conclusion

The interdisciplinary approach to the research presented in this paper incorporates the collocational method (Hlebec 2008; Hlebec 2012), as well as componential analysis of the extracted collocates of the adjectives and the semantic content of their near synonyms in the English and Serbian languages.

The first significant result of the method concerns the specific method of selecting near synonyms. The following valid result of the analysis highlights the influence of the grammatical gender (male, female, neuter) on the various most frequent collocates of the analysed descriptive adjective, when seen from the perspective of each gender.

For example:

bled: *utisak* (626); *čovjek* (740); *primer* (4); *izgovor* (4) (Table 1)

bleda: *senka* (6560); *kopija* (38100); *svetlost* (1660); *slika* (25300) (Table 2)

bledo: *lice* (17100); *čelo* (1120); *svetlo* (4460); *dete* (323) (Table 3)

Besides the influence of the most frequent collocational framework of the adjective on the choice of its near synonyms, we found out that this interrelation depends on the adjective's grammatical gender and also on the choice of near synonyms, especially regarding the near synonyms proximity-of-meaning order.

Namely, we discovered that this proximity-of-meaning order of near synonyms varies with the gender implied (masculine, feminine, neuter):

For example:

- Near synonyms of the adjective *bled* are: *bledunjav* (202), *anemičan* (4), *beskrvan* (3), *avetinjski* (2)
- Near synonyms of the adjective *bleda* are: *anemična* (124), *bledunjava* (16), *beskrvna* (10), *avetinjska* (9)
- Near synonyms of the adjective *bledo* are: *anemično* (641), *avetinjsko* (334), *bledunjavo* (159), *beskrvno* (122)

The same interrelation between the word order of near proximity-of-meaning synonyms and grammatical gender in Serbian is not noticeably present in the English language, presumably because grammatical gender does not exist in English (Čarapić 2015: 385).

The results of the research are in accordance with the starting hypothesis that a collocational framework defines the meaning of a word more precisely than the very denotation of the same word. Consequently, the findings of the research imply that the semantic (and grammatical) aspects of a word are reflected in their collocational framework, which confirms and constitutes the basis of the cognitive approach to the study of meaning. Therefore, we shed light on the similarities and idiosyncrasies of these two contrasted languages, bearing in mind the presence of the grammatical gender in Serbian and its lack in English.

Boroditsky and Phillips (2002) carried out research displaying that the arbitrary designation of a noun as masculine or feminine can have an effect on how people think about things in the world. Having taken into account the many ways in which languages differ, these findings suggest that the private mental lives of people who speak different languages may differ much more than previously thought (Boroditsky and Phillips 2002: 80). In this respect, the importance of the research lies in emphasizing the disparity between the English and Serbian language in the issues of grammatical gender. These differences can have a substantial number of consequences in the processes of translating and using English and Serbian as a second language. Pointing out these differences can improve the quality of translating and of spoken English and Serbian as a second language.

We can conclude that besides *lacking blood* as a basic denotation of meaning, this adjective and its near synonyms imply other nuances of meaning, such as other types of deficiency (lack of intensity of colour (*trace, light*), *impression*, efficiency (*campaign*), *vivacity* (*solitariness/music*)). According to Apresjan (1995) one of the most productive ways of creating synonyms comes out of *secondary meanings of lexemes*, i.e.

their metaphorical and metonymic meanings. The secondary meaning of a lexeme can be synonymous with a primary or a secondary meaning of another lexeme (lexemes *zlato* (*gold*) and *anđeo* (*angel*) can be contextual synonyms if in their secondary meanings they denote and refer to *dete* (*child*) (Dragičević 2010).

Analysis of the descriptive adjective and its near synonyms carried out within the most frequent collocational framework reveals a great number of samples implying idiomatic meanings in English and Serbian. The stated result is in line with the conclusions drawn by Dragičević (2010: 156) that: “the meaning of the lexemes is determined and shaped by the context, thus each new context features new semantic components of the lexeme, while the other components are shadowed.” Therefore, this result proves the starting hypothesis that the collocational framework of the lexeme determines the meaning of the lexeme with more precision than its denotational meaning does, highlighting the flexible and dynamic nature of word meaning as well as the importance of metaphor, being the basis of that flexibility.

Metaphorical extensions of meaning were researched by Persson (1989) in his analysis of the differences in meaning between the near synonyms *deep* and *profound*. It was concluded that these adjectives have a different meaning when analysed in a different collocational framework. *Deep* collocates with the words expressing affection, conviction, feelings, sorrow, satisfaction, regrets and so on whereas *profound* collocates with the words expressing distaste, failure, influence and the like. Bearing in mind their metaphorical meaning they may imply either position on the one hand or depth on the other. Only *deep* contains the metaphor of position, while depth can be expressed by both terms.

The results of the analysis can be linked up to the findings of Šarić (2011) who emphasizes that the cognitive approach to linguistic analysis is encyclopaedic and as such it differs from the theory viewing meaning from the structuralist approach to this issue, which is similar to the way dictionaries deal with it.

In contrast to Structuralism, there is no distinction between semantics and pragmatics. Meaning is understood as all that one knows about the world. This ‘encyclopaedic semantics’ is foundational to Cognitive Linguistics and its impact upon analysis cannot be underestimated. To appreciate the importance of the assumption, it can be rephrased – meaning is how people use words in context (Glynn and Robinson 2001: 185).

In order to make these differences in meaning more transparent in the area of lexicography by applying this method within the forthcoming thesauri of English and Serbian, it would undoubtedly improve their quality, taking into account the obvious lack of presentation of the nuances in meaning among the given synonyms of the selected node word. At present, synonyms in the English and Serbian thesauri are listed either in alphabetical order or randomly without paying attention to their proximity in meaning.

To clarify, it has been proposed that a list of synonyms is included next to the node word following the principle of proximity of meaning, not randomly or alphabetically. More precisely, the most frequent collocational framework of the node word should be extracted, within which the near-synonymy samples should be analysed, thus measuring their proximity of meaning to the node word. Moreover, alongside the suggested method, the use of synonyms within the sentence should be added, commenting on the nuances of their meaning within the context. In addition, as only adjectives in male gender are stated in Serbian dictionaries of synonyms and there is no insight into the specific semantic features of adjectives in female and neuter gender, these samples of the adjective analysed should be included.

In conclusion, we can agree with Hallig and Wartburg (1963) that a major motivation for the onomasiological approach is the fact that alphabetic lists of words conceal the semantic and conceptual structures of languages (cf. Blank 2003: 45). This research represents a modest contribution to the field of onomasiological analysis which now builds the fundament of modern cognitive semantics (Geeraerts 1993: 648).

Bearing in mind the results of the analysis, indicating a multi-layered morphological features of the adjective *bled*, -a, -o in Serbian and its near synonyms (*bledunjav*, -a, -o, *anemičan*, -a, -o, *beskrvan*, -a, -o, *avetinjski*, -a, -o) we can conclude, thus confirming the starting hypothesis, that grammatical gender generates extension of meaning in Serbian to a greater extent (26)⁶ compared to analysis of its English counterpart *pale*

⁶ *bledunjav trag/način* (Eng. *pale trace/way*)
anemičan rast (Eng. *anemic growth*)
avetinjski svet/proplanak (Eng. *ghostly world/glade*)
bled utisak/primer/izgovor (Eng. *pale impression/example/excuse*)
bledunjava svetlost/figurina (Eng. *pale light/figurine*)
anemična kampanja/igra (Eng. *anemic campaign/play*)
avetinjska svetlost/figura/pustoš/muzika (Eng. *unearthly glow/figures/havoc/music*)

and its near synonyms (*ashen, pallid, livid, wan*) (13)⁷, due to the lack of grammatical gender in English.

References

- Agirre, E. and D. Martínez (2000). Exploring automatic word sense disambiguation with decision lists and the Web. *Proceedings of the COLING Workshop on Semantic Annotation and Intelligent Annotation*, Luxembourg: Centre Universitaire, 11–19.
- Apresjan, J. D. (1995). *Selected Works*, Vol. II. Moscow: Jazyki russkoj kul'tury.
- Arrpe, A. and J. Järvikivi (2007). Every method counts: Combining corpus-based and experimental evidence in the study of synonymy. *Corpus Linguistics and Linguistic Theory*, 3, 131–159.
- Atkins, B. T. S. (1987). Semantic ID tags: corpus evidence for dictionary senses. *Proceedings of the Third Annual Conference of the UW Centre for the New Oxford English Dictionary*, Waterloo, Canada, 17–36.
- Blank, A. (2003). Words and concepts in time: towards Diachronic Cognitive Onomasiology. In: R. Eckardt, K. V. Heusinger and C. Schwarze (eds.), *Words in Time. Diachronic Semantics*, Berlin/New York: Walter de Gruyter, 37–65.
- Boroditsky, L. and L. Schmidt (1992). Sex, syntax, and semantics. *Proceedings of the Cognitive Science Society*, 22, 42–47.
- Cruse, D. and A. Cruse (1986). *Meaning in language: An introduction to semantics and pragmatics*. Oxford: Oxford University Press.
- Čarapić, D. (2015). Near synonymy analysis of the descriptive adjective “*debeo, -la, -lo*” and its English counterpart “*fat*”. *Poznan Studies in Contemporary Linguistics*, 51(3), 375–410.

bleda kopija/senka/svetlost (Eng. *pale copy/shadow/light*)

bledunjavo zelenilo/sunce (Eng. *pale greenery/sun*)

anemično društvo (Eng. *anemic company*)

avetinjsko priviđenje/bljedilo/poreklo (Eng. *ghostly apparition/pale/sourcing*)

bledo svetlo (Eng. *pale light*)

⁷ *ashen colour*

pallid hue/white

livid bruise/scar/scratch/fury

wan smile/sunlight/ghost/humour

pale green/colour

- Ćosić, P. (2008). *Rečnik sinonima i tezaurus srpskog jezika*. Beograd: Kordnet.
- DiMarco, C., G. Hirst and M. Stede (1993). The semantic and stylistic differentiation of synonyms and near-synonyms. *Spring Symposium on Building Lexicons, Machine Translation*, Stanford, CA, 114–121.
- Divjak, D. (2006). Ways of intending: A corpus-based cognitive linguistic approach to near-synonyms in Russian. In: S. T. Gries and A. Stefanowitsch (eds.), *Corpora in Cognitive Linguistics. Corpus-based approaches to syntax and lexis*. Berlin: Mouton de Gruyter, 19–56.
- Divjak, D. (2010). Structuring the lexicon. A clustered model for near-synonymy. *Cognitive Linguistics Research*, 43, 249–272.
- Divjak, D. and S. T. Gries (2006). Ways of trying in Russian: clustering behavioral profiles. *Corpus Linguistics and Linguistic Theory*, 2(1), 23–60.
- Divjak, D. and S. T. Gries (2008). Clusters in the mind? Converging evidence from near synonymy in Russian. *The Mental Lexicon*, 3, 188–213.
- Dragičević, R. (2010). *Leksikologija srpskog jezika*. Beograd: Zavod za udžbenike.
- Edmonds, P. and G. Hirst (2002). Near synonymy and Lexical Choice. *Journal of Computational Linguistics*, 28, 105–144.
- Firth, J. R. (1957). A synopsis of linguistic theory 1930-1955. In: *Studies in linguistic analysis*, Oxford: Blackwell, 1–32.
- Gibbs, R. W, Jr. and T. Matlock (2008). *Metaphor, imagination, and simulation: Psycholinguistic evidence*. In: R. W. Gibbs, Jr. (ed.), *The Cambridge handbook of metaphor and thought*, 161–176.
- Glynn, D. (2011). Corpus-driven cognitive linguistics. A case study in polysemy. *Philology*, 52, 185–198.
- Glynn, D. and J. Robinson (2001). *Polysemy and synonymy. Corpus methods and applications in Cognitive Semantics*. Amsterdam: John Benjamins.
- Geeraerts, D. (1993). Cognitive grammar and the history of lexical semantics. In: B. Rudzka-Ostyn (ed.), *Topics in Cognitive Linguistics*, Amsterdam: John Benjamins Publishing Company, 647–677.
- Geeraerts, D. (1998). The semantic structure of the indirect object in Dutch. In: W. Van Langendock and W. Van Belle (eds.), *The dative*. Amsterdam/Philadelphia: John Benjamins, 35–55.
- Geeraerts, D. (2009). *Theories of Lexical Semantics*. Oxford: Oxford University Press.
- Grefenstette, G. (1999). *Very Large Lexicons*. Pittsburgh: Clairvoyance Corp.

- Gries, S. T. and A. Stefanowitsch (eds.) (2006). *Corpora in Cognitive Linguistics. Corpus-based Approaches to Syntax and Lexis*. Berlin/New York: Mouton de Gruyter.
- Hanks, P. (1996). Contextual dependency and lexical sets. *International Journal of Corpus Linguistics*, 1(1), 75–98.
- Hlebec, B. (2008a). Kolokacijska metoda semantičke analize (na primeru imenice *pažnja*). *Semantička proučavanja srpskog jezika. Srpski jezik u svetlu savremenih lingvističkih teorija*, knj. 2. Beograd: SANU, 65–79.
- Hlebec, B. (2008b). 'Predikativni instrumental' u svetlu kolokacijske analize. *Južnoslovenski filolog*, 64, 535–550. doi: 10.2298/JFI0864535H
- Hlebec, B. (2008c). Collocations with *old*, *young* and *new* and their Serbian correspondents. In: K. Rasulić and I. Trbojević- Milošević (eds.), *ELLSSAC Proceedings*, Vol. 1, Beograd: Filološki fakultet, 171–192.
- Hlebec, B. (2011). The portrait of wild (in the collocational technique). *Filolog*, 3, 212–130.
- Hlebec, B. (2012). The seme 'strong' in lexicological definitions. *Belgrade English Language & Literary Studies*, 4, 7–27.
- Inkpen, D. (2006). Building and using a lexical knowledge-base of near-synonym differences. *Computational linguistics*, 32(2), 223–262.
- Kilgarriff, A. and G. Grefenstette (2003). Introduction to the Special Issue on Web as Corpus. *Computational Linguistics*, 29(3), 1–15.
- Keller, F. and M. Lapata (2003). Using the web to obtain frequencies for unseen bigrams. *Computational Linguistics*, 29(3), 459–484.
- Mihalcea, R. and D. I. Moldovan (1999). A method for word-sense disambiguation of unrestricted text, 152–159. (15 June 2016) <<http://www.cse.unt.edu/~rada/papers/mihalcea.acl99.pdf>>.
- Murphy, L. (2003). *Semantic relations and the lexicon: antonyms, synonyms and other semantic paradigms*. Cambridge: Cambridge University Press.
- Palmer, F. R. (1976). *Semantics: A New Outline*. Cambridge: Cambridge University Press.
- Persson, G. (1989). *Deep and Profound: A Study in So-Called Synonymy*. Umeå: Printing Office of Umeå University.
- Piits, L. (2013). Distributional hypothesis: Words for 'human being' and their Estonian collocates. *Trames*, 17(2), 141–158.
- Quine, W. O. (1951). Two Dogmas of Empiricism. *The Philosophical Review*, 60, 20–43. (Reprinted in his 1953 *From a Logical Point of View*).

- Resnik, P. and N. A. Smith (1999). The web as a parallel corpus. *Computational Linguistics*, 29(3), 349–380. (10 May 2013) <<http://acl.ldc.upenn.edu/J/J03/J03-3002.pdf>>.
- Sinclair, J. (1996). Beginning the study of lexis. In: C. E. Bazell et al. (eds.), *In Memory of F. R. Firth*, London: Longman, 410–430.
- Sinclair, J. (1991). *Corpus, Concordance, Collocation*. Oxford: Oxford University Press.
- Sun, K. T., Y. M. Huang and M. C. Liu (2011). A WordNet-Based Near-Synonyms and Similar-Looking Word Learning System. *Educational Technology & Society*, 14(1), 121–134.
- Szathmáry, E., J. Ferenc and P. Csaba (2001). Can genes explain biological complexity? *Science*, 292(5520), 1315–1316.
- Šarić, Lj. (2011). Kognitivna lingvistika i sinonimija: Teorija i leksikografska praksa. *Croatica et Slavica Iadertina*, 7(2), 305–325.
- Zgusta, L. (1971). *Manual of lexicography*. The Hague/Paris: Mouton de Gruyter.

Electronic corpora

- British National Corpus – BNC (2 December 2013) <<https://www.natcorp.ox.ac.uk>>
- Corpus of contemporary Serbian language, (Faculty of Mathematics, University of Belgrade) (2 December 2013) <<http://www.korpus.matf.bg.ac.rs/prezentacija/korpus.html>>
- Words Bank: English database (2 December 2013). <<http://www.collins.co.uk/page/Wordbanks+Online>>

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АНАЛИЗА ПРИМЕРА ПРИБЛИЖНЕ СИНОНИМИЈЕ ОПИСНОГ ПРИДЕВА
PALE У ЕНГЛЕСКОМ И *БЛЕД*, *-А*, *-О* У СРПСКОМ

Сажетак

У оквиру опсежног научног истраживања описних придева и њихових приближних синонима приметили смо преовлађујуће присуство идиоматског значења анализираних придева. У овом раду ћемо применити контрастивну анализу описног придева *блед*, *-а*, *-о* у српском и описног придева *pale*, као и њихове приближне синониме у енглеском и српском језику како бисмо доказали преовлађујуће присуство пренесеног значења у оба језика. Резултати примењене анализе показују да се семантички (и граматички) аспекти речи одражавају на колокацијско окружење ријечи. У прилог томе, очекује се и да ће се колокацијско окружење придева *блед*, *-а*, *-о* променити у зависности од граматичког рода (мушког, женског, средњег), што ће утицати и на след његових приближних синонима. С друге стране, не очекује се да ће се ове промене десити и у енглеском језику управо због недостатка граматичког рода. Методологија истраживања обухвата анализу учесталости примарног и идиоматског значења описног придева *блед*, *-а*, *-о* и његових приближних синонима употребом електронског корпуса Савременог српског језика (Математички факултет, Универзитет у Београду), као и анализу описног придева *pale* и његових приближних синонима анализираних употребом Британског Националног Корпуса и базе података Words Bank: Енглески.

Кључне речи: описни придев, приближни синоними, идиоматско значење, граматички род, колокацијско окружење, најучесталији колокати

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УЛОГА КОЛОКАЦИЈА У ТУМАЧЕЊУ ЗНАЧЕЊА ЛЕКСЕМА У ЕНЦИКЛОПЕДИЈСКОМ СРПСКО-ЕНГЛЕСКОМ РЕЧНИКУ БОРИСА ХЛЕБЕЦА**

Апстракт

Будући да *Енциклопедијски српско-енглески речник / Comprehensive Serbian-English Dictionary* (EP) Бориса Хлебеца (2010) својом макро- и микроструктуром излази из оквира традиционалног лексикографског остварења код нас, он је и богат извор за различита лексичко-семантичка, лексикографска, али и лингвокултуролошка истраживања. Предмет овога рада јесу колокације, тј. постојанији лексички спојеви унети у речнички чланак, чија је функција разграничење значења полисемантичких речи, с једне стране, те оних блискозначних, с друге. На значењу примера *слаб* и *лош* у српском језику, чија се значења укрштају одређеним заједничким семама, што, у појединим случајевима, потврђују и преводни еквиваленти на енглеском (попут *weak, bad, poor*), постављају се следећи циљеви истраживања: (а) идентификовати заједничка и диференцијална семантичка обележја на основу значења примарних колоката (нпр. *слаб* ≈ *лош* *стрелац*, *слабо здравље*, *лоше памћење* и сл.; али: *слаб чај*, *снег*, -о *пиво* ≠ *лош чај*, *снег*, -е *пиво*); (б) сагледати степен и значај контекстуализације (нпр. *знати из лошег искуства*; *Болесник је провео лошу ноћ.*); (в) на основу рестрикција у удруживању наведених придева с именицама, издвојити семантичке скупине именица као модел за израду једнојезичног речника колокација српског језика. Истраживање лексичке спојивости и рестрикција у том процесу у овом раду примарно је усмерено на истицање значаја овако уређеног речничког чланка, у

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којем су све нијансе значења лексеме контекстуализоване и на тај, једини теоријско-методолошки ваљан начин, јасно дефинисане. Истовремено, када су колокације у питању, истаћи ће се значај овога модерног, структурно комплексног, садржајно врло обухватног речника, вишеструко окренутог ка кориснику, а чије потенцијале тек треба испитати и применити дате закључке на израду нових речника различитих профила.

Кључне речи: семантика, колокација, речник, придеви, именице, српски језик, енглески језик

1. Теоријски оквир истраживања

Теоријски и практични аспекти лексиколошких и лексикографских истраживања, у пракси често у раскораку, почивају на неравномерном односу према ванјезичким и лингвистичким датостима. У том контексту, значајна је Киферова диференцијација на лингвистичка, концептуална и енциклопедијска знања, при чему су последња повезана са значењем речи, али неактивирана непосредно у исказу¹ (Kiefer 1990: 2). Ово корелира с Филморовим ставом у оквиру теорије семантичких оквира, која „истиче континуитете, а не дисконтинуитете између језика и искуства” (Fillmore 1982: 111 [Филмор 2014: 73]). Језиком металексикографије ово се своди на диференцијацију између традиционалног и савременог метода – првим се одговара на питање „Шта све *може* да значи и како све *може* да се преводи реч X”, док би се другим, прагматички оријентисаним методом, трагало за одговором „Шта значи и како се користи реч X у *конкретном контексту*” (Prčić 2018: 107). С тим у вези, грубу поделу речника на језичке и енциклопедијске, засновану превасходно на обухватности грађе, при чему ови други „дају податке о ванјезичком свету, физичком или не, а само су уређени по поретку речи” (Šipka 2006: 135), у лингвистичком смислу, треба превазићи управо прагматички оријентисаним методом и контекстуализацијом с циљем разумевања семантичких, стилско-функционалних и жанровских, конотативних и употребних нијанси значења. С друге стране, само одређење *енциклопедијски* уз речник упућује на то да се у њему налазе информације о именима личности, места, историјских догађаја и сл. (уп. Kristal 1987: 108), што не кореспондира с *енциклопедијским знањима*, што Кифер илуструје приме-

¹ Пример којим аутор ово илуструје јесте *Уживам у твојој новој књизи*, при чему знања о форми (тврдих и меких корица) или садржају књиге (проза, фантастика и сл.) долазе из сфере наших енциклопедијских знања о датом ентитету.

ром *Он је Наполеон нашег доба*, јер се „имена могу претворити у заједничке именице концептуализацијом одређених енциклопедијских знања повезаних с њима” (Kiefer 1990: 3).

1.1. Речник као извор за лексиколошка и семантичка истраживања

Када је у питању однос лексиколошких истраживања и лексикографске теорије и праксе, познато је и признато да лексиколошка, и, шире, лингвистичка испитивања великим делом почивају на лексикографским достигнућима. Обрнут смер утицаја теоријских лексиколошких испитивања на лексикографију као примењену дисциплину није задовољавајући, тј. „теоријске синтезе, лексиколошке и друге, понекад [се] тешко и закаснило враћају у лексикографску праксу из које су највећим делом настале” (Гортан-Премк 1994а: 203). Парадоксална је чињеница да постоји извесна незаинтересованост лексикографије за властиту методологију будући да се теоријска лексикографија не своди само на уопштене уводне напомене приређивача и техничке смернице о употреби речника, него је повезаност са свим дисциплинама које проучавају језички систем чини врло комплексном дисциплином (уп. Zgusta 1991: 23; Дражић 2014: 189). Нарочито је важна контрастивна лексикографска перспектива, јер се њоме стиче увид у рефлектовање различите парцелације ванјезичке стварности, будући да „сегменте унутар целокупног и свеобухватног семантичког простора [...] језици раздељују на различите начине” (Prčić 2008: 138).

1.2. Енциклопедијски подаци у Речнику

Како се сазнаје из *Предговора Енциклопедијском речнику* (даље ЕР) Б. Хлебеца, аутор ово одређење користи управо с обзиром на критеријум обухватности грађе, наводећи следеће: „Да би речник оправдао назив ‘енциклопедијски’, увршћени су бројни географски називи и властита имена, а повремено су давана објашњења лексиконског типа [...] када се ради о лексиси везаној за српску културу и обичаје” (Хлебец 2010: 5). Овоме пак следи битан податак о микроструктури речника: „истанчаност у избору еквивалената, јасно разлучење значења, мноштво података који треба да помогну разумевању одредница и правилној употреби еквивалената, конотацији и преливима” (Хлебец 2010: 5), што сведочи управо о савременом лексикографском методу, који укључује низ ванјезичких података. Овако конципиран речник,

који, с једне стране, садржи бројне лексеме енциклопедијског карактера, с културолошким, културно специфичним речима (нпр. *бадњак, кољиво; пилав, пребранац; Милош*² [1. *М. Обилић Miloš Obilić (a heroic character of traditional Kosovo epics 2. в. Обреновићи)*] и сл.), те, с друге стране, детаљно презентовану полисемантичку структуру лексеме, разлучене синониме и блискознанчице у оквиру једне одреднице, различито номиноване (нпр. ширити: 1. broaden, widen; 2. spread, diffuse; propagate; expand; bruit; shed; 3. widen; expand; spread; open out; spread; disseminate; expand; go around/round), те јасно идентификоване семантичке реализације (нпр. 2. spread (*вести, идеју, измишљотине, јеванђеље, причу*) : spread (sth material из нечега from sth у нешто to sth)), осим што је двојезични, истовремено има елементе општег речника, речника синонима, колокација, идиома, речника културно специфичних речи, а с обзиром на обиље лексичког фонда који покрива, те његову микроструктуру, с правом има и одређење енциклопедијског речника. Посебно значајно место у речнику заузимају управо празна места у систему, тзв. *лакуне*, безеквивалентне лексеме.³ Управо стога, овакав речник богат је извор за лингвистичка, културолошка, једнојезичка или контрастивна истраживања.

2. Методологија истраживања

Предмет овога рада јесте сегмент лексичке спојивости, тј. постојанијих лексичких спојева – колокација, презентованих у ЕР као метод за диференцијацију и декодирање значења у полисемантичкој структури једне лексеме. На примерима обраде придева *слаб* и *танак* сагледаће се (а) сегментација значења датих придева и њихово могуће значењско преклапање у ЕР; (б) упоредиће се микроструктура датих одредница у ЕР са оном која је наведена у *Речнику српскохрватскога књижевног језика* Матице српске (даље РМС) како би се уочила диференцијација и хијерархизација значења, те сагледале могуће смернице које даје ЕР што се тиче другачије номинације поје-

² Оваква имена у литератури називају се *прецедентна имена*, која уз прецедентне текстове (нпр. народне пословице и изреке, фразеологизми и бајке, песме, општепознати дијалози из филмова, рекламе, новински наслови итд.) представљају везу језика и културе и тиме се на вишим нивоима учења језика отварају нови видници и упознаје слика света говорника језика који се учи (уп. Драгићевић 2011: 86).

³ „Безеквивалентна лексика побуђује посебну пажњу у учењу страних језика, нарочито ако су разлози за њено постојање културолошки, јер у тим случајевима, безеквивалентне лексеме представљају ознаке за културолошки специфичне појмове” (Драгићевић 2018: 216).

диних значења (нпр. bad (део тела); weak (појава) и сл.); (в) из контролног корпуса, који чини електронска грађа корпуса српског језика (*СрпКорп*), на ексцерпираних првих 300 примера за оба придева, формираће се семантичка потпоља секундарних именичких колоката применом колокацијске методе, чиме ће се, укрштањем с речничким примерима, добити информација о учесталости појединих веза као и хијерархизацији према броју лексема у одређеном потпољу.

2.1. Значење речи – место, значај и улога колокација

Термин колокација,⁴ различито дефинисан у зависности од аспекта проучавања лексичке спојивости (уп. Sinclair 1966; Halliday 1966; Melčuk 1988; McKeown–Radev 2002; Stubbs 2002) у раду се дефинише као: „синтагматски лексички спој двеју или више аутосемантичних лексема, устројен према морфосинтаксичким правилима неког језика, с већим или мањим степеном постојаности и међусобне везаности елемената, условљеним језичким и ванјезичким, културно-историјским и друштвеним датостима” (Дражић 2014: 73). На значај и улогу колокација у декодирању сегмента значења полазног семантичког или граматичког садржаја у више наврата скретао је пажњу Б. Хлебец у својим истраживањима (Хлебец 1994; 2002; 2008а; 2008б), а практична се примена препознаје у његовим речницима. Аутор је полазио од поставки колокацијске методе, у чијој је основи анализа спреге синтагматског и парадигматског плана, при чему се заправо: „увидом у парадигматску заменљивост једног колоката другим лексемама осветљава део њеног садржаја, а како се лексеме спајају захваљујући заједничким семантичким елементима, откривање семантичког елемента једног омогућава увид у део садржаја другог колоката” (Хлебец 2008а: 65). Овакав приступ проучавању значења заступљен је у лексиколошким и лексикографским истраживањима. Тако, нпр. Фонтенел (Fontenelle 2013) констатује да савремена истраживања о природи синтагматских односа почивају на фертовској традицији, тј. поставци да се речи разумеју на основу оних с којима се удружују (‘words shall be known by the company they keep’), те да је ово један од најплодоноснијих приступа истраживању удруживања лексичких јединица. Као једно од значајних дела, које укључује, између осталог, и овај сегмент тумачења

⁴ Термин колокација у српској лингвистици није се у потпуности усталио, афирмисан је од стране англиста, махом у контрастивним, као и у теоријским истраживањима (Nejgebauer 1982; Pervaz 1982; Šević 1985; Gotštajn 1986; Prčić 1997¹; Хлебец 2002, 2008; Мићић 2004; Стојић 2010).

јесте *Дескриптивно-комбинаторни речник*⁵ (1984) И. А. Мељчука и А. К. Жолковског, који нуди револуционарни предлог описа лексикона,⁶ будући да, између осталог, за разлику од уобичајених речника, систематизује сва синонимска лексичка средства именована одређеног појма, „што се у првом реду постиже прецизним описом свих лексичко-семантичких комбинација у којима се може наћи лексем који се описује те набрајањем синтаксичких ограничења којима он подлијеже” (Bratanić 1993: 359).⁷ Јасно је, дакле, да су основна питања проучавања колокација феномени полисемије⁸ и, нужно, синонимије, јер је лексичка синонимија, као секундарни лексички систем, настала регуларно у процесу полисемије и једног типа деривације, као продукт секундарне номинације, констатује Д. Гортан-Премк (1994б) анализирајући грађу из постојећих дескриптивних речника.⁹

⁵ Рус. *Толково-комбинаторни словарь*; енгл. *Explanatory-combinatorial dictionary*; фр. *Dictionnaire explicatif et combinatoire*. С обзиром на врло комплексну структуру речничког чланка, руски речник садржи свега 250 одредница, тј. *вокабла* на 990 страна (фр. *vocable* – шири појам од одреднице; обухвата одреднице за лексеме сродног значења, исте основе), а француски *Dictionnaire explicatif et combinatoire du français contemporain*, у две свеске (1984 и 1988), тек нешто више од стотину (в. Bratanić 1993: 359), што је касније допуњено са око 400 речи (1992, 1999).

⁶ „[...] активан је, универзалне природе, укључује енциклопедијску информацију само онда када је то неопходно за правилно коришћење речи, поседује строг теоријски оквир, претпоставља максималну експлицитност и систематичност информације” (Ристић, Радић–Дугоњић 1999: 149).

⁷ Његова је микроструктура строго дефинисана типовима односа у трима зонама: семантичка – дефиниција на посебном метајезику; синтаксичка – ‘образци управљања’; зона лексичке спојивости путем лексичких функција. Нарочито је важно што оваква врста речника, поред своје, у основи теоријске природе, има активни карактер и може наћи примену у настави како матерњег тако, посебно, страног језика.

⁸ У процесу ресветљавања једног од кључних лексиколошких и лексикографских проблема – полисемије, аутор као један од поступака запажа управо питање лексичких дефиниција у поменутом смислу (нпр. *заседа: чекаати у заседи, напасти из заседе* → ‘скривање на месту’; *заседе су се утишале* → ‘нечије / неко’, *одолео је свим заседама* → ‘изненадан напад на некога’ – повезани делови дефиниције : мање повезани делови, као у примерима метонимијске везе: *почистити сто од мрва – почистити мрве са стола; гулити дрво – гулити кору с дрвета; мустити краву – мустити млеко* и сл.). Лексикографска обрада ових примера могла би се свести, према наводима овога аутора, на назнаку ‘или’ (нпр. обрати учинити да /кајмак/ не буде на млеку или да /млеко/ буде без кајмака), те на употребу заграда (нпр. ‘(оно што садржи) посуда...’) (Хлебџ 1994: 33–36).

⁹ Закључци ауторке могу се свести на следеће: а) апсолутни синоними не реализују се када су у питању основна значења лексема (*глава, нога, језик*), једнореферентни деривати (*зубић, професорка*), двореферентни деривати (*извиђач, гладан, сестрин*); б) у секундарним семантичким реализацијама готово све лексеме могу ступити у апсолутне синонимске

Испитујући синонимију у колокацијама на примерима научне аргументације у енглеском језику, Љ. Готштајн (1986) наводи да колокабилност није исто што и проста комбинаторика значења конституента једне колокације.¹⁰ Ауторка закључује да као противтежа синонимији, сили ентропије, делују силе колокације које теже да унесу ред. На истом корпусу, у студији *Networks and Knowledge in ROGET's THESAURUS* В. Хилен (Hüllen 1999), указује на значај испитивања синонимије, те синтагматске лексичке спојевости, који су даље извор за многа истраживања и пројекте.¹¹ Као пример складиштења синонимских лексема у наведеном тезаурусу може послужити нпр. низ блискозначница у тематско-семантичкој групи 'чистота': *чистота, пристојност, честитост, поштење, врлина, скромност, стид, невиност; чист, неокаљан, скроман, пристојан, уљудан* и друге, те фразних (пословичних) конструкција типа *чистима је све чисто* и сл.

Водећи се оваквим истраживањима, а полазећи од колокацијске методе, у чијој је методологији испитивање компатибилитета и рестрикција у удруживању лексема на синтагматском и парадигматском плану, циљ нам је да сагледамо укрштања и разилажења у значењу придева *слаб* и *танак*, којима се, начелно исказује интензитет каквог ентитета или појаве, а на основу њихових речничких дефиниција, те степена подударности семантичких реализација са енглеским еквивалентима, забележеним у ЕР. Најпре ће се анализирати речнички чланци, једног једнојезичног српског дескриптивног речника и другог двојезичног енциклопедијског, да би се на основу речничких дефиниција, разлучених значења и подзначања, идентификовањем синонимних заједничких придева у дефиницијама, установиле семантичке скупине именица с којим колоцирају, које су показатељ дела значења самог придева. Контрастивни аспект указаће на потребу лексикализовања одређе-

односе (*мутити – ковати, сновати, роварити*), при чему су идентични и семантички садржаји датих лексема и експресивна маркираност, а њихова је позиција условљена постојањем обавезног детерминатора (...главно је да нам више разни Павловићи не *муте по вароши*.) (уп. Гортан-Премк 1994б: 9). Ова је врста семантичке (и синтаксичке) везаности индикативна за постојаније лексичке спојеве као што су колокације.

¹⁰ Ово илуструје примером колокације *доћи до закључка* (to reach a conclusion) и могућих синонима оба колоката забележених у речнику *Roget's Thesaurus*, те долази до шездесет и три комбинације, што би представљало потпуну хаотичност у језику. Од свих потенцијалних комбинација, у грађи је нађено пет (што никако не значи да их нема још) (Gotštajn 1986: 41).

¹¹ Дифур (Dufour 1998), у оквиру пројекта DÉFI, (CEPL – University of Liège), описује три методе за утврђивање семантичке везе међу колокатима, користећи лексичко семантичку базу WordNet: категоризацију у *Roget's Thesaurus of English Words and Phrases*; интуитивни метод – поређење текстуелне грађе и речника колокација.

них значења у енглеском језику, што је користан податак за диференцијацију значења у српском језику, као и за могуће безеквивалентне, културно специфичне речи, лакуне.

3. Лексичко-семантичка анализа и лексикографска обрада придева *слаб* и *танак*

У семантичком садржају придева са значењем интензитета или какве димензије, па тако и код придева *слаб* и *танак*, налазе се, као семантички примитиви, придеви *велик* и *мали*,¹² те се као примарно значење у РМС бележи следеће: *слаб* – који је *мале* физичке снаге; *танак* – који је *мале* дебљине. Компоненте /физичка снага/ и /дебљина/ имају богат значењски потенцијал, што резултира широком семантичком дисперзијом: први развија осам значења, други девет. Значајан закључак у вези с централним члановима категорије људских особина (ЉО) изводи Р. Драгићевић применом инпут-анализе (анализе упутница), која се састоји у претрази ових придева у дефиницијама РМС, с претпоставком да фреквентнији придеви „имају најопштију семантику, њихово значење повезује највећи број придева ЉО [...] такви придеви морају заузети централно место у систему ових придева” (Драгићевић 2001: 206–207). Како је показало ово истраживање, придеви са значењем интензитета у самом су врху фреквенцијске листе: најучесталији је придев *јак* (40), а одмах затим *слаб* (33), што значи да ове особине, различито номиноване, доминирају у нашој перцепцији и доживљају човека. Као и већина придева који се дефинишу уз помоћ других, а често и ови други путем првих (*circulus definiendo*), и ови придеви дефинисани су и на овај начин. Даље ће се издвајати део дефиниције у РМС, с посебним фокусом на синонимима у њима, а контекстуализација се даје издвојеним колокатима (уколико постоје илустративни примери) из ширег, реченичног контекста.

слаб, а, о 1. болешљив, слабуњав. 2. који није јаке воље. 3. који не располаже јаком влашћу ~ краљ. 4. а. мале снаге, енергије, незнатан, безначајан: ~ почетак, ~ свршетак, ~и стихови. б. који није

¹² О томе сведоче истраживања која су вези са процесом усвајања језика код деце, те се „[п]ридев *велик* разумева као синоним за скоро све немаркиране чланове антонимских парова придева који означавају димензију, док се придев *мали* доживљава као синоним за све маркиране придевске антониме са значењем димензије (Драгићевић 2001: 191).

довољно јак, засићен чиме: ~ јуха, ~ дуван. 5. мален по интензитету, по снази испољавања: ~ пламичак. 6. а. мален, незнатан, недовољан, оскудан: ~ надница. б. који нема праве вредности, недовољно добар, лош, рђав: ~ оцне, ~ плот. в. који изражава непотпуну количину: ~ мера 7. који нешто слабо познаје, неискусан: ~ латиниста, ~ музичар. 8. који има склоност према чему негативном: ~ на вину.¹³

Како се види, блискозначни придеви којима се тумаче одређена значења јесу следећи: *болешљив, слабуњав; незнатан, безначајан; мален, незнатан; недовољан, оскудан, лош, рђав; неискусан*. Низак интензитет, недостатак примарно физичке снаге, везује се за именице на скали – (а) човек (физички, карактерно, психолошки, интелектуално, према вештини); (б) ентитет /конкретно+/ (храна, пиће, новац, творевине); (в) ентитет /конкретно-/ (когнитивни судови, интелектуалне радње).

танак 1. а. који је мале дебљине, који се јавља у плитком слоју ~ конац, ~ платно, ~ превлака, ~ млаз, ~ зид, ~ дрво. б. узак: ~ стаза. 2. витак, протегљаст: ~ стас. 3. а. прозиран, провидан, разређен: ~ магла. б. једва приметан, само наговештен: ~ смијешак. 4. танан, префињен: ~ слух. ~ ћуд. 5. звонак, висок; пискав: ~ глас. 6. фиг. а. мали (по количини и вредности), сиромашан (у битним квалитетима), незнатан, оскудан, сиромашки: ~ плата, ~ зарада, ~ ручак. б. који садржи мало хранљивих састојака, неплодан, постан (о земљи). ~ земља, ~ хлеб в. који је слабе густине, разводњен, разређен: ~ вино, ~ ракија, ~ млеко, ~ чорба. 7. фиг. који је слабог имовног стања, ситан, мали. ~ трговац. 8. фиг. а. слаб, нежан; истрошен, истанчао: ~ вјера, ~ здравље, ~ крв. б. који пружа мало сигурности и утехе, који мало охрабрује: ~ срећа, ~ нада. 9. мање непријатан, мање неповољан; неважан, споредан: тањи крај.

Значење придева *танак*, осим дескриптивним дефиницијама, предочено је и следећим синонимима: *витак, протегљат, прозиран, провидан, разређен*, (једва) *приметан, наговештен; танан, префињен; звонак, висок, пискав; мали, сиромашан, незнатан, оскудан, сиромашки; неплодан, постан; раз-*

¹³ Као изрази с конституентом *слаб*, у РМС наведени су следећи примери: на слабом ногама стајати; ~ (најслабија) страна, тачка; слабих живаца; слабом путем поћи; слабији пол; слаб на језику. За придев *танак* дат је низ архаичних израза, од којих је данас актуелан *ударати у танке жице*.

водњен, разређен; ситан, мали; слаб, нежан; истрошен, истанчао; неважан, споредан. За разлику од придева *слаб*, овим се придевом детерминишу именице којима се означавају (а) ентитетети /конкретно+/ (творевине, делови екстеријера, биљке, неке атмосферске појаве и процеси; храна и пиће; новац); (б) човек (домен перцепције и чула, карактер; физичка својства); (в) ентитети /конкретно-/ (емоције, душевна стања).

Као пресек стања, када су у питању синоними у дефиницијама, издвајају се следећи придеви: *незнатан*, *мален/мали*, *оскудан*, док се у семантичкој структури придева *танак* остварује и значење придева *слаб*, што није у обрнутом случају. При томе, придев *мали* је очекиван као семантички примитив обележених придева у антонимском пару, док се *незнатан* и *оскудан* везују за ентитете којима се номинује новац: *зарада*, *плата*, *надница*; *ручак* (б.в), али и *вера*, *здравље*, *крв* (8.а. фиг.). На основу ових података у РМС, обама придевима означава се низак интензитет каквог ентитета, с тим што се придевом *слаб*, будући да се примарно односи на човека, уноси компонента личног учешћа (свесног или не) које резултира стањем слабости. Придевом *танак* пак исказана је првасходно датост физичких, махом неживих ентитета, чиме је искључена могућност самоактивности. Преклапања у значењу ових придева, како показује РМС, остварују се у секундарним значењима, где су активирани компоненте /мали/, /недовољан/. Детаљнији подаци добиће се из *СрпКорп*, који нуди бројнију грађу и бележи савремено стање.

3.1. Слаб и танак у ЕР

За разлику од овог дескриптивног речника српског језика, ЕР Б. Хлебца умногоме има другачије уређену микроструктуру, што је очекивано с обзиром на профил речника и окренутост ка кориснику. У одредници *слаб* налази се девет семантичких скупина означених бројевима, с тим што се поједини еквиваленти понављају (нпр. *poor*), што је условљено диференцијацијом према значењу именица с којима колоцира. Општи назив скупине (нпр. део тела) дат је у загради, а даље се у оквиру једне скупине могу наћи и други еквиваленти који нису означени бројем нити типографски издвојени. У својим теоријским радовима, Б. Хлебец наводи да у придевско-именичким¹⁴ колокацијама дефиниције садрже директиву

¹⁴ Ове су дефиниције дате у оквиру истраживања лексичко-семантичке анализе придева са значењем једне димензије (Хлебец 2002: 213–235).

(означену ##), којом се исказује садржај везивне именице, спојни елементи, чворна места за разне врсте речи, вероватно ограниченог броја,¹⁵ и анализу – исказује се садржај придева у ужем смислу (нпр. *дубока жалост* = ‘#психичка појава# која има велики интензитет’ – искључују *дубок плес, *дубоко слушање → ‘#појава# ...; *дебела шала* ‘#вербална појава# која има превелико одступање од норме за пристojно’ – искључују *дебела лаж* јер „не нарушава правила пристojности”). Узимајући у обзир полисемантичку структуру лексеме, ауторова је намера да дође до дефиниције сваке семантичке реализације (семеме) *принципом оптималног укључења* којим би дефиниција обухватала минималан и довољан скуп елемената, довољан да значење одвоји на парадигматском плану, те покривала максималан број јављања дате лексеме. Полазећи од ових поставки, као практично решење добија се нпр. оваква одредница, у раду минимално сведена на фокус истраживања:

слаб 1. **weak** (*физички*¹⁶); **bad** (*део тела*); ~ији *пол* gentle sex; ~их *живаца* of a nervous disposition *form* 2. **flimsy** (*предмет* нпр. *кутија*) 3. **weak** (*појава, енергија; здравље*); *poor* (*особа у погледу неке способности; стрелац*); *бити* ~ог *здравља* be in poor health; *имати* ~о *памћење* have a bad memory; ~а *коса* thin hair; ~а *страна* w. point; ~*тачка* (*наклоност*) a blind spot; ~а *циркулација* poor circulation; ~е *воље* (*ген.*) weak-willed; ~ија *страна* (која ће вероватно изгубити) underdog; ~о *здравље* low health; ~о *знање* smattering knowledge; *с. пулс* slow pulse 4. **poor** (*успех*); *weak* (*незадовољавајући у нечему*) ~а *оцена* [...] 5. **weak** (*неубедљив*); **flimsy, lame, poor** (*изговор*); ~а *утеха* little/small comfort/consolation 6. **weak** (*без ауторитета*); *useless* (*неспособан*) 7. **weak** (*течност; чај*); ~а *храна* spare diet; ~о *пиво* thin beer; *с. снег* light snow 8. **slim** (*нада, могућност, изгледи*); *remote* (*шанса, веза*) 9. **slack** (*пословање, продаја*); ~а *валута* weak currency; ~и *глагол* weak verb

¹⁵ „Постоји могућност, и на њеној провери свакако треба порадити, да су директиве садржајем истоветне са класемама, управним деловима именичких дефиниција, а даље истоветне с почетним категоријама из когнитивне лингвистике (unique beginners), попут ‘биљка’, ‘намештај’, ‘животиња’, ‘воће’, ‘одећа’, ‘возило’, ‘супстанца’ (‘твар’), ‘место’, ‘алатка’. Треба очекивати да овај кључни појам има свој препознатљив корелат у живчаним путевима у мозгу” (Хлебец 2008а: 70–71).

¹⁶ Уз назив скупине у загради даје се и енглески превод (нпр. *физички* physically), што у раду не наводимо, осим у подзначањима, нпр: ~о *знање* smattering knowledge; *с. пулс* slow pulse. Граматичке информације такође нису навођене у илустрацији одреднице.

Кључни параметар за диференцијацију значења, како се може закључити из одреднице, јесте семантичко поље којем припадају именице или проширене директиве, те ће се, нпр. *weak* појавити чак пет пута, као хипероним који примарно одређује физичке ентитете, да би се гранао, као у примеру 7 (*течност; чај*): *spare diet; thin beer; light snow* на различито лексикализоване особине с компонентом /слаб/ у зависности од семантике именице (*храна, пиво, снег*). Тако ће нпр. придев *bad* везивати за себе именице са значењем *део тела*, али ће се поједине физичке особености квалификовати другачијом номинацијом: *gentle sex* (*нежнији пол*) или психолошки: *~их живаца of a nervous disposition form* (*слабих/танких живаца*). С друге стране, за значење придева *weak* болдом су истакнути синоними, као у значењу наведеном под 5 (*неубедљив*) **flimsy, lame, poor** [јадан, неубедљив, сиромашан] *изговор*, што нпр. није компатибилно с именицом *утеха*, те аутор у наставку даје и овај пример *little/small comfort/consolation*.

Придев *thin*, како се види, налази се у значењу *weak*, али у различитим семантичким скупинама, потпољима – 3. *појава, енергија; здравље: ~а коса thin hair* и 7. *течност; чај: ~о пиво thin beer*. Заједничко овим ентитетима (*коса, пиво*) јесте компонента /интензитет -/ у домену квалитета – засићености, густине, те би у српском еквиваленти били *слаба коса, слабо пиво, ретка коса*, али *благо пиво*.

У одредници *thin* бележи се седам семантичких скупина или значења и исто толико блискозначница, али и других лексичких варијанти у зависности од граматичког устројства споја (*врло танак, танак као папир и сл.*). Како се у српском језику, према подацима које бележи РМС, семантика квалитета означеног придевом *танак* може номиновати већим низом блискозначних придева него придевом *слаб* и у односу на стање које бележи ЕР, предочиће се и одредница *thin* у ЕР.

танак 1. thin (*ствар thing*); **sheer** (*тканина textile*); *врло т. wafer-t; т. као папир paper-t; т. слој земљишта shallow layer of soil; танко црево small intestine, spec. jejunum* **2. lean** (и *крепак особа*); *т. струк slim waist* **3. thin** (*извештај, доказ*); *bare* (већина) **4. mingy** (*оскудан*); **spare** (*оброк*); **weak** (*напитак*) **5. high-pitched** (*глас, звук*) **6. танка крв** (*наслеђе*) *distaff side* **7. танки консонант** *voiceless consonant*

Будући да се значење ових придева примарно начелно диференцира према томе да ли квалификују ентитете према интензитету физичко /човек/ : /ствар/, очекивано је да ће се преклапања у номинацији реализовати у се-

кундарним, удаљеним значењима *weak* ≈ *thin*: *течност*, *чај*: *напитак*; *коса*, *пиво*: *ствар*, док се само за *thin* везују именице из групе *извештај*, *доказ* и сл. У српском би све ове именице биле компатибилне и са *слаб* и са *танак*, с тим што би се њима уносила конотативна компонента значења (уп. *неуверљив*: *слаб*: *танак* (колоквијално) *извештај*, *доказ*).

3.2. Слаб и танак у СрпКорп

На основу речничких података, превасходно информација које нуди ЕР, мноштва лексичких решења у семантичкој структури анализираних придева, синонима, блискозначних придева, разграничених семантичким скупинама именица с којима колоцирају, сумираће се приказана решења одредницама које би могле чинити окосницу колокацијског речника српског језика, када су у питању придевско-именички спојеви. Примери су ексцерпирани из електронског корпуса српског језика и биће устројени према фреквенцији појављивања значењског потпоља, чије ће се најсажетије значење дати у загради.

слаб 1. [физички, тело *онемоћао*, *нејак*; *мршав*] девојка, деца, жена, људи, мати; 2. [физички/псих.; део тела *болестан*] здравље, зуби, кости, крв, леђа, нерви, око, плућа, руке, срце; 2.1. *редак* брада, коса; 3. [душевно *лош*, *крхак*] вера, воља, духом, душа, интелигенција, мотивација, моћ запажања, пажња, памет, разумевање, снага; *слаба* тачка; *слабо* место 3.1. *блед*, *неуверљив* вајда, верзија, замена, изгледи, молитва, нада, опирање, памћење, покушај, потреба, представа (о нечему), утеха, утисак, шанса; математичар, сликар; стихови; 4. [перцепција *пригушан*; *мутан*] глас, звук, крик, режање, тон, узвици; лампа, светлост, сијалица; мирис; вид; *танак*, *неприметан*, *благ* огањ, осмех, румен (на образу); 5. *лош*, *мали* вредност, квалитет, оцена; плата; *недовољан* исхрана, одећа; *редак*, *неконцентрисан*; *оскудан*, *танак* кафа, супа, чај; зоб, принос; 6. [предмет *танак*, *неиздржљив*] зид, кеса, прозор, скела, стуб; 7. [управа, енергија *неделотворан*, *неефикасан*] држава; зрачење, сила, талас, удар; 8. [природа (једва) *приметан*, *наговештен*] ветар, измаглица, магла, светлост, снег; 9. [однос *некарактеран*] *слаб према*: алкохолу, дувану, женама.

танак 1. [физички, тело *вита*к] дама, госпођа, тело; 2. [део тела, стање *издужен, танан*] боре, бркови, врат, залисци, језик, коса, кости, листови, ноге, нос, обрве, пас, прсти, реп, руке, струк, ткиво, уста; огреботина, ожиљак; *прозиран* кожа; *истрашен* здравље, нерви, стрпљење; 3. [одећа, обућа, предмет *слаб, танушан, истанчао*] блуза, каиш, капут, кеса, кошуља, машна, одело, спаваћица; потпетице, штикле; 4. [материјал; ткање *узак, прозиран*] венац, душек, завеса, јорган, материјал, платно, ткање, ћебе; игла, конач, паучина; 5. [творевина *узан*] бедем, зид, преграда; бич, дршка, лопата, жица, палица; рам, срп, труба, цев; *необиман* књига, свеска; *прозиран* маркер, хартија; 6. [глас *звонак, висок, пискав*] глас, јецај, шиштање; 7. [биљка *слаб*] грана, дрво, жилице, стабљика; 8. [форма *узан, мали*] ивица, линија, млаз, нанос (чега), парче, слој, трака, црта; *пљоснат* лепиња, телефон; 9. [природа (једва) *приметан, наговештен*] измаглица, магла, облаци, обрис, плаветнило, светлост, сенке.

Овако уређени речнички чланци, у којима се полисемантичка структура диференцира према лексикализованој архисеми, а значење дефинише блискозначницом, при чему су примери фреквентни колокати, вишеструко су окренути кориснику, који је, пре свега, неизворни говорник српског језика. На примерима ових двају придева јасно ће се уочити диференцијација између *слаб* ≈ *танак* у нпр. *слаб осмех* јер се ради о форми осмеха који није широк, усиљен је, и нпр. *слаба одећа* која има прилошку семантизацију (← *слабо* обучен човек, с мало одеће на себи). Али, с друге стране, заједнички ће колокати бити из сегмента нпр. *течност*: *слаба* ≈ *танка* кафа или *биљке* *слаба* ≈ *танка* грана, стабљика и сл.

4. Закључак

Енциклопедијски српско-енглески речник Бориса Хлебеца дело је у којем се лексичком систему приступа готово свеобухватно, када су у питању синтагматски и парадигматски план и зато је вишеструко корисно како за кориснике којима је српски страни језик тако и изворним говорницима. У овом раду је приказан само један сегмент – место и улога колокација у разумевању значења придева *слаб* и *танак*. Упоредјујући значења наведена у РМС и допуњујући грађу примерима из *СрпКорп*, може се закључити да је аутор навео готово сва значења која постоје у српском језику, додајући и она

која су специфична за енглески језик (нпр. *~ија страна* (која ће вероватно изгубити) *underdog*). Овакво богатство информација шири културолошке видике и богати речник онима који се, пре свега професионално баве контрастивним српско-енглеским везама. Примери који илуструју значења, коллокации, бирани су пажљиво, то су фреквентне и постојане везе, углавном неспецификованог, општег лексичког фонда (*слаба циркулација, танак струк* и сл.), мада не изостају термини (*танко црево*) или изрази (*танак као папир*). Специфичност је овога речника и то што су детаљно наведени синоними или лексеме које уносе конотативно значење, што је врло важно за кориснике на високим нивоима учења језика, будући да се оваквим нијансама лексикализованог значења постиже прецизност и јасност исказа (*глас* нпр. јесте *танак* (колоквијално), али је у том значењу и *звонак, висок, пискав*). Овако умрежене лексичке и семантичке информације у речничкој одредници послужиле су нам да начинимо огледну одредницу за једнојезични речник колокација српског језика, при чему су као примери послужили делимично блискозначни придеви, како би се сегментом именичких коллокација једног семантичког потпоља осветлио део значења једног придева и уочила њихова заједничка и диференцијална обележја. Посао на склапању лексичког мозаика по принципима колокацијске методе, како наводи аутор овога речника „биће завршен тек када буду добијене ваљане дефиниције за бар двадесетак хиљада чешћих лексема [...] што представља замашан, али не и неостварљив подухват” (Хлебец 2008а: 77).

Литература

- Bratanić, M. (1992). Prema novoj leksikografiji (teorija modela „Značenje-Tekst” i objasnidbeno-kombinatorni rječnik). *Suvremena lingvistika*. Zagreb: Hrvatsko filološko društvo, 56–66.
- Dufour, N. (1998). Recognizing Collocational Constraints for Translation Selection: DEFI's Combined Approach. In: T. Fontenelle, P. Hiligsmann, A. Michiels, A. Moulin, S. Theissen (eds.), *EURALEX '98 Proceedings*, Liège: University of Liège, 109–117.
- Fontenelle, T. (2013). Wordnet, Framenet and Other Semantic Networks in the International Journal of Lexicography – the Net Result?. *International Journal of Lexicography*, 25/4, 437–449.

- Gotštajn, Lj. (1986). *Sinonimija u kolokacijama (sa primerima engleskog jezika naučne argumentacije)*. Novi Sad: Institut za strane jezike i književnosti Filozofskog fakulteta Univerziteta u Novom Sadu.
- Hüllen, W. (1999). Dictionaries of Synonyms and Thesauri. In: A. P. Cowie (ed.), *The Oxford History of English Lexicography*, Oxford: Clarendon Press, 25–47.
- Kiefer, F. (1990). Linguistic, Conceptual and Encyclopedic Knowledge: Some Implications for Lexicography. In: T. Magay and J. Zsigány (eds.), *BudaLEX '88 proceedings. Papers from the EURALEX Third International Congress*, Budapest: Akadémiai Kiadó, 1–10.
- Kristal, D. (1987). *Kembrička enciklopedija jezika*. Beograd: Nolit.
- McKeown, K. R. and D. R. Radev (2000). Collocations. In: R. Dale, H. Moisl, and H. Somers (eds.), *A Handbook of Natural Language Processing*, New York: Marcel Dekker, 507–523.
- Mel'čuk, I. A. (1998). Collocations and Lexical Functions. In: A. P. Cowie (ed.), *Phraseology. Theory, Analysis, and Applications*, Oxford: Clarendon Press, 23–53.
- Mel'čuk, I. A. and A. Zholkovsky (1984). *Explanatory Combinatorial Dictionary of Modern Russian*. Vienna: Wiener Slawistischer Almanach.
- Mićić, S. (2004). *Nazivi bolesti i poremećaja u engleskom i srpskom jeziku*. Beograd: Beogradska knjiga.
- Nejgebauer, A. (1982). Odlike kolokacija u engleskom jeziku. *Zbornik radova Instituta za strane jezike i književnosti*, 4, 339–347.
- Pervaz, D. (1981). Kolokacija: od reči do termina. *Naučni sastanak slavista u Vukove dane*, 18/1, 59–67.
- Pervaz, D. (1984). O nekim kolokacijama sa pridevom težak. *Zbornik Matice srpske za filologiju i lingvistiku*, 27–28/1, 603–608.
- Prčić, T. (1997¹; 2008²). *Semantika i pragmatika reči*. Novi Sad: Zmaj.
- Prčić, T. (2018). *Ka savremenim srpskim rečnicima*. Filozofski fakultet: Novi Sad.
- Sinclair, J. (1966). Beginning the Study of Lexis. In: C. E. Bazell, J. C. Catford, M. A. K. Halliday et al. (eds.), *In Memory of J. R. Firth*, London: Longman, 410–430.
- Stojičić, V. (2010). *Teorija kolokacija*. Beograd: Zadužbina Andrejević.
- Stubbs, M. (2002). *Words and Phrases. Corpus Studies of Lexical Semantics*. Oxford: Blackwell.
- Šević, R. (1985). Izučavanje kolokacija u engleskom i srpskohrvatskom jeziku i moguća primena u nastavi engleskog jezika. *Zbornik radova III simpozijuma Kontrastivna jezička istraživanja*, Novi Sad: Filozofski fakultet, 179–199.
- Šipka, D. (2006). *Osnovi leksikologije i srodnih disciplina*. Novi Sad: Matica srpska.

- Zgusta, L. (1991). *Priručnik leksikografije*. Sarajevo: Svjetlost.
- Гортан-Премк (1994а): Gortan-Premk, D. (1994a). O novome tipu deskriptivnog rečnika. *Zbornik Matice srpske za filologiju i lingvistiku*, 37, 203–208.
- Гортан-Премк (1994б): Gortan-Premk, D. (1994b). O leksičkoj sinonimiji. *Naučni sastanak slavista u Vukove dane*, 22/2, 5–11.
- Драгићевић (2001): Dragičević, R. (2001). *Pridevi sa značenjem ljudskih osobina u savremenom srpskom jeziku (tvorbena i semantička analiza)*. Beograd: Biblioteka Južnoslovenskog filologa.
- Драгићевић (2011): Dragičević, R. (2011). Lingvokulturološki pristup u nastavi srpskog jezika kao stranog. U: V. Krajišnik (ur.), *Srpski kao strani jezik u teoriji i praksi II*, Beograd: Filološki fakultet, 81–95.
- Драгићевић (2018): Dragičević, R. (2018). *Srpska leksika u prošlosti i danas*. Novi Sad: Matica srpska.
- Дражић (2014): Dražić, J. (2014). *Leksičke i gramatičke kolokacije u srpskom jeziku*. Filozofski fakultet: Novi Sad.
- Ристић и Радић-Дугоњић (1999): Ristić, S. i M. Radić-Dugonjić (1999). *Reč. Smisao. Saznanje*. Beograd: Filološki fakultet.
- Филмор (1982 [2014]): Filmor, Č. (1982 [2014]). Semantika okvira. U: K. Rasulić i D. Klikovac (ur.), *Jezik i saznanje. Hrestomatija iz kognitivne lingvistike*, Beograd: Filološki fakultet, 105–151.
- Хлебец (1994): Hlebec, B. (1994). Problemi polisemije. *Naučni sastanak slavista u Vukove dane*, 22/2, 5–11.
- Хлебец (2002): Hlebec, B. (2002). Leksičko-semantička analiza srpskih prideva sa značenjem jedne dimenzije. *Srpski jezik*, 7/1–2, 213–236.
- Хлебец (2008а): Hlebec, B. (2008a). *Kolokacijska metoda semantičke analize na primeru imenice pažnja*. U: M. Radovanović i P. Piper (ur.), *Semantička proučavanja srpskog jezika*. Beograd: SANU, 65–79.
- Хлебец (2008б): Hlebec, B. (2008b). „Predikativni instrumental” u svetlu kolokacijske analize. *Južnoslovenski filolog*, 64, 535–550.

Извори

- EP: Hlebec, B. (2010). *Enciklopedijski srpsko-engleski rečnik / Comprehensive Serbian English Dictionary*. Beograd: Zavod za udžbenike.
- PMС: *Rečnik srpskohrvatskoga književnog jezika*, I–VI. (1967–1976). Novi Sad: Matica srpska.

СрпКорп: Корпус савременог српског језика. <http://www.korpus.matf.bg.ac.rs/korpus/>

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THE ROLE OF COLLOCATIONS IN INTERPRETING THE MEANING OF
LEXEMES IN *COMPREHENSIVE SERBIAN-ENGLISH DICTIONARY*
BY BORIS HLEBEC

Summary

Boris Hlebec's *Comprehensive Serbian-English Dictionary* (2010) exceeds the traditional lexicography boundaries both macro- and microstructurally. This dictionary presents itself as a reliable source for many different lexical-semantic, lexicographic, as well as cultural linguistic studies. This paper elaborates on collocations – namely, stable (fixed) lexical strings enlisted in the Dictionary, with the purpose of distinguishing the meanings of polysemous words from those having similar meaning(s). The Serbian lexemes *slab* and *loš* share certain semantic features (semes), which may also be confirmed by their English translation equivalents (such as *weak, bad, poor*). The aims of this study are as follows: (a) to pinpoint both common and distinctive semantic features of the given Serbian lexemes in collocations, based on the primary collocate meaning (e.g. *slab* ≈ *loš* → *slab strelac* poor archer, *slabo zdravlje* poor health, *loše pamćenje* poor memory, etc.; yet, *slab čaj* weak tea, *slab sneg* light/weak snow, *slabo pivo* weak beer; and *slab* ≠ *loš* → *loš čaj* poor tea, *loš sneg* poor snow, *loše pivo* bad beer); (b) to provide insight into the contextualization significance (e.g. *znaš iz lošeg iskustva* I learnt about "xy" from bad experience; *Bolesnik je proveo lošu noć* The patient had a bad (restless) night); (c) in light of the restrictions on arranging together the given Serbian adjectives + nouns, to select nominal groups that would serve as a model for compiling a collocations dictionary of Serbian. The primary aim of this study on the available lexical combinations and restrictions, therefore, is to shed light on the importance of such a dictionary item, with all the shades of lexical meaning that are contextualized and clearly defined in a theoretically and methodologically sound way. Simultaneously, such a close inspection of the given collocations shall put an emphasis on the wider significance of Hlebec's modern and multipurpose dictionary, that is also structurally and thematically rich and complex. Its full potential is yet to be discovered, and the conclusions drawn are then to be used as a starting point for addressing novel dictionary projects.

Key words: semantics, collocation, dictionary, adjectives, nouns, the Serbian language, the English language

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CONTEXTUAL PROSODIC THEORY APPLIED TO ENGLISH-SERBIAN POETIC TRANSLATION

Abstract

The paper focuses on two rival translations of Shakespeare's Sonnet 129 into Serbo-Croatian (Hlebec 1987). The translator provides Version A, which faithfully conveys the stylistic nuances of the original, and is aimed to be appreciated by a sensitive reading public, and Version B, which the translator calls "adulterated", but believes to be more accessible to a wider audience. However, he feels that Version B is "somehow more likeable" (Hlebec, personal communication). This impression was shared by all seven educated native speakers of Serbian consulted, among whom were three third-year students of English. Using Contextual Prosodic Theory and the Corpus of Contemporary Serbian, the paper sets out to explain this impression. The results suggest that syntactic patterns in Version A, being closer to the English original than in Version B, may impede comprehension, and that certain lexical items may not chunk the same states of affairs in Serbian as their English equivalents do in English. A representative poetry corpus must be created in order to verify Hlebec's view (personal communication) that syntax employed in Version A is characteristic of Serbian poetry and therefore appropriate in poetic translation.

Key words: corpus stylistics, Contextual Prosodic Theory, collocation, semantic prosody, corpus-derived subtext, poetic translation

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1. Introduction

Louw's Contextual Prosodic Theory (CPT) emerged out of its originator's involvement with the COBUILD (1998) project, whose aim was to create the first corpus-based English dictionary. Having at his disposal a 22-million-word corpus, Louw came up with the idea of a reference corpus, to be used for a more nuanced interpretation of poetic texts. This is how in 1987 at Hilda's College, Oxford, Louw launched the discipline of corpus stylistics (Louw and Milojkovic 2014: 263), which was to employ large language corpora as a reference norm against which to interpret semantic nuances in individual texts. The principle behind this interpretation was that the most frequent collocates of the node in the reference corpus shed additional light on its semantics, which later became known as the semantic prosody of the node (Louw 1993). Initially focusing on lexis only, this principle was later transferred to grammar, suggesting that a grammar string's *logical semantic prosody*, or its *corpus-derived subtext*, consisted of its most frequent lexical variables.¹

Since a large and representative corpus of a language is a reliable source of additional information on the node's semantic aura, CPT may be used to facilitate the process of translation, as well as to adjudicate the success of particular translations (Louw and Milojkovic 2016). It stands to reason that the semantic aura of the author's expression ought to be reasonably well represented in the translation. Albeit time-consuming, this interpretative strategy is a valuable addition to translation methodology (Wang and Humblé 2018: 551), particularly when it comes to famous poets whose works may have been a source of difficulties for many a translator.

In its subsequent sections, this paper will give an account of how CPT may be used to compare two rival translations. In addition to semantic prosody and subtext, it will make use of the term *states of affairs* (Wittgenstein 1922), which are created by the node in the reference corpus, and which yield themselves to description based on Firth's definition of the context of situation (1957: 182).

¹ For a detailed account of corpus-derived subtext and Louw's Contextual Prosodic Theory, see Louw and Milojkovic (2014, 2016) and Milojkovic (2013).

2. Comparing rival translations

2.1. Translations A and B of Sonnet 129

In his paper *Prevođenje Šekspirovog soneta 129 na Srpskohrvatski jezik* (“Translating Shakespeare’s Sonnet 129 into Serbo-Croatian”, Hlebec 1987), Professor Boris Hlebec of the University of Belgrade² argues that more care should be taken when translating Shakespeare’s sonnets than is usually the case. The translator should take into account the wish of the reading public to appreciate as many Shakespeare’s stylistic nuances as possible – the density of language, the phonological associations, the alliteration and assonance, the repetitions, symmetries, parallelisms and regularities. One should not confine oneself to transferring the narrative and descriptive essence of the sonnet, unless the target reading public is not “sensitive to the poetic function”, claims the author (Hlebec 1987: 135). To this end, Hlebec studies Jacobson’s and Johns’s (1970) comments on Sonnet 129 as well as Culler’s (1975) references to these authors, adds his own observations and translates Sonnet 129, retaining as many key stylistic aspects as possible – the compression of thought, the symmetries of morpho-syntax, the sound effects. In particular, he notices the grammatical features in the sonnet that underline the universal aspect of the described phenomenon (Hlebec 1987: 132). Interestingly, Hlebec refers to his informed translation as “Version A” and at the end of the paper offers “Version B” – an “adulterated”, as he calls it, example of what Shakespeare’s sonnets usually look like when translated. What is not stated in the paper is his own misgivings that, paradoxically, the second version is “somehow more likeable” (Hlebec 2012, personal communication). It seemed to me that CPT existed to answer why certain translations “sound better”. Nevertheless, at the very start I was baffled by the fact that, while other Serbian educated native speakers agreed that the second version

² This article is a revised version of a chapter to be included in Louw and Milojkovic (2016). At the time, this initial plan did not materialise, but I am using this opportunity for the second time to acknowledge Professor Hlebec’s encouragement, support and professional advice regarding chapters 7 and 8 of the book. The material was gathered and written up in 2013 (this must be borne in mind when it comes to references to students and corpora). I would also like to express my deep gratitude to my then students, Višnja Krstić, Slađana Andušić and Suzana Subotić, who took the trouble to participate in my analysis of prof. Hlebec’s translations.

“sounded better”, I, a native speaker of Russian, was delighted with the first.

This is the sonnet followed by the two versions:

Sonnet 129

The expense of spirit in a waste of shame
Is lust in action; and till action, lust
Is perjured, murderous, bloody, full of blame,
Savage, extreme, rude, cruel, not to trust,
Enjoy'd no sooner but despised straight,
Past reason hunted, and no sooner had
Past reason hated, as a swallow'd bait
On purpose laid to make the taker mad;
Mad in pursuit and in possession so;
Had, having, and in quest to have, extreme;
A bliss in proof, and proved, a very woe;
Before, a joy proposed; behind, a dream.
All this the world well knows; yet none knows well
To shun the heaven that leads men to this hell.

Version A

*Trošenje snage u rasapu srama
Pohote strast je; u dejstvu strast biva
Krvava, zverska, reč zadatu slama
Svirepa, lažna, zla, pomamna, kriva,
Slađena tek je – već prezrena nama',
Tražena besno, a čim dostignuta
Mržena besno, poput kakvog mâma
Stavljenog da se sludi ko proguta.
Isto u težnji k'o imanju luda,
Pomamno tražeć, sežuć, tažeć htenje,
Kušana – sreća, okušana – huda,
Pre žuđen ushit, posle priviđenje.
Svet dobro zna sve to, no ne zna kako
Izbeći raj što vodi u taj pakō*

Version B

*Trošenje snage kad nestaje stida –
To pohota je; i dok ona traje
Divlja je, krvava, zakletvu kida,
Nepouzdana, svirepa i zla je.
Po užitku kratkom, istoga trena
Prezrena je, uz puno mržnje lude,
Poput nekakvog mamca postavljena
Da onaj ko proguta sluđen bude.
Pomamna kad traži i kada ima,
Mahnita kad seže i kada ganja,
U dejstvu čini ljude blaženima
A utažena – tek je pusta sanja.
To zna svet dobro, ali nije lako
Izbeći taj raj što vodi u pakō.*

The question I asked seven educated native speakers of Serbian was which version they liked better. I did not ask them to compare either version with the original, but to focus on the difference between the two translations. The feedback I got focused mainly on syntax. They claimed that in Version A it was “archaic”, “more suitable for Shakespeare’s times”, while Version B was pronounced much more appealing to the modern reader. The same went for some “archaic” lexical choices. As syntax has to do with corpus-derived subtext, I decided to compare both versions subtextually. As for lexis, could there be any collocational mismatches in Version A due to the effort involved in conveying Shakespeare’s manifold nuances? Could the whole first version be suffering from artificiality? And why could I, a Russian native speaker, feel only the translator’s mastery?

This characteristic comment on both versions came from Višnja Krstić, then a third-year student at the Department of English, University of Belgrade:

I agree that Version A conveys meaning better, whereas Version B sounds more natural. In my opinion, Version A sounds like a word-for-word translation; there is no flow. However, Version B sounds as if it was originally written in Serbian.

The research question of this paper is, therefore, why Version B was regarded by all interviewees as “more appealing” than Version A. Theoretically, it could also be extended to which version of the sonnet’s translation should be evaluated as the better one of the two, taking into account not only semantic accuracy, but also naturalness. However, this paper cannot deal with such an issue in sufficient depth, except to acknowledge that the former question must have a bearing on the latter.

The deployment of the Corpus of Contemporary Serbian for this purpose needs clarifying. A balanced reference corpus of a language is a representative sample of a speaker’s accumulated linguistic experience. Syntactically, poetic texts differ from prose. There is no poetry corpus of the Serbian language available, therefore precedents in poetic language could not be empirically established. Still, a departure from syntax that is not normally found either in prose or in poetic discourse must influence the speed of processing, especially if lexical collocations create unusual states of affairs. Besides, the Corpus of Contemporary Serbian is still insufficient in size for a full-scale study, given the flexible word order of Slavic languages as compared to English. The present study is offered as an example of how CPT may assist translation into Serbian, and certainly not as definitive judgement. If a representative poetry corpus of Serbian was available, both reference corpora would have been consulted. In any case, a poetic deviation from prose syntax would have to be found frequently enough in poetry in order to be pronounced easily comprehensible. When it comes to lexical collocation, the question is not so much whether a lexical choice is or is not unusual, but whether a collocation thought up for the purposes of translation creates, in the mind of the reader, the state of affairs desired by the translator. Finally, any deviation from the norm in a poetic text entails foregrounding. Ideally, its translation should employ foregrounding if and only if it reflects the meaning of the original.

2.2. Evaluating the first syntactic whole

In order to answer the research question, the first syntactic whole will be evaluated in detail.

“Word for word” and “no flow” would suggest unnatural subtext. For the benefit of subtextual analysis I divided the original sonnet into syntactic wholes – the shortest that were possible. I did not succeed in the latter attempt too well, as Shakespeare’s syntax is at its most condensed from the middle

of the second line till the end of line 8. Then, I compared each syntactic whole with its semantic equivalent from both versions. As I was primarily interested in subtext, I removed the formal indication of beginnings and endings of separate lines, making the sentences resemble prose. Subtext is at the root of a language, therefore a poem written by a native speaker will break language rules only for the purpose of foregrounding. If a deviation from the norm in a translation does not result in foregrounding consistent with the original poem's message, it probably should not have occurred at all, particularly if it is significant. With translated texts the question of *intended meaning* is solved by the original text.

Th' expense of spirit in a waste of shame is lust in action
Trošenje snage u rasapu srama pohote strast je (Version A)
Trošenje snage kad nestaje stida – to pohota je (Version B)

In Version A, after the prepositional phrase, “lust in action” is translated as “passion of lust”, and the nominal predicate comes before the copular verb, which has been moved to the end of the sentence. The displacement of the verb is influenced by the rhythm. Alliteration abounds. The word order in the nominal predicate is also reversed: the Serbian equivalent of ‘lust’ – *pohota* is emphasised by its initial position in the line, but in everyday language it would be more natural for it to come after *strast* (‘passion’). *Pohote* is the genitive case of *pohota* and modifies *strast* in the nominative, which is the head of this noun phrase. In Serbian it is more usual for nouns in the genitive to follow nominative nouns they modify, and for the copular verb to precede such a noun phrase (e.g. *jeste strast pohote*).

That the structure *pohote strast je* is uncommon in Serbian prose can easily be proved with the help of the reference corpus. I entered the search string *[a-z]+e [] je*, which is the equivalent of **e+*+je*. In the first 1,000 contexts I found only three structures containing two nouns followed by the verb form *je* (‘is’). They were *shvatanje bolesti je* (‘understanding of the disease is’), *lice pobedenoga je* (‘the face of the defeated is’), and *lice pobednika je* (‘the face of the winner is’). None of these begin with a noun in the genitive followed by a nominative noun. On the contrary, they all consist of a nominative noun followed by a genitive one. The *-e* ending is an indication of the neuter gender of the first noun, not of the genitive case.

Still, this can hardly create an interruption. Such a deviation from prose word order is not at all uncommon in Serbian poetry, and, in practice, there is no danger of impeding understanding. What may cause discomfort in the

reader is the syntagm *pohote strast* ('passion of lust'). Indeed, 'passion' may be considered a hypernym of 'lust', and, in this context, the two may be used interchangeably in both English and Serbian. The use of *strast* ('passion') is justified as it substitutes *pohota* ('lust') in the second half of line 2, no doubt for valid versification-related reasons: not only is the word monosyllabic, but its three-consonant beginning supports alliteration that the translator was at pains to re-establish in Serbian. However, in the domain of subtext, the translator has created an unusual (poetic) grammar string that amounts to a reversed (from the point of view of everyday language) relationship of two nouns that, when clarified, may be taken to mean the same as either of these nouns on its own. As a whole, the lexico-grammatical collocation *pohote strast je* is a complication.

In Version B this complication does not occur. Lines 1 and 2 are separated by a dash – this is a natural barrier, preparing the reader for the explanation which is to follow. The content of the first line is summed up in *to* ('that'), after the dash. The translator then proceeds to call lust 'lust', and not 'passion of lust' (*pohota* and not *pohote strast*). "Is lust in action" is translated as *to pohota je* ('that is lust'). The copular verb follows the nominal predicate, consisting of one word, and has *to* ('that') as its subject, rather than the whole of line 1, as in Version A. What has been lost is the repetition of the word 'lust' in line 2 and an opportunity for using the noun *strast* ('passion') for alliteration purposes.

Let us now compare versions A and B in the domain of lexical collocation. "Th' expense of spirit" is translated as *trošenje snage* in both versions. Version A's equivalent to "in a waste of shame" is *u rasapu srama*, where the preposition is followed by a noun in the locative case and a modifying noun in the genitive. *Rasap* is a rare word, adequate because it is generally used in elevated discourse – I found 16 instances of its use in the then 113-million-word Corpus of Contemporary Serbian,³ which support this usage:

³ Since there were two interim versions of the corpus between 2011 and 2013, I must have used the one close to that which is currently available: SrPKor2013. No changes have been made to it since January 2013.

1 A sad, opet, pod pretnjom opšteg <rasapa>, božansko i ljudsko u našoj prirodi pokušavam da sla
 2 ima prevladava doživljaj velikog <rasapa>. Gledano iz ovog ugla, istorija srpske književnosti
 3 neporecivu vezu između moralnog <rasapa> i nereda u prirodi. Greh čoveka proširio se na prirod
 4 sednut blizinom smrti, bolesti i <rasapa>, okružen stvarnim i zamišljenim besovima, podozren
 5 kome živimo. Očigledno posledice <rasapa> (razora) supstancijalnog uma - utelovljenog u reli
 6 bi htjeli, svi vinovnici njegova <rasapa> u našoj bivšoj domovini. Ima u svijetu takvih slučaj
 7 haja i vaja, sveukupnoga našega <rasapa> življenja. To je najdublja savremena romaneskna psi
 8 vodanske depresivnosti, koja vuče u <rasap> i samozatiranje. Nimalo slučajno ispisujem ove t
 9 i. Kakav emocijsni šok i moralni <rasap> moraju da dožive deca kad im na nekoliko dana majku
 10 ulencije i vrednosni i hijerarhijski <rasap>, njen uticaj pomera na margine smisla ove društ
 11 ljudi biju Srboljuba u kafani", " <Rasap> pustinjaka"...) spadaju u vrhove srpske poezije dva
 12 i socio - demografskih uslovnosti. <Rasap> savremenih gradova rezultat je zanemarivanja simu
 13 raspon se, u stvari, pokazuje kao <rasap>. Svođeci račune sveta, lične i kolektivne zanose, e
 14 ncijama i vrednosno hijerarhijskim <rasapom>, i sama književnost seli na margine smisla društ
 15 budu obrazac uživanja u sveopštem <rasapu>, niti za sadomazohističko zadovoljstvo zlom i des
 16 a se ne radi samo o, kako kaže, <rasapu> vrednosti, anomiji i stanju bezvrednosti, već o

Rasap is used in all 16 contexts to draw attention to waste that is great both in its scale and mindlessness. The nominative noun is followed by a genitive noun (as in Version A) in four lines out of sixteen (the genitive is expressed in the English original by the prepositional phrase “of shame”). The genitive noun collocates of the noun *rasap* in the reference corpus lines all imply something of value:

- line 5: *supstancijalnog uma* (‘of a mind of substance’)
- line 11: *pustinjaka* (‘of hermits’)
- line 12: *savremenih gradova* (‘of modern cities’)
- line 16: *vrednosti* (‘values’)

A claim can be made that the translation in Version A sounds odd because the Serbian noun *rasap* usually has positive collocates, while *sram* (‘shame’) has negative associations. Still, this is nothing but proof that the noun phrase “in a waste of shame” has been adequately translated: shame must have been viewed by the poet as a desirable quality, forestalling expressions of lust.⁴ As for *rasap*, the word is relatively rare – this is shown by the presence of only 16 contexts in the Corpus of Contemporary Serbian – and sufficient knowledge of its behaviour cannot be drawn from the corpus. However, the concordance shows that the word *rasap* is used when describing general and long-lasting states affecting groups and societies; when it affects individuals (context 9), society is to blame. In context 4 it is not clear what kind of waste is discussed in the individual’s life – it is possible that it is the consequence of his being born into a certain class

⁴ For a discussion of the meanings of ‘shame’ and the translator’s choice of lexical equivalents, see Hlebec (1987: 132-134).

of people. On the other hand, in the translation this rare word is used to describe an individual state, albeit universal, and a short-lasting one.

In Version B, the equivalent of “in a waste of shame” is *kad nestaje stida* (‘when shame disappears’). In contrast to *u rasapu srama* (which contains a rare word unusually used), *kad nestaje stida* is immediately understandable. This is a subordinate clause, fairly frequent; *nestaje* is the third person singular present tense form of a fairly frequent verb. *Stid* is very similar in meaning to *sram* and is considered its synonym. In fact, out of the 435 instances of the form *stida* in the Corpus of Contemporary Serbian (this form was searched for in order to satisfy the definition of corpus-derived subtext, and to narrow down the sample obtained), one did contain the exact collocation *nestaje stida*. This is a quote from Vuk Karadžić, the founder of modern Serbian – which makes the example all the weightier:

145. obiljkama.txt:

Srbi pripovedaju da je ono crveno od pre veće bilo , pa onda svakoga dana biva manje , jer nestaje <stida> među ljudima (Vuk , Rječn . , s . v .) . SUNCOKRET Sonnenblume (*helianthus annuus*) . Suncokret

What remains to establish is the difference in usage between the two Serbian equivalents of ‘shame’: *sram* (Version A) and *stid* (Version B). The old expression *ni stida, ni srama*, which can be translated as ‘some have no shame’ shows that there might be a difference (why use two words where one would suffice):

1 Đinđić i njegova stranka ističu na stub <srama> , a državu tretiraju kao svoj plen , rekao je na
2 cvet i trn . Ako . Ona je uvek žena bez <srama> a muž joj sunce . Iako joj svakog proleća dolaz
3 Pešić . Aleksandra Brkić Zid plača i zid <srama> Akademska rasprava ispred zida plača Studenti
4 nešto! " " Mislim da nemate ni stida ni <srama> , ako baš hoćete da znate šta mislim " , rekla j
5 vati vaše telo . Kod Radmile taj osećaj <srama> bi pojačan i jakim grižom savesti . Tek u tom tr
6 njala nazore . Bol je postajao teži od <srama> . Bolničarka je podelila starim ljudima u odelj
7 rniji , Huanov teret će postati simbol <srama> cele jedne zemlje , piše londonski " Observer " .
8 raslo interesovanje " klijenata " . Žig <srama> često obeležavana žigom srama , kao kopilad , " de
9 ednje pare i vraćao se kući , pun jeda i <srama> . četvrte ili pete večeri pode mu za rukom da s
10 koji se stavljaju , bez razloga , na stub <srama> ... Čitanje zahteva praćeno je stalnim povicim
11 najveći varoški dasa!? Kako bi mogao od <srama> da se pojavi na ulici!? A i ja sam mu one no
12 o razvodu govorilo šapatom , krišom , sa određenom dozom <srama> - danas je situacija uveliko d
13 e tako postiglo stavljanje Irana na stub <srama> , gde je ovde poodavno stavljen kao deo osovi
14 o dvostruko slovo S nosi kao " Kainov žig <srama> " . Gras Izraelcima poručuje da svoja dostig
15 i i nemo posmatrati taj separatistički hod <srama> i beščašća zvaničnika u Crnoj Gori i uvlač
16 za sredinu u kojoj se bez ustručavanja i <srama> (i bez ozbiljnijih posledica) javno mokri na
17 Ali sad svako može da greši otvoreno i bez <srama> , i da živi i napreduje . I zato je svako ko
18 ednu , šunjevića na drugu stranu . Kroz suze <srama> i gneva video je Nenad još dugo visoku pri
19 integracija je znak degradacije i obesčašenja , <srama> i inferiornosti , kao što je za moju
20 Gospod je rekao: "Kad nogama izgazite ruho <srama> i kad dvoje postanu jedno , i kad muško sa

1 je nesvestica od sasušene kamilice i od - <stida>. A evo kako je sve to bilo. Ta prokleta stva
 2 i beše slab i mekušan čovek umre od tuge i <stida>, a ona tada dovede u zamak svoj grešni plod
 3 žid, uneo celog sebe, bez ulepšavanja, bez <stida> - a to je upravo ono što nas intimno i pove
 4 lične koristi, po unutrašnjoj potrebi, bez <stida>, bez grize savesti, čak i bez straha. Sve š
 5 pravi društvo. Smejao se kapetanu, koji od <stida> crveni, a vikao je da nagone tela treba zad
 6 da to devojče nešto oseća prema njemu, od <stida>, crveni. Mogao bi joj po godinama otac biti!
 7 saginjao, i njegovo se meso od hladnoće i <stida> crvenilo. Čeprkao je pod kamenom u vodi, i s
 8 u njemu lepog Crnogorca - ona bi umrla od <stida>. Čak ni on to ne sme da zna. Ni jednim gesto
 9 nekadašnjih đaka koji bi propao u zemlju od <stida> da mu se spomene šta je nekada šarao po k
 10 da bude u kući, ne može da je gleda od <stida>, da ona njega gleda posle petnaest godina, pa
 11 golišave, nasmejane vragolije i ne porumene od <stida>. Dole su vodoskoci skakutali, umorno i
 12 pred crkvom dovodila ga je do očajnog besa i <stida>. Doznao je da ima sina, i od toga dana b
 13 boli svakog odvažnika skromnosti ili ovna <stida>. Eto, tako me je tog jutra grof biskup Turn
 14 mišići na obrazima tresu se pod crvenilom pravog <stida>. Gospa Nola ga pogleda, i nešto u nj
 15 Kada ponovo otvorim oči, sklopljene od <stida>, gospodica Edit već leži na našem otomanu, po
 16 oseća Andra, pa je i njega stid zbog tuđeg <stida>. Hoće nečim i sebe i Ćima da uteši, a cig
 17 Musenalmanacha, premirujući od nerazumljivog <stida> i čudne bojazni. Pretvarala se da čita a u
 18 kamenjem i blatom. U meni je sve vrilo od <stida> i gneva i kad mi je smešna situacija postal
 19 oči se zamagle, ispuni ga svoga ono osećanje <stida> i gneva na samog sebe, osećanje koje ko
 20 je u ovoj staroj srpskoj dereglji reda, i ponosa. i <stida>... i,i, i lepote, da i lepote je

The collocates of the form *srama* imply public shame in the majority of the contexts: *stub srama* ('mark of shame', lines 1, 10, 13), *zid srama* ('wall of shame', lines 3, 8), *žig srama* ('the mark of shame', line 14). Although lines 5, 6, 9, and 18 show that *sram* as an individual feeling also exists, it is more frequently used in social contexts rather than private (lines 7, 11, 12, 15, 16, 17, 19). On the other hand, *stid* is always used for describing inner, private emotions, especially in contexts of sexual relationships or even their remote possibility (lines 6, 8, 9, 11, 12, 14, 15, 17). In lines 5 and 7 exposure of one's body causes *stid*. *Sram* is a consequence; *stid* is a preventive quality. *Sram* may be used in the context of political games, while *stid* is the feeling that may overwhelm a person in the context of temptation. *Stid* is what a person is expected to feel to prevent him or her from experiencing *sram* later on, so to speak.

All in all, when it comes to *u rasapu srama* (Version A), the word *rasap* in Serbian seems to imply a general and long-lasting waste, and *sram* in this context seems to support its social, not individual, connotation.⁵ On the other hand, *kad nestaje stida* is a frequent structure as well as an existing lexico-grammatical collocation, including the collocate *stid*, which is perhaps more appropriate in contexts of sexual temptation. The

⁵ I do not claim that the modern reader is aware of these nuances. I merely state that a lexical collocation in which both collocates are used in a type of context different from the type where they are normally used (and create different states of affairs in the reference corpus) may not be spontaneously absorbed.

latter therefore seems to be a more appropriate translation, given that neither translation offers underlying meanings that are present in the original.

The difference between *sram* and *stid* was pointed out to me by student Sandra Anđušić: “I feel that *stid* has a milder connotation, while *sram* is more intense.” It is possible that Sandra felt that *sram* was more intense than *stid* because public shame is felt as more irreparable and hurting. Given corpus data, I have not found that *stid* is less intense, rather that it is centred upon a different kind of relationship: society is not involved.⁶

2.3. States of affairs and subtext in the rest of the two versions

In her feedback Sandra Anđušić also points to another pair of alternative lexical choices. “Lust/ is perjured” is translated differently in Version A and Version B. Version A says *reč zadata slama* (literally ‘breaks the given word’), whereas in Version B it is *zakletvu kida* (‘breaks (literally ‘tears’) the oath’). *Zadata reč* (‘a given word’) is less firm a promise in Serbian than *zakletva* (‘oath’), which is obvious enough not to be in need of corpus evidence. Sandra points out that the verbs used with these may also not be identical in intensity:

The second one is *slama* versus *kida*. *Slama* sounds, to me, less violent and it has a sort of metaphorical meaning, usually used with something unintentional or breaking vows or promises. However, *kida* has a more vicious sound to it and it reminds me of mindless destruction, or animalistic behaviour.

These qualities are more opaque to intuition than the difference between a given word and an oath and are worth checking:

⁶ These findings explain a modern reader’s possible reaction to the expression *u rasapu srama*. Etymologically, it seems that both Serbian equivalents of ‘shame’ work (<http://feb-web.ru/feb/ushakov/ush-abc/18/us457304.htm?cmd=0&istext=1>, <https://lexicography.online/etymology/vasmer/c/copom>, accessed on 5th August 2020).

1 uzdahnu: - - Videćemo, Pavle. I ovom trenutku <kida> se u meni ono najličnije, i moram ostati
 2 eni običaj (prvič). Stanković posle venčanja <kida> sve ili gotovo sve veze između Sofke i nj
 3 kosi, licu, očima. Ona se potpuno raspameti i <kida> svoju bluzu. Ja istrnem prednji deo njen
 4 razvesele, a svirka im oštra, oštra te srca <kida>!... Takva je moja svirka i pesma bila kad j
 5 takmiče, i da mu svaki njihov nepotreban pokret <kida> telo. Zapazio je da u njegovoj kobili n
 6 unav, pritešnjen na drugoj svojoj obali novim nasipom, <kida> u svome besu nemilosrdno moj vr
 7 pesnice. Više ne mareći za to što me po licu prosto <kida>, u toj pravoj klanici od valjda pol
 8 esednika, "slušao" kako se studen uvlači u sve i <kida> unutrašnjost svake stvari. A dokle god
 9 da zamolimo još dragoga boga da se veza ne kida, a ovde se stalno <kida>... upalilo je iz prve
 10 kako mu strah, svojim grozničavim kandžama, poče da <kida> utrobu i već zausti da najzad svim
 11 cepaju na vrhuncima, stene dršču, a ogroman grohot <kida> vazduh i valja se i stropoštava u s
 12 Kišinjev se osamostalio. Istina, i on bi u Evropu, ali da ne <kida> veze sa Moskvom. Iako Buk
 13 On to ne može da razume. Neće. A ja moram... <Kida> vlažan kraj cigarete. To mora jednom da s
 14 (Begović, ŽSG, 121); takođe se za vreme grada <kida> vrbica i unakrst baca u vatru (Begovi
 15 zariva potom zube u meko tkivo obraza, muči se i <kida>, zahvata s raznih strana ali na kraju
 17 ivilizacija je u trajnom sukobu koji je naprosto <kida>. Zbog toga mrzovoljno dopušta da se o
 18 čiji i lepo se videlo da bridu iznutra valjda ga <kida> zikra a neće da prijavi ono a mi baš
 19 ih leđa, da odgurne nogom, da raskine rukama, da <kida> zubima, - - pa da ispravi ponovo gla
 20 uže počinje da se froncla, da bih stigao do tačke u kojoj se <kida>. Ali zanima me pre, tokom

These are twenty contexts of the verb form *kida* that first came up in the corpus. In lines 3, 5, 6, 7, 8, 13, 14, 15, 19 and 20 (50% of the lines) the tearing is literal. In lines 2, 9, 12 and 17 what gets broken is ties and connections. In 1, 4, 10 and 18 a person is torn by a strongly felt emotion, in line 8 by physical cold, in line 11 the air is torn by noise. In line 19 the tearing with one's teeth is metaphorical and necessary for survival, but the collocate 'teeth' relexicalises (i.e. revives) the physical aspect of the verb's meaning.

Out of the 177 contexts of the form *kida* yielded by the Serbian corpus, in one the verb is co-selected with the collocate *reči* ('words'):

a analizu pak - kao što ćemo uskoro videti - najzanimljiviji je slučaj kada se pri izmeni reda reči <kida> najuža sintagmatska veza, što neminovno uslovljava pojavu nove pauze: "Svesku daj sestri? svoju

What is broken in this context is the syntagmatic relation, which is due to the change in the word order (Serbian). These are the contexts of the verb form *slama*:

1 kad se uhvati s njime u koštac, kako ga onaj <slama>, mrvli, satire i obara, pokazujući svoju sn
 2 rane. *** Boga ti božjeg, šta se to s neba <slama>! Zar u poslednjem času psuješ? Uvek si pijan
 3 ljudi su jednostavno zaboravili kako grip <slama> i baca u krevet kada je u punom naletu , mada
 4 osti i svoje savesti ili da se neprekidno <slama> između zahteva svog unutarnjeg bića i zahteva
 5 igra u ovoj azijskoj zemlji. Brzo vodstvo " <slama> " Kazah. Igrači plaćeniji nego u Srbiji Ka
 6 plavuša. Ksenija Pajčin Za nju se šuška da <slama> muška srca kao slane štapiće i da nema tog b
 7 og džet-seta i stekla titulu devojke koja " <slama> muška srca", otkriva koje osobine ceni kod
 8 tako da veliki broj sudenja i autodafea brzo <slama> nagli razvoj. Poslednji su događaji poznat
 9 prema izveštaju AFP iz Tokija, na kojima se <slama> ovaj mamutski sistem koji je celom svetu pr
 10 se ustremi ka pobjedi. Umesto da nastavi da <slama> protivnicu u visokom ritmu, dozvolila joj j
 11 Sa XVIII vekom, u Kini, kao i u Evropi, <slama> se biološki stari poredak, skup prinuda, prepr
 12 uzrokuješ nečiju bol? U ovom filmu ta tema <slama> srce, jer je glavna junakinja spremna da iz
 13 dečaka. Sada sam opet tu, u revoluciji koja <slama> svu tu tišinu, u zemlji kojoj će uskoro bi
 14 karijeri sa nepokolebljivim inatom iznova <slama> tabue i preispituje postavljene standarde u
 15 kao da se ništa ne događa, Stari poredak se <slama> : tradicionalna ustrojstva poljoprivrede i
 16 prirode i prividne moralnosti koja se lako <slama> u određenim okolnostima, što se ponajbolje
 17 trgovine i delatnosti. Tada sve počinje da se <slama>, vrhunac krize se dostiže, vekovni trend
 18 ako plaše, skoro su potpuno eliminisane. Grip <slama> Zanimljivo je da mi imamo otpor i prema
 19 ljudi, ali teret godina njih, očito, najlakše <slama>, a da im se pred sudnji čas niko ne nad
 20 holozii, izrazito individualan. - Kriza nekoga <slama>, a nekoga jača, tako da odgovor na pita
 21 Poraz jako teško podnosim i u tom trenutku me <slama> . Ali mi i ukazuje na potrebu da još k
 22 iodu posle 1961. godine "ravnoteža se potpuno <slama> " (B. Krstić), a srpsko stanovišтво se
 23 egove moći i muževnosti Karla Bruni Žena koja <slama> muška srca, rokerka sa gitarom, nekadaš
 24 stivala u Bijaricu) , zastupa stav da publiku "<slama>" nametnuti izbor, pa otuda popularnost
 25 gan "u ormaru" ili, pak, nešto iskustveno novo <slama> njegovu nenasilnost? Da li, naime, kod
 26 virulentnost uzročnika toliko izražena da uvek <slama> odbrambene snage organizma. A takvih b
 27 pripremi svu logistiku za našu evakuaciju, da <slama> otpor Britanaca koji su se protivili nj
 28 poslanika, o stranačkoj "gvozdenoj ruci" koja <slama> parlamentarizam i predstavljanje naroda
 29 lanicama evrozone, kao u Irskoj koja se takode <slama> pod posledicama svetske krize, govori
 30 i koja na kraju tragično pobeđuje. Život se <slama> pod pritiskom ubistvenih okolnosti u tren
 31 a svaki uticaj. Nasilje priznaje volju, ali je <slama>. Prijetnja i zavođenje djeluju tako št
 32 sličnih domaćih zadataka". Osećaj odbačenosti "<slama>" srce Kada saznamo da se nekom ne dopa
 33 edice koje je ovaj rat ostavio na ovim ljudima <slama> srce. Molim se Bogu da ono što su ovi
 34 bi bez nje bio nemoguć. Tvrdi zakon rata se ne <slama> u sudaru sa nemoćnom subjektivnošću ko
 35 ne bih bio ovo što sam sad. Da li Vas nesreća <slama>? Video sam u različitim kulturama da s

The form *slama* seems to be rarer than *kida*, with its 35 occurrences in comparison with 177 of *kida*. Only in the first two lines is there any indication that the verb form is sometimes used literally, in its meaning of 'break'. In line 1, the verb is followed by three more verbs whose superordinate may be 'destroy'; however, even the wider context available in the Corpus of Contemporary Serbian does not make it clear whether this is not definitely a metaphor. In line 2 the meaning is close to the English verb 'thunder', referring to noise made by weapons. In the rest of the lines, the verb form is used delexically (i.e. figuratively, not in its literal meaning) throughout:

1. *Srce* ('heart') is the object of the verb in lines 6, 7, 12, 23, 32, 33.
2. A person (their system of values, resilience, will etc.) is (being) 'broken' under pressure in lines 4, 19, 20, 21, 24, 35.
3. A good quality of a person or system is 'broken' (i.e. defeated) in lines 25, 28, 31.
4. The opponent is 'broken' (i.e. defeated) in sports in lines 5, 10.
5. A disease 'breaks' (i.e. incapacitates) one in lines 3, 18, 26.

6. (The development of) an order or system is broken in lines 8, 9, 11, 13, 14, 15, 17, 22, 29, 30, 34.

On the whole, *slama* seems to be used delexically much more frequently than *kida*; it does not refer to destroying connections, but to defeating people or their principles, as well as (positive) traditions. The emphasis is on the consequences, whereas in the contexts of *kida* it seems to be on (the violence of) the process. *Slama* may be used positively (as in the breaking of taboos in line 14, or defeating opponents – on the basis of only two lines, 5 and 10, we may conclude that the verb is not used of the home player(s) – clearly, more evidence is necessary). An old order being replaced by a new one is not necessarily destructive in the long run – on the contrary, this is a historical necessity (lines 11, 15). A flu may incapacitate, but only temporarily. However, where the use of *slama* is negative, what we are left with is the feeling of frustration at unlawful violence and the lack of protection of the victim.

I am inclined to conclude that Version B (*zakletvu kida*) is a better choice than Version A (*reč zadatu slama*). *Slama* is hardly justifiable in the context of *zadata reč* ('the given word'). It is often used delexically in a wide range of situations, but the translation does not evoke any of the states of affairs present in the concordance, and, therefore, the association between the noun phrase and the verb form could be seen as mechanical, thought up for the purpose of translation. The same argument could be used to comment on *zakletvu kida* in Version B, but I believe the situation is saved by the physical associations created by the verb form, reminiscent, as the student pointed out, of animalistic instincts involved in the setting of the sonnet. In the concordance of *kida* there is a context of intercourse (3), as well as several delexical uses (50% of the concordance, as noted above). Also, there are contexts of breaking ties and connections. *Slama* seems less likely to be used in the context of sex, it is too delexical. Interestingly, none of the classics like Andrić, Ćosić or Crnjanski seems to have used it in the texts that make up the Corpus of Contemporary Serbian; generally, the texts where this verb form is used are not literary, with one or two exceptions. Finally, while *kida* means 'destroys', *slama* has the additional meaning of 'defeats', especially when the act is unfair and leaves victims behind it.

Let us now briefly look at the other sections of sonnet 129 and versions A and B, with the syntactic wholes uninterrupted by endings/beginnings of lines:

and till action, lust is perjured, murderous, bloody, full of blame,
savage, extreme, rude, cruel, not to trust, enjoy'd no sooner but
despised straight, past reason hunted, and no sooner had past reason
hated, as a swallow'd bait on purpose laid to make the taker mad;

*u dejstvu strast biva krvava, zverska, reč zadatu slama, svirepa,
lažna, zla, pomamna, kriva, slađena tek je – već prezrena nama,
tražena besno, a čim dostignuta mržena besno, poput kakvog mama
stavljenog da se sludi ko proguta. (Version A)*

*i dok ona traje divlja je, krvava, zakletvu kida, nepouzdana, svirepa
i zla je. Po užitku kratkom, istoga trenu prezrena je, uz puno mržnje
lude, poput nekakvog mamca postavljena da onaj ko proguta sluđen
bude. (Version B)*

There is no need to resort to the Serbian corpus (given the amount of work involved) to observe that there are several syntactic (and therefore subtextual) patterns here that are not common in contemporary Serbian. For example, *slađena tek je* (“enjoyed no sooner” in Shakespeare) consists of a form corresponding to the English past participle followed by the temporal adverb *tek* and by the third person singular verb form *je* of the infinitive *biti* (‘to be’). There is a fair number of examples of the pattern **ena tek*, but none were yielded by the searchline **ena tek je*, as the usual (everyday) pattern would be *tek je slađena* (only one example of it was found, *tek je završena*, meaning ‘just finished’).

Tražena besno... mržena besno preserves the parallelism of “past reason hunted... past reason hated”, but introduces too many verb forms corresponding to English participles,⁷ and this is known not to be a feature of contemporary Serbian. The saved space does not seem to help matters, especially since these two “participles” are separated by a third “participle” construction (*a čim dostignuta* – “and no sooner had”). *Dostignuta* is not

⁷ In Version A, the Serbian form corresponding to the English past participle is the one termed in Serbian *glagolski pridev trpni*, and the form corresponding to the English present active participle is termed *glagolski prilog sadašnji*. For brevity's sake, such Serbian forms will be referred to as “participles”.

a rare verb form in Serbian – there were 69 occurrences in the Corpus of Contemporary Serbian – and the “participle” form itself is very much present in the language (e.g. *zategnuta*, *užasnuta*, etc.). The culprit is *čim* (‘no sooner’ or ‘as soon as’), because in everyday language it is followed by the verb form *je*. Indeed, in the single context yielded by the searchline *čim *uta*, the form ending in *-uta* modifies a noun, while there are no lines where there is an end-stop after *čim *uta*.

podneti zahteve za vraćanje mandata <čim pomenuta> odluka bude objavljena. Zahtevi će, kako ka

In any case, the conglomeration of “participle” structures must account for Version A “not sounding as good as Version B”, according to the feedback provided by the seven speakers of Serbian consulted.

Version B, although it does not preserve the parallelism “past reason hunted... past reason hated”, retains fewer “participles” than Version A, and does not feature so much alliteration, employing a more naturally Serbian sentence structure. For example, the succinct “participle”-containing clause *sladena tek je* is replaced with the prepositional phrase *po užitku kratkom* (‘after short-lasting enjoyment’). Similarly, the “participle” phrase *mržena besno* (the equivalent of “past reason hated”) is replaced with the prepositional phrase *uz puno mržnje lude*.

Student Suzana Subotić comments:

Besides the oddity of *tražena besno* and *mržena besno*, which has rather an English pattern, I also think that the third line in the second version is more acceptable in Serbian. The word order is closer to ours, which ensures better understanding and, at the same time, has a more profound impact on our emotions. Furthermore, if there’s no oddity in this particular construction in English (“On purpose laid to make the taker mad”), then this shouldn’t be the case in Serbian either (*Stavljenog da se sludi ko proguta.*). I am aware that this change in word order may occur for the sake of the rhyme as well, but the second version, although not capturing Shakespeare’s exact meanings, still sounds better.

The same subtext-related problems in Version A (namely, odd word order and too many forms corresponding to English participles) and their relative absence in Version B are observed in the following sections of the sonnet’s translations:

Mad in pursuit and in possession so
Isto u težnji k'o imanju luda (Version A)
Pomamna kad traži i kada ima (Version B)

Version A actually takes time to decode, so hard did the translator try to condense the meaning of the original; Version B is understandable at once.

Had, having, and in quest to have, extreme
Pomamno tražeć, sežuć, tažeć htenje (Version A)
Mahnita kad seže i kada ganja (Version B)

The three shortened “active participles” in Version A call for the same comment as “participles” in lines 5-7, although the shortened form as such is not completely rare, as I found two prose contexts for the search line *žeć and one poetic context for the search line *žuć:

*1 Ifigeniju na Tauridi, dušom svojom zemlju Grka <tražeć>, ili poput Ovidija u Tomima, razmišlja
2 adića - dobrovoljaca, pevajući narodne pesme i <tražeć> pred dvorom i Ruskim poslanstvom otetu*

1 ane kante što je pretura vetar . Automobili bruje <kližuć> po kocki puta kao po ribama sura vod

As to Version B, here parallelism with the previous line is formed; although this is unwarranted by the original, it makes up for the missed parallelism of “past reason hunted... past reason hated” in this version. The repetition of *kada* (‘when’) may be taken to reflect repetitions in this section of the original.

A bliss in proof, and proved, a very woe
Kušana – sreća, okušana – huda (Version A)
U dejstvu čini ljude blaženima (Version B)

Version A is again dependent on forms corresponding to English participles. The obsolete adjective *huda* (‘bad’, ‘miserable’, ‘poor’) is appropriate to poetic discourse – I also found 20 forms of it in the Corpus of Contemporary Serbian.

The wording in Version B does not contain the contrast found the original: *U dejstvu čini ljude blaženima* ('in action [it] brings people bliss'). Paradoxically, I like this line better than I can reasonably explain. I attribute it to the regular metre and the pleasant associations with the plural instrumental adjective *blaženima* ('filled with bliss'), as well as the natural-sounding word order. However, there is something about the prepositional phrase *u dejstvu* ('in action', 'while in progress') that I find comforting, co-selected with what follows. *U dejstvu* does not chunk pleasant states of affairs, or a positive semantic prosody, as a rule. Here are its 15 occurrences in the Corpus of Contemporary Serbian:

1 blistavih boja svud unaokolo po sobi. Mehanizam je bio <u dejstvu>, ali šta je bio ishod toga
 2 benima bili su rovovi, a prašina je dimila kraj topova <u dejstvu>. Bele brazde se množile, du
 3 o nastaloj nezgodi veštak utvrđuje poremećaj ili otkaz <u dejstvu> ili sadejstvu svih elemenat
 4 cionim magnetizmom. Ja sam joj našao potpuno tumačenje <u dejstvu> indukovanih struja što ih m
 5 akete, saopštio je Republički hidrometeorološki zavod. <U dejstvu> je bilo 151 protivgradna st
 6 ipak je to posebna institucija , što se najbolje vidi <u dejstvu> na obligacije , koje je dru
 7 bi ili ne upotrebi raznih organa živih stvorova, dakle <u dejstvu> onoga što je prešlo u navik
 8 m se i priznaje uticaj na njih, kao što se ispostavilo <u dejstvu> Pekinga prema Pjongjangu i
 9 j neizvesnosti, dok se nije znalo da li je napadač još <u dejstvu>, posetioci šoping centra su
 10 ma (ukupno 50)? Ispostavlja se, istovremeno, da <u dejstvu> prema saveznoj kasi nema jedinstv
 11 niko. Želja bivših vladodržaca ovog svijeta, oličena <u dejstvu> raznih "tajnih službi" ispu
 12 eti. Pojam modaliteta ("izmene") obuhvata promene <u dejstvu> ugovora koje nastaju oročavanje
 13 nička etapa. Ona je ovim postupkom postala dominantna <u dejstvu> unutrašnjeg prostora katedr
 14 profesor Demaris Rozenhau je objasnio uočenu razliku <u dejstvu> viskija i votke na ljudski o

U dejstvu definitely carries a negative semantic prosody, which is either shown by the phrase's immediate collocates or by collocates that appear in its somewhat wider context. Indeed, only line 13 is completely free of negativity. Although there is no contrast in Version B, the translator managed, through negative semantic prosody, to convey the clash between the "act" and the "bliss", and it ought to be felt at some level by native speakers, if my 15 lines are representative of the language.

In Russian, however, I discovered that the prosody of *в действии*, the Russian equivalent, is mixed: in technical and scientific contexts it tends to be positive; outside of these it can still be positive, but often is ironic or negative. For example, in the first four lines taken from the main corpus of the Russian National Corpus, the first context is technical and positive, the second and the third ironic, and the fourth negative:

1 Сегодня мы продемонстрируем установку в действии, на строительной площадке около спортивного

2 Это такая программа защиты свидетелей в действии?

3 «Решительная сила» в действии В отдельные сутки натовская авиация совершала до 500 самолето-вылетов на СРЮ

4 пах (кэптивное страхование). Схема в действии Компания-работодатель любым доступным способом переводит деньги в «дружественный» банк, например, по хозяйственным платежам.

The first context is that of a construction site, the second mocks a witness protection programme, the third describes NATO's attack on former Yugoslavia (here it is not clear whether the journalist is sarcastic or outraged), and the last newspaper context deals with types of money laundering. Without further investigation into the semantic prosody of the Russian equivalent, I will conclude that the semantic prosody of *в действии* in Russian depends on its (positive or negative) collocates, and that perhaps my liking of the line *U dejstvu čini ljude blaženima* is a reaction to the positive collocate *blaženima*, whereas in Serbian the definite negative prosody creates the Shakesperian contrast described above.

Generally speaking, my liking of Version A, in which I disagreed with native speakers of Serbian, must be explained by the presence of forms corresponding to English participles in this translation. Whereas they are not common in Serbian, such forms are much more common in Russian, especially in literary writing.

Before, a joy proposed; behind, a dream.

Pre žuđen ushit, posle priviđenje (Version A)

A utažena – tek je pusta sanja (Version B)

In Version A, both parallel contrasts of this and the previous line have been retained. There are no verbs in these two lines, whereas in Version B both this and the previous line contain a verb.

In Version B there is no contrast within the line; however, the line forms a contrast with the previous one. Thus, the parallelism of the two contrasts is lost. What is retained is the elegance of Shakespeare; perhaps a literal transfer of his density can only be made at the expense of naturalness. It appears that, in Serbian, verbs are necessary in such transitions within texts for them to be processed more easily. Version B in this and the previous line reads more easily because of the presence of verbs, and, perhaps, because

of fewer juxtapositions. On the other hand, my feeling is that Version A is more intense, due to fewer verbs, especially copular verbs.

In addition, this is student Suzana Subotić's comment on the translator's adding the adjective *pusta* ('empty') to the noun *sanja* ('dream'):

Here we have gradation, it is not just *priviđenje* ('vision') or a dream, it is *pusta sanja*. Professor Hlebec took the liberty of adding the adjective *pusta* ('empty') for us to grasp the true attitude of the poet.

And finally, let us consider the couplet:

All this the world well knows; yet none knows well
To shun the heaven that leads men to this hell.

*Svet dobro zna sve to, no ne zna kako
Izbeći raj što vodi u taj pako. (Version A)*

*To zna svet dobro, ali nije lako
Izbeći taj raj što vodi u pako. (Version B)*

There is a slight variation in Version B: instead of saying 'no-one knows how to avoid the heaven that leads to that hell' (Version A), the translator says 'it is not easy to avoid...' This is how student Višnja Krstić explains her preference for Version B:

On the one hand, in Version A "yet none knows well" is translated as *no ne zna kako*, which is the proper translation since it fully transfers the meaning. On the other hand, *ali nije lako* (Version B) has a somewhat different meaning from what stands in the original text (*literally 'but 'tis not easy' – M. M.*). Nevertheless, this clause is more convincing to me – it carries the feeling of grief caused by the tempting nature of the human heart. In addition, it shows the ambiguous nature of man – we can easily distinguish right from wrong, but we often fail to resist following the wrong path. Therefore, Version B is also closer to readers on the emotional level.

It is worth adding here that I found no instances of *no ne zna kako* in the Serbian corpus, and 23 instances of *ali nije lako*. There were ten instances of *ali ne zna kako* (the conjunction *no* is more archaic, *ali* is common).

Although the remaining sections of versions A and B have not been studied in as much detail as the first syntactic whole, the overall impression remains that syntax in Version B is far closer to the Serbian language than it is in Version A. My being a native speaker of Russian, in which syntactic structures from Version A are not unusual, especially in literary language, may explain my preference for Version A, in which I disagreed with all the seven speakers of Serbian that I consulted.

3. Concluding remarks

To conclude, if the only goal of the translator was to convey the meaning, the form, and the sound effects of the original poem, Version A would not have caused a less positive reaction than Version B on the part of seven out of seven educated English speaking Serbs who I consulted, all of whom were aware of the original and both translations. This may be due to Version A containing some syntactic patterns and lexical combinations which were inspired by the original text but might not be characteristic of Serbian. Nevertheless, student Sandra Anđušić did point out that:

...the first version shows the frustration of the original poem, the absurdity and the savageness of lust and love, as in the original, mainly due to words which are not so frequently used. Also, there are a lot of participles with shortened forms that are not as easily pronounced in a sentence, which only contributes to the overall air of the poem. The whole Version A requires more effort to read and to understand. It sounds more archaic, which is not a very bad characteristic when translating Shakespeare, since he is not a contemporary author, although his themes and motives are timeless. As for Version B, it seems to me a more “fluent” poem, since it somehow glides right off the tongue and is quite easy to read. This, perhaps, leads to easier identification with the emotions of the poem, since the reader can process it more easily. The constructions are much clearer and simpler. Also, there are three negative adjectives in the fourth verse, in contrast to five in version A and in the original. I found it less gloomy and depressing.

Given the richness of Serbian syntax and vocabulary, the Corpus of Contemporary Serbian in its present form⁸ is still too small to conduct reliable investigations. A Serbian poetry corpus has not been constructed, which greatly reduces space for comment on poetic translation. However, on the basis of the comparison of Version A and Version B, it is clear that subtext used in a translation ought to have precedents in the target language, whether in its main or poetry corpus. Without such precedents the translator creates unwarranted foregrounding, not found in the original. This has a bearing on “poetic word order” – innovative reversals of word order in translation may impede comprehension.

Alliteration seems to interfere with a translator’s choices as he or she may prefer lexis which may chunk odd or non-existent states of affairs in the language – such constraints are also imposed by the versification pattern. According to Louw (1993), when it comes to lexical collocation, a deviation from the norm in native speech will result in either irony or insincerity, both of which will be felt at some level by the addressee. Deviations from the norm as an attempt at poetic translation may produce states of affairs that do not exist either in the original text or in the target language. This will require an additional amount of effort on the part of the reader.

What must take precedence, truthfulness to form and content or “naturalness” of the final version? Boris Hlebec himself gave the following answer:

Sonnet CXXIX is an example of perfect matching poetic content with form, and it would be a pity not to have rendered something of that intricate and impressive versification pattern. However, it takes a reader fully aware of and ready to accept this iconicity in order to appreciate the merits of the translation that (at least partly) reproduces the pattern. The adulterated “popular” Version B serves as the second best alternative for those readers who are not tuned in to the poetic function and, being concentrated only on content, do not look for the meaningful repetition, internal rhyme, parallelism, sound symbolism, alliteration, and the motivated abundance of the “passive participles”. Of course, such readers are opposed to the style when it is not smooth and find it unnatural when it only slightly deviates from the everyday

⁸ It comprises 122 million words, and this has not changed since 2013.

syntax, although poetry in their native tongue abounds with such usages and the original is no less terse than the language of the translation in Version A. (Hlebec, personal communication)

It may not be complimentary for Version B to “sound better” than Version A – after all, as one of the students observed, the impression left by Version B may be more favourable partly because there are fewer lexical items, which are, in Shakespeare, all indicative of frustration, discomfort, and inner conflict. In addition, Professor Hlebec (personal communication above) insists that the original is “no less terse” than Version A, and, besides, that Serbian poetry does contain many examples of syntax used in that version. The former statement calls for a study of native speakers’ reactions to the original; the latter for a poetry corpus. Still, the paper has shown that certain lexical choices in Version A might be considered less appropriate because they may not create the states of affairs intended when it comes to Serbian, while others were found particularly suitable. All in all, what is true to the original must not sound forced in the target language – and, when it comes to poetic translation, that is best checked not only in its reference corpus, but also in a representative corpus of its poetry.

References

- Culler J. (1975). *Structuralist Poetics: Structuralism, Linguistics, and the Study of Literature*. London: Routledge and Kegan Paul.
- Vitas, D. and M. Utvić. (2003). Corpus of Contemporary Serbian (version SrpKor2003). *Copyright Human Language Technologies Group, University of Belgrade*. (2012 and 2013) <<http://www.korpus.matf.bg.ac.rs/prezentacija/korpus.html>>.
- Jakobson, R. and L. G. Jones (1970). *Shakespeare’s Verbal Art in “Th’Expense of Spirit.”* The Hague: Mouton.
- COBUILD (1998). *Collins COBUILD English Dictionary*. London: HarperCollins Publishers.
- Hlebec B. (1987). Prevođenje Šekspirovog soneta 129 na srpskohrvatski jezik. *Naučni sastanak slavista u Vukove dane*, 16(3), 129–136.
- Louw, W. E. (1993). Irony in the text or insincerity in the writer? The diagnostic potential of semantic prosodies. In: M. Baker, G. Francis and E. Tognini-Bonelli (eds.), *Text and Technology: In Honour of John Sinclair*, Amsterdam: John Benjamins, 152–176.

- Louw, W. E. and M. Milojkovic (2014). Semantic Prosody. In: P Stockwell and S. Whiteley (eds.), *The Cambridge Handbook of Stylistics*, Cambridge: CUP, 263–280.
- Louw, B. and M. Milojkovic (2016). *Corpus Stylistics as Contextual Prosodic Theory and Subtext*. Amsterdam: John Benjamins.
- Milojkovic, M. (2013). Is corpus stylistics bent on self-improvement? The role of reference corpora 20 years after the advent of semantic prosody. *Journal of Literary Semantics*, 42(1), 59–78.
- Wang F. R. and P. Humblé (2017). Corpus Stylistics as Contextual Prosodic Theory and Subtext by Bill Louw, Marija Milojkovic. *Style*, 51(4), 550–555.
- Wittgenstein, L. 1922 [1960]. *Tractatus Logico-Philosophicus*, transl. D. F. Pears and D. F. McGuinness. London: Routledge and Kegan Paul.

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ПРИМЕНА КОНТЕКСТУАЛНО-ПРОЗОДИЈСКЕ ТЕОРИЈЕ НА ПРЕВОЂЕЊЕ ПОЕЗИЈЕ С ЕНГЛЕСКОГ НА СРПСКИ ЈЕЗИК

Сажетак

Рад проучава два паралелна превода Шекспировог сонета 129 на српски језик (Хлебџ 1987). Преводац даје варијанту А, која верно преноси стилске нијансе оригинала и намењена је „компетентној“ публици, и варијанту Б, коју преводац назива „разблаженом“, али сматра да је она разумљивија за ширу публику. Међутим, сам преводац осећа да је варијанта Б „некако допадљивија“. С овим утиском се сложило свих седморо образованих испитаника којима је српски језик матерњи, међу којима су била и три студента треће године Англистике. У раду се, применом контекстуално-прозодијске теорије и Корпуса савременог српског језика, траже могући разлози за то. На основу резултата може се закључити да синтаксички обрасци у варијанти А, будући ближи енглеском оригиналу него у варијанти Б, могу отежавати разумевање, и да је могуће да одређене лексеме у српском преводу не стварају исте асоцијације као њихови еквиваленти у енглеском оригиналу. Потребно је креирати репрезентативан корпус српске поезије да би се проверио

став професора Хлебеца да је синтакса употребљена у варијанти А својствена српској поезији, па је, према томе, адекватна за превод овог сонета.

Кључне речи: корпусна стилистика, контекстуално-прозодијска теорија, колокације, семантичка прозодија, корпусни подтекст, превођење поезије

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ENGLISH LEXICAL CORRESPONDENTS OF ASPECTUAL PAIRS IN SERBO-CROATIAN

Abstract

This paper looks into some English lexical correspondents of aspectual pairs in Serbo-Croatian (SC). Because SC and English are diametrically opposed in terms of how overtly they express aspect, SC and English are usually seen as typical representatives of languages with and without aspect, respectively. In SC, the aspectual dichotomy is expressed by the following three instruments in the following order of frequency: a) pairs of lexically related verbs; b) biaspectual verbs, and c) pairs of different verbs. Our analysis shows that ‘aspectless’ English uses the same three instruments but in a different order of frequency. Most English verbs are biaspectual, i.e. their aspectual interpretation depends on a number of factors outside the verb. This study focuses on the other two instruments. Several different types of such lexical means for the expression of aspectual dichotomy in English are identified according to the lexical and morphological relations between their members.

Key words: perfectivity, imperfectivity, aspect, lexical aspect, aspectual pair

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1. Introduction

Extensive typological studies (Dahl 1985; Groot and Tammola 1984; Bybee and Dahl 1989; Thelin 1990) have proven that aspect is a universal linguistic category, which confirms that the distinction between perfectivity and imperfectivity is relevant for all languages. Languages employ different, language-specific means to express this distinction, but just because something is language-specific does not mean it is unique. The languages analyzed in this study, SC¹ and English, have more than one means that can be used for this purpose (see §2.1. and §2.2. for SC and English, respectively). This study² uses SC as a starting point for the analysis of these different means in English, and the lexical means in particular. But what do we mean by imperfectivity and perfectivity?

Imperfectivity is associated with the ‘internal structure’ of the situation (Comrie 1976: 24), ‘internal change’ (Hlebec 1990: 17), a ‘situation enduring without change’ (Galton 1984: 9), ‘durativity’ (Verkuyl 1972), and ‘incompletion’ (Kabakčiev 2000).

Perfectivity, on the other hand, is associated with the concepts of the ‘indivisible whole’ (Dahl 1984: 13; Comrie 1976; Arad 1998: 274), ‘change’ (Galton 1984: 9), ‘transition’ from one state to another (Hlebec 1990: 91), ‘non-durativity’ (Verkuyl 1972), and ‘completion’ (Kabakčiev 2000).

These meanings can be expressed perfectly clearly at the level of the verbal lexeme in various languages, as is illustrated in Spanish *hablar* ^{ipf3} ‘talk’, English *rage* ^{ipf}, Polish *wierzyć* ^{ipf} ‘believe’, SC *sipati* ^{ipf} ‘pour’, German *durchlesen* ^{pf} ‘read through’, English *solve* ^{pf}, SC *reći* ^{pf} ‘say’, and Polish *kupić* ^{pf} ‘buy’.

Although some of the major works on aspectology focus equally on the universal and the language-specific properties (Comrie 1976, 1985; Dahl

¹ Serbo-Croatian (‘SC’) is a South Slavic language whose name fell out of use with the disintegration of the former Yugoslavia. It is a polycentric language with four varieties: Serbian, Croatian, Bosnian, and Montenegrin. The author uses the term Serbo-Croatian here because the corpus used is composed of Croatian or Serbian English and Croatian English dictionaries. The name issue is irrelevant for this study because the four languages do not differ in the manner by which they express aspect.

² The present study is a summary of a much more extensive study conducted under the supervision of Professor Hlebec. The author expresses her deep appreciation for Professor Hlebec’s selfless support and dedication.

³ The superscript abbreviations ipf and pf will be inserted after respective examples to indicate the imperfective or perfective aspectual value of a given verb or verb phrase.

1985; Groot and Tommola 1984; Brinton 1988; Bybee and Dahl 1989; Thelin 1990), aspect has for many remained the Slavic ‘thing’ probably because in this language group it is overtly expressed through affixation and stem alternation. Yet, some of the most important developments in aspectology are due to the extremely detailed research done on English, previously thought to be an aspectless language (Zandvoort 1962: 10).

Vendler’s time-schemata (see also Ryle 1949; Vendler 1967; Kenny 1963; Dowty 1977, 1979; Mourelatos 1978) or aspectual classes (with imperfective states and activities on the one hand, and perfective accomplishments and achievements on the other) were presented as universal categories. Indeed, they have been tested and proven reliable on the material of other languages (see Novakov 1991 for Serbian, for example). Vendler’s accomplishments proved instrumental to the further development of aspectology because most of the examples he used were not verbs but verb phrases composed of activities and specified arguments. Vendler’s examples show that the same verb, such as *draw*, can be both an activity and an accomplishment depending on the internal argument. For example, *draw*^{ipf} is an activity and *draw a circle*^{pf} is an accomplishment because the temporal bounds of the referent of *a circle* are mapped onto the referent of the activity of *drawing* which might otherwise go on indefinitely (Verkuyl 1971; Kabakčiev 2000). In simpler terms, the activity *draw* cannot go on forever since there is a terminus, or *telos*, expressed by the internal argument *a circle*. The same accomplishment is expressed by a prefixed perfective in most Slavic languages, e.g. Serbian *nacrtati*^{pf} or Russian *нарисовать* ‘draw’. The Dutch linguist Verkuyl explored this further in order to analyze the impact of arguments and other elements on the aspectual interpretation of verbs, which is known as the compositional approach to aspect (Verkuyl 1972, 1989). Much of the work done by formal semanticists (Partee 1999; Rothstein 2004) focused on how exactly spatio-temporal boundedness affects verbs, and verbs of creation in particular (also known as ‘incremental theme verbs’). There is a general understanding that most English verbs can lend themselves to almost any aspectual interpretation in context⁴. Cognitivists (Langacker 1987, 1991,

⁴ However, it is ironic that to this day all the wonderful achievements in aspectology have not made their way into the modern grammars of English. They still focus on the overt expression of aspect in English, mainly on the expression of the imperfective meaning through the progressive morpheme. There is no mention of the role of articles in the specification of arguments or the explication of aspect. In addition, the simple fact that

2008; Lakoff and Johnson 1980; Zhang 1995) take this fact into account when they say that the verbal system is a continuum in which there is a group of typical atterminative verbs, and a group of typical terminative verbs, while all other verbs remain in between. These ‘fuzzy areas’ are created because there is no clear distinction between the conceptualization of boundedness and non-boundedness on the one hand, and the aspectual meanings of perfectivity and imperfectivity on the other (Zhang 1995: 34).

Is there any point then in examining and describing the aspectual value of English verbs when every verb can have any aspectual value? We believe there is. If the majority of English verbs are biaspectual, it is worth examining the following:

- a) Are there any verbs in English that cannot express both aspectual values⁵,
- b) If so, are some of these verbs correlated to some other means that can be used to express the ‘missing’ aspectual value,
- c) What is it that makes these situations so different that different linguistic means have to be used in English to express the two aspectual values, and
- d) If such pairs of aspectually related verbs are established in English, what can be done to improve the description of that segment of the English verbal system?

To respond to these questions, we proceed as follows. Section Two briefly discusses the explication of aspectual distinctions in SC and English. The methodology and the results of the analysis are presented in Section Three. The observations are elaborated in Section Four, and a number of conclusions and suggestions are presented in Section Five.

2. Aspect

In this section we briefly describe the key instruments that SC and English employ in the specification of aspectual semantics. The key difference is that in SC, rich verbal morphology compensates for the absence of articles (which is crucial for the specification of arguments), while English, because

the non-progressive morpheme can also express the imperfective meaning is often left to the learner’s intuition.

⁵ This excludes generic and habitual meanings.

it has articles, does not need to shift the burden of specification from the arguments to the verbs.

Affixation is crucial for the expression of aspect in SC. How productive some of the SC prefixes are is best demonstrated by the number of verbs in our sample (see §3.1.) that share their initials with these prefixes. The contribution of the prefixes *do-*, *iz-*, *na-*, *o-*, *pro-*, *pre-*, *raz-*, *s-*, *u-*, and *za-* is clearly shown in Figure 1.

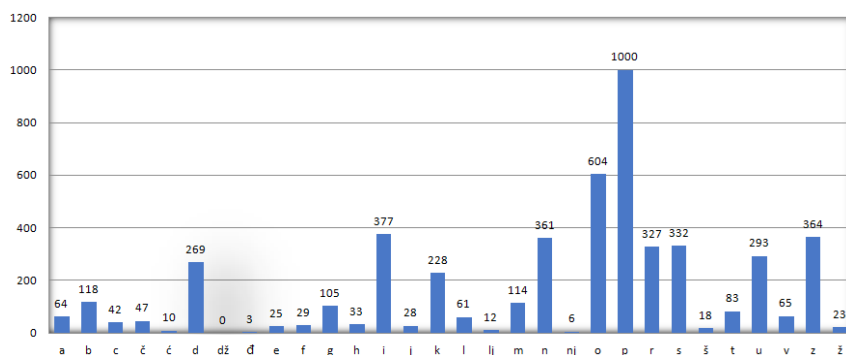


Figure 1. The number of items in our sample in alphabetical order

2.1. Aspect in SC

Imperfective verbs in SC are states, *znati* ‘know’, activities, *govoriti* ‘speak’, and secondary activities (formed from momentary verbs with the addition of infixes to express repetition, such as *kuckati* ‘knock’). Some states cannot be perfectivized, such as *sastojati se* ‘consist’, while some can be used to yield perfective verbs that express the moment when a state began. For example, *znati* ‘know’ has its perfective counterpart *saznati* ‘learn/come to know’. Most activities get their perfective counterparts in the form of verbs with the same base, modified by affixation, such as *pjevati* ‘sing’ : *otpjevati* ‘finish singing’. Some activities are formed from achievements through affixation, such as *udarati* ‘hit (repeatedly)’ from *udariti* ‘hit (once)’. There are also cases when aspectual meanings are expressed by two different lexemes, such as *govoriti* ‘speak’ : *reći* ‘say’, or *slušati* ‘listen’ : *čuti* ‘hear’. Conversely, there are cases when a single lexeme is used to express both the imperfective and the perfective meaning. This is a case of aspectual polysemy, and such verbs are called biaspectual verbs. For example, *čestitati* ‘congratulate’ is both imperfective and perfective, as shown in *Petar upravo*

čestita autoru ‘Petar is congratulating the author’ and *Petar je čestitao autoru tri puta* ‘Petar has congratulated the author three times’.

Perfective verbs in SC are accomplishments, *pročitati* ‘read’, achievements, *udariti* ‘hit’, and delimitatives, *porazgovarati* ‘talk for a while’. Perfectives may capture different stages in a situation: the beginning, *propjevati* ‘start singing’, *prozboriti* ‘start talking’, *zajecati* ‘start sobbing’, *poletjeti* ‘fly away’, and so on; the end, *stići* ‘arrive’, *izgorjeti* ‘burn down’, *pojesti* ‘eat up’, *pregristi* ‘bite through’, *prekopati* ‘dig’; the moment when the entire action is exhausted in an instant, *pasti* ‘fall’, *skočiti* ‘jump’, *sjesti* ‘sit down’ and so on; and perfectives which are an activity and an accomplishment in one (also called *perfective*, *delimitative*, or *episodes* in the literature, see Kabakčiev 2000), such as *posjedjeti* ‘sit for a while’.

These complex meanings are expressed by rather complex morphology. Prefixes can be semantically empty, such as the prefix *u-* in *uraditi*^{pf} ‘do’, where the prefix *u-* simply adds the aspectual information to the base, or semantically full, when the prefix adds a meaning on top of the aspectual meaning of perfectivity, as in *preraditi*^{pf} ‘process’, where *pre-* adds the idea of an action that affects all the parts or aspects of the object. Thus, perfective verbs formed by an empty prefix usually do not allow imperfectivizing suffixes (secondary imperfectivization). For example, *uraditi*^{pf} ‘do’ may not form the imperfective **urađivati*. Perfective verbs formed by semantically full prefixes may, but need not, allow imperfectivizing suffixes. For example, *preraditi*^{pf} ‘process’ becomes *prerađivati*^{ipf} ‘to be processing’. Conversely, *prespavati*^{pf} ‘oversleep’ does not allow the secondary imperfective **prespavljivati* ‘to be oversleeping’.

To make things even more complex, many prefixes are polysemous. The prefix *po-*, for example, means both ‘begin’ (*poletjeti* ‘fly away’) and ‘finish’ (*pojesti* ‘eat up’). Other prefixes have many more meanings, such as the prefix *za-*, which participates in the formation of the following perfective verbs to express: location (behind) in *zabaciti* ‘throw behind’, location (around) in *zagrliti* ‘hug’, location (to/forward) in *zakačiti* ‘attach’, time (start) in *zapjevati* ‘start singing’, quantity (intensity) in *zagarjeti* ‘scorch’, quantity (intensity+) in *zadubiti se* ‘pore’, and manner (change of property) in *zacrvenjeti se* ‘become red’ (the examples illustrating the meanings of *za-* are taken from Šojat et al. (2012: 120)).

Because these morphosemantic relations are so intricate, some authors suggest it is more natural to analyze Slavic verbs in clusters rather than pairs (Janda 2007). According to this approach, different verbs with

different morphology and aspectual values should be analyzed together if they are semantically related.

2.2. Aspect in English

Most English verbs are biaspectual, which means that the same verb can signal both imperfectivity and perfectivity. Even states, as typically imperfective verbs, can have a perfective interpretation in context. For example, the aspectual interpretation of the state *want* changes from the imperfective in *He wanted^{ipf} to move back home* to the perfective achievement in *All of a sudden, he wanted^{pf} to move back home*.

Some states are always imperfective, irrespective of the context. For example, *depend^{ipf}*, *own^{ipf}*, and *contain^{ipf}* always express states, where the focus is on continuity without change. To express change, such as the moment when something suddenly becomes dependent on something or someone, or the moment someone started owning something, English would use a different mechanism, such as *become the owner of* or *become dependent on*.

In addition, although some verbs are morphologically not correlated at all, we feel their lexical meaning and aspectual value are connected. One such example is the pair composed of the state *know^{ipf}* and the achievement *learn^{pf}*, which marks the beginning of the state of knowing.

Activities are imperfective but they easily turn to perfective accomplishments in English thanks to the mechanism of temporal bounding. For example, the imperfective *draft* becomes perfective in the verb phrase *draft a contract*, which in turn may become imperfective with the addition of a durative adverbial, as in *drafted^{ipf} a contract the whole afternoon*.

As shown in (1), the transitive verb *empty*, even when clearly bounded by a specified internal argument, can hardly be classified as either typically perfective or typically imperfective since its aspectual value depends entirely on the broader context.

- (1) a. John always emptied^{ipf} the bin at around 9 p.m.
b. John emptied^{ipf} the bin when a police officer called him by his name
c. John emptied^{pf} the bin in less than three minutes
d. John emptied^{pf} the bin at 9 p.m. sharp

In (1a), *empty* is a ‘generic cursive’ activity, which amounts to a state-like situation. In (1b), it is an activity, in (1c) an accomplishment, and in (1d) an achievement. Example (1b) shows that although the non-progressive morpheme (in the perfective grammatical aspect) and the specified argument (*the bin*) yield a perfective meaning, the clause that follows annuls the perfectivity of *John emptied^{pf} the bin* (or unbounds the accomplishment thus created) and gives the first clause an imperfective (durative) meaning in this case. Examples (1c) and (1d) illustrate the temporal bounding mechanism. To expand on this, *the bin* in (1c) serves as a *telos* and bounds both temporally and spatially the action of *emptying*, while the adverbial *in less than three minutes* indicates that the bin or its contents were such that it required a certain period of time before it could be emptied. The specific time adverbial *at 9 p.m. sharp* in (1d) is the component that yields the sentence as perfective. Therefore, *empty* belongs to all the four situation types and can have either perfective or imperfective aspectual values.

There are also accomplishments whose internal lexical aspectual meaning is perfective, such as *master* or *solve*. Although they are transitive verbs and take internal arguments just like activities, they seem to imply, even without the argument, that the terminus has been achieved. Unlike accomplishments that are composed of an activity and a specified argument, e.g. *draft a contract*, these accomplishments, i.e. *master* and *solve*, do not normally take the progressive morpheme because their internal perfectivity would not be compatible with the imperfectivity of the progressive. However, both *master* and *solve* require a certain activity over a period of time before they can reach the terminus and it is therefore logical that there must be a means that is used to signal it in English.

Achievements, such as *knock^{pf}*, change their inherent aspectual nature into the imperfective in phrases including a frequency adverb, such as *often knocked^{ipf}*, or in the progressive morpheme, such as *is knocking^{ipf}*. Achievements, such as momentary verbs, always take the non-progressive morpheme to express the perfective aspectual meaning, but the non-progressive morpheme is still aspectually polysemous in the absence of other clues, as shown in (2).

(2) He knocked^{pf/ipf} on the door

Knock in (2) may stand for a single occurrence or for repetition, even without the presence of adverbials expressing such meanings.

Some achievements (often called ‘run-up achievements’ in the literature), such as *die*, also include a time before the culmination point, and yet, they remain perfective. If used in the progressive morpheme, the meaning conveys ‘is about to’, unlike other achievements, such as *knock* above, which express a series of individual occurrences.

This short overview shows that the clear division of situation types into imperfective states and activities and perfective accomplishments and achievements is valid only out of context since the same verb can express both imperfective and perfective aspectual values. It also shows that in addition to these biaspectual verbs, there are verbs in English that are imperfective or perfective only but may be correlated to other linguistic means that express the other member of the aspectual pair. Since the majority of SC verbs are organized in aspectual pairs, we decided to use SC as the starting point for the identification of their lexical correspondents in English. In §3 we explain the process and the results.

3. Study

Languages lexicalize situations differently. Within the same family even, such as the family of Slavic languages, identical situations are encoded differently. For example, Serbian has intransitive *praznovati*^{ipf} ‘celebrate’ only, while Russian has both *prazdnovat*^{ipf} and *otprazdnovat*^{pf} ‘celebrate’. However, another Serbian lexeme with the same sense, transitive *slaviti* ‘celebrate’^{ipf} has both imperfective and perfective forms, *slaviti*^{ipf}: *proslaviti*^{pf}: *proslavljati*^{ipf}.

On the other hand, English has multiple means for expressing the same lexical and aspectual meaning. For example, the perfective *drink up* can also be expressed with *drink* and a specified argument, such as *the beer*. Likewise, the beginning of the state *be ill*, can be expressed with both *become ill* and *fall ill*.

Before we explain the methodology of our study, it must be noted that particle verbs, such as *drink* : *drink up*, are the lexical means for the expression of aspect in English that are well documented in the literature and thus it is not necessary to recount the details here. With that exception, there have been no attempts, at least to the knowledge of the author, to make a systematic overview of other such means in English.

3.1. Methodology

Two bilingual dictionaries into English (Bujas 1999; Drvodelić 1989) were used both as registers of SC verbs and as sources of their English correspondents. In them, the lexicographers separate the members of SC aspectual pairs and list them in alphabetical order. For example, although *pisati* ^{ipf} and *napisati* ^{pf} ‘write’ form an aspectual pair, they are listed under the letters *p* and *n*, respectively. Since we wanted to identify the English correspondents of the SC aspectual pairs, the missing member was identified and its lexical correspondent registered at the same time as the one we encountered first during the search.

Those pairs accepted as the SC aspectual pairs for the purposes of this study were pairs differing only in their aspectual value. For example, although *boljeti* ^{ipf} ‘ache/hurt’ and *razboljeti* ^{pf} ‘fall ill’ have the same base *boljeti* ^{ipf}, they do not form an aspectual pair because they are semantically different (i.e. the prefix *raz-* is not empty). At the same time, we see *razboljeti se* ^{pf} ‘fall ill’ as correlated to *razboljevati* ^{ipf} ‘fall ill’ (a biaspectual verb, in the repetitive, habitual sense here) but also, and more importantly for our study, to *bolovati* ‘be ill’ because that is the resultant state of the achievement *razboljeti se* ^{pf} ‘fall ill’.

The correspondents that were identified were then inserted into tables with five columns. The first column on the left was reserved for SC verbs (aspectual pairs, biaspectual and monoaspectual verbs). The other columns were for the English lexical correspondents, classified into the following situation types: states, activities, accomplishments, achievements, and episodes.

Most of the English correspondents were biaspectual verbs and were inserted in two columns (e.g. imperfective activities and perfective accomplishments), and a large number in three different columns, for the reasons that are explained in §2.2. above. All the remaining correspondents were then examined and classified according to their form, which ranged from very closely related to not related at all. What they all had in common, however, was a close correlation in their lexical and aspectual meaning.

The correspondents offered by the dictionaries were carefully examined and corrected whenever it was felt that they did not properly reflect the aspectual and lexical meaning of the SC verbs. In addition, where the different senses of a verb lead to different English correspondents, they were recorded as two different verbs.

The study covered 5,041 verbs and verb pairs in SC and their English correspondents. The next section will present them in a number of groups and sub-groups.

3.2. Results

In this section we present evidence to show that in English there are verbs that are not biaspectual, and that they are indeed correlated to some other means that express the other aspectual value of the imperfectivity/perfectivity dichotomy. We also try to draw certain conclusions about why these English verbs behave differently from the majority of English verbs in the way they express such aspectual distinctions.

Out of 5,041 SC verbs and verb pairs, 459 are biaspectual, and 527 monoaspectual. The biaspectual and monoaspectual verbs together total 986 verbs, which means that the remaining 4,055 verbs had their aspectual counterparts with which they formed aspectual pairs (see Fig. 2). A total of 9,096 verbs were covered by our study. This numerical data can already be used at this stage to make some general observations. For example, it is interesting to note that SC aspectual pairs make up over 80% of all the verbs covered in the study, and that only 20% are not organized into aspectual pairs. Biaspectual verbs form roughly 9% of all the verbs (459 out of 5,041), which is contrary to the general impression that biaspectual verbs constitute a small group deviating from the standard. This figure confirms the finding of another recent study (Spasojević, 2015). More importantly, this may suggest that contemporary SC grammars should devote more space and attention to this group of verbs and the mechanism of the compositional aspect in SC.

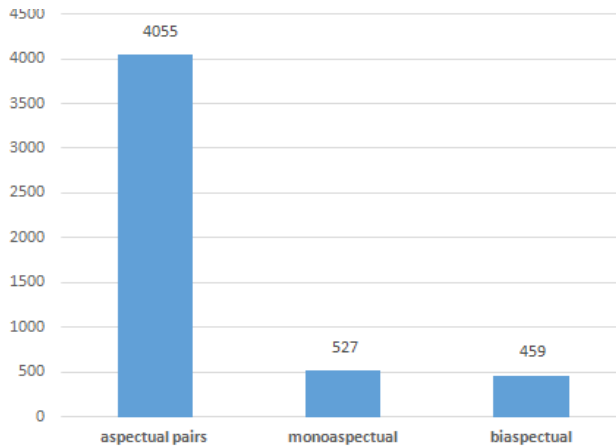


Figure 2. The SC verbs

Out of all the English correspondents of the 5,041 SC verbs and verb pairs, 4,624, or almost 92%, are biaspectual verbs (see Fig. 3). This shows that this compositional mechanism is indeed the most important mechanism for the understanding of aspect in English. Of the remaining 8% of the English correspondents, 123 are imperfective only, which leaves 294 verbs for our analysis. Although we have made every effort to accurately classify and count all the verbs, these numbers are given for orientation only.

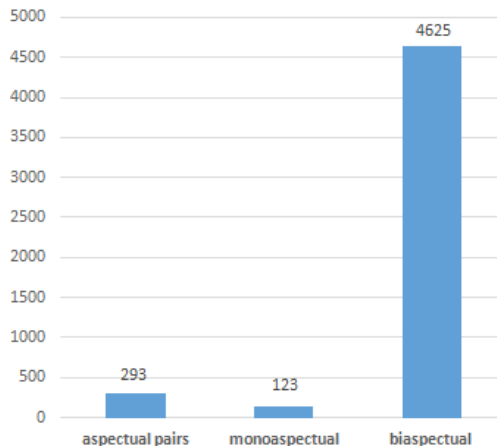


Figure 3. The English correspondents

In what follows, we give examples of the several types of pairs identified in the analysis.

Group 1

The pairs in this group are expressed by different lexemes in English. In terms of situation types, there are two types of pairs.

One type is composed of states and achievements, e.g. *ache*^{ipf} : *smart*^{pf}. Achievements include both inceptive and finite verbs, which means that they describe the moment when the related state began or ended.

The other type is composed of activities and accomplishment, e.g. *treat*^{ipf} : *cure*^{pf}.

Many verbs in this group express sensory or cognitive activities. They are private in nature, and if they take objects, they are not easily delimited. For example, if one is suffering or grieving for a while, it is difficult to establish when a change occurred, i.e. when a person got over, or overcame that state. That is probably the reason why English lexicalizes respective situations by different means. The examples of such English pairs are shown on the left, with their correlated SC pairs on the right. In this group, the SC verbs are perfectivized by prefixes that express the beginning or end of the state or activity.

(3)	<i>ache</i> ^{ipf}	:	<i>smart</i> ^{pf}		'boljeti' ^{ipf}	:	'zaboljeti' ^{pf}
	<i>know</i> ^{ipf}	:	<i>learn</i> ^{pf}		'znati' ^{ipf}	:	'saznati' ^{pf}
	<i>dive</i> ^{ipf}	:	<i>plunge</i> ^{pf}		'gnjuriti' ^{ipf}	:	'zagnjuriti' ^{pf}
	<i>treat</i> ^{ipf}	:	<i>cure</i> ^{pf}		'liječiti' ^{ipf}	:	'izliječiti' ^{pf}
	<i>suffer</i> ^{ipf}	:	<i>overcome</i> ^{pf}		'bolovati' ^{ipf}	:	'prebolovati' ^{pf}
	<i>chase</i> ^{ipf}	:	<i>drive away</i> ^{pf}		'tjerati' ^{ipf}	:	'otjerati' ^{pf}
	<i>grieve</i> ^{ipf}	:	<i>get over</i> ^{pf}		'žaliti' ^{ipf}	:	'prežaliti' ^{pf}
	<i>urge</i> ^{ipf}	:	<i>force</i> ^{pf}		'tjerati' ^{ipf}	:	'natjerati' ^{pf}

Group 1 also includes: *love*^{ipf} 'voljeti' : *take a fancy to/grow fond of*^{pf} 'zavoljeti', *pursue*^{ipf} 'tjerati' : *turn away*^{pf} 'otjerati'; *argue*^{ipf} 'dokazivati' : *prove*^{pf} 'dokazati', *deal*^{ipf} 'rješavati' : *solve*^{pf} 'riješiti', *coax*^{ipf} 'ubjeđivati' : *persuade*^{pf} 'ubjediti'; *reason*^{ipf} 'ubjeđivati' : *persuade*^{pf} 'ubjediti'; *practice*^{ipf}/*exercise*^{ipf} 'vježbati' : *master/learn* 'uvježbati', *wander*^{ipf}/*stray*^{ipf}/*ramble*^{ipf} 'lutati' : *go astray/lose one's way/get lost* 'zalutati', *be situated*^{ipf} 'nalaziti se' : *find oneself* 'naći se', *quarrel*^{ipf}/*wrangle*^{ipf}/*bicker*^{ipf} 'svađati se' : *fall out* 'posvađati se', *rage*^{ipf}/*rave*^{ipf} 'mahnitati' : *get furious/get mad* 'pomahnitati', and so on.

Group 2

This group includes pairs of aspectually related verbs whose members are expressed by different morphological means but always have some elements in common. The imperfective members are states and (physical, cognitive) activities, and the perfective ones are both accomplishments and achievements.

(4)	sleep ^{ipf}	:	get some sleep ^{pf}		'spavati' ^{ipf}	:	'odspavati' ^{pf}
	fight ^{ipf}	:	fight one's way through ^{pf}		'boriti se' ^{ipf}	:	'izboriti se' ^{pf}
	sit for an exam ^{ipf}	:	pass an exam ^{pf}		'polagati' ^{ipf}	:	'položiti' ^{pf}
	brake ^{ipf}	:	brake to a halt ^{pf}		'kočiti' ^{ipf}	:	'zakočiti' ^{pf}

Other examples include *have an effect*^{ipf} 'primjenjivati se/imati pravnu snagu' : *take effect*^{pf} 'primijeniti/stupiti na snagu', *be lacking/be short of*^{ipf} 'manjkati' : *run short of/fall short of*^{pf} 'pomanjkati', *agree*^{ipf} 'slagati se' : *come to an agreement*^{pf} 'složiti se', and so on.

Group 3

Here, all the imperfective members are activities, and all the perfective members are accomplishments. The perfectives are resultative verbs, i.e. verbs implying the successful completion of the activity. Most verbs depict various internal, cognitive processes that cannot be measured precisely. It is therefore not possible to speak of an activity, i.e. a process moving step by step towards the objective, using a lexeme that implies completion. In addition, these verbs usually take animate or abstract objects that do not lend themselves easily to any measurement of the impact that the activities have on them.

(5)	try to persuade ^{ipf}	:	persuade ^{pf}		'ubjeđivati' ^{ipf}	:	'ubijediti' ^{pf}
	try to prove ^{ipf}	:	prove ^{pf}		'dokazivati' ^{ipf}	:	'dokazati' ^{pf}
	try to solve ^{ipf}	:	solve ^{pf}		'rješavati' ^{ipf}	:	'riješiti' ^{pf}

Most SC pairs use stem alternation to produce imperfective and perfective members. Thanks to the *-iva/-ava* infix, imperfective verbs are formed to express the activity that precedes the moment when the terminus is reached. As shown by the examples in (5), English needs to use *try to + verb* in order to express that stage.

Other resultatives that form their imperfective counterparts in this way include: *tame, resist, improve, appease, engage, assimilate, civilize, wrench, preserve, dishearten, dispirit, demoralize, discourage, deter, entice, allure, decoy, forge, extinguish, coax, elicit, reconcile, devise, contrive, upset,*

accomplish, camouflage, compensate, compromise, concentrate, consolidate, damage, destroy, spoil, legalize, conciliate, motivate, outwit, compel, force, urge, delude, deceive, temper, decipher, solve, find out, unravel, disentangle, dissuade, resist, justify, vindicate, warrant, relax, master, contest, refute, impugn, dispute, adjust, adapt, substantiate, sober up, dissuade, save, rescue, quieten, calm, restrain, soothe, mitigate, embellish, convince, decide, figure out, reassure, reason out, resolve, satisfy, unravel, and so on.

Group 4

This is a large group of pairs in which the imperfective member is a single verb, and its perfective counterpart consists of the same verb and a particle or a preposition. The particle imposes a boundary on the activity verb. The imperfective members are activities, while the perfective members are accomplishments and achievements.

Two major sub-groups were identified. One includes verbs of movement, where the particle expresses a direction (*squat down*) or a spatial boundary (*push to*).

(6)	push ^{ipf}	:	push to ^{pf}		'gurati' ^{ipf}	:	'dogurati' ^{pf}
	squat ^{ipf}	:	squat down ^{pf}		'čučati' ^{ipf}	:	'čučnuti' ^{pf}
	dash ^{ipf}	:	dash off ^{pf}		'jurit' ^{ipf}	:	'odjurit' ^{pf}

Other examples of verbs of movement include: *climb : climb up, sail : sail away, sail : sail out, sail : sail past, crouch : crouch down, walk : walk to, run : run up to, roll : roll up to, crawl : crawl up to, row : row up to, dive : dive in, move : move out, march : march out, march : march past, lie : lie down, run : run away, fly : fly through, fly : fly past, wiggle : wiggle out, dash : dash on, dash : dash off, dash : dash away, gallop : gallop away, rush : rush past, ride : ride past, and the like.*

It is clear that all verbs of movement can form several different perfective counterparts so as to specify various directions. This also means that their number is probably much greater than the number identified on the basis of the SC aspectual pairs in our dictionaries.

Another sub-group are verbs of other physical activities, with or without agents, where the meaning of the particle is aspectual and marks the beginning (*blaze up*) or end (*starve out*) of the activity, but which can also express the meaning of direction and location, as shown in:

(7)	burn ^{ipf}	:	burn down ^{pf}	‘gorjeti’ ^{ipf}	:	‘izgorjeti’ ^{pf}
	peel ^{ipf}	:	peel off ^{pf}	‘guliti’ ^{ipf}	:	‘zguliti’ ^{pf}
	drink ^{ipf}	:	drink up ^{pf}	‘piti’ ^{ipf}	:	‘popiti’ ^{pf}
	dry ^{ipf}	:	dry up/out ^{pf}	‘sušiti’ ^{ipf}	:	‘isušiti’ ^{pf}
	clean ^{ipf}	:	clean up ^{pf}	‘čistiti’ ^{ipf}	:	‘očistiti’ ^{pf}
	blaze ^{ipf}	:	blaze up ^{pf}	‘plamtjeti’ ^{ipf}	:	‘zaplamtjeti’ ^{pf}

Among other examples, we found the following pairs: *burn* : *burn down*; *burn* : *burn away*, *peel* : *peel off*, *peel* : *peel away*, *suck* : *suck out*, *pump* : *pump out*, *chisel* : *chisel out*, *drink* : *drink off*, *drink* : *drink up*, *pay* : *pay out*, *dry* : *dry up*, *drain* : *drain off*, *brush* : *brush out*, *brush/brush down*, *scribble* : *scribble out*, *burn* : *burn down*, *push* : *push out*, *tire* : *tire out*, *sweep* : *sweep up*, *sweep* : *sweep away*, *plough* : *plough up*, *grow* : *grow up*, *gnaw* : *gnaw through*, *burn* : *burn through*, *bit* : *bite through*, *gamble* : *gamble away*, *dig* : *dig up*, *doze* : *doze off*, *clean* : *clean up*, *scrape* : *scrape off*, *sew* : *sew up*, *tear* : *tear off*, *wipe* : *wipe off*, *chew* : *chew up*, *file* : *file down*, *hunt* : *hunt down*, *strip* : *strip down*, *grind* : *grind off*, *chop* : *chop up*, *cut* : *cup up*, *brush* : *brush out*, *brush* : *brush down*, *wash* : *wash out*, *wash* : *wash off*, *wash* : *wash away*, *churn* : *churn up*; *flame* : *flame out*; *blaze* : *blaze up*; *ooze* : *ooze out*; *leak* : *leak out*, *wear* : *wear away*, *wear* : *wear down*, *flow* : *flow in*, *flow* : *flow out*, *boil* : *boil over*, *shoot* : *shoot forth*, *melt* : *melt away*, *bleed* : *bleed out*, *spin* : *spin out*, *melt* : *melt down*, *sweep* : *sweep up*, *sweep* : *sweep away*, *boil* : *boil over*, *flame* : *flame up*, and various other examples.

A third, much smaller sub-group was identified which includes verbs of speaking, such as:

(8)	babble ^{ipf}	:	babble out ^{pf}	‘brbljati’ ^{ipf}	:	‘izbrbljati’ ^{pf}
	blunder ^{ipf}	:	blunder out ^{pf}	‘lupetati’ ^{ipf}	:	‘izlupetati’ ^{pf}

Group 5

In this group, the imperfective members describe states and activities, while their perfective counterparts are achievements that mark the moment when the change took place, i.e. when the state or activity began. This moment is specified in English with the help of *start* and *begin*. These verbs are also called inceptive or inchoative verbs and very often express activities occurring of their own accord. Most express cognitive, auditory and visual perception, as shown in (9) below. The SC perfective verbs all include the prefixes *za-*, *pro-*, and *po-* to mark the moment of change.

(9)	bark ^{ipf}	:	start/begin to bark ^{pf}	‘lajati’ ^{ipf}	:	‘zalajati’ ^{pf}
	cough ^{ipf}	:	start/begin to cough ^{pf}	‘kašljati’ ^{ipf}	:	‘zakašljati se’ ^{pf}
	boil ^{ipf}	:	start/begin to boil ^{pf}	‘ključati’ ^{ipf}	:	‘proključati’ ^{pf}
	blow ^{ipf}	:	start/begin to blow ^{pf}	‘duvati’ ^{ipf}	:	‘zaduvati’ ^{pf}
	hope ^{ipf}	:	start/begin to hope ^{pf}	‘nadati se’ ^{ipf}	:	‘ponadati se’ ^{pf}
	walk ^{ipf}	:	start/begin to walk ^{pf}	‘hodati’ ^{ipf}	:	‘prohodati’ ^{pf}

Other imperfective verbs (activities) whose perfective counterparts are formed in this way are the following: *hurt, itch, rule, stink, tingle, tremble, pant, puff, sob, choke, giggle, whine, gurgle, clatter, rattle, quarrel, flap, bleat, mew, hiss, growl, snarl, sob, squeal, bleat, yell, cackle, croak, crow, blow, neigh, rustle, snore, laugh, hum, tremble, tittle, dance, blow, drizzle, limp, float, flutter, swing, say, flow, walk*, and others.

Group 6

In this group of aspectually related verbs, the imperfective members are states composed of *be* + *adjective* (which are the correspondents of SC verbs), while the perfective members are achievements that express the moment when the state began, which is expressed with *become/get* + *adjective*, as shown in (10). As in the previous groups where the perfective describes the beginning of the state or activity, most SC perfective verbs include the prefixes *za-* and *raz-*.

(10)	be worried/worry ^{ipf}	:	become worried ^{pf}	‘brinuti’ ^{ipf}	:	‘zabrinuti se’ ^{pf}
	be furious ^{ipf}	:	become furious ^{pf}	‘biješjeti’ ^{ipf}	:	‘razbiješjeti’ ^{pf}
	be sad ^{ipf}	:	become sad ^{pf}	‘tugovati’ ^{ipf}	:	‘rastužiti se’ ^{pf}
	be swollen/swell ^{ipf}	:	become swollen ^{pf}	‘nadimati se’ ^{ipf}	:	‘naduti se’ ^{pf}
	be silent ^{ipf}	:	become silent ^{pf}	‘ćutati’ ^{ipf}	:	‘ućutati se’ ^{pf}
	be part of ^{ipf}	:	become part of ^{pf}	‘pripadati’ ^{ipf}	:	‘pripasti’ ^{pf}

Group 6 is limited only by the number of adjectives that can combine with *be* on the one hand, and *become* and *get* on the other. As demonstrated in the first two pairs, some have multiple forms (*be worried*, but also *worry*).

Group 7

This is a group of aspectually related verbs in which the imperfective member is an activity, and its perfective counterpart is an accomplishment, which in addition to the perfective component in its meaning, always includes the specification of the manner in which the basic activity is conducted. In SC, this additional meaning is expressed most often by the prefixes *na-* and *po-* to convey the meaning of ‘a sufficient quantity of’ and ‘one by one’ respectively.

(11) open ^{ipf}	:	open one by one ^{pf}	‘otvarati’ ^{ipf}	:	‘pootvarati’ ^{pf}
chop ^{ipf}	:	chop (a sufficient quantity) ^{pf}	‘sjeckati’ ^{ipf}	:	‘nasjeckati’ ^{pf}
dance ^{ipf}	:	dance to one’s heart’s content ^{pf}	‘igrati’ ^{ipf}	:	‘nairgrati se’ ^{pf}
throw ^{ipf}	:	throw all over (the place) ^{pf}	‘razbacivati’ ^{ipf}	:	‘porazbacivati’ ^{pf}
be ill ^{ipf}	:	have one’s share of illness ^{pf}	‘bolovati’ ^{ipf}	:	‘nabolovati se’ ^{pf}
run ^{ipf}	:	run one’s fill ^{pf}	‘bježati’ ^{ipf}	:	‘nabježati se’ ^{pf}
drip/filter ^{ipf}	:	fill by filtering/dripping ^{pf}	‘cijediti’ ^{ipf}	:	‘nacijediti’ ^{pf}
squat ^{ipf}	:	squat for a long time ^{pf}	‘čućiati’ ^{ipf}	:	‘načućiati se’ ^{pf}

The two prefixes are quite productive and we will list here only a few additional examples of the perfective counterparts of such pairs: *root up a sufficient quantity*, *draw enough water*, *scream one’s fill*, *distribute a (certain) quantity*, *get a lungful of (air)*, *throw away*, *cut off one after another*, *take one by one by force*, and so on.

All the imperfective members of the pairs listed in this group have their perfective counterparts with empty prefixes, e.g. *otvarati*^{ipf} : *otvoriti*^{pf} ‘open’, *sjeckati*^{ipf} : *isjeckati*^{pf} ‘chop’, *igrati*^{ipf} : *odigrati*^{pf} ‘play’, and so on, but they were included in our analysis because these more expressive perfective counterparts do not have other imperfective counterparts, as is the case for other perfectives with ‘full’ prefixes. For example, *prepisati* is related to *pisati*^{ipf} because, morphologically, *pisati*^{ipf} is its base, but semantically, *prepisati*^{pf} is related to the imperfective *prepisivati*^{ipf}, and not to *pisati*^{ipf}.

Group 8

In the last group of our English lexical correspondents, the perfective members have a perfectivizing affix. The pairs are composed of activities and accomplishments/achievements. The activities express a gradual transition that involves a change of quality. The accomplishments/achievements express the completion of the transition, which may take place in an instant or may take some time.

In the first sub-group, the imperfective member is expressed using the verb *be/grow* and an adjective that describes the quality towards which the activity develops. Their perfective counterparts are composed of the adjective that formed the imperfective member and the perfectivizing suffix *-en* (e.g. *blacken* from ‘black’ + ‘en’). The meaning of the perfectivizing suffix is ‘make’ or ‘become’. This meaning is identical to that of the perfectivizing SC affixes *za-*, *po-*, and *o-* shown in the examples that follow. The perfective members can also be expressed by *become* + *adjective*:

(12)	grow black ^{ipf}	:	blacken ^{pf}		‘crniti’ ^{ipf}	:	‘zacrniti/pocrniti’ ^{pf}
	grow red ^{ipf}	:	reddden ^{pf}		‘crveniti’ ^{ipf}	:	‘pocrveniti’ ^{pf}
	grow loose ^{ipf}	:	loosen ^{pf}		‘labaviti’ ^{ipf}	:	‘olabaviti’ ^{pf}
	grow stiff ^{ipf}	:	stiffen ^{pf}		‘ukrućivati se’ ^{ipf}	:	‘ukrutiti se’ ^{pf}

The second sub-group includes the English correspondents that resemble SC aspectual pairs the most because the perfective members, just like in SC, are composed of a prefix (*be-*, *en-*, and *a-*) and the base verb. The meaning of the prefix *be-* is ‘cover all over’, and the meaning of the prefixes *a-* and *en-* is ‘make’.

(13)	spatter ^{ipf}	:	bespatter ^{pf}		‘prskati’ ^{ipf}	:	‘naprskati’ ^{pf}
	rage ^{ipf}	:	enrage ^{pf}		‘bijesniti’ ^{ipf}	:	‘razbijesniti’ ^{pf}
	tune ^{ipf}	:	attune ^{pf}		‘štimiti’ ^{ipf}	:	‘naštimiti’ ^{pf}
	lure ^{ipf}	:	allure ^{pf}		‘mamiti’ ^{ipf}	:	‘namamiti’ ^{pf}
	dew ^{ipf}	:	bedew ^{pf}		‘rositi’ ^{ipf}	:	‘orositi’ ^{pf}
	drabble ^{ipf}	:	bedrabble ^{pf}		‘prljati’ ^{ipf}	:	‘zaprljati’ ^{pf}

4. Discussion

The analysis identified and examined 294 English lexical correspondents of SC aspectual pairs. The number is certainly much larger given that some means, such as those including *be/become*, *start/begin* and *grow*, are very productive and take part in the creation of many more verb phrases that were not included in the dictionaries.

The study provided us with some valuable insights into the aspectual composition of the two verbal systems. The data confirmed that SC and English do indeed use the same set of tools to express imperfectivity and perfectivity, but also revealed that their major tools are in inverse proportion in terms of the number of verbs that use them. In SC, aspectual meanings are dominantly encoded in aspectual pairs, while in around 10% of cases they are encoded in biaspectual verbs. In English, it is the other way round as in over 90% of cases, aspectual meanings are encoded in biaspectual verbs, with only around 8% in aspectually related pairs. Both languages have a small number of cases where different verbs are employed to express different aspectual meanings. It may be concluded, therefore, that in spite of these mismatches, the aspectual systems of the two languages have a great deal in common.

In terms of the status of the individual members of the pairs, one might argue that they are in fact monoaspectual verbs, i.e. either imperfective only or perfective only. We believe that would not be an appropriate description since unlike the already identified monoaspectual English verbs (e.g. *consist*) for which no counterpart perfective meaning can be identified irrespective of the form in which that meaning would be expressed, the members of our pairs of lexical correspondents evidently always have a counterpart which differs in the aspectual value only.

It is clear that there are many other ways of lexicalizing some of the imperfective and perfective meanings in English. For example, this study identified *smart*, *started to ache* and *begin to hurt* as perfective correspondents for the state *ache*, but many native speakers of English would probably use *There was a pang* or *I felt a pang*, among a range of other possible expressions. This simply demonstrates that expressing aspectual meanings is important and that languages create many different means for this purpose.

Let us now turn to one of our key questions - why does English have pairs of aspectually related verbs in addition to its biaspectual verbs? The analysis points to the following two reasons.

One is that in a large number of cases these pairs relate to activities that are neither easily observed nor delimited. Such verbs are found in each of our groups, for example *ache*, *suffer*, *urge*, *fight*, *prove*, *solve*, *burn*, *dry*, *boil*, *cough*, *worry*, *loosen* and *bedew*, to name but a few. Many of them are intransitive and depict situations that are beyond our control. This means that the imperfective and perfective meanings in these situations are quite specific and that they require specific means for their expression. This is in contrast to most other physical activities that have arguments that are easy to observe and delimit (e.g. *write a book*, *sing a song*, *make a cake*, and so on).

The second reason is related to the fact that in many of our pairs the perfective member is an achievement that captures the moment when the state or activity began (*drive away*, *dash off*, *blaze up*, *start to cough*, *become sad*, and various others). This is, in some senses, to be expected, given that, with a few exceptions, English does not have verbal morphology that would help specify these particular meanings. That is why periphrastic expressions are used instead.

As mentioned previously, bilingual dictionaries were used primarily as registers of SC verbs, and as primary sources of the English lexical

correspondents that were always carefully examined. The analysis points to a number of things. First, the English correspondents in the dictionaries are sometimes incorrect. For example, the correspondents offered for SC *liječiti*^{ipf} 'treat' include 'treat medicinally (medically)'; 'treat a person for ...^{ipf}'; 'medicate^{ipf}', but also 'cure medically^{pf}', 'cure of a disease^{pf}', which is wrong since *cure*^{pf} is a resultative verb implying the successful completion of the activity, which is not the aspectual meaning of *liječiti*^{ipf}. Second, the use of *begin/start to* in the expression of inceptive verbs, such as *start to ache*, is often too general in the formation of the English correspondents and given priority over inherently perfective lexemes, such as *smart*. Third, the lexical entries provide no aspectual information for English verbs that are not biaspectual. For example, it would be very useful if the English correspondents of SC *ubijediti* 'convince, persuade' came with the note that they are perfective only.

5. Conclusion

The study has given us a better insight into the structure of the two verbal systems and confirmed that the two languages use the same set of instruments, but with a different order of frequency.

For SC, the main conclusion is that as many as 10% of its verbs are biaspectual, which is not properly reflected in grammar reference works. It is common knowledge that in SC grammars, a great deal of space is always devoted to prefixation and stem alternation, while biaspectual verbs are barely mentioned and illustrated through only a few examples (usually of foreign origin). Given that they represent 10% of the total, biaspectual verbs deserve a better description.

The study has also demonstrated that around 10% of English verbs form pairs of aspectually related verbs. Eight different groups have been established in our analysis, featuring verbs that often express an action that is difficult, if not impossible, to measure, delimit, or control. That is probably the reason why English uses different lexical means to express the imperfective and perfective meanings related to such actions. Another major group is that of those inchoative verbs that mark the beginning of a state or an activity. The reason why the perfective counterparts to these imperfective states and activities are expressed periphrastically is that the morphological means for the expression of this meaning in English is often insufficient.

We hope to have responded to our first three questions from §1. As for the last question, one further step in our contribution to the description of English could be to attempt to verify our pairs in electronic corpora of English or through tests designed to obtain such verification directly from native speakers of English.

We also hope some of our suggestions will be useful for dictionaries, reference grammars, and EFL teachers, but also EFL learners, who often overgeneralize the use of biaspectual verbs in the explication of aspectual meanings in English.

References

- Arad, M. (1998). *VP-Structure and the Syntax-Lexicon Interface*. MIT Occasional Papers in Linguistics 16. Cambridge, MA: MIT Department of Linguistics.
- Brinton, L. (1988). *The Development of English Aspectual Systems*. Cambridge: Cambridge University Press.
- Bujas, Ž. (1999). *Veliki hrvatsko-engleski rječnik*. Zagreb: Nakladni zavod Globus.
- Bybee, J. L. and O. Dahl (1989). The creation of tense and aspect systems in the languages of the world. *Studies in Language*, 13(1), 51–103.
- Comrie, B. (1985). *Tense*. Cambridge: Cambridge University Press.
- Comrie, B. (1976). *Aspect. An Introduction to the Study of Verbal Aspect and Related Problems*. Cambridge: Cambridge University Press.
- Dahl, O. (1984). Perfectivity in Slavonic and Other Languages. In: C. de Groot and H. Tommola (eds.), *Aspect Bound: A Voyage into the Realm of Germanic, Slavonic and Finno-Ugrian Aspectology* (Proceedings from the First Scandinavian Symposium on Aspectology in Vasa, 26–28 August 1983), Dordrecht-Holland/Cinnaminson: Foris Publications, 3–22.
- Dahl, O. (1985). *Tense and Aspect Systems*. Oxford: Basil Blackwell.
- Dowty, D. R. (1977). Toward a Semantic Analysis of Verb Aspect and the English 'Imperfective' Progressive. *Linguistics and Philosophy*, 1, 45–78.
- Drvodelić, M. (1989). *Hrvatsko ili srpsko engleski rječnik*. Zagreb: Školska knjiga.
- Galton, A. (1984). *The logic of aspect. An axiomatic approach*. Oxford: Clarendon Press.

- Groot, C. de and H. Tommola (eds.) (1984). *Aspect Bound: A Voyage into the realm of Germanic, Slavonic and Finno-Ugrian Aspectology*. Proceedings from the First Scandinavian Symposium on Aspectology in Vaasa, 26–28 August 1983). Dordrecht-Holland/Cinnaminson, Foris Publications.
- Hlebec, B. (1990). *Aspects, Phases and Tenses in English and Serbo-Croatian*. Grazer Linguistische Monographien 8. Graz: Institut für Sprachwissenschaft der Universität Graz.
- Janda, L. A. (2007). Aspectual clusters of Russian verbs. *Studies in Language*, 31, 607–648.
- Kenny, A. (1963). *Action, Emotion, and Will*. London: Routledge and Kegan Paul.
- Kabakčiev, K. (2000). *Aspect in English: A “Common-Sense” View of the Interplay between Verbal and Nominal Referents*. Studies in Linguistics and Philosophy 75. Dordrecht: Springer.
- Lakoff, G. and M. Johnson (1980). The Metaphorical Structure of the Human Conceptual System. *Cognitive Science*, 4, 195–208.
- Langacker, R. W. (1987). *Foundations of Cognitive Grammar*, vol. 1, *Theoretical Prerequisites*. Stanford: Stanford University Press.
- Langacker, R. W. (1991). *Foundations of Cognitive Grammar*, vol. 2, *Descriptive Application*. Stanford: Stanford University Press.
- Langacker, R. W. (2008). *Cognitive Grammar*. Oxford: Oxford University Press.
- Mourelatos, A. (1978). Events, Processes and States. *Linguistics and Philosophy*, 2, 415–434.
- Novakov, P. 1991. *Glagolski vid i Aktionsart u engleskom i srpskohrvatskom jeziku*. [Aspect and Aktionsart in English and Serbo-Croatian]. PhD dissertation. Faculty of Philosophy, University of Novi Sad.
- Partee, B. H. (1999). Nominal and temporal semantic structure: Aspect and quantification. In: E. Hajičová, T. Hoskovec, O. Leška and P. Sgall (eds.), *Prague Linguistic Circle Papers*, 3, 91–108.
- Rothstein, S. (2001). What are Incremental Themes? In: J. Gerhard, A. S. Strigin, S. Wilder and N. Zhang (eds.), *ZAS Papers in Linguistics*, 22, 139–157.
- Ryle, G. (1949). *The Concept of Mind*. London: Barnes and Noble.
- Spasojević, M. Lj. (2015). *Dvovidski glagoli u savremenom srpskom jeziku* [Biaspectual verbs in modern Serbian]. PhD dissertation. Faculty of Philology, University of Belgrade.

- Šojat, K. et al. (2012). Derivational and Semantic Relations of Croatian Verbs. *Journal of Language Modelling*, 1, 111–142.
- Thelin, N. B. (1990). Verbal Aspect in Discourse: on the State of the Art. In: N. Thelin (ed.), *Verbal Aspect in Discourse. Contributions to the Semantics of Time and Temporal Perspective in Slavic and Non-Slavic Languages*, Amsterdam/Philadelphia: John Benjamins Publishing Co, 3–88.
- Vendler, Z. (1967). Verbs and Times. In: Z. Vendler (ed.), *Linguistics in Philosophy*, Ithaca, NY: Cornell University Press, 97–121.
- Verkuyl, H. J. (1972). *On the Compositional Nature of the Aspects*. Dordrecht: D. Reidel.
- Verkuyl, H. J. (1989). Aspectual Classes and Aspectual Composition. *Linguistics and Philosophy*, 12(1), 39–94.
- Zandvoort, R. W. (1962). Is 'Aspect' an English Verbal Category? *Gothenburg Studies in English*, 14, 1–20.
- Zhang, L. (1995). *A Contrastive Study of Aspectuality in German, English and Chinese*. New York/Washington/San Francisco: Peter Lang.

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Весна Булатовић

ЕНГЛЕСКИ ЛЕКСИЧКИ КОРЕСПОНДЕНТИ ВИДСКИХ ПАРОВА У СРПСКОХРВАТСКОМ ЈЕЗИКУ

Сажетак

Рад се бави енглеским лексичким кореспондентима видских парова у српскохрватском (СХ). СХ и енглески су дијаметрално супротни у погледу начина исказивања граматичке категорије вида, због чега се посматрају као типични представници 'видских', односно 'невидских' језика. У СХ, видске разлике изражавају се сљедећим средствима: а) видским паровима сродних лексема, као нејчешћим средством, затим б) двовидским глаголима и, на крају в) видским паровима несродних лексема. Наша анализа показује да 'невидски' енглески језик користи иста три средства, али обрнутим редосљедом у погледу учесталости. Највећи број енглеских глагола је двовидски, што значи да њихово видско тумачење зависи од неколико фактора изван глаголске лексеме. Предмет наше анализе су управо ова

друга два средства. На основу лексичких и морфолошких односа међу парњацима анализом је издвојено неколико подтипова лексичких средстава за изражавање видских разлика у енглеском.

Кључне ријечи: свршеност, несвршеност, вид, лексички вид, видски пар

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IDEOLOGICAL MEANDERING IN TEXTUAL RENDERING: BINARITIES, INNUENDOS AND OVERTONES IN TRANSLATION

Abstract

The two essential components of translation are culture and language, and the inquiry into translation and translating lies in bringing together theory and practice in an interactive fashion. As it is essentially a linguistic exercise, the translation process needs to include a meticulous contemplation of all linguistic aspects of the text, including phonemic, morphological, syntagmatic, and semiotic facets. However, it would be naïve to believe that the list ends there. Political and ideological beliefs will not shape just the TL expressions and narratives – translation too, will frequently reflect the translator's political affiliation or ethnic belonging. This paper selectively explores linguistic features that translators need to be alert about in their work. In conjunction with other considerations, including textual, phatic, cultural and stylistic, the translator's work definitely appears to be an informed act. In the analysis of text organization, in particular with relation to translation, the concept of semantic congruence comes to the fore. This being the case, the translator needs to be aware of the key textual mismatch between English and Serbian in order to produce acceptable TL renderings. His or her ability to move from parataxis to hypotaxis and vice versa constitutes an important component of their translatorial competence.

Key words: translation, meaning, ideology, influence, lexis

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1. A broad overview

Our social relations are largely contingent upon our compliance with different rules of a symbolic character that help us establish order and mutual understanding as rationally as we can. We use signs to convey and receive different information without which our efforts to transpose meaning from one language into another would be unimaginable. That is how all natural phenomena, from the cloud and the moon in bucolic poetry to fruit and plants in paintings, or apices in the texts of historians and politicians, get a new symbolic function and become material hubs that spin the thoughts and feelings to go beyond the individual, and beyond the social. The task of linguists remains to explain not only the categories of meaning, but also other fundamental categories, such as: sign, symbol, sense, communication and interpretation. Research into meaning ought to be pragmatic enough to encompass the issues of determination of specific meanings of individual types of symbolic activities, as well as determination of general conditions under which a certain utterance is socially communicable and intelligible to other members of the community regardless of whether it is being translated or not.

It is not easy to pinpoint which of the existing linguistic disciplines is supposed to delineate these matters. The ongoing paradigmatic change from equivalence-based theories to more functionally-oriented translation theories has had a significant influence on translation studies. In addition to contextual factors including text type, author, and audience, which usually figure heavily in linguistic and text-linguistic approaches to translation, the central role of the translator (whether acting individually or in association with a producer) has been underscored in more functionally-informed theories.

This invokes earlier attempts to depict the activity in a triangular fashion. That is why translation, according to Lefevere (1992) ought to be perceived as a process, product and reception. Translation refers to the product and reception, while translating refers to the process. Besides, translation can also be outlined as representation, transmission and transculturation (Tymoczko 2007). If translation entails all these determinants, it should then be observed through the prism of a responsive and wide-ranging theory married to good practice. The two fundamental components of translation are culture and language, and the inquiry into translation and translating lies in bringing together theory and practice

in an interactive fashion. Because it brings the two together, the ideology and politics of translation and the architecture of information transmitted through language, the right approach to examining translation must take into account both phatic and referential elements of language, where one or the other will show some dominance without excluding the other.

Such a description can also apply to translation activity, where one strategy will exhibit domination while leaving enough space for others. The main objective of this paper is to spell out the doctrines relating to different translation theories in an attempt to form a multi-faceted and open-minded picture of translators' work. A well-versed translator cannot be asked to confine himself/herself to one translation strategy or paradigm, but instead they are likely to maneuver among them in pursuit of adequate solutions to issues. Thus, as Pym (2010: 166) observes:

When theorizing, when developing your own translation theory, first identify a problem – a situation of doubt requiring action, or a question in need of an answer. Then go in search of ideas that can help you work on that problem. Whatever approach or paradigm proves to be adequate, its aptitude may not be of an enduring nature and the perplexities of future circumstances may necessitate yet another shift.

Peter France points to the fact that theoreticians today have a far more complex task than the mere differentiation between what is good and what is bad; what they are concerned with nowadays is the different options that translators can utilize and the ways they can be adapted in conformity with the historical, sociological and cultural context (2000). Namely, globalization has also had its antithesis epitomised in the increased interest in one's cultural roots and one's own inherent identity. Thus, the translator, as the Irish theoretician Michael Cronin nicely described it, is also a passenger, one who roams from one culture to another (2000).

1.1. Soaring above the micro-versus-macro dichotomy

In the past two decades, one could observe an increase in the awareness “toward more sociologically- and anthropologically-informed approaches to the study of translation processes and products” (Inghilleri 2005: 125). For the sake of this paper's vistas, they might as well be referred to as

macro level views, in particular those of Pierre Bourdieu, Niklas Luhmann and Bruno Latour. The end translation product will never assume a pure form, embracing wholly one theoretical orientation or another. Farghal (2012: 35) places the translator in the staple of a social game portraying the interaction between various agents in translation activity and goes on to show how the strategy of 'foreignization' might be adopted as a global strategy in translating a ST; however, the actual production of the TT will have to involve cases where the strategy of 'domestication' presents itself as a must, in order to avoid some communication breakdowns. By the same token, the micro covers all aspects of language. During the second half of the twentieth century, and so far in the twenty first century, there have been several series of shifts from morpheme to word, from word to sentence, from sentence to text, from text to context, from context to discourse, from discourse to genre, from language to culture and society, which necessitated an interdisciplinary interest between translation studies and sociology. Such a dynamic platform of theories indicates that there is no need to observe any one paradigm, and certainly no need to adhere to one exclusively.

This goes to show that there usually exists a heave of friction between several theoretically popular options at the macro level although they become more congruent and dynamic during the actual process of translation. The main weight, however, should be given to the relevance of macro issues such as culture, (master) discourse, genre, ideology, norms, and so on, prior to the actual translation process. That being said, one ought not to take the micro intricacies or restrictions lightly as they can have significant bearing on the work of translators. Translation never communicates in an untroubled fashion because the translator reconciles the linguistic and cultural differences of the foreign text by reducing them and supplying another set of differences, basically domestic, drawn from the receiving language and culture to enable the foreign to be received there. As such, translation emerges to be a cultural act, one that entails a certain level of manipulation given that it inherently involves a variety of stages in the process of transfer across linguistic and cultural restrictions.

2. Ideological divergence

Human sciences aspire to reach the level of exactness that is present in exact sciences. Such an objective is easily spelt out and contrived, but far more difficult to truly achieve and materialize. Translation, like every activity that is heavily influenced by the human factor, is not immune to lateral centripetal influences that drive it away from axiomatic credentials. In approaching texts, translators are influenced, whether consciously or subconsciously, by their own beliefs, backgrounds, assumptions and the like; hence, their employment of certain linguistic devices, such as ‘transitivity’, ‘cohesive device’, ‘over-lexicalisation’, ‘style-shifting’, and so on (Hatim and Mason 1997: 143–163). Political substrates have generally been used in negative dogmatic terms mostly within the space of traditional Marxist explanations in which it is, “a form of cognitive distortion, a false or illusory representation of the real” (Gardiner 1992: 60). Namely, if one undertakes a meticulous segregation and fragmentation of expressions, notwithstanding larger semantic units and without due respect to cultural aspects of the given text any of the following issues can ensue – a) information can be misconstrued; b) the original text may not be sufficiently fathomed; or c) the internal relations within the expression may be deemed as lost altogether.

From an extreme point of view, one can even argue that the essence of the transference of meaning lies within the decomposition of the world as we know it. As a downright facet of translation, ideology is seen by Lefevere (1998: 41) as an approach through which readers in general and translators in particular approach texts. In such a world, translation becomes a necessity, particularly if we bear in mind that the cutting edge of translation is also the pillar of a culture, as Bhabhae described it metaphorically (Bhabhae 1994). Farghal (2008: 1) views translators’ sociopolitical action as “superimposing certain directionality on the text in order to approximate it to, or even have it meet, their own or some other agent’s goal”.

One of the clear dilemmas that translators face in the case of Serbian into English translations comes to the fore when the need to translate the name of one of the two constituent entities in Bosnia and Herzegovina. Namely, the entity that in the Serbian language spells out as Republika Srpska is translated into English in two different ways: a) The Republic of Srpska, and b) Republika Srpska. This is not a mere choice whether to

transliterate the original name or not. There is more political and ideological load to this than meets the eye. If the translator opts to translate it as The Republic of Srpska, just like any other republic is vocalized in the English language, the translator seems to be adding a layer of statehood that it does not really enjoy in its constitution and the Dayton Peace Agreement, for it is not really a republic, but rather an entity in the binary composition of the country. If the translator should opt to translate it as Republika Srpska however, they do not do it justice either, as, in that case, they seem to rely more on political rather than linguistic positions rendering it as the only *Republika* reference in the English language out of hundreds of other *Republics*. The famous German linguist Friedrich Schleiermacher would probably refer to this issue with his foreignizing versus domestication dichotomy, which will be more closely revisited in the following chapter.

2.1. A tang of political innuendo

The postcolonial view on the relations between the source and target text necessitates that the inequality of their status ought to be observed from several angles. The majority of scholars in translation studies and allied fields see ideology as “the tacit assumptions, beliefs, value system which are shared collectively by social groups” at a certain time (Hatim and Mason 1997: 144). What immediately comes to mind in *the Republika Srpska/The Republic of Srpska* case is that fits nicely with the Schleiermacher’d dichotomy of domestication versus foreignization translation strategies referred to in the text above. For Venuti (1995: 20), the domesticating method is “an ethnocentric reduction of the foreign text to target language cultural values, bringing the author back home”. There seems to be a close correlation between domestication and the so called fluent translation, whose main attribute is the use of terms which render the TT seamlessly palatable. It is straightaway perceptible and plain, “familiarized” and domesticated.

Foreignizing translation practices on the other hand, entail the choice of a foreign text and the invention of translation discourses. A foreignizing translator can use “a discursive strategy that deviates from the prevailing hierarchy of dominant discourses, but also by choosing to translate a text that challenges the contemporary canon of foreign literature in the target language”. (Venuti 1995: 148). The choice whether to domesticate the entity’s name into the English language and spell it out as *The Republic*

of *Srpska* or to utilize the foreignizing strategy and render it as *Republika Srpska* without the preceding definite article is not bereft of political beliefs, for it is apparent that those who prefer to keep the entity away from the centralization of the whole country and retain its distinctive autonomy prerogatives lean towards translating it as *The Republic of Srpska*, while those who dream of seeing Bosnia as a centralized county without sovereign entity dividing lines in the future prefer to translate it as *Republika Srpska*. The preferences in this case seem to correspond to the translators' ethnical backgrounds.

A similar situation used to exist in the case of translating the name of Ukraine in the English language. There was a time when the majority of native English translators would opt to place the definite article in front of the name of the country, much to the disdain of native Ukrainians who objected to the use of the definite article on account of it diminishing its independence conspicuousness. As the time lapsed and as the country leant closer and closer to the western political sphere, the definite article before the name of the country in the translations by western translators began to fade away, until its near complete elusiveness in the current translations. One can surmise that some translators, having their own beliefs and conviction, or even political affiliations, not only add, omit, shift, modulate, undertone, euphemize, understate or exaggerate, but also actively engage in the so called "naming strategy", in which they opt for one type of name over another (Simpson 1993: 141), in order to consciously or subconsciously produce a TL text which is more in conformity with a local political agenda or innuendo.

As far as the relationship between the source culture and target culture is concerned, it is worth noting that they seldom dwell on equal platforms. Robyns (1994: 120, 409) argues that the target culture is prone to taking a certain attitude regarding the source culture which can be described as part of one of the following scenarios: a) the target culture encourages transporting foreign materials from the source culture, provided that the transported materials are naturalized in accordance with the established systems of the target culture and its norms and conventions – which can rightfully be described as imperialistic; b) the target culture regards the source culture as a threat to its identity, thereby avoiding any influence the target culture might exercise – a defensive stance; c) the two cultures see each other equally – a trans-discursive dichotomy; or d) the target culture looks at the source culture as a capable culture that can compensate for target cultural deficiencies – defective.

These seemingly opposing attitudes have existed for as long as the writings on translation, from Cicero and Horace to Munday and Baker. Consequently, no matter what the relationship between the interfacing cultures is, whether imperialistic, defensive, trans-discursive, or defective, there will always be a certain level of influence on the translator prior to undertaking the actual act of translating. That being said, the influence may well reach its summit when the relationship is imperialistic whereby the target culture adopts a colonial approach in transporting the foreign materials (Almanna 2014: 98). The question that arises here is whether the translator, the editor, the producer or the purveyor of the translation has the right to interfere ideologically and steer the TT towards different goals.

2.2. Stereotypical beliefs and emblematic outputs

Such an imperialistic relationship between the source and the target cultures has encouraged the translation of literary works that are in line with the existing stereotypical representations summoned up in the target readers' thoughts towards the original countries of origin notwithstanding of the literary quality of the texts. That might explain why some western countries are so much in love with literary works that are of a controversial nature in their countries of origin – usually those that deal with some sort of sedition, blasphemy, feminism or human rights which conveniently feed into the target culture's stereotypical narratives.

A tang of controversy always adds a bit of honing and a convenient cutting edge. The only Nobel Prize ever awarded to any literary work from the territory of the former Yugoslavia was given to *The Bridge on the Drina* novel by Ivo Andrić. Its literary endowments indisputable, the controversial plot in the current political terms was another potential garnish to be scored. Perhaps an even better example is the only Oscar winning film from the same territory – *No Man's Land*. There is a widespread belief that its poor artistic prowess was only rewarded for its plain political biasness, apparently much appreciated by the Academy jury. Ideological preponderance is pervasive and ubiquitous, and as Pinchuck puts it 'words are a means of expressing an idea or conveying a message, while the purpose of communication is what guides their conventionality. They function under strong restrictions and offer some resistance to individual manipulation. Words are means, but means with peculiar properties' (1977).

3. Conclusion

A comprehensive consideration of the diversity of different approaches to translation eventually leans towards its functionality. In other words, every translation ought to start from the contemplation of the purpose it is meant to serve in the target language, or at least that is what the translation *skopos* urges us to do. On the one hand, translation activity may be viewed as a transmitting entity based on a sacred original, where the translator functions as a mere mediator. On the other hand, translation activity may be regarded as an originating entity based on the *skopos* of the translation, where the translator acts as a free go-between. In-between, there are a host of cases in which differing judgments can be passed.

Being both the ST receptor and the TT sender, the translator is involved in a number of tasks, such as reading, analyzing, interpreting, comprehending, transferring, restructuring, adapting, improving, evaluating, and so on (Bell 1991; Belhaaj 1998). Pondering the SL meaning as the etalon of the TT accuracy inexorably leads to the conclusion that meanings have metamorphosing and alternating roots and different paths of genesis. They take us into unexplored and uncharted waters of primordial experience. Words, on the other hand, are quintessential symbols. They owe their power to the fact that they link the semantic content with the pre-semantic depths of human experience and the two-dimensional structure of symbols. Lack of transparency of symbols combined with the strife to translate them exactly seems to pose an unsolvable problem which lies in the fact that all symbolic meanings are indeed deeply rooted in the realm of our individual and collective experience. This becomes apparent when certain formulations are phatic in nature, and translating them this way or another significantly changes the political and ideological output. In extreme cases, the ethnic belonging of the translator may become obvious just by the option they chose.

While, in the past, the preponderance of scientific research was placed on the comparison of the original with the product of translation, often with the latent aim to discover what has been 'lost' in translation, in the current, poststructuralist approach there seems to be a dramatic turn so that the ultimate aim is no longer to evaluate but rather to understand what has happened during the process of translation of meanings with ideological or political load when transferring them from one ideological system into another.

The bond between ideological beliefs, thoughts and language is even more intimate than commonly believed. It is not about first mentally

translating a formulation, only to express it in the TL subsequently, thus making it accessible to others. Once formed, it goes on to exert influence on the thinking of each individual in the given community, as well as on the further course of its cultural creativity. Cassirer highlights the following fact of importance in consideration of the relation between language and thought: “Learning to name objects, a child does not simply add one sign on top of another. It actually learns to form notions for those objects, in order to comprehend the objective world...Without the facility of the name, every new progress in the objectification process would be lost again already in the following moment.” (Cassirer 1944: 132). In addition, there are facets of language that will have an impact on the faithfulness of translation too. The character and wealth of its lexis, peculiarities of its grammar and syntax seem to be in full conformity with the experience of human practice in given natural and societal circumstances.

References

- Almanna, A. (2014). *Translation Theories Exemplified from Cicero to Pierre Bourdieu*. Munich: Lincom Europa.
- Cassirer, E. (1944). *An Essay on Man: An Introduction to a Philosophy of Human Culture*. New York: Yale University Press.
- Belhaaj, A. E. (1998). *The Process of Translation: Factors, Tasks and Challenges*. Saudi Arabia: Umm Al-Qura University Press.
- Bell, R. (1991). *Translation and Translating: Theory and Practice*. London/New York: Longman.
- Bhabha, H. (1994). *The Location of Culture*. London/New York: Routledge.
- Cassirer, E. (1944). The concept of group and the theory of perception. *Philosophy & Phenomenological Research*, 5, 1–35.
- Cronin, M. (2000). *Across the Lines: travel, language, translation*. Cork: Cork University Press.
- France, P. (2000). Translation Studies and Translation Criticism. In: P. France (ed.), *The Oxford Guide to Literature in English Translation*, Oxford: Oxford University Press, 3–10.
- Inghilleri, M. (ed.) (2005). The Sociology of Bourdieu and the Construction of the ‘Object’ in Translation and Interpreting Studies. *The Translator*, 11(2), 125–145.

- Farghal, M. (2012). *Advanced Issues in Arabic-English Translation Studies*. Kuwait: Kuwait University Press.
- Farghal, M. and M. Al-Hamly (2010). Remodeling in Kuwaiti Newspaper Commentary Titles. *Annals of the Arts and Social Sciences*, 319(31), 46.
- Gardiner, M. (1992). *The Dialogics of Critique: M M Bakhtin and the Theory of Ideology*. London: Routledge.
- Hatim, B. and I. Mason (1997). *The Translator as Communicator*. London/New York: Routledge.
- Lefevere, A (1992). *Translation, Rewriting and the Manipulation of Literary Frame*. London/New York: Routledge.
- Lefevere, A. (1998). Translation Practice(s) and the Circulation of Cultural Capital: Some Aeneids in English. In: S. Bassnette and A. Lefevere (eds.), *Constructing Cultures*, Clevedon: Multilingual Matters, 40–56.
- Pym, A. (2010). *Exploring Translation Theories*. London/New York: Routledge.
- Simpson, P (1993). *Language, Ideology and Point of View*. London: Routledge.
- Robyns, C. (1994). Translation and Discursive Identity. *Poetics Today*, 15(3), 405–428.
- Tymoczko, M. (2007). *Enlarging Translation, Empowering Translators*. Manchester, UK and Kinderhook, NY: St Jerome Publishing.
- Pinchuck, I. (1977). *Scientific and Technical Translation*. London: Andre Deutsch Ltd.
- Venuti, L. (1995). *The Translator's Invisibility*. London/New York: Routledge.

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ИДЕОЛОШКЕ СЕРПЕНТИНЕ У ПРИРЕЂИВАЊУ ТЕКСТА: БИНАРНОСТИ,
АЛУЗИЈЕ И НАТУКНИЦЕ У ПРЕВОДИМА

Сажетак

Два неизоставна елемента у сваком преводу су култура и језик, док се подробније истраживање превода и превођења своди на зближавање теорије и праксе на интерактиван начин. С обзиром да је у питању суштински лингвистичка област, процес превођења треба да укључи минуциозно разматрање свих лингвистичких аспеката унутар текста, укључујући фонемске, морфолошке, синтагматске и семиотичке аспекте. Међутим, било би наивно вјеровати да се списак ту и завршава. Политичка и идеолошка убјеђења не утичу само на изразе и нарацију унутар изворног језика – преводи такође често одају преводиочеве политичке афилијације или етничку припадност. Овај рад селективно разматра лингвистичка обиљежја на која преводиоци треба да обратe посебну пажњу у свом раду. Заједно са осталим разматрањима, укључујући, текстуална, фатичка, културолошка и стилистичка, рад преводиоца дефинитивно има обиљежја информисаног чина. Приликом анализирања организације текста, поготово у погледу превођења, концепт семантичке усклађености долази до изражаја. У таквој ситуацији, преводилац треба да буде свјестан кључног текстуалног неслагања између енглеског и спрског језика како би се остварило прихватљиво уобличавање текста у циљном језику. Преводиочева способност да начини отклон од паратаксе у корист хипотаксе, и обрнуто, чиниће битан дио његове преводилачке компетенције.

Кључне ријечи: превођење, значење, идеологија, утицај, лексика

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БАШ ЧЕЛИК У ПРЕВОДУ ЕЛОДИ ЛОТОН МИЈАТОВИЋ

Апстракт

У овом раду аутор анализира енглески превод популарне српске народне бајке *Баш Челик*, а аутор превода је Елоди Лотон Мијатовић. Аутор описује преводилачке технике и поступке које је Мијатовићева користила и анализира њихову оправданост. Још један битан елемент овог рада су и елементи изворне културе, при чему је укратко описано како их преводилац преноси циљној читалачкој публици. Чак и уколико се примене савремени стандарди, може се рећи да је квалитет овог превода изузетно висок.

Кључне речи: Елоди Лотон Мијатовић, *Баш Челик*, превод, преводилачке технике и поступци

Народна бајка *Баш Челик* се први пут појавила у преводу на енглески још 1874. године у оквиру антологије српске народне прозе под насловом *Serbian Folk-Lore*¹, чији је састављач и преводилац Елоди Лотон Мијатовић. Ауторка је била супруга познатог српског дипломате, књижевника и ерудите Чедомиља Мијатовића, уз кога се упознала са српском књижевношћу, културом и обичајима.

Имајући у виду да је Мијатовићева живела у Србији и да је била удата за интелектуалца који је изворни говорник српског, могла је да се упозна и са народним и књижевним варијететом, односно варијететом који је го-

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¹ Mijatovich, E. L. (1874). *Serbian Folk-Lore*. London: W. Isbister & Co.

ворила тадашња интелектуална елита. Варијетет са кога је преводила *Баши Челика* је био народни језик, који је био основа тадашњег књижевног језика, али који је био донекле сиромашнији у односу на књижевни, који је већ у 19. веку почео да се обогаћује изражајним средствима на пољу лексике и синтаксе (Милановић 2010: 132). Варијетет са кога је преводила је представљао изазов у смислу вокабулара и реченичне конструкције, јер је значење речи понекад било потребно реконструисати, некада није било одговарајућих еквивалената или појмова у енглеском, док су дуге реченице изворног текста у више наврата морале да буду скраћиване.

Уколико се осврнемо на још неке карактеристике језика народне прозе, требало би поменути битне особености које примећује Вукобрат (1992: 3), а у које спадају карактеристична употреба глаголских облика, инверзија субјекта и предиката, изостављање глагола говорења, карактеристична употреба управног и неуправног говора и слично, као и понављање у знаку броја три, при чему аутор подразумева да се као мотиви јављају три брата, три сестре, три просца и слично. Овome се може додати и то да са језичке стране то подразумева и три описа неке ситуације или догађаја, при чему се одређени језички обрасци понављају, што има импликација и на превод, а што ће бити изложено накнадно.

Као проблеми при превођењу појављују се још и разлика у стиливима изворника и превода, као и фактор публице. Како је већ наведено, *Баши Челик* је писан народним језиком, чије особености нису могле бити у потпуности пренете, а апсолутна једнакост у стиливима се у превођењу не може постићи (Хлебец 2009: 147). Стил превода одговара тада уобичајеном књижевном стилу, али без много нормативних стега карактеристичних за другу половину 19. века на енглеском говорном подручју. С друге стране, Мијатовићева није могла да користи стил којиме би говорио британски земљорадник тога доба, већ је користила књижевни језик своје епохе каквим су писане бајке, премда се може рећи да је вокабулар нешто једноставнији.

Након овог кратког описа језика и проблема са којима се преводилац сусрео, потребно је рећи нешто више о даљем току анализе. Иако се сваком преводу може приступити са више аспеката, који се грубо могу поделити на књижевне и лингвистичке, овај рад се концентрише на лингвистичку анализу превода. При анализи превода коришћена је класификација преводилачких техника и поступака из књиге која се тиме бави, тј. *Преводилачке технике и поступци* (Хлебец 2017), као и поставке теорије превођења коју аутор описује у делу *Општа начела превођења* (Хлебец 2009) како би се у зборнику посвећеном професору Хлебецу на још један начин указало поштовање према његовом преданом раду.

Можемо почети од имена насловног лика, које се у наслову појављује два пута, и то прво у транскрибованом облику, а затим и дословно преведено (*Bash Chalek; or True Steel*). Као што је већ речено у једном сродном раду, Мијатовићева је у жељи да што прецизније преведе наслов решила да га прво транскрибује, а затим и да преведе, премда је упркос њеним напорима име Баш Челик донекле изгубљено у преводу, најпре услед немогућности језика да пренесе метафоричко значење именице *челик*, које се може односити и на чврсту или јаку особу, односно јунака (Томовић 2020: 521, према Вукобрат 1992: 12). Употреба два поступка у превођењу се може оправдати жељом да се пренесе и изворно име, али и његова функција, значење и асоцијације јер се преводилац у одређеним случајевима може одлучити да овако поступи уколико жели да сачува комбинацију интенција (Хлебец 2009: 120). Пракса дословног превођења имена или налажења домаћег еквивалента је типична „када су географски појмови и имена личности измишљени, као у бајкама, причама за децу и научној фантастици, тј. када личности и места нису везани за своје порекло” (Хлебец 2009: 121). Ипак, на овом месту се мора напоменути да је транскрибовани облик *Bash Chalek* употребљен само у наслову, док се у даљем тексту појављује искључиво као *True Steel*, чиме преводилац прихвата већ познату праксу превођења имена личности из бајки, као што су нпр. *Snow White* (енгл.), *Schneewittchen* (нем.), *Белоснежка* (шп.), *Blanche-Neige* (фр.), *Белоснежка* (рус.) (насловни лик из бајке *Снежана и седдам патуљака*) или *Пепелуга*, односно *Cinderella* (енгл.), *Aschenputtel* (нем.), *Cenerentola* (итал.), *Cendrillon* (фр.) итд.

Уколико се пажљиво прочита изворни текст, лако се може приметити да је Баш Челик заправо једина властита именица, тј. да је једини лик који има име у класичном смислу. Сви остали ликови означени су титулама, обично царским, или заједничким именицама које означавају родбинске односе или професију, као што су *шћер* (ћерка), *брат*, *сестра*, *зет*, *шурак*, *слуга*, *механџија* и слично. Да бисмо ово подробније објаснили, почећемо од титула.

У раду у коме је детаљније описано како Мијатовићева преводи владарске титуле (Томовић 2020: 523) већ је примећено да се царска титула преводи као *king*, односно у случају *Баш Челика*, као *great king*. Речи *цар* и *emperor* нису класични еквиваленти јер се у англосаксонском свету по традицији именица *czar/tsar*, користи првенствено за руску царску титулу, али може се односити и на цареve словенских земаља. Из овога се може закључити да су за превод именице *цар* коришћене две технике – описни превод када се преводи као *great king*, и превод аналогijом када се у енглеском тексту поја-

ви *king*. Закључак да је у питању превод аналогизмом заснива се на претпоставци да је Мијатовићева користила реч *king* како би њен текст био ближи уобичајеним конвенцијама употребе језика у бајкама на енглеском језику (Tomović 2020: 523), али и према дефиницији превода аналогизмом, према којој се речи специфичне за појмове у једној култури замењују онима које имају сличну функцију, употребу или изглед (Хлебец 2017: 58).

По истом принципу су преведене и изведенице именице *цар*, тј. *царство* и *царевић*, које се у преводу појављују као *kingdom*, што се на основу наведеног може описати као превод аналогизмом, односно *king's son / son of the king* (описни превод заснован на преводу аналогизмом) или *prince*. За именицу *prince* се може рећи да у овом случају представља генерализацију, пошто ова реч у енглеском означава сина било ког монарха, укључујући и онога који има царску титулу. Овде се могу споменути и резултати већ наведеног истраживања (Tomović 2020: 523), где је наведено да Мијатовићева користи исте поступке и при превођењу осталих народних бајки.

Осим царева који се појављују као „класични” монарси, у *Баш Челику* постоје и животињски цареви, антропоморфна бића која владају змајевима, орловима и соколовима. Ова три цара се јављају у облицима *цар орлујски*, *цар змајски / змајски цар* и *цар соколовски / соколовски цар*, а већином се јављају са мање типичним редом речи именица + придев. У преводу ових синтагми јавља се више поступака, у које спадају превод аналогизмом, транспозиција и пермутација: *цар змајски* – *King of Dragons, Dragon King*; *цар соколовски* – *King of Falcons* (без пермутације), *Falcon King*; *соколовски цар* – *King of Dragons, Dragon King* (без пермутације); *цар орлујски* – *King of Eagles* (без пермутације), *Eagle King*, али се у једном случају синтагма *змајски цар* преводи само као *dragon*, док се у тексту на неколико места за соколовског и орловског цара јавља само *цар*, што Мијатовићева преводи као *Falcon*, односно *Eagle King*, користећи технику додавања. Корисно је напоменути и да упркос понављању мотива, као што је у овом случају сусрет младог царевића и његових зетова, који се одвијају на истоветан начин, ни изворни текст ни његов превод нису потпуно доследни и не користе истоветну лексику како би описали исту ситуацију која се три пута јавља.

Осим појма цара, као још један занимљив културни елемент се може споменути и именица *сабља*. Она се у преводу реализује као *sword*, што више одговара именици *мач*, која се у изворном тексту не користи. За ово одступање је разлог по свој прилици преводиочева жеља да текст приближи читаоцу. Наиме, на основу књижевне традиције са енглеског говорног подручја, може се претпоставити да је тадашња читалачка публика имала

другачије поимање старинског ратника и његовог оружја, тј. некога ко носи мач, а не сабљу.

У бајци се као митско биће појављује и аждаја, што Мијатовићева преводи као *alligator*. Овакав избор речи можда делује чудно или неадекватно, али за такав поступак ипак постоји оправдање. Наиме, као пандан аждаји се јавља и змај, а обе именице се могу односити на исти појам (РСЈ 2007). Заједничка црта обе српске именице јесте да се односе на гмизавце, па је очигледно да је Мијатовићева желела да очува ову семантичку црту (Томовић 2020: 524). Овоме се може додати и да је приметила једну суптилну разлику коју ове две именице имају у изворном тексту – док је аждаја изузетно негативно биће, које напада главне јунаке, змај се јавља као позитиван лик, било у лику змајског цара, било у лику осталих змајева који помажу у борби против Баш Челика. Овоме се може додати да је уместо енглеских именица *wyvern* или *fire Drake*, које су такође могле да се употребе у преводу, именица *alligator* употребљена како би се читалац удаљио од књижевне традиције енглеског говорног подручја и везивања за средњовековне приче о змајевима, а поступак се може означити као превод аналогijом, премда *alligator* нема снажну културну обојеност.

Пред сам крај бајке споменута и једна животиња која не спада у митско биће, али се често јавља у народном стваралаштву: утва златокрила. Према речничкој дефиницији (РСЈ 2007), ова птица спада у барске, а стручни назив јој је *Casarca ferruginea*, док се на енглеском назива *ruddy shelduck*, премда је могуће рећи и само *shelduck*. У преводу је ова врста означена само као *bird*, тј. употребљена је генерализација. Са ове временске дистанце немогуће је одредити да ли је Мијатовићева одлучила да се послужи генерализацијом јер није могла да нађе енглески еквивалент или је само хтела да читаоцу олакша разумевање радње.

Занимљив пример за овај текст јесте и реч *пустиња*, која се у савременом значењу на енглески најчешће преводи као *desert* или *wasteland*, али се у тексту примарно односи на пустару, тј. предео где нема људи и насеља. Ипак, у преводу се *пустиња* рефлектује као *unknown land*, *wilderness* и *forest*, што може указати на то да Мијатовићева није била сигурна које конкретно значење ова реч има и да ју је преводила на основу сопствене интерпретације амбијента. Синтагма *unknown land*, која се јавља у енглеском тексту, може се условно назвати описним преводом, иако се не може рећи да оба њена елемента чине прецизне значењске елементе изворне речи, што је битно за описни превод (према Хлебец 2017: 53). За *wilderness* и *forest* се може рећи да су примери конкретизације, која подразумева да се „у контексту успоставља еквиваленција и [да се] изостављени значењски елемент ипак

може реконструисати” (Хлебец 2017: 35). Оправдање за овакав став се може наћи у чињеници да у оригиналу постоје контекстуални сигнали да се ради о месту које није пустиња у класичном смислу, већ да у њему има дрвећа, да пада киша и слично.

Као још један конкретизације може се навести и пример како је превођена реч *авлија*, која се у енглеском тексту јавља као *forecourt*, *courtyard* и *yard*. Турцизам *авлија* напросто означава двориште (енгл. *yard*), док конкретизација постоји код *forecourt* (простор испред зграде) и *courtyard* (отворен простор окружен зградама). И овде су коришћени контекстуални сигнали како би се пренела слика из оригинала.

Када се текст превода погледа у целини, може се приметити да Мијатовићева често користи додавање, односно „формално увршћење елемента који се не помиње у изворном тексту” (Хлебец 2017: 42). У даљем тексту наведимо неке од најкарактеристичнијих примера и анализираћемо их. Иако је у процесу превођења коришћено више техника и поступака, фокусираћемо се на додавање.

- (1) *Али најмлађи вели... – But the youngest son said...*
- (2) *Нека ти је сретна и честита! – May she be to you a happy and honest wife!*
- (3) *[3]ар не знате више што је отац наш рекао? – Have you forgotten what our father told us to do?*
- (4) *Треће ноћи у оно исто доба... – The third night, at the same hour as before...*
- (5) *Кад се мрак почне приближавати... – When the next day was closing and it began again to grow dark...*
- (6) *Тако је дуго ишао... – He walked very far on this errand...*
- (7) *Он ватру наложи, а сунце огране... – He soon lighted the fire again, and meanwhile the sun having arisen...*
- (8) *... а свијет се скупи и Бога стане молити за здравље онога који их је посјекао. – ... gathered round and praised God, and prayed for good health and good luck to those...*
- (9) *... те је овај попије. – who emptied it at once.*
- (10) *... О луда жено! није моје јунаштво у сабљи, него је у мојој стрижели. – O foolish woman! my strength is not in my sword, but in my bow and arrows!²*

² Напомена: правопис се донекле разликује у односу на данашњи по питању писања великог слова иза знака интерпункције, састављеног писања речи и слично. Сви примери оу оба језика су наведени онако како су написани у оригиналном тексту.

Уколико анализирамо примере, можемо закључити да Мијатовићева користи додавање како би избегла употребу деиктичких елемената, које је могла да употреби у прва два примера без довођења читаоца у дилему, али и из жеље да реченица буде информативнија и потпунија, што важи за све примере. Најзанимљивији је пети пример, где се у преводу појављује цела клауза, иако реченица може да функционише и без ње. Могуће је претпоставити да је овде употребљено додавање из стилских разлога или евентуално преводиочев превид. Разлог за употребу синтагме *praised God* може се приписати уобичајеној верској пракси тог доба, односно обраћања божанству.

Одуступање и изостављање постоје у тексту превода, али нису толико уочљиви колико додавање. Имајући у виду жељу преводиоца да текст буде што прецизнији и информативнији, оваква пракса је разумљива. Ипак, у том смислу се као изузетак може навести следећи пример:

(11) *Царевић узме перце и поче тражити Баш Челика.* – *So the prince took the feather and went away.*

Најбитнија информација која се изгубила у преводу јесте сврха његовог одласка и особа коју тражи, па овакав поступак делује помало чудно имајући у виду прецизност и информативност и тешко је наћи ваљан разлог због чега је Мијатовићева одлучила да тако поступи.

Иако су наведени примери углавном обухватили ниво лексеме и синтагме, потребно је рећи нешто и о нивоу реченице, али и самог текста.

(12) *Царевић видећи да против ове силе не може ништа, пође кући, но једнако мишљаоше како би жену своју Баш Челику отео, док му на једанпут падне на ум, што су му зетови казали, кад му је сваки од њих по једно перце дао.* – *Then the prince, seeing he could do nothing against this great power, turned back, reflecting, however, all the time, as to the best way of getting his wife back from True Steel. At last, he remembered what his brothers-in-law had said to him when they gave him their feathers.*

(13) *Најпослије дођу порано опет код једног великог језера, и договоре се да даље не путују, него ту код језера да преноће, „јер” веле „може бити, ако даље одемо, да воде не нађемо ње би могли заноћити” па тако ту и остану.* – *Pretty early in the morning they came to a large lake and resolved to go no further, but remain there all the day, and also to spend the night there. ‘For if we go on,’ said they, ‘we are not sure that we shall find any more water near which we can rest.’ So they remained there.*

(14) Тако је дуго ишао, све му се чинило близу, кад на једанпут дође у једну пећину, у пећини гори велика ватра и ту има девет дивова, па натакли два чока те их пеку уз ватру, једног са једне а другог са друге стране ватре, а на ватри стоји једна оранија велика пуна исјеченијех људи. – *He walked very far on this errand, and though the glare seemed always near him, it was a very long time before he reached it. Suddenly, however, he came upon a cave, and in the cave a great fire was burning. Round it sat nine giants, and two men were being roasted, one on each side of the fire. Besides that, there stood upon the fire a great kettle full of the limbs of men ready to be cooked.*

Услед разлике у синтакси између два језика, Мијатовићева је повремено морала да у преводу скраћује релативно дуге реченице изворног текста. Као што је већ раније наведено, изворни текст је писан народним језиком, који је Карацић донекле редиговао, али народни језик тог доба није имао одређена синтаксичка средства нити стил који би одговарао енглеском, већ у једној реченици комбинује више саставних клауза обогаћених апозицијама. Осим тога, превод датира из времена када је прескриптивна граматика била популарна и када су многе структуре биле стилски неприхватљиве, што је по свој прилици још један разлог за овакве интервенције на пољу синтаксе. Коначно, традиција превођења са српског на енглески тада практично није ни постојала, што је такође утицало на употребу преводилачких техника и поступака и остале интервенције при превођењу.

Иако овај превод *Баиш Челика* датира из 19. века, о њему се могу донети одређени судови на основу савремених критеријума. За почетак је корисно споменути да Мијатовићева није имала филолошко нити преводилачко образовање у савременом смислу, а на основу претраге у COBISS-у и другим изворима, може се рећи да је имала веома мали број превода и неколико самосталних дела, углавном историјске литературе. С друге стране, на основу детаљног прегледа текста, анализе употребљених техника и поступака, тј. њихове адекватности, може се констатовати да је превод веома квалитетан. Како што је раније показано, Мијатовићева познаје нијансе значења изворника, пажљиво бира како ће елементе изворне културе представити публици енглеског говорног подручја која је слабо упозната са изворном културом, а добро решава и проблеме који настају услед неподударности синтаксе српског и енглеског језика. Готово сва одступања од оригинала могу се образложити објективним разлозима и не може се рећи да је читалац превода ускраћен за битне елементе оригинала.

Литература

- Хлебец (2009): Hlebec, B. (2009). *Opšta načela prevođenja*. Beograd: Beogradska knjiga.
- Хлебец (2017): Hlebec, B. (2017). *Prevodilačke tehnike i postupci*. Beograd: Čigoja.
- Мијатовић, Е. Л. (1874). *Serbian Folk-Lore*. London: W. Isbister & Co.
- Милановић (2010): Milanović, A. (2010). *Kratka istorija srpskog književnog jezika*. Beograd: Zavod za udžbenike.
- РСЈ: *Rečnik srpskoga jezika*. (2007). Novi Sad: Matica srpska.
- Томовић, Н. (2020). Cultural Elements in Elodie Lawton Mijatović's Translation of Serbian Folk Tales. U: B. Čubrović (ur.), *BELLS90 Proceedings*, Vol 1. Beograd: Filološki fakultet, 519–528.
- Вукобрат (1992): Vukobrat, S. (1992). *Englesko-srpske književne veze*. Beograd: Naučna knjiga.

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Nenad Tomović

ELODIE LAWTON MIJATOVICH'S TRANSLATION OF *BASH CHALEK*;
OR *TRUE STEEL*

Summary

In this paper, the author analyzes Elodie Lawton Mijatović's translation of *Bash Chalek*, a popular Serbian folk tale. The author of the paper describes translation techniques and procedures used in the translation and analyzes if they are justified. Another important element of the paper are elements of the source culture and a description of how the translator deals with them. It can be concluded that the quality of the translation is excellent, even by modern standards.

Key words: Elodie Lawton Mijatović, *Bach Chalek*, translation, translation techniques and procedures

Contributors

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