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ТЕМАТ ЛИПАРА / THEMATIC ISSUE  
ТАЧКЕ КОНТАКТА И КОНТРАСТА: ЕНГЛЕСКИ И СРПСКИ /  
POINTS OF CONTACT AND CONTRAST: ENGLISH AND SERBIAN

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## PREFACE TO THE THEMATIC ISSUE *POINTS OF CONTACT AND CONTRAST: ENGLISH AND SERBIAN*

As a medium of business, science, education, diplomacy, and advertising, English has been exerting its influence on various languages for many years now, leading to an increase in their lexical stocks and changes at all levels of linguistic structure. Historically speaking, the expansion of English began with the pioneering voyages to the Americas that were succeeded by the 19th-century colonial aspirations in the South Pacific and Africa, where English later attained the status of an official or semi-official language (Crystal 2003). In other countries across the globe, English has gradually acquired prestigious connotations, becoming regarded as a vehicle of modernity, progress, and globalization (Piller 2003).

Following this development, Kachru (1985) described the use of English internationally by means of a three-circle model. The *inner circle* concerns the countries in which English has traditionally been the primary language, i.e. the US, UK, Ireland, Canada, Australia, and New Zealand. The *outer* or *extended circle* refers to the non-native contexts in which English has acquired administrative recognition, performing the role of a secondary language, e.g. Singapore, India, Malawi, etc. Finally, the *expanding* or *extending circle* involves the nations that have acknowledged the growing importance of English as an international language by introducing it into their educational systems, e.g. Japan, Poland, Spain, etc.

When it comes to the Serbian language, alongside being taught as a foreign language at the primary, secondary, and tertiary levels of education, English has been steadily pervading different aspects of everyday life. This tendency was elaborately discussed in Prčić's (2005) monograph *Engleski u srpskom*. Moreover, numerous authors have since investigated instances of lexical, morpho-syntactic and pragmatic innovations in Serbian resulting from its contact with English (cf. Vasić, Prčić & Nejgebauer 2011; Bugarski 2013; Mišić-Ilić 2017). Other authors focused on the comparison and contrast of the wide variety of phenomena in the two languages (Filipović 1980; Ivir 1983, 1985; Đorđević 2004; Hlebec 1984, 1990, 2008; Čubrović 2017, 2019, 2021). Nevertheless, as the 21st century progresses, it brings new tendencies and new challenges.

With this in mind, the aim of the present issue was to take stock of the current empirical and theoretical status of the field of contrastive studies pertaining to the English-Serbian pair and offer fresh perspectives on linguistic features which the two languages (do not) have in common, across a variety of linguistic disciplines: phonetics, phonology, morphology, syntax,

semantics, pragmatics, discourse analysis, and lexicology. Contributions in this issue which link contrastive linguistics and translation, lexicography, corpus linguistics or EFL acquisition were conducted both in the direction from English to Serbian and vice versa.

In spite of the fact that contrastive studies of the English-Serbian pair have been quite a propulsive field of scientific investigation, some issues of substance have necessarily remained under-researched due to the multidimensionality of contrastive research questions.

One such possible direction of future contrastive investigations is suggested in this issue by the analysis of Mirjana Mišković-Luković, in which English parenthetical linguistic expressions are examined in terms of their semantic and pragmatic roles.

In her practically oriented contrastive study, Danica Jerotijević Tišma explores interphonology by examining whether the causes of spirantization in the Serbian-English interlanguage system can be ascribed to mother tongue interference. On a similar note, Marija Janevska observes the acoustic properties of high back vowels in the two languages and the characteristics of their production by Serbian students of English. Marta Veličković and Jelena Danilović Jeremić reconsider other levels: the former examines and discusses syntactic and semantic features of stance taking in the writing of Serbian EFL students while the latter provides an insight into the use of the word-building strategy in Serbian EFL learners. Katarina Subanović offers a systematic overview of the approaches to the grammatical and lexical aspect in English and Serbian linguistic literature and grammar books. Dejan Karavesović adds to a similar discussion by reviewing the terminology of contrastive investigations of contemporary English and Serbian, drawing attention to the lack of uniformity of their metalinguistic apparatus. In their corpus-based study, Jelena Josijević and Sanja Markeljić identify and analyze the intensifiers used with comparatives in English and Serbian, focusing on those that signal zero degree. Also guided by a corpus-based approach, Tiana Tošić-Lojanica compares adjectival free adjuncts in English and Serbian.

The purpose of comparing and contrasting languages goes beyond illuminating practical issues of language acquisition and language teaching, as it provides a strong foundation for the exploration of language typology and language universals, including universality of conceptual metaphors. It is along these lines that translatability of metaphors is explored by Tatjana Grujić and Tamara Janevska. While Tatjana Grujić examines Serbian equivalents of English metaphors based on the source domain of *MACHINES*, Tamara Janevska's contribution focuses on metaphoric competence of English majors whose mother tongue is Serbian. Touching upon other aspects of conceptual metaphor theory, Nina Manojlović focuses on the pragmatic aspects of the metaphorical conceptualization of the abstract domain of *TIME* in the two languages.



The editors would like to extend their gratitude to all the authors and reviewers who kindly contributed to this issue, hoping that it will present a useful update of empirical and theoretical contrastive insights which will stimulate further research within this academic field.

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# СТУДИЈЕ

*Часопис за књижевност, језик,  
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## GETTING IT ACROSS THE TABLE: THE MANIFESTLY DISCOURSE ADVERBIALS REVISITED

The paper reconsiders the semantic and pragmatic roles of a subset of parenthetical linguistic expressions that typically go under a general heading of sentence (or sentential) adverbs (or adverbials) or pragmatic markers. The subset comprises expressions that encode the speaker's strongest subjective stance to the proposition expressed by the utterance (e.g. the English expressions *obviously*, *clearly*, *evidently*, *certainly* and *surely*, and their Serbian counterparts *očigledno*, *jasno*, *sigurno* and *svakako*).

Given the main, theoretic, orientation of the paper, however, the contrastive issue had to be neglected. Still, the paper gives an impetus for contrastive studies, in particular, regarding the encoded linguistic meaning in relation to interactional import. An accumulation of contrastive data, and analyses thereof, will contribute not only to re-evaluating and refining what we have come to know about encoded meaning, but also, and more importantly, to solving the contentious issue of the strict conceptual/procedural dichotomy.

**Key words:** cognitive pragmatics, discourse adverbials, judgements, mutual manifestness, relevance, sociopragmatics

### 1. INTRODUCTION

There is an apparent tug-of-war between the aim of my paper and the contrastive thematic issue of this journal. Still, they are not conflicting, especially to the extent my underestimation of contrastive nuances is offset by my findings and argumentation. An explorative path may widely be opened for further, more contrastively, oriented studies; after all, this boils down to the never-ending issue of the universality of linguistic phenomena.

The topic of my paper is concerned with a subset of the so-called *discourse adverbials* (or *sentence adverbials*)<sup>2</sup> which pertain to the lexical

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2 The choice of the terms reflects specific theoretical considerations. Namely, in terms of communicative import, *discourse adverbial* seems to be a more appropriate term given that the other is more tied to the traditional preoccupations of a syntactic theory, and various ramifications thereof. In relevance theory, for instance, *sentence adverb(ial)* is typically used, but then again, the theory is far more concerned with explaining the very possibility of communication than with the social side of the coin (Mišković-Luković and Dedaić 2010).

field of manifestness.<sup>3</sup> However, given that the topic is summarily reflected in the title, a few words might be in order.

First and foremost, my title suggests that there is a set of synonymous discourse adverbials that have a distinct sociopragmatic function. In other words, apart from their VP internal syntactic counterparts and coded meaning, they further indicate a particular discursive, or interactional, meaning. Secondly, I have deliberately chosen to name the set by the umbrella adverbial *manifestly*; even though this form is no longer widespread in use (albeit because of that) it, nonetheless, reflects the core (i.e. linguistic-semantic) meaning of the related bunch of adverbials. Thirdly, the blending of the English expressions *get across (something to someone)* and *reach across the table* reflects the purpose – the speaker's intention to communicate something to her addressee by her use of a *manifestly* discourse adverbial.<sup>4</sup> Finally, *revisited* in the title summarises the proper scope and aim of my paper, representing its theoretical pivot.

The paper is organised around the following sections: section (2) illustrates the linguistic phenomena under investigation; section (3) presents two different approaches to the subject of my paper; section (4) highlights the theoretical underpinnings relevant to my analysis and discussion (4.1) and offers a modified relevance-theoretic approach (4.2); section (5) is a summary tracing a path for further (contrastive) research.

## 2. THE MANIFESTLY DISCOURSE ADVERBIALS

The following examples serve as an illustration in order to get a clearer picture of the linguistic phenomena at hand:<sup>5</sup>

- (1) She was, obviously, in a very emotional state.
- (2) He was found in the garden of the house – dead but untouched by explosion, and as there was no sign of violence it was presumed that he had been suffocated by a damp cloth's being held over his mouth. So, clearly, it was a case of murder.
- (3) Evidently, she had nothing to do with the whole affair.
- (4) Certainly, she would not like it if they were involved with Leicester.
- (5) As for him, I could not be sure how much was real affection, how much ambition. Surely, he was not still hoping for marriage – but even if he were not, he needed to keep her favour.

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3 The term *lexical* field evokes the structural semantics perspective, but is used here as a convenient shorthand considering that my paper is couched within the relevance-theoretic framework of a radically modular approach to mind, and henceforth to cognition.

4 Following the standard practice of relevance theory, the pronouns *she* and *he* are used here for convenience to refer to the speaker and addressee, respectively, so as to avoid cumbersome references.

5 The English data have randomly been taken from fiction, TV media and the Internet (e.g. Google and oxfordlearnersdictionaries.com). However, given the predominantly theoretical nature of my paper, hypothetical examples are also used as typical of inferential theories of communication (Gricean and post-Gricean alike).

The list, of course, may be expanded to include other discourse adverbials, such as *decidedly*, *doubtless*, *undoubtedly*, etc. and their variant constructions such as *no doubt*, *for sure* or *it+be+adjectival form* (e.g. *it is obvious/clear/evident/certain/sure that...*). Likewise, there is a number of corresponding synonymous Serbian constructions, such as *očigledno*, *jasno*, *sigurno*, *nesumnjivo*, *van (svake) sumnje* and *očigledno/jasno/sigurno/nesumnjivo je da...* etc. The expansion of the list, however, is not crucial for the main thread of my argumentation.

### 3. DELINEATING THE ISSUE

#### 3.1. FRASER'S APPROACH

Fraser (1996) was among the first to give a comprehensive classification of the so-called *pragmatic markers*. Relying on various theoretical strands (e.g. neo-Gricean, relevance-theoretic and sociopragmatic), Fraser starts by defining pragmatics as:

[A]n account of the process by which the language user takes a sentence representation provided by the grammar and, given the context in which the sentence is uttered, determines what messages and what effects the speaker has conveyed.

(Fraser: 1996: 167)

Essential to his classification is the hypothesis that "sentence meaning, the information encoded by linguistic expressions, can be divided up into two separate and distinct parts" (Fraser 1996: 167). One is the propositional content ("content meaning"), the other "everything else" (i.e. pragmatic markers). So, according to Fraser (1996: 168), pragmatic markers are "the linguistically encoded clues which signal the speaker's potential communicative intentions".

The discourse adverbials as in (1)–(5), together with other expressions (e.g. *conceivably*, *perhaps*, *possibly*, *seemingly*, *without question* and *it is perhaps the case that...*) are then classified as *evidential markers*, more precisely, they fall within a broader class of *commentary markers* "which signal the degree of confidence, positive or negative, weakly or strongly, held by the speaker about the truth of the basic message" (Fraser 1996: 181–182).

Fraser (1996) is neither a relevance-theoretic nor a neo-Gricean pragmatist.<sup>6</sup> However, working within his idiosyncratic framework, he, nonetheless, relies on some of the crucial, inferential pragmatic notions, most notably, (*communicative*) *intention* and *signalling*. The latter, in particular, if translated into relevance-theoretic terms, poses a problem –

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6 Moreover, Fraser (1996), sporadically, opposes even sociopragmatic accounts of the so-called *discourse markers*; for instance, Schiffrin's analysis of *y'know*.

that of the distinction between conceptual/procedural linguistic encoding. To this issue I return in my analysis in section (4).

### 3.2. THE RELEVANCE-THEORETIC APPROACH

Contrary to Fraser, whose classification lumps together various linguistic expressions irrespective of their different semantic roles, relevance theory has provided a heuristics for an overall classification of linguistically encoded meaning based on the semantics (encoded/metaphysical)/pragmatics (inferential) distinction (see, for example, Blakemore 1987, 2004 and Carston 2002).

In a nutshell, the relevance-theoretic account goes as follows. Linguistic forms may exhibit different combinations of semantic and pragmatic roles (see the table below).

<i>What does a linguistic form encode?</i>	<i>Does a linguistic form contribute to the truth conditions of an utterance?</i>	<i>At which communicative level does a linguistic form function?</i>
LINGUISTIC SEMANTICS	TRUTH-CONDITIONAL SEMANTICS (i.e. "REAL"-WORLD SEMANTICS)	PRAGMATICS
conceptual meaning	truth-conditional contribution	explicit (basic explicature, higher-level explicature)
procedural meaning	non-truth-conditional contribution	implicit (implicature: premises and conclusions)

Conceptually encoded meaning provides constituents for the representational content of an utterance – that of the basic explicature (i.e. the proposition expressed by an utterance) or of a higher-level explicature (i.e. various higher-order representations under which the basic explicature may be embedded, such as mood indicators, word order, and other linguistic phenomena). Procedurally encoded meaning, by contrast, constrains pragmatic inference in the process of interpretation – at the explicit level of communication (e.g. deictic expressions or tense markers) and implicit (e.g. various pragmatic connectives or particles). On the other hand, basic and higher-level explicatures as well as implicated premises and conclusions are all propositions, which means that they can be true or



false *per se*. However, the truth and falsity of an utterance solely pertains to its propositional, declarative, content<sup>7</sup> (i.e. to the basic explicature).

We may sketch now the standard relevance-theoretic classification of sentence adverbials. Namely, they contribute conceptually encoded meanings, by forming higher-level explicatures, such that the meanings communicate different ways our mind entertains propositions expressed by our utterances: attitudinal, illocutionary, evidential and hearsay adverbials. Not only do they differ in the specific meanings their respective classes encode, but also in their truth-conditional contribution.<sup>8</sup>

Evidential adverbials, which fall within the focus of my paper, conceptually encode the speaker's commentary on (i.e. the speaker's evidence for) the reliability of the basic explicature. As such, they are considered to modify the basic explicature, and this, in turn, gives support for the claim about their truth-conditional contribution. The typical representatives of the class are the sentence adverbials *obviously*, *evidently*, *possibly*, *apparently*, *supposedly* and *seemingly*. The standard analysis is illustrated in (6)–(8):

- (6) a. Obviously, I'm going to miss the deadline.  
 b. 'It is obvious/obviously true that the speaker is going to miss the deadline'  
 c. 'The speaker strongly believes that she is going to miss the deadline'
- (7) a. Evidently, Frederick the Great entertained Voltaire at Sanssouci.  
 b. It is evident that Frederick the Great entertained Voltaire at Sanssouci.  
 c. The speaker strongly believes that Frederick the Great entertained Voltaire at Sanssouci.
- (8) a. Possibly, we're too late.  
 b. It is possible that the speaker and the addressee are too late [for...]<sup>9</sup>  
 c. The speaker weakly believes that the speaker and the addressee are too late [for...]

7 As a reminder, the truth-conditional/non-truth-conditional issue is not specific to the relevance-theoretic framework as it has been one of the pivotal notions in semiotics, formal semantics, the philosophy of language, etc.

8 Attitudinal adverbials (e.g. *(un)fortunately*, *happily*, *regrettably*, *sadly*) conceptually encode the speaker's attitude to the basic explicature (cf. corresponding synonymous Serbian expressions such as *nažalost*, *srećom*, *tužno je da [...]* etc.). Illocutionary adverbials (e.g. *frankly*, *seriously*, *confidentially*) conceptually encode the illocutionary force of the speaker's utterance (cf. corresponding synonymous Serbian expressions such as *iskreno*, *ozbiljno*, *u poverenju*). Hearsay adverbials (e.g. *allegedly*, *reportedly*) conceptually encode that the speaker is not the source of the information stated in the basic explicature (cf. corresponding synonymous Serbian expressions such as *navodno*, *kaže se da [...]*, *prenosimo*, *rečeno je da [...]*). In terms of truth-conditional semantics, the situation varies with the non-truth-conditional attitudinal adverbials at one extreme and the truth-conditional hearsay adverbials at the other. In between are illocutionary adverbials because of a limited subset of truth-conditional expressions (to these I return in section (4) when I discuss the truth-conditional issue in relation to the *manifestly* discourse adverbials).

9 The phrase *too late* requires a contextually provided constituent for the enrichment of the logical form of the uttered sentence to the fully propositional basic explicature.

Thus, utterances (6a)–(8a), which host *obviously*, *evidently* and *possibly*, inferentially trigger the formation of the respective higher-level explicatures (6b-c)–(8b-c) that comment on what the speaker sees as the degree of evidential support for the propositions expressed by the utterances. In other words, evidentials modify the proposition expressed and are, therefore, truth-conditional expressions.

What I want to challenge regarding the standard relevance-theoretic analysis hinges on the following: i) the strict dichotomy between conceptual/procedural encodings (and bearing in mind Fraser's (1996) use of *signalling*) and ii) the claim about the truth-conditional contribution. These points account for the use of the word *revisited* in the title. Furthermore, being a staunch relevance-theoretic linguist, however, my main aim can be none other than that of fine-tuning the standard analysis by bringing both inferential and social aspects of the topic to bear on further research into the so-called *evidentials*, either monolingually or contrastively. To these points I return in section (4).

## 4. THE MANIFESTLY DISCOURSE ADVERBIALS REVISITED

### 4.1. THE MAIN THEORETICAL UNDERPINNINGS

Essential to my understanding of the meanings and roles of the *manifestly* discourse adverbials are the following dichotomies (Grice's is the first, relevance-theoretic the other two): a) meaning<sub>NN</sub> vs. speaker meaning, b) informative vs. communicative intention and c) manifestness vs. mutual manifestness.<sup>10</sup>

Grice (1989) regards the meaning<sub>NN</sub> of an expression (i.e. linguistic, or encoded, meaning) as not only subsequent to, but also dependent on what the speaker meant<sub>NN</sub> by using the expression. The success of meaning<sub>NN</sub> depends on the speaker's intention that her audience should recognise this intention and, moreover, adopt some belief, presumably the speaker's, based on the speaker's formulation of her utterance. Thus, for instance, declarative utterances induce belief.

Developing Grice's (central) notion of intention to account for utterance understanding, relevance theory has introduced two layers of intention (both are cognitive and non-representational) – informative (basic) and communicative (higher-order). Namely, the speaker makes (more) manifest a set of assumptions to her addressee (the informative intention) and the speaker intends to make it mutually manifest to the speaker and her addressee that the speaker has a particular informative

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<sup>10</sup> I have presented and discussed the relevance-theoretic approach to communication, especially in relation to various linguistic phenomena, throughout my published work (see, for instance, Mišković-Luković 2006a, 2009, 2010, 2012, 2015, 2015/2018). Of course, the main references remain Sperber and Wilson (1986/1995) and Carston (2002).

intention (the communicative intention). Thus, if an addressee recovers the intended interpretation of the speaker's utterance, the speaker's communicative intention will succeed; if the addressee does not accept the propositional content of the speaker's utterance, the speaker's informative intention will fail.

Manifestness and mutual manifestness are intertwined as inseparable elements of an intentional (i.e. ostensive-inferential) communicative fabric. There is, however, a constant mental struggle at work between the two notions, evidently related to the informative and communicative types of intention.<sup>11</sup>

Manifestness of an assumption to an individual is a matter of degree. An individual (say, an addressee in verbal communication) is (more or less) capable not only of (mentally) representing the assumption, but also of holding it as (probably) true at a given moment (say, the time of the speaker's utterance). In a mutual cognitive environment, however, each manifest assumption becomes also mutually manifest. Thus, in verbal communication, it becomes manifest both to the speaker and her addressee that they share a certain set of manifest assumptions.

## 4.2. FINE-TUNING THE RELEVANCE-THEORETIC ACCOUNT

In order to explain the semantic/pragmatic configuration of the *manifestly* discourse adverbials (henceforth, MDA for convenience) I shall go back to the table in (3.2).

### 4.2.1. LINGUISTIC SEMANTICS AND INFERENTIAL PRAGMATICS

It is indisputable that MDAs are conceptual linguistic expressions because they necessarily inherit the encoded meaning from their respective adjectival and VP internal adverbial counterparts, as illustrated in (9) and (10):

- (9) a. They show you such obvious respect.  
b. He had never been able to see himself clearly.  
c. She was pleased with Jago's evident support.  
d. I was certain to help her.  
e. Can you be sure?
- (10) a. Kakva očita laž!  
b. Pa valjda možeš jasno da vidiš da te on očigledno zavlaci sve vreme.  
c. Ma zašto si tako arogantno siguran u sebe!

But what specific linguistic meaning does my MDA set encode? Recall Fraser's and relevance-theoretic explanation of *evidentials* (pragmatic markers and sentence adverbials, respectively) in section (3). Common to

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<sup>11</sup> Cf. the borderline case of phatic communion, for instance, where the speaker's communicative intention is emptied of the lower-order, informative intention.

both accounts is the speaker's commitment to the propositional content of her utterance (henceforth, P for short), namely, *saying that P* and *believing that P* (to a higher or lesser degree). *Saying that P*, and the concomitant belief attitude, is essential to the relevance-theoretic explanation of the mood indicators, here the declarative mood (Sperber and Wilson 1986/1995). Given that the mood indicators are inferentially recovered in a procedural way, it might appear that there is no conflict with Fraser's use of *signalling*. But therein is the catch. To clarify, *signalling* and, more commonly, *indicating* are typically used in relevance theory to refer to those linguistically encoded meanings that serve as semantic constraints on relevance of the speaker's utterance. In other words, the terms are tied to various procedural linguistic items that indicate implicatures – premises or conclusions (see, for example, Blakemore 1987 and Mišković-Luković 2006a) and not to those linguistic phenomena that encode higher-level explicatures, such as evidentials (and other sentence adverbials). Having said this, I cannot but conclude that Fraser does not get it right. On the other hand, if his *signalling* is understood in terms of sociopragmatic meaning, I cannot but strongly agree. This point I leave for later.

To return to the question of the specific conceptual meaning of MDAs, my proposal is straightforward. Within the cognitive domain of manifestness (understood in the relevance-theoretic terms presented in (4.1)), MDAs fall within a broader group of epistemic expressions of judgements. I adopt here Bennett's (2002) position on judgements – irrespective of why the speaker feels whatever degree of confidence she has in P, or how she has arrived at this belief, she expresses how confident she is in P.

So, in terms of the linguistically encoded – *conceptual* – semantics, an MDA encodes the speaker's intentional, strongest attitude to P, such that P must necessarily be true from the speaker's (subjective) point of view based on her particular “beyond-reasonable-doubt-evidence” (be it perceptual, mental/deductive or contextual). This, of course, gives further support for the relevance-theoretic claim about the inferential development of the sort of higher-level explicatures illustrated in (6b-c)–(7b-c) in subsection (3.2). The following excerpt succinctly illustrates my conclusion:<sup>12</sup>

- (11) Carol Christie: He was hitting me against the pillar. I don't know how many times. I fainted. Obviously, I was unconscious.

In co-text (11), not only are the expressions *fainted* and *be unconscious* repeatedly (pleonastically) used, but also, and more importantly, they give credence to the speaker's evidence for her ill-treatment should anyone think of challenging it, especially in terms of the number of hitting. Although the start of the hitting process has been consciously evidenced by the speaker, the “how-many-times” remains undetermined in terms of

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12 The example has been taken from the documentary “Who the (bleep) did I marry?”, which was released on the TV programme *ID* on December 23<sup>rd</sup>, 2022 (the interviewee is a battered wife).

duration and ending; hence the use of the MDA *obviously*, which, from the speaker's perspective, reinforces and justifies P in the given context.

#### 4.2.2. TRUTH-CONDITIONAL SEMANTICS

So far, my modified account of the specific conceptually encoded meaning of MDAs, coupled with my position that they are judgements rather than evidentials, does not preclude the standard relevance-theoretic analysis of their inferential role in forming higher-level explicatures of the types illustrated in (6)–(7). However, what I want to challenge here is their truth-conditional contribution.

The situation with illocutionary adverbials serves as my starting point. As presented in section (3.2), illocutionary adverbials are non-truth-conditional expressions save for a small set that does contribute to P in a truth-conditional way (e.g. *on/off the record*, *morally*, *technically*, *in practice/reality*, and *suchlike*).

To illustrate, let us consider the following examples:

- (12) Rhett Butler to Scarlet O'Hara: Frankly, my dear, I don't give a damn.  
(13) Mr Simpson's associate: On the record, Mr Simpson killed his wife; off the record and morally, he didn't.

The truth-conditional difference between the illocutionary adverbials *frankly* in (12) and *on the record*, *off the record* and *morally* in (13) lies in what these adverbials actually modify. While *frankly* in (12) modifies the illocutionary verb of saying in the higher-level explicature ('Rhett Butler is saying/suggesting frankly that P') and, therefore, has no truth-conditional bearing on P (i.e. that Rhett Butler does not care about Scarlet O'Hara's circumstances (these would have to be contextually supplied to enrich Butler's utterance to its full propositional content)), *on the record*, *off the record* and *morally* in (13) modify P ('Mr Simpson's associate is saying that on the record P' and 'Mr Simpson's associate is saying that off the record and morally P'); otherwise the propositions expressed by the utterances in (13) would result in contradiction ('Mr Simpson killed his wife' and 'Mr Simpson didn't kill his wife').<sup>13, 14</sup>

Turning now to MDAs, and given my spelling out the core meaning (tied to their falling within the class of judgments rather than evidentials), any consideration of their truth-conditional contribution gets beside the point. Not only implicatures but basic explicatures as well come with certain strength (Sperber and Wilson 1986/1997). Mišković-Luković (2009) considers one such instance, namely, the case of an inferentially developed

13 There is, additionally, another element relevant for understanding utterances in (13); it concerns legalese (i.e. the difference between murder in the first-degree and manslaughter) and lies outside the scope of my paper.

14 In this paper I ignore negation (e.g. in the form *that's not true* or *it is not the case that [...]*) as typically applicable to verification of the truth-evaluable status of an expression employed in an utterance because it has no significant bearing on my argumentation.

weak basic implicature whenever P hosts the procedural expressions *sort of* or *kind of*. There is no reason then not to suppose that languages may have resources to encode meaning relevant for the construction of a strong basic explicature. This they may do in two ways: either by directly contributing their *procedural* meaning to the basic explicature (akin to the *sort of* and *kind of* marking the weakness of the basic propositional content) or indirectly, by contributing their *conceptual* meaning to the formation of the higher-level explicatures such that the embedded (basic) explicature cannot be but strongly communicated. In the case of MDAs, as I have argued, the basic explicature comes with the strongest degree at face value. Surely then, the issue of truth-functionality has to be taken off the table.

#### 4.2.3. SOCIOPRAGMATIC CONSIDERATIONS

Bringing into my account the sociopragmatic aspect of communication, I take, intuitively, the MDA *surely* (and Serbian *svakako*) as the best representative of this subclass of judgements (or, at least, the most convenient to facilitate a better understanding of my argumentation). This MDA is entrenched, so to speak, in interactional challenges<sup>15</sup>, frequently occurring in the environment of the discourse marker *but* (see Mišković-Luković 2006a for an exhaustive relevance-theoretic analysis of *but*). The following examples (including example (5) in section (2)) illustrate:

- (14) A: There were several gardeners at work who touched their forelocks as we passed.  
B: Michael wouldn't believe such a legend, surely.
- (15) "All men in the public eye are envied and slandered." I found myself fervently defining Robert. "And surely there never was one more so than the Earl of Leicester."
- (16) It's my family, you know. We're talking about my father. If there is anything strange about the family, I should know it, surely.
- (17) It was a nightmare into which I had strayed. She could not do it. Surely, she could not do it. But why not? Those about her would assure her that she must.
- (18) A: You and I together for the rest of our lives on the Island. Together we'd make it into a paradise.  
B: But, surely, if two people are in love, where they live is not important.

What is interactionally transacted here is the speaker's explicit antagonism to a potential disclaimer of her stance about her (subjective) epistemically strongest P. This, coupled with an attendant element of a seemingly genuine surprise ('How can anyone doubt P'), forms part of a manipulative discursive strategy *par excellence*: in a single stroke of her MDA paintbrush, the speaker aims at precluding any opposition to P and, simultaneously, forewarning about the cost of such an interactional move

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<sup>15</sup> *Interactional challenges* are broadly conceived of to include speaker's musings (i.e. self-talking) as in fictional prose.

(cf. Brown and Levinson 1988 for politeness issues, especially in relation to the addressee's loss of negative face). The bottom line is that the speaker's seeks the addressee's compliance.

Getting back to the main notions presented in section (4.1), and to wrap up my line of argumentation, the cognitive-inferential side of the communicative coin is not divorced from its social side. In other words, the relevance of the speaker's interactional use of an MDA lies in ensuring the success of her informative intention by representing P as mutually manifest in the imposed mutual cognitive environment.

The final point that remains to be addressed in this paper is the relevance-theoretic strict conceptual/procedural dichotomy.<sup>16</sup> Both Fraser (1996) and Grice (1989) are on the same track: *signalling* in relation to (potential) communicative intentions (Fraser)<sup>17</sup> and giving precedence to the intentional speaker meaning over the linguistically encoded meaning (Grice). My hypothesis is that MDAs, on the basis of their linguistically encoded conceptual meaning, automatically trigger the formation of the strong implicated conclusion – in a *procedural* way – whereby the deductive process (i.e. from premises to conclusions) is *signalled* (or *indicated*) as cancelled or, at least, suspended because the inferential shortcut has conceptually been provided (along the lines: either the speaker's P *as is*, or the addressee's compliance with the speaker's P).

## 5. CONCLUDING REMARKS

In this paper, I have presented two influential approaches to my subject matter, and have looked at their theoretical strength and weakness. I have proposed a middle path, by adopting the proposal from Bennett (2002) about judgements. Having thus delimited the cognitive domain of MDAs, I moved to a modified relevance-theoretic account of how MDAs achieve their semantic and pragmatic roles in communication by bringing together all the important aspects: linguistic, inferential and social. My aim was to show how such expressions could become explainable without a residue (due to specific considerations of different theoretical approaches) so that, if “juggled” one against the other, their proper account might, nonetheless, remain in force (to a significant degree).

A promising line for contrastive studies lies in further exploration into the interplay of cognitive and interactional meanings of MDAs. In addition to (dis)proving, but, certainly, fine-tuning my revised account of the standard relevance-theoretic approach, such studies may shed more light on the remaining controversial issue of the strict conceptual/

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16 This has been my long-standing issue with the standard relevance-theoretic account of linguistically encoded phenomena (cf. Mišković-Luković 2006b for an account of the English expression *in other words*).

17 However, Fraser's *communicative* intention does not coincide with the relevance-theoretic notion.

procedural dichotomy (i.e. a linguistic item encodes either conceptual or procedural meaning). As regards truth-conditional semantics, I do not expect significant changes to my account once my long-standing argumentation has finally set in.

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**Мирјана М. Мишковић-Луковић / ЧВРСТО САОПШТИТИ САГОВОРНИКУ:  
МАНИФЕСТНИ АДВЕРБИЈАЛИ ДИСКУРСА – РЕЕВАЛУАЦИЈА ПРИСТУПА**

**Резиме** / Предмет рада су енглески адвербијални, парентетикални изрази, који имају синонимне еквиваленте у српском језику (нпр. *јасно, очигледно/очигледно, сигурно, свакако, несумњиво* и сл.). Рада је, превасходно, теоријски по усмерењу, јер има за циљ преиспитивање два утицајна приступа овој проблематици: Фрејзерову анализу „прагматичких маркера” и стандардни приступ теорије релеванције у анализи „реченичних адвербијала”.

Налазећи ослонац у селективно истакнутим појмовима инференцијалних приступа комуникацији (тј. Грајсовом и теорије релеванције), као и Бенетовом разграничењу евиденцијала од говорниковог просуђивања, рада – теоријски и методолошки – доводи у везу језички кодирано значење, допринос истиносним условима пропозицији говорниковог исказа, као инференцијалну и социопрагматичку улогу испитиваних језичких феномена.

У раду се закључује следеће:

- језичко кодирање: примарно – концептуално, секундарно – процедурално (секундарно аутоматски (тј. несвесно) произлази из примарног;
- допринос истиносним условима: ирелевантно
- инференцијално-прагматички допринос: формирање експликатуре вишег нивоа (примарно), формирање јаког закључка (секундарно);
- интеракциони циљ: обезбеђивање беспоговорне сагласности саговорника.

Теоријски циљ рада и има свој будући практични аспект: проверу закључака у сепаратним језицима, као и проверу закључака у контрастивној анализи парова језика.

**Кључне речи:** когнитивна прагматика, адвербијали дискурса, говорниково просуђивање, узајамна манифестност, релеванције, социопрагматика

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## THE MACHINE METAPHOR IN TRANSLATION FROM ENGLISH TO SERBIAN

This study explores the MACHINE metaphors in English to Serbian translation of scientific writing. It has already been demonstrated that the metaphors based on the source domain of MACHINES structure identical target domains in English and Serbian producing a strikingly similar set of correspondences. However, the translatability of metaphors based on the source domain of MACHINES has not been examined so far. Consequently, the aim of this study is to explore the amount of overlap between English and Serbian when it comes to translation of MACHINE-based conceptual mappings in scientific writing. The analysis was conducted on the corpus of several hundred examples of metaphorical conceptualizations based on this source domain in English and their counterparts in Serbian translation. The illustrations extracted from the corpus were grouped according to whether the source language (English) metaphors were: a) retained; b) removed; c) entirely eliminated, or c) added in the target text (Serbian). The results show that MACHINE metaphors are remarkably stable in translation, and that even when translation modifications are introduced, they are mainly limited to the selection of a different representative within the same source domain.

**Key words:** conceptual metaphor, metaphor in translation, English to Serbian metaphor translation, metaphor stability, scientific writing

### 1. INTRODUCTION

This study examines the stability of MACHINE metaphors in English to Serbian translation. More precisely, it explores whether the translator's decisions when rendering MACHINE-based source-text metaphors into Serbian as the target language affect the distribution and configuration of metaphors in scientific writing. For the analysis of metaphors in English to Serbian translation the Lakoff and Johnson's (1980) Conceptual Metaphor Theory (CMT) is applied. This theoretical framework postulates that metaphor exemplifies the innate ability of the human mind to see and interpret one concept in terms of another and the study of conceptual metaphor has for decades remained a propulsive field in contemporary linguistic, continuously developed both by its founders (Johnson 1987, 2007; Lakoff 1987, 1993; Lakoff & Turner 1989; Lakoff & Johnson 1999) and other metaphor scholars (Turner 1991, 1997; Fauconnier 1994; Gibbs 1994; Fauconnier & Turner 2002; Kövecses 2002, 2005, 2006, 2010).

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Within the theoretical framework of cognitive linguistics, a metaphor is not an isolated figurative expression in a text, but a mapping from one domain of human experience (typically referred to as the source domain) to another (the target domain). Metaphors establish and reflect mental connections made between two unrelated concepts or areas of experience, and these connections in turn allow humans to think and consequently talk about the target domain in terms reserved for the source (Lakoff 1993: 203; Evans & Green 2006: 295). The metaphorical mappings are necessarily partial, which allows a single target domain to be structured by a whole spectrum of source domains. The starting point of Conceptual Metaphor Theory is the claim that humans think in metaphors, which implies that metaphors are what makes abstract thought possible (Lakoff & Johnson 1980; Kövecses 2002). In other words, according to CMT, metaphors operate by mapping well-understood, concrete source domains onto more abstract target domains. To illustrate, the sentence below metaphorically structures the target domain of HUMANS by means of the source domain of MACHINES, and the mapping between the two domains is conventionally formulated as HUMANS ARE MACHINES. Such structuring enables additional metaphorical mappings between MUSCLES and ENGINES (*engine, internal combustion engine*), as well as between the ENERGY which the muscles need and the FUEL that allows the machine to operate.

Muscles are engines which, like the steam engine and the internal combustion engine, use energy stored in chemical fuel to generate mechanical movements.

It is obvious that, contrary to traditional studies of rhetoric, where metaphor is seen as a decorative figure of speech, metaphors in cognitive linguistics are perceived as operating on the level of human conceptualization. This raises a whole set of questions pertaining to metaphor translation problems, as the metaphorical patterns may vary from one language to another due to linguistic and cultural factors. The research conducted so far suggests that some major metaphors are present in a large number of languages (such as HAPPY IS UP OR ARGUMENT IS war), but their different components can be involved in variation across languages and cultures (Kövecses 2005, 2006). In culture, metaphor exists at the interface between universality and variation: universality because of the cognitive source of much metaphor (Kövecses 2005: 17–64) and variation because of the alternative metaphors that exist in different cultures (ibid.: 67–87). Grujić (2018) has demonstrated that English and Serbian cultures are relatively similar when it comes to MACHINE metaphors, as they share the same underlying mechanistic world view. Considering that the earlier studies (Grujić 2014, 2018, 2019, 2021) have established that MACHINE metaphor in English and Serbian structures the identical range of target domains in a strikingly similar set of correspondences, it is the aim of this study to explore the amount of overlap between English and Serbian when it comes to the translation of MACHINE-based conceptual mappings in scientific writ-

ing, or to analyze metaphors used in the source and target texts to gain an insight into MACHINE metaphor stability and retention during transfer from one language to the other.

In this study the stability of MACHINE metaphors is deliberately explored on a corpus consisting of a select set of scientific writing, as this type of discourse is 'regulated' by two mutually exclusive approaches to metaphors. The one requires the scientific texts to use precise, clear and unambiguous language so as to reflect the reality of the world directly (see Ortony 1993b: 1), while the other claims that the objective world cannot be accessed directly and consequently must be constructed on the basis of the constraining influences of human knowledge and language (Ortony 1993b: 2). These two different approaches result in two opposing views of metaphor: the former understands it as something characteristic of rhetoric rather than science, as it is 'deviant and parasitic upon normal usage' (Ortony 1993b: 2, see also Leane 2007: 83–84), while the latter considers it an essential component of language creativity, which attitude is in line with modern research into language, cognition and the ability of human beings to process information. In this view, metaphors can have an exegetic function as they serve to facilitate understanding of a difficult topic, and this is exactly how they were predominantly used in both English and Serbian in the corpus of writing on which this study was conducted.

The contemporary view of translation no longer sees it exclusively as 'the replacement of textual material in one language (SL) by equivalent textual material in another language (TL)' (Catford 1965: 20). This view of translation is criticized as showing tendency to reduce translation to purely linguistic phenomenon. A 'cultural turn' in the 1980s (see Malmkjær 2005: 36; Snell-Hornby 2006: 47–68) changed the view of translation, which is now seen as an act of communication 'situated within a particular linguistic and cultural context, and influenced by genre conventions, audience expectations and the translator's own interventions in the text, whether these be unknown or intentional' (Shuttleworth 2017: 40). In comparison with the wealth of studies exploring metaphors in various languages, the translatability of metaphor remains a rather under researched and neglected field, although the number of studies dealing with it grows steadily (Newmark 1985; Toury 1995; Snell-Hornby 1995; Musolff, MacArthur & Pagani 2014; Guldin 2016; Shuttleworth 2017). When it comes to detailed discussions of metaphor in translation by metaphor scholars, the more important works include Knowles and Moon (2006: 61–72), Kövecses (2014) and Steen (2014). Over the years many classifications have been constructed to account for the procedures employed by translators when translating metaphorical expressions. For example, Newmark's well-known classification includes: a) reproducing the same image in TL, 'provided the image has comparable frequency and currency in the appropriate register', b) replacing the image in SL 'with a standard TL image which does not clash with the TL culture, c) translating the metaphor with simile, d) translation

of metaphor (or simile) by simile plus sense (or the addition of explanatory material), e) conversion of metaphor to sense, f) modification of the metaphor, g) deletion, h) using the same metaphor combined with sense (Newmark 1985: 304–311). Toury (1995: 83) adds two more possible scenarios: translating a non-metaphor by a metaphor and adding a metaphor in the target text when there is no ‘linguistic motivation’ in the source text. For this qualitative study, the various possible translation procedures were grouped into four broad categories: a) retention, b) removal, c) deletion and d) addition, with the initial hypothesis that the retention rate of MACHINE metaphors is high, which would classify it as stable in translation.

## 2. CORPUS AND METHODOLOGY

The study was conducted on the author’s corpus consisting of several hundred examples of MACHINE metaphors excerpted from three pieces of scientific writing by Richard Dawkins and their Serbian translations. The selection of sources was determined by the fact that Dawkins abundantly and consistently uses the MACHINE metaphors when defending his scientific arguments (so much so that one metaphorical mapping is reflected in the very title of one of the source books – *The Blind Watchmaker*). In addition, the translation effort today is almost entirely limited to popular science books and articles, as the other types of scientific writing are rarely translated due to the fact that English has acquired the status of an international language of science.

To identify metaphors in the corpus the ‘Metaphor Identification Procedure’ (MIP) proposed by the Pragglejaz Group (2007: 3) was applied. Essentially, according to the Pragglejaz approach to metaphor identification, if a lexical unit’s usage contrasts with a ‘more basic contemporary meaning’ – the meaning that is more concrete, related to bodily action, more precise or historically older, even if it is not the lexical unit’s most frequent meaning (Pragglejaz Group 2007: 3) – then the expression is considered metaphorical. Metaphorical expressions which were identified in SL text were then compared to their translation equivalents in the corresponding TL sections. They were analyzed according to whether the metaphor in translation was: a) retained (preserved in terms of both the domain and the mapping selection), b) removed (replaced by identifiable non-metaphorical textual material), c) omitted (missing from the target text without any identifiable trace in the translation), or d) added, following the model proposed by Shuttleworth (2017: 67). The examples were accordingly placed into four broad categories, the fourth being the smallest due to the direction in which the research was conducted.

### 3. RESULTS AND DISCUSSION

When formulating the metaphorical mappings, the author has strived to place them at the level of generalization that is appropriately high to account for all metaphorical expressions in a given set, yet appropriately low to differentiate between similar but not identical subsets. For example, the most general metaphor structuring nature is the NATURE IS HUMAN metaphor, which involves various levels of specificity, each a metaphor in itself: NATURE IS A DESIGNER, NATURE IS A BLIND DESIGNER OR NATURE IS A SOFTWARE DESIGNER. The following sections will demonstrate that conceptual metaphors based on the source domain of MACHINES are predominantly preserved in Serbian translation, and focus on the differences in terms of the extent and number of source and target text mappings. The corpus evidence indicates that the metaphorical expressions related to the source domain of MACHINES tend to be dealt with systematically and consistently, preserving not just the central mapping but additional entailments as well.

The presentation of results starts with the metaphorical mappings which have been entirely preserved in Serbian translation. The identified metaphors and their Serbian counterparts will be grouped according to the target domain structured by the MACHINE metaphor and the related COMPUTER-based metaphors. The remaining sections will gradually explore the process of modification of MACHINE metaphors, their removal from the target text, where they are replaced by non-metaphorical language, their complete deletion in Serbian translation and their sporadic addition where no corresponding metaphorical mapping can be traced in the source text.

#### 3.1. RETAINED MACHINE-BASED MAPPINGS IN THE CORPUS

The analysis reveals that the overarching metaphor for nature both in the English source text and in its Serbian translation proves to be the NATURE IS A DESIGNER/WATCHMAKER/BLIND WATCHMAKER, with two synonymous lexemes (*часовничар* and *сајција*) as its Serbian linguistic realizations. Furthermore, in an entire web of additional, less central mappings, nature *sets up* (S: *постави*) the *machinery* (S: *машинерија*) of life, which it *controls* (S: *контролиса*) and *makes* (S: *створи*) creatures. This MACHINE-based metaphor informs and pervades the entire narrative, and consequently extends over larger stretches of writing and is frequently repeated, together with its metaphorical entailments. Generally speaking, it remains quite stable in the TL, although some slight modifications introduced by translator's alterations of the ST metaphor have been observed. To illustrate, in the same example below, the translator decided to opt for the noun *творца* as the Serbian equivalent for *designer*. The closer and more neutral correspondents of *designer* in Serbian are *инжењер* or *конструктор* (E: *engineer, designer*), as the lexeme *творца* (E: *the maker, creator*), associated with Genesis and the creation of the world, carries some biblical conno-

tations. The translator's decision to change the source domain turns the example below into a mixed metaphor (combining the metaphor NATURE IS A DESIGNER with NATURE IS A MAKER), thus removing certain aspects of the SL metaphor (namely, the fact that the author is referring to an engineer working at the drawing board), yet adding a new layer of meaning (as the word *творца* can refer to both biblical and real-world maker).

Some people see this as a fundamental flaw in the whole theory of the blind watchmaker. They see it as the ultimate proof that there must originally have been a designer, not a blind watchmaker but a far-sighted supernatural watchmaker. Maybe, it is argued, the Creator does not control the day-to-day succession of evolutionary events; maybe he did not frame the tiger and the lamb, maybe he did not make a tree, but he *did set up* the original machinery of replication and replicator power, the original machinery of DNA and protein that made cumulative selection, and hence all of evolution, possible. Неки ово виде као темељан недостатак у целој теорији о слепом часовничару. За њих је то коначан доказ да мора постојати творца, не *слепо сајција* него далековиди натприродни часовничар. Може бити, веле они, да творац не контролише свакодневно смењивање еволуционих догађаја; можда није подарио лик тигру или јагњету, можда ниј створио дрво, али јесте поставио првобитну машинерију за репликацију, оригиналну машинерију ДНК и протеина а то је омогућило кумулативну селекцију и стога и свеколику еволуцију.

The lower-level metaphors structuring the natural world such as HUMANS ARE MACHINES, ANIMALS ARE MACHINES and ORGANS ARE MACHINES (with THE NATURAL WORLD IS A SET OF MACHINES as the superordinate metaphor) have also proven to be rather resilient in translation to Serbian. These additionally produce even more specific metaphors which map particular kinds of machines, tools and devices to a broad spectrum of target domain elements (entire species, as well as organs of particular species of living beings). As shown below, *radar* is mapped to human *consciousness*, *optical instrument* to an *eye*, *bats* to *technically highly advanced echo-machines*, while bees have *oscillatory motors* which they can *switch on or off*.

The argument of this book is that we, and all other animals, are machines created by our genes.

У овој књизи износим тврдњу да смо ми, и све остале животиње, машине што су их створили гени.

As with language, the principles that make up our moral grammar fly beneath the radar of our awareness.

Као и у случају језика, правила наше моралне граматике нису уочљива на радару наше свесности.

This level of magnification shows the eye as an optical instrument.

Овај ниво повећања приказује око као оптички инструмент.



[...] the smaller bats appear to be technically highly advanced echo-machines.  
[...] мање врсте слепих мишева по свој прилици су технички напредније ехо-машине.

[...] bees send an instruction to switch on (or switch off) the oscillatory motor.  
[...] пчеле шаљу наредбу осцилаторном мотору да се укључи (или искључи).

Apart from the above mentioned metaphor HUMAN CONSCIOUSNESS IS A RADAR, the human thought is conceptualized as *apparatus* (S: *апарат*), which can be *tuned* (S: *погешен*), or *well-tuned* (S: *добро погешен*) to *work* (S: *рагу*).

Our well-tuned apparatus of skepticism and subjective probability-theory misfires by huge margins, because it is tuned – ironically, by evolution itself – to work within a lifetime of a few decades.

Наш добро подешен апарат за скептицизам и пристрасну теорију вероватноће грдно греша зато што је подешен – а иронија је да се за то побринула сама еволуција – тако да ради унутар животног века од неколико деценија.

MACHINE-based metaphors are also applied to the lowest structural elements of the body: CELLS ARE MACHINES. Additional mappings entailed by this metaphorical conceptualization include CELL ACTIVITY IS (MASS) PRODUCTION and THE RESULT OF CELL ACTIVITY IS A PRODUCT (E: *mass-produced, manufacture, product*; S: *масовно се производе, израђују, производ*).

These slightly altered protein molecules are mass-produced by the protein-making machines that manufacture other compounds in the cells, the gene products.

Незнатно промењени молекули протеина масовно се производе у ћелијама мозга који се развија. Они делују као ензими, машине које израђују друга једињења у ћелији, то јест производе гена. [...]

The metaphor AN ORGANISM IS A SET OF MACHINERY structures specific organs, as well as cells and genes. Lower level mappings between machinery and parts of the body are realized as *machinery of life* (S: *машинерија животиња*). Cells are conceptualized as a separate machinery (A CELL IS A MACHINERY, with linguistic realizations E: *machinery of the cell*, S: *машинерија ћелије*), which entails additional mappings between genes and machinery elements (GENES ARE PART OF THE MACHINERY, realized as E: *part* and S: *део*).

[...] of the dissected machinery of life, beginning with the human eye [...].  
[...] сециране машинерије живота, почевши од људског ока [...].

DNA molecules replicate in the complicated machinery of the cell [...].  
Молекули ДНК репликују се у компликованој машинерији ћелије [...].

[...] while the replicators – now known as genes – were seen as part of the machinery used by individual organisms.

[...] гледало као на део машинерије коју употребљавају поједини организми.

Structured by the MACHINE metaphor, cells are also conceptualized and discussed as *working units* belonging to the *chemical industries of the genes*, in themselves *pharmaceutical factories* consisting of *protein machines*. Consequently, they use *raw materials*, have *production lines*, *end products*, *chemical products*, which they *churn out*, while *mitochondria* are *chemical factories*. This entire set of SL mappings has been preserved in the TL text: *радна јединица, хемијска индустрија гена, фармацеутичка фабрика, митохондријске машине, сирови материјали, производна линија, стварашти, хемијске фабрике.*

I prefer to think of the body as a colony of genes, and of the cell as a convenient working unit for the chemical industries of the genes.

Ја више волим да о телу мислим као о колонији гена, а о ћелији као о погодној радној јединици хемијске индустрије гена.

The mitochondria are chemical factories, responsible for providing most of the energy we need.

Митохондрије су хемијске фабрике које нам дају највећи део потребне енергије.

In a human pharmaceutical factory the synthesis of a useful chemical needs a production line. The starting chemical cannot be transformed directly into the desired end-product.

У људској фармацеутој фабрици, за синтезу употребљивих хемијских супстанци потребна је производна линија. Почетна хемијска супстанца не може се непосредно претворити у крајњи производ.

Each kind of protein machine churns out its own particular chemical product. To do this it uses raw materials that are drifting around in the cell, being, very probably, the products of other protein machines.

Свака врста протеинске машине ствара властити хемијски производ. За то користи сирове материјале расуте по ћелији који су вероватно производи других протеинских машина.

Similar mappings are observable when it comes to entirely different yet equally unobservable aspects of natural activity. Geological processes, for example, are structured by the GEOLOGICAL PROCESSES ARE MACHINES metaphor: *radioactive elements* are thought of and discussed as *stopwatches* (S: *штоперице*), which *buzz* (S: *ошкучава*) and operate by means of *springs* (S: *опруга*) that can be *wound down* (S: *огвије се*).

[...] particular radioactive elements decay at precisely known rates. It is as though precision-made miniature stopwatches had been conveniently buried in the rocks.

[...] да се тачно зна брзина полураспада одређених радиоактивних елемената, То је као да сте минијатурне швајцарске штоперице подесно уметнули у стене.

The radiocarbon stopwatch buzzes round at a great rate, so fast that, after some thousands of years, its spring is almost wound down and the watch is no longer reliable.

Штоперица са радиоактивним угљеником откуцава врло брзо, заправо толико брзо да се после неколико хиљада година њена опруга скоро потпуно одвије и сат више није поуздан.

### 3.2. RETAINED COMPUTER-BASED MAPPINGS IN THE CORPUS

A substantive subset of metaphorical expressions in the corpus was based on one specific type of machines – computing devices. Generally, metaphors of this kind structured the conceptualization of the human mind: THE BRAIN IS A COMPUTER, and this metaphor was predominantly retained in Serbian translation together with the additional mappings (BRAIN ACTIVITY IS OPERATION OF A COMPUTER, PATTERNS OF THOUGHT ARE COMPUTER PROGRAMS, NERVES ARE COMPUTER CABLES, GENES ARE COMPUTER PROGRAMMERS). The linguistic realizations in both languages include *electronic computer, operation, programmed, cables, programmer, set up, information technology* (S: *електронски компјутер, операција, програмирана, каблови, програмер, погесити, информациска технологија*).

The apparatus they use for timing their movements has more in common with an electronic computer, although it is strictly different in fundamental operation.

Апаратура којом се користе да би временски ускладиле своје покрете има много више заједничког са електронским компјутером, премда се по основној операцији оштро разликује од њега.

We shall continue to treat the individual as a selfish machine, programmed to do whatever is best for its genes as a whole.

Наставићемо да о јединки говоримо као о себичној машини, програмираној да чини оно што је најбоље за њене гене као целину.

The brain is connected to the sense organs – eyes, ears, taste-buds, etc. – by means of cables called sensory nerves.

Мозак је са чулним органима – очима, ушима, квржицама за укус и тако даље – повезан кабловима који се зову сензорни нерви.

The genes, too, control the behavior of their survival machines, not directly with their fingers on puppet strings, but indirectly like the computer programmer. All they can do is to set it up beforehand; then the survival machine is on its own, and the genes can only sit passively inside.

Гени такође контролишу понашање својих машина за опстанак, не непосредно повлачећи марионетске концe, него посредно, као компјутерски

програмер. Они могу само да унапред подесе своју машину; потом је она препуштена сама себи, а гени само пасивно седе у њој.

We have seen that DNA molecules are the centre of a spectacular information technology.

Видели смо да су молекули ДНК центар спектакуларне информацијске технологије.

### 3.3. RETAINED AND SLIGHTLY MODIFIED MAPPINGS IN THE CORPUS

Although the MACHINE metaphors show significant resilience in translation to Serbian, as demonstrated above, several forms of their alteration have been observed. To be precise, in a number of cases where the metaphorical mappings between MACHINES and various target domains have been preserved, the Serbian translations display certain modifications of the TL mappings which radiate in three directions: a) TL mappings are established at a higher (more general) level within the same source domain; b) TL mappings are established at the same level but exploit a different representative of the source domain; c) TL mappings are established at a lower (more specific) level of the same source domain.

The generalization of the metaphorical mapping in translation is illustrated below. As can be seen, although retained, the TL MACHINE metaphor involves a different, more general mapping: instead of a specific part of the machine (S: *мотор*, E: *engine*) the translator opted for the lexeme with a broader meaning (S: *машина*, E: *machine*). The identical generalization occurs when the SL metaphor MUSCLES ARE ENGINES/STEAM ENGINES/INTERNAL COMBUSTION ENGINES is modified to the more comprehensive MUSCLES ARE MACHINES (realized in Serbian as *машина* and *мотор*, E: *machine* and *engine*): although it preserves the basic metaphorical mappings (E: *steam engine, fuel, generate*; S: *парна машина, гориво, произвeсти*), it at the same time to some extent impoverishes the idea of movement in the TL text.

Once we are allowed simply to postulate organized complexity, if only the organized complexity of the DNA/protein replicating engine it is relatively easy to invoke it as a generator of yet more organized complexity.

Уколико нам је дозвољено да постулирамо организовану сложеност, па макар то била само организована сложеност машине за репликацију ДНК или протеина, релативно ју је лако замислити као генератор још веће количине организоване сложености.

Muscles are engines which, like the steam engine and the internal combustion engine, use energy stored in chemical fuel to generate mechanical movements. Мишићи су машине које, попут парне машине и машине са унутрашњим сагоревањем, користе енергију ускладиштену у хемијском гориву како би произвеле механичко кретање.

The similar modification is observed in examples where the MACHINE metaphor is realized through the lexeme *machinery*, while the corresponding Serbian translation bases the imagery on a more prototypical representative of the source domain, thus again shifting the translation choice to a more general level (S: *машина*; E: *machine*).

This reason is that we animals are the most complicated and perfectly-designed pieces of machinery in the known universe.

Тај се разлог крије у чињеници да смо ми, животиње, најсложеније и најсавршеније пројектоване машине у познатоме свемиру.

Most interesting cases were those where the translator decided to preserve the metaphor and utilize the identical source domain, but selected a different representative of the category. To illustrate, in the example below *machinery* (a set of machines) was substituted by *апаратура* (E: apparatus), and *механизам* (E: mechanism), which both belong to the category of MACHINES, but are by no means identical to the element selected for the SL mapping (*machinery*). The reason probably lies in the fact that the lexeme *machinery* is metaphorically used to suggest robustness and relentlessness (as shown in Grujić 2018), which are typically not the qualities associated with sex organs or sexual behaviour in Serbian, so the translator decided to substitute the SL mapping with the less intimidating two in the TL.

The machinery of sexuality, sex organs, sexual behavior, the cellular machinery of sexual cell division, all these must have been put together by standard, low-level Darwinian cumulative selection, not by species selection.

Апаратура за полно размножавање, полни органи, полно понашање, механизам деобе полних ћелија, све то мора бити успостављено стандардним дарвинистичким кумулативним одабирањем ниског нивоа.

Another similar situation occurs with the SL metaphor IDEAS ARE VEHICLES, where the mapping between the domains of MACHINES and HUMAN MIND was once again preserved, yet modified by an altered choice of the TL lexeme (i.e. domain representative): instead of *возило* (the Serbian lexeme that shows no MACHINE-based metaphorical extensions of meaning) the term *замајац* (E: flywheel) was used to better convey the sense of movement implied by the English lexeme *vehicle*.

When I discovered that members of the society were using the motion as a vehicle for playing arguing games, I resolved to decline future invitations from debating societies that encourage insincere advocacy on issues where scientific truth is at stake.

Кад сам открио да чланови друштва користе идеју као замајац у својим дебатним играма, решио сам да надаље одбијам позиве дебатних друштава која су подстицала неискрено заступање ставова.

The third form of retention with modification occurs when the TL metaphor involves a more specific mapping than that in the SL. For example, the SL metaphor in the illustration below structures *INSTINCTS AS MACHINE FUNCTIONS* (realized in English as *engineered*), while the TL metaphor employs *COMPUTER PROGRAMMING* for the metaphorical mapping (S: *програмиран*; E: programmed)

An example of a deliberately engineered misfiring of the maternal instinct is provided by cuckoos, and other 'brood parasites' – birds that lay their eggs in somebody else's nest.

Један пример намерно програмираног затајивања материнског инстинкта дају нам кукавице и остали „паразити легла” – птице које носе јаја у туђе гнездо.

A special case of retention occurs in examples similar to the illustration below, where the SL metaphor is replaced by the TL metaphor that utilizes a different source domain. To be precise, the metaphorical verb *built* was given a modified metaphorical interpretation in the TL (S: *саграђен*, which is a linguistic realization of the metaphor *HUMANS ARE BUILDINGS* rather than *HUMANS ARE MACHINES*), as this TL verb mainly collocates with nouns denoting larger constructions (houses and buildings).

We were built as gene machines, created to pass on our genes.

Саграђени смо као генске машине, створени да даље предајемо своје гене.

### 3.4. REMOVAL OF METAPHORICAL MAPPINGS IN THE CORPUS

Occasionally the metaphorical mappings between *MACHINES* and target domains have been removed, as can be observed in the illustrations below. The removal of *MACHINE* metaphors (e.g. *living machinery* below) denotes cases where the metaphorical expression was converted to sense in the TT (in Newmark's terms), or more precisely substituted with the equivalent non-metaphorical expression (S: *живи организам* [E: living organism]). However, it should be noted that the underlying metaphorical mapping *THE ACTIVITY OF ORGANISMS IS FUNCTIONING OF A MACHINE* was fully retained in the translation (E: the workings, S: *функционисање* [E: functioning]).

This idea is directly transferable to the workings of living machinery.

Та замисао директно је преносива на функционисање живих организама.

The SL metaphorical conceptualization of humans as *robot vehicles* (S: *роботизована возила*) was also removed and replaced with partially metaphorical expression *механички преносиоци* (E: mechanical carriers) and *носиоци* (E: carriers). Admittedly, it is little wonder that the metaphorical expression *vehicle* presents a translation challenge since, as noted

above, its Serbian equivalent (S: *возило*) shows no similar metaphorical extension of meaning, which makes the vehicle-based metaphors impossible to retain in Serbian. Another metaphor removal is observed where TL *effective*, realizing the mapping between the SUCCESS OF HUMAN ACTIVITIES and the EFFECTIVENESS OF MACHINE WORK, was replaced by the non-metaphorical adjective *успешан* (E: successful).

We are survival machines – robot vehicles blindly programmed to preserve the selfish molecules known as genes.

Ми смо машине за опстанак – механички преносиоци слепо програмирани да очувамо себичне молекуле познате као гене.

Animals have become active go-getting gene vehicles: gene machines.

ивотиње су постале активни, предузетнички носиоци гена: генске машине.

But making a living got steadily harder as new rivals arose with better and more effective survival machines.

Али са искрсавањем нових противника, са бољим и успешнијим машинама за опстанак, било је све теже одржати се у животу.

The metaphorical conceptualization of humans as machines below involves a rich web of interdomain mappings between DESIGN (S: *пројектовани*) and CREATION, the DRAWING BOARD (S: *цртаћи сто*) and EVOLUTION, ASSEMBLING (S: *монтирају*) and DEVELOPMENT. However, one of the additional mappings between organs and machine parts in the SL text fails to occur in the Serbian translation, which partially alleviates the intense underlying mechanistic worldview produced by a single sentence (S: *нас* [us] instead of *наши делови* [our parts]). Similarly, metaphorical mapping between GENES and COMPUTER ENGINEERS is entirely missing in Serbian non-metaphorical translation by means of the verb *ујриличити* (E: organize).

Were we designed on a drawing board, too, and were our parts assembled by a skilled engineer?

Јесмо ли и ми пројектовани на некаквом цртаћем столу и јесу ли нас монтирали искусни инжењери?

[...] both the beetle genes and the bacterial genes will take whatever steps lie in their power to engineer the same future events.

[...] предузимати све што је у њиховој моћи да уприличе иста будућа збивања.

### 3.5. DELETION OF METAPHORICAL MAPPINGS IN THE CORPUS

When metaphors are deleted, they leave no trace in translation. In our corpus the Serbian translator opted to do away with certain metaphorical mappings on several occasions, which was stylistically quite justified.

To illustrate, in the example below the HUMAN MIND is conceptualized as MACHINE. The additional mappings in the ST occur between the MACHINE PRODUCTION and MENTAL ACTIVITY (*produce*) as well as between the BY-PRODUCT and the RESULT OF MENTAL ACTIVITY. The deletion of the former mapping in the TT allows the translator to avoid the unnecessary repetition of two almost identical Serbian lexemes (the verb *производи*, and the noun *производ*).

Even though conventional Darwinian selection of genes might have favoured psychological predispositions that produce religion as by-product, it is unlikely to have shaped the details.

Чак иако је конвенционална дарвинистичка селекција гена можда давала предност психолошким предиспозицијама чији је споредни (0) производ религија, мало је вероватно да је уобличио детаље религија.

As shown above, computer-based metaphors preserve well in translation to Serbian, where it is possible to retain both central and additional mappings between source and target domains. However, in some cases, the translators had difficulties rendering all the shades of meaning of this metaphor, which is why some generalizations can be observed. For example, a specific type of device, *the on-board computer*, that is installed on mobile objects such as an aircraft, a submarine or a car, was translated by means of a hypernym (S: *комјутер*, E: computer), thus modifying and slightly depleting the metaphor, since the mapping between humans and means of transportation was deleted.

DNA replicators built 'survival machines' for themselves – the bodies of living organisms including ourselves. As part of their equipment, bodies evolved on-board computers – brains.

ДНК репликатори саградили су себи машине за преживљавање – тела живих организама, укључујући и наша. Као део своје опреме, тела су развила (0) рачунар – мозак.

In other cases, some additional mappings between MACHINES and LIVING ORGANISMS were entirely lost, due to the translator's decision to delete the metaphorical SL expression (E: *assembled*) and preserve its non-metaphorical collocates (S: *рођење*; E: *birth*) at the same time retaining the basic metaphor in the sentence (DNA IS ROM; S: ДНК ЈЕ РОМ МЕМОРИЈА).

DNA is ROM. It can be read millions of times over, but only written to once – when it is first assembled at the birth of the cell in which it resides.

ДНК је РОМ меморија. Може да се чита милионима пута, али у њу само једном може да се упише – приликом (0) рођења ћелије у којој је смештена.



### 3.6. ADDITION OF METAPHORS IN THE CORPUS

Due to the focus and direction of this study, where MACHINE metaphors were first identified in English and then paired with their Serbian equivalents, the number of singled-out metaphor additions was predictably low (under 10 instances). Generally speaking, the TT additions were introduced predominantly for the purpose of clarity. For example, the phrase *by means* could have been translated more closely as *на начин* (E: in the manner), but the translator probably opted for the lexeme *механизам* (E: mechanism) to enrich the imagery in the manner consistent with the dominant metaphors in the book. Similarly, there were no linguistic reasons to introduce the MACHINE-related word *постројење* (E: manufacture, production plant) in the description of nature's factories.

Some 1,000 million of these are transmitted every second, by means that are not properly understood, to brain which then takes appropriate action. Отприлике милијарду импулса се сваке секунде, механизмом који још увек потпуно не разумемо, преносе до мозга а он даље предузима потребну акцију.

Green plants have been called nature's 'factories' – beautiful, quiet, nonpolluting, ---producing oxygen, recycling water and feeding the world. Зелене биљке се називају природним „фабрикама” – дивним, тихим, чистим постројењима која производе кисеоник, прочишћавају воду и хране свет.

An all-encompassing metaphorical picture of the cell emerges when the source-domain elements band together. In the example below, the cell is simultaneously conceptualized as *machinery*, the *apparatus*, a *machine*, or a *device*. As can be seen, both the imagery and the selection of source-domain elements of the metaphor THE CELL IS A MACHINERY/APPARATUS/MACHINE/DEVICE is consistently retained in the Serbian translation (S: *машинерија*, *апарат*, *машина*, *уређај*). However, it should be noted that the translator did not just retain the MACHINE metaphor, but he/she further strengthened and expanded it by adding the engineering-related verb *конструисан* (E: designed) as the equivalent for *evolved*.

Certainly the modern cellular machinery, the apparatus of DNA replication and protein synthesis, has all the hallmarks of a highly evolved, specially fashioned machine. We have seen how staggeringly impressive it is as an accurate data storage device.

Сигурно је да модерна хелијска машинерија, апарат за репликацију ДНК и синтезу протеина, има све карактеристике посебно конструисане и добро развијене машине. Видели смо колико је она запањујуће импресивна као прецизан уређај за чување података.

#### 4. CONCLUSION

This study explores the behaviour of MACHINE-based scientific English metaphors in Serbian translation, for which aim the Conceptual Metaphor Theory is applied. This theoretical framework, which was not originally designed for translation studies research, and was consequently criticized both for downplaying the extent of interlingual and intercultural variation in metaphor and for its notorious disregard for the importance of authentic rather than made-up, idealized examples, actually provides a robust starting point for research into metaphor in translation. The results suggest that metaphors that exploit the source domain of MACHINES show a high level of retention in the TL. In other words, the majority of metaphorical mappings between MACHINES and a whole spectrum of various target domains are preserved in translation to Serbian. The study finds that occasionally the metaphorical mappings, though retained, undergo slight modifications in terms of level (or generality), as they are established at: a) a more general level in the TL; b) the identical level but select a different source domain representative in the TL; c) a more specific level in the TL. Our analysis shows that MACHINE metaphors are only occasionally removed and rarely deleted, mainly for stylistic (to avoid repetition) or linguistic reasons (because the corresponding TL lexeme shows no suitable metaphorical extensions of meaning). Additions of MACHINE metaphors in the TT were few and primarily motivated by the translator's wish to preserve the clarity of the picture.

Apart from clarity, there were other arguments guiding the translator's motivation for modifications, removals and deletions of MACHINE metaphors. The imagery and ideology produced by the mappings based on this source domain, mechanistic as they necessarily are, have been shown to primarily highlight the target domain in terms of stability, efficiency and productivity, thus in turn producing a rather dehumanizing, bleak and gloomy depiction of the domains which they structure (Grujić 2018). It is our conclusion that the Serbian translators were guided by the wish to slightly soften the edges of such harsh metaphorical mappings when they decided to reduce either their frequency (by removing and deleting them) or their potency (by selecting a less intimidating member of the category, e.g. mechanism instead of machinery). However, the true causes of metaphor removal, deletion and addition can only be established by further studies of metaphor in translation, a complex but fast growing topic. This will contribute not just to our understanding of metaphor in translation and to translation studies research, but to our comprehension of translation in general.

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**Татјана С. Грујић** / МЕТАФОРА МАШИНЕ У ПРЕВОДУ СА ЕНГЛЕСКОГ НА СРПСКИ

**Резиме** / Ова студија, користећи теоретски оквир когнитивне лингвистике, односно теорије појмовних метафора, испитује метафоре засноване на изворном домену машине у преводу са енглеског на српски језик. Претходне студије показале су да постоји изузетно висок степен сличности у погледу распона појмовних домена које метафора машине структурира у ова два језика, као и у погледу међудоменских пресликавања која се одвијају између машине и других појмовних домена. Ова студија представља следећи корак у испитивању на машини заснованих метафора у два језика јер испитује њихову преводивост, односно преводну постојаност, користећи више стотина примера ексцерпираних из корпуса научно-популарних текстова. Резултати потврђују почетно очекивање да је у питању метафора високог степена стабилности, која се у највећем броју случајева задржава у циљном тексту. Одређене модификације при задржавању, које су запажене у једном мањем броју примера, могу се свести на генерализацију, конкретизацију и замену представника изворног домена у циљном језику, док је до брисања метафоре машине или њеног потпуног уклањања долазило ретко. Такође се бележи спорадично додавање на машини заснованих метафора у преводу, односно јављање метафоричких преводних израза које у изворнику није могуће идентификовати.

**Кључне речи:** појмовна метафора, превођење метафоре, стабилност метафоре, научно-популарни функционални стил

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## **A CURIOUS CASE OF /t/ and /d/ SPIRANTIZATION IN SERBIAN-ENGLISH INTERPHONOLOGY**

The paper explores a subtype of the phonological process of lenition, more precisely, the phenomenon of spirantization in the Serbian-English interlanguage system. During the process of spirantization, plosive sounds transform into fricatives and the factors causing altered realizations may stem from various sources, the most prominent being mother tongue interference. For example, due to the specific pronunciation of alveolar stops and fricatives in L1, Spanish learners of English as a foreign language tend to transfer the feature into their L2, causing thus all voiced plosives, regardless of the place of articulation, to transform into fricatives (Zampini 2008). However, the phonological system of Serbian is not characterized by the same processes, hence, the occasional spirantization in the interlanguage system, we argue, cannot be derived from mother tongue interference, yet may be the result of other factors, such as, qualitative hypercorrection. The analyzed corpus was obtained from the recordings of a spontaneous speech by 15 Serbian English-major students at the tertiary level of education. We investigated the instances of spirantization using the methods of acoustic analysis and spectrographic illustrations via *Praat*, version 6.2.04. The findings indicated that only alveolar plosives (both voiced and voiceless) were spirantized, most frequently in accented position. Regarding the phonetic environment, the word-initial pre-vocalic position, as well as the word-final post-vocalic and post-consonantal position, triggered the highest frequency of spirantization occurrence. Acoustic measurements confirm the initial assumptions regarding the specific nature of spirantized variants [dz], [ts], [ð] and [θ]. The results have important pedagogical implications and provide insights into the complexity of cross-linguistic influence.

**Keywords:** spirantization, Serbian-English interlanguage, plosives, fricatives, affricates, hypercorrection

### **1. INTRODUCTION**

During the process of second language acquisition, learners internalize certain principles and regularities that they encounter while being exposed to the target language either through formal instruction or by direct linguistic experience in a native-speaking country. Thus, the process of developing a complex interlanguage phonological system is by no means less creative than the one involved in first language acquisition. Rather

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than regarding it as a collection of separate categories changing gradually over time or remaining frozen at a particular state, the interlanguage phonological system should be considered as a continuum of ever-evolving forms with the ultimate aim of reaching the near-L2 features.

Studies dealing with the acquisition of L2 phonological system have continuously pointed to the difficulties learners face in acquiring the articulatory and acoustic properties of target sounds simultaneously striving to define the most important factors influencing native-like production attainment (Moyer 2004). Even though the methodological approaches and interpretation designs might have been different, the one factor that has been recognized as prevailing and overarching among internally driven factors explaining errors in the L2 pronunciation is definitely mother tongue interference (Ellis 1997: 51). The influence of native phonological system has been found particularly impactful at the beginning stages of learning (Major 1987).

The continuum of interlanguage phonology represents a dynamic system acting as a filter of sorts that, under the influence of various factors, eventually determines which L1 features will be preserved and combined, or utterly replaced by L2 phonetic characteristics. Some essential factors include the age of onset, type of input, and native-environment experience, along with a variety of extralinguistic factors, such as anxiety, motivation or learner attitudes. Furthermore, a significant predictor of an L2 sound acquisition success is individual aptitude, the factor being of particular importance for mastering the pronunciation of target sounds in a formal school environment, especially having in mind that not every student has an equally developed ability to observe and imitate the teacher, or any other type of input (Liu, Fu 2011). One aspect of individual aptitude, phonological short-term memory, was found to negatively correlate with an accurate perception of English consonants by L1 speakers of Italian (MacKay et al. 2001).

The present study forwards the investigations of interlanguage phonology by looking into the examples of spirantization, i.e. the fricativization of stop consonants among Serbian EFL learners. The aim is to establish the frequency of occurrence of spirantization, analyze the phonetic context that stimulates the latter and describe the acoustic features characterizing the sounds produced this way. Moreover, the goal is to modestly contribute to the theoretical accounts of L2 sound acquisition by offering an explanation related to the possible causes of spirantization in the interphonology of Serbian and English.



## 2. LEARNER STRATEGIES IN SECOND LANGUAGE ACQUISITION OF PHONOLOGY

In the complex process of learning and acquisition, driven by native-language phonological and phonetic features, i.e. the (dis)similarities with target sounds, learners often substitute a target sound for a familiar L1 sound, and although it was traditionally assumed that speakers use only one fixed substitute, studies have shown that differential substitution is characterized by variability (Rau et al. 2009). Differential substitution in interlanguage phonology is somewhat reminiscent of similar processes during the first language acquisition in children, since substitution strategies evolve in a similar fashion: plosives replacing fricatives and affricates, voicing of obstruents before vowels and devoicing of final obstruents, pronouncing sounds in the front part of the oral cavity, replacing liquid consonants with approximants, as well as the interchangeable use of /p/ and /t/ (Ingram 1991). The replacement of /k/ into /t/ is more common than vice versa, and the explanation lies in the acoustic similarity of the given sounds (Ohala 2007). Along with differential substitution, it is well-established in SLA literature that learners resort to avoidance and overgeneralizations as strategies to compensate for issues arising in target sound production.

One of the strategies is also hypercorrection, a term derived from studies of language variation and change. In sociolinguistics, hypercorrection happens when speakers are aware that certain language forms are more prestigious, so they mistakenly use them in contexts where these would not be expected by prescriptive rules (Labov 1972). Labov termed this type of hypercorrection *quantitative* or *statistical*, since it referred to an increased use of a more prestigious form resulting in a grammatically acceptable utterance. The major cause is linguistic insecurity, yet factors such as age and educational level might likewise trigger it (Angermeyer, Singler 2003). However, the widely accepted term for the type of hypercorrection in SLA, the one the present research is particularly interested in, is *qualitative* hypercorrection (*structural* in Labov's terminology), representing an avoidance strategy, in which speakers tend to use a more prestigious form (presumably a target language form for foreign language learners) in a place where it does not belong, consequently resulting in an ungrammatical utterance (Janda, Auer 1992). Eckman et al. (2013) re-considered the previous notions that hypercorrection stems exclusively from mother tongue interference, thus simply representing a subtype of overgeneralization and overreaction to L1 influence. The view that hypercorrection cannot come early in SLA, but is positively correlated with the learner's educational level and is a result of linguistic insecurity and confusion (Angermeyer, Singler 2003; Eckman et al. 2013) is adopted in the current study, as well. If the native language does not possess similar phonetic patterns happening in interlanguage hypercorrection instances, one cannot speak

of mother tongue interference, yet there are other variables to be taken into account.

### 3. THEORETICAL BACKGROUND ON SECOND LANGUAGE ACQUISITION OF PHONOLOGY

There are quite a few theoretical models offering explanations for L2 sound acquisition, some of which are predominantly focused on production (e.g. the *Markedness Differential Hypothesis* (Eckman 1991) or the *Ontogeny Phylogeny Model* (Major 2001)), while others concentrate on perception and the intertwined relationship between the two modalities (e.g. the *Perceptual Assimilation Model* (PAM) (Best 1994) and the *Speech Learning Model* (SLM) (Flege 1995)). Both of the latter two models, adopted by the present study, as well, have been subjected to extensive research leading to the revised forms PAM-L2 (Best, Tyler 2007) and SLM-r (Flege, Bohn 2021). The common feature of the two is the notion that the difficulties in acquiring L2 sound system can be predicted based on the similarities/differences in L1 and L2 phonological systems.

According to PAM-L2, an example of direct realist theories of speech perception, a learner's native language will affect their ability to perceive the subtle phonetic details in the L2 input, resulting in L2 contrast assimilating to two L1 categories, L2 phones varying in category goodness assimilating to one L1 category, and some L2 sounds being unassimilable because they are perceived as non-speech sounds (Best 1994; Best, Tyler 2007). The core tenets of SLM state that the successfully perceived differences between L1 and L2 phonetic categories will lead to native-like L2 production, vaguely suggesting the linear relationship between perception and production, even though the model never explicitly underlines that the successful perception will definitely cause native-like production (Flege 1995). The revised version of the model recognizes the co-evolving of perception and production, emphasizing the very process and development of L2 category formation through careful consideration of L1 and L2 phonetic nuances distinction among learners who differ greatly in various aspects (Flege, Bohn 2021). Nevertheless, the model has yet to answer whether these learner differences affect the overall speed of acquisition. Even though both models emphasize the necessity of establishing crosslinguistic similarities before a successful L2 sound acquisition, a myriad of factors needs to be included in the analysis since, as relevant research has shown, even speakers of the same L1 display variable patterns of perceptual assimilation (Waltmunson 2005; Mayr, Escudero 2010). The PAM-L2 model has been applied in numerous studies (e.g. Antoniou et al. 2013; Faris et al. 2016), as well as SLM-r (Wayland 2021; Zhou et al. 2022), although it has yet to be investigated especially through longitudinal approaches.

#### **4. SPIRANTIZATION AND THE PHONOLOGY OF SERBIAN AND ENGLISH**

Spirantization represents a process of lenition, whereby plosives are either used interchangeably or in complementary distribution (e.g. in Spanish) with homorganic fricatives (Warner, Tucker 2011). Various factors impact the degree of lenition, including phonetic context, task formality, position in a word and lexical stress. More frequent lenition was found post-vocally in non-word-initial and unstressed positions, and in a rapid, conversational style. Additionally, spirantization is more likely to occur in high-frequency vocabulary (Bybee 2001). Having in mind that the lenited plosives are not characterized by high-frequency ranges, researchers have likewise used the term “approximant” in lieu of “spirant” (Carasco et al. 2012: 150). Judging by the available literature, previous studies have mostly addressed L2 spirantization as a result of L1 transfer in the interlanguage. Hence, Zampini (1996, 2008) and Algara et al. (2004) demonstrated mother tongue interference with Spanish speakers of L2 English. Contrary to traditional accounts, studies found instances of spirantization among native English speakers, especially in spontaneous speech (Warner, Tucker 2011; Riebold 2011). When it comes to the relevant acoustic measurements employed, studies have predominantly focused on intensity (Ortega-Llebaria 2004; Eddington 2011).

In the process of target sound acquisition, Serbian EFL learners are confronted with the following phonological makeup of English and Serbian plosive, fricative and affricate sounds (only the three classes shall be discussed since they are found relevant for the research conducted in the present paper):

a) in English there are bilabial /b/, /p/, alveolar /d/, /t/ and velar /g/, /k/ plosives. /b/, /d/, /g/ are voiced, and /p/, /t/, /k/ are voiceless. Regarding fricatives, there are labiodental /v/, /f/, dental /ð/, /θ/, alveolar /z/, /s/, postalveolar /ʒ/, /ʃ/ and glottal /h/. /v/, /ð/, /z/, /ʒ/ are voiced, and /f/, /θ/, /s/, /ʃ/, /h/ are voiceless (Ladefoged 2006). Voiceless plosives are aspirated in English, an allophonic variation absent from Serbian, at least based on traditional accounts. There are only two postalveolar affricates in English, voiceless /tʃ/ and voiced /dʒ/;

b) in Serbian, there are bilabial /b/, /p/, and velar /g/, /k/ plosives. Classifications regarding /d/ and /t/ are somewhat different depending on the author. Namely, they range from dental to alveolar (Simić, Ostojić 1996: 195; Petrović, Gudurić 2010). When it comes to phonation, the distribution of plosives is the same in both languages. Fricative classification exhibits even more disagreement among authors, especially voiced labiodental /v/, which is traditionally classified as sonorant, while more recent accounts view it as a fricative (Petrović, Gudurić 2010). The latter authors add /j/ into the class of fricatives, as well. There is also the voiceless labiodental /f/, voiceless dental /s/ and its voiced counterpart /z/ (recognized as alveolar, as well (Petrović,

Gudurić 2010)), palatal voiced /ʒ/ and voiceless /ʃ/, as well as voiceless velar /h/. When it comes to affricates, the phonology of Serbian offers more variants than English: voiceless dental /ts/, and alveo-palatal voiceless /tʃ/, /tʃʃ/ and voiced /dʒ/, /dʒʒ/.

These subtle phonetic differences posit a particular problem for second language learners, resulting in various degrees of perceptual assimilation and equivalence classifications, demonstrated in previous studies (cf. Jerotjević Tišma 2019a, 2019b).

## 5. METHODOLOGY

*Aims of the Research.* The aim of the present paper revolves around investigating instances of spirantization in the interphonology of Serbian and English, thus seeking to establish the phonetic context that triggers it (incorporating word position and stress), the overall frequency of occurrence and provide an acoustic and articulatory description of the lenited sounds. Furthermore, the goal is to offer a possible explanation for the state of affairs following the tenets of the selected theoretical frameworks (PAM-L2 (Best, Tyler 2007) and SLM-r (Flege, Bohn 2021)).

*Research Questions.* The research is based upon the following research questions:

- What is the frequency of occurrence of spirantization in our particular corpus?
- Is spirantization exhibited by Serbian EFL learners dependent on a specific place of articulation and voicing?
- Which phonetic context is the spirantization triggered by? What is the role of stress?
- What are the acoustic features relevant for describing instances of spirantization among Serbian EFL learners?
- What are the possible factors of spirantization?

*Participants.* The target sample of participants was composed of 15 second-year English-major students at the Faculty of Philology and Arts, University of Kragujevac, who have been recognized as occasional “spirantizers” during the regular classes of English Phonetics and Phonology, throughout the course of four generations of students<sup>2</sup>. The number 15 composes 6.58% of the total number of students, showing that spirantization is not fairly frequent among the selected Serbian EFL learners. However, bearing in mind that these were highly proficient students striving to become teachers of English, we deemed them valuable source of informa-

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2 Based on the personal teaching experience of the author of the paper, spirantization does not occur among a large number of Serbian EFL students encountered during the Phonetics and Phonology courses, therefore the sample of participants belonged to four different generations of students. However, the conditions of recording and sample selection were performed on identical terms for the sake of validity and accountability.

tion regarding interlanguage variability. All the participants were female (average age=21.26) and the currently assessed proficiency level was B2 CEFR<sup>3</sup>.

*Instruments and Procedure.* To avoid the observer's paradox and careful speech issues during formal word list reading, the spontaneous speech was elicited using the interview technique. The participants were asked to self-record themselves answering a list of pre-planned questions regarding their everyday life (e.g. What are your plans for the future? What is your dream job? How do you define success? Have you ever travelled abroad?, What is your dream travel destination? etc.). The interview contained twelve questions including the introductory one asking the participants to present themselves in a few sentences. The total length of the recordings was 137 minutes, with the average duration of an individual recording of 9.13 minutes. The recording took place in the academic year 2016/2017, 2017/2018, 2021/2022 and 2022/2023, with the students receiving course credits for participation. The collected recordings were later analyzed for spirantization occurrences (stop consonants being pronounced as fricatives), and subjected to auditory and acoustic analysis. Segments where speech was flowing naturally and the speaker was most relaxed were extracted for further analysis. Repeated words were also counted as examples of spirantization, meaning that each spiranted sound was counted as one regardless of the multiple appearances in the same words. All the participants signed the consent form beforehand. They were provided with thorough instructions on how to make the recordings, using the same voice recording application on their mobile phones at the 44.1 kHz sampling frequency, saved in waveform audio file format suitable for analysis in *Praat*, version 6.2.04 (Boersma, Weenink 2021). The fricativized examples were analyzed measuring the relevant parameters in fricative analysis, the latter being centre of gravity, standard deviation, skewness and kurtosis, supported by measures of duration and intensity. The aforementioned parameters will be explained in more detail in the following section of the paper. The necessary descriptive statistics were conducted using SPSS, version 24.

## 6. RESULTS AND DISCUSSION

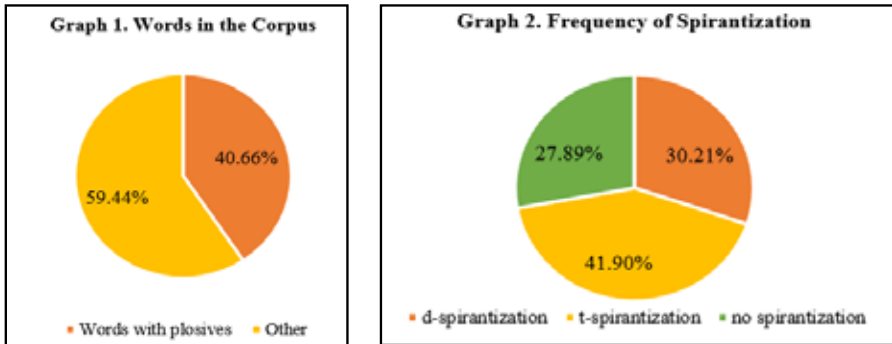
Even though the initial audio analysis of the recordings clearly demonstrated that bilabial and velar plosives showed no signs of spirantization, this was also acoustically confirmed, which led to the exclusion of words containing /b/, /p/, /g/, /k/ from further analysis. Only alveolar plosives were investigated, and the following results relate to the aforementioned sounds exclusively. This points to the conclusion that place of articulation

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3 The participants were asked to do an in-class self-assessment using the online diagnostic tool available at <https://learnenglish.britishcouncil.org/english-levels/online-english-level-test>.

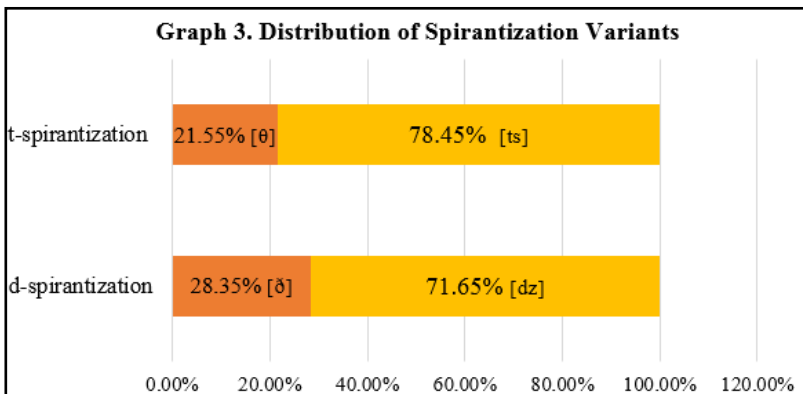
plays an important part in evaluating instances of spirantization among Serbian EFL learners for reasons to be explained in the ensuing sections of the paper.

Results of the quantitative analysis of the corpus related to the number of words containing plosive sounds are presented in Graph 1. Plosives appear in about 40% (n=3977) of the entire number of words in the selected corpus (n=9780).



Graph 2 shows frequencies of spirantization compared to all alveolar plosives in the corpus, and it is about one-third for /d/ (30.21%) and slightly higher for /t/ (41.90%). Looking at the entire corpus, this means that d-spirantization makes up 6.56% and t-spirantization forms 9.1% of all the pronounced plosives. As mentioned earlier, it may not be considered a significant number of examples prevailing the corpus, nonetheless, it may signal an ongoing process of L2 category formation.

Graph 3 displays a distribution of variants in relation to all the instances of alveolar plosive spirantization.

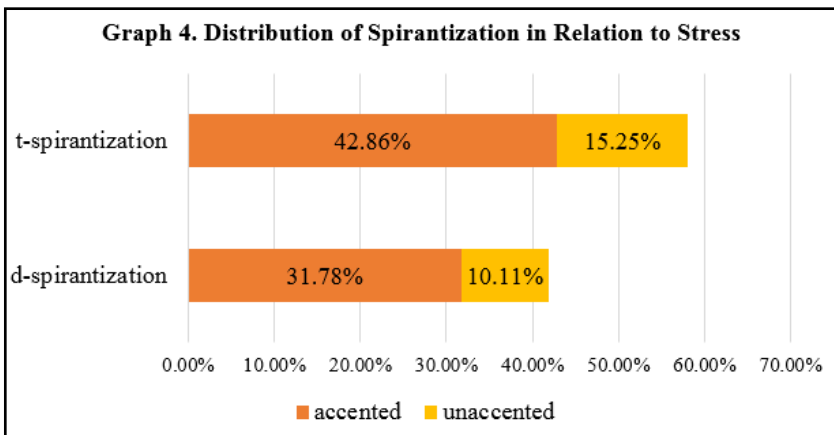


For the voiceless alveolar plosive, two variants are present in the corpus, a dental affricate (or a combination of a voiceless alveolar stop segment combined with a voiceless alveolar fricative) [ts] (78.45%) being the dominant one, and a voiceless dental fricative [θ] (21.55%). Voiced al-

veolar fricative has two variants, also, which arguably represent the voicing counterparts of the two previously mentioned variants of the voiceless alveolar stop. Namely, there is the voiced alveolar plosive and voiced alveolar fricative combination [dz] (71.65%) and the voiced dental fricative [ð] (28.25%). The voiceless dental affricate [ts] is present in the Serbian phonological system, while absent from English, and [dz] is absent from both Serbian and English. Both variants of dental fricatives are absent from the phonological system of Serbian and present in English. The important cue seems the element of fricativization in every variant, and affricates may designate learners' insecurity since they contain both the plosive and the fricative element.

Having in mind that both voiced and voiceless alveolar plosives show similar frequency of occurrence, voicing may not be a triggering factor for spirantization displayed by Serbian EFL learners.

Graph 4 answers the research question related to the effect of stress position on spirantization by exhibiting the distribution of spirantized sounds in accented and unaccented positions in relation to a total number of instances of spirantized alveolar plosives.



Contrary to previous findings (Warner, Tucker 2011), accented position showed a higher percentage of spirantization examples in the present corpus. This could point to the conclusion that stressed position triggers instances of marked pronunciation, as is usually the case in second-language phonology. It could also indicate a specific composition of vocabulary that facilitated such uneven distribution, resulting, of course, from the singularity of the corpus composed of spontaneous speech.

The results of the frequency counts for the distribution of alveolar plosive spirantization in different phonetic contexts are displayed in Table 1.

Table 1. Distribution of Spirantized Alveolar Plosives in Different Phonetic Environments

Plosive	Phonetic Context				
	/#_V	/#_C	/V_V	/V_#	/C_#
/d/	36.78%	6.51%	8.43%	26.82%	21.46%
/t/	19.34%	12.70%	10.50%	35.64%	21.82%

Judging by the examples from the current corpus, spirantization prevails in initial pre-vocalic, and final positions following either a vowel or a consonant. The initial pre-vocalic position is particularly stimulating for voiced alveolar spirantization, while the word-final postvocalic position represents the environment where t-spirantization is especially prolific. The least triggering position for the voiced alveolar spirantization is word-initial pre-consonantal, which is probably due to the fact that approximants (following /d/ due to the phonotactic constraints of English), in our case mostly /r/, cause retraction rather than spirantization, but also affect articulatory gestures preparing them for the articulation of sounds higher in sonority. Nevertheless, it is interesting that the situation is not the same for the voiceless alveolar plosive, since the percentage of occurrence is almost two times higher. The possible explanation may lie in the voicing, and vocal fold vibration, which is a feature that switches off for /t/ making the configuration of the vocal tract less complex and challenging for EFL learners. A similar explanation could be offered for the word-initial pre-vocalic differences in the distribution of /d/ and /t/. Namely, it is well-known that vowels make pronunciation easier, consequently, an additional feature, such as voicing, does not make things more difficult for pronouncers. A relatively low percentage of occurrence in medial intervocalic positions could be explained using similar argumentation. A further reason may lie in the specific phonological composition of the particular words found in the corpus. Examples of medial positions other than intervocalic were excluded from analysis because of the specific nature of the corpus resulting in the uneven number of examples. Anyhow, the results indicate that phonetic context is a relevant factor for elucidating alveolar plosive spirantization in Serbian-English interphonology.

Table 2 displays the acoustic measurements relevant for the spirantization variants in the present corpus, the variants being fricatives.

Table 2. Mean Values of Spectral Moments for Instances of Spirantization

Spectral moments	Spirantized plosives			
	[dz]	[ts]	[ð]	[θ]
<i>Centre of Gravity (Hz)</i>	9820	10259	6498	6028
<i>Standard Deviation</i>	2420	1790	3227	2884



<i>Skewness</i>	-0.11	0.86	-0.15	0.09
<i>Kurtosis</i>	0.02	3.17	0.34	-0.32
<i>Intensity</i>	72	70	54	57
<i>Duration (ms)</i>	350	246	205	280

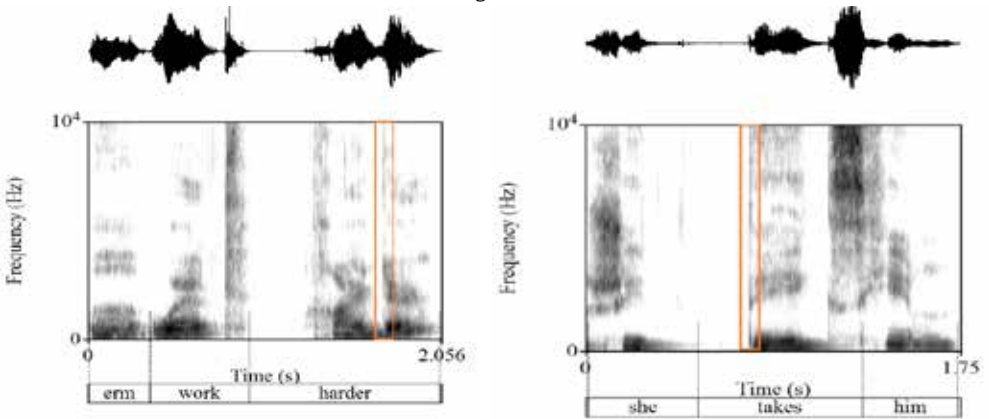
The centre of gravity or centroid frequency indicates how high the frequency is in the spectrum on average (Maniwa et al. 2008). Dispersion or standard deviation shows the level of dispersion of aperiodic noise in the spectrum – the higher the value, the wider the noise area. The skewness points to the highest concentration of aperiodic energy in the spectrum having an asymmetric appearance, and if the value is positive, it means that most of the energy is located above the centre of gravity, and vice versa. The kurtosis value shows how much of the spectral energy is accumulated in the main amplitude in relation to the rest of the spectrum, i.e. how prominent the main amplitude is compared to other parts of the fricative spectrum.

Acoustic measurements performed for the purposes of the present research clearly demonstrate that the variants substituting alveolar plosives are different sounds. Furthermore, the results confirm heavy fricativization. Namely, alveolar affricates show high values of frequency indicating the presence of strident fricative noise. Dental fricative variants display lower frequencies, as expected, yet higher than the usual measurements of English dental fricatives (Ladefoged, Disner 2012). The latter may evidence a singularly dynamic nature of pronunciation in the interlanguage, when learners combine phonetic elements of diverse sounds to produce an interlanguage-specific variant. The intensity is higher in affricate variants, also as expected, whereas duration measurements indicate that the voiced alveolar affricate lasts the longest, with the voiced dental fricative lasting for the shortest amount of time. It seems worth mentioning that a single-segment duration of about 200 ms may point to learner effort or hesitation related to the pronunciation of a particular sound or the specific environment.

The following four figures are presented as illustrations of the specific instances of spirantization encountered in the corpus, supporting the previous quantitative findings.

For the sake of clarity and further comparison, Figure 1 displays two spectrograms of the voiced and voiceless alveolar fricative showing no signs of spirantization.

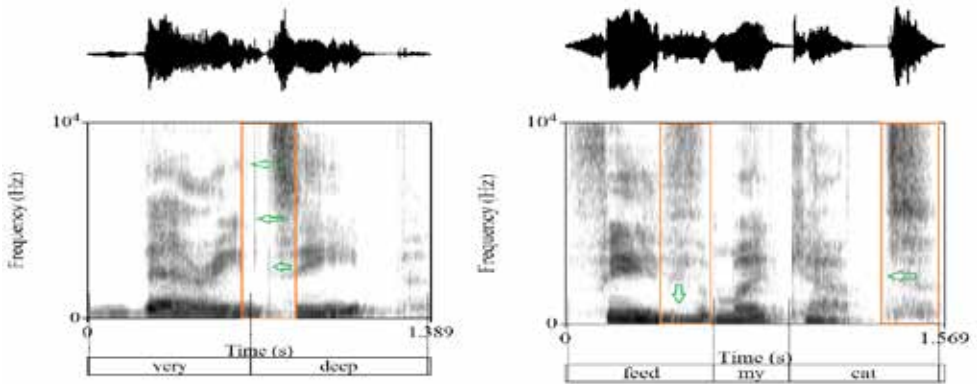
Figure 1. Spectrograms Displaying Non-Spirantized Alveolar Plosives /d/ (left) and /t/ (right)



In both pictures, there is a visible release burst following a relatively short period of occlusion accompanied by a voice bar (for /d/), and a longer period of occlusion with the absence of a voice bar (for /t/) showing typical examples of plosive articulation. Formant transitions point to the alveolar place of articulation. The picture on the right likewise displays barely visible signs of frication, marking fairly little aspiration.

However, the following two figures display different configurations, presenting spirantization variants for the voiced alveolar in Figure 2, and the voiceless alveolar plosive in Figure 4.

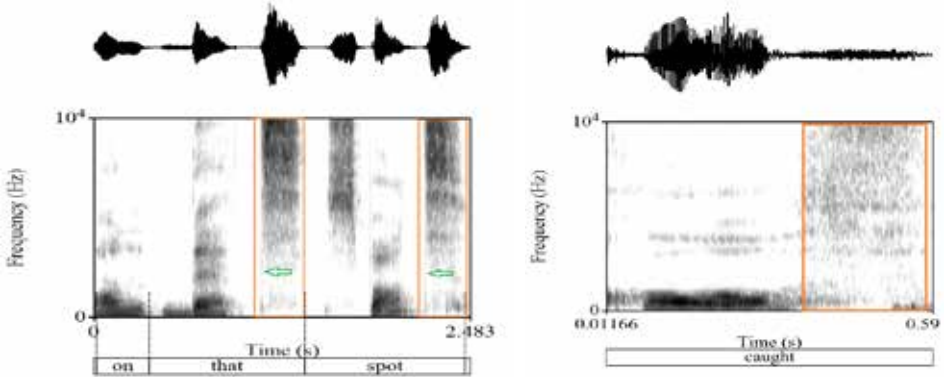
Figure 2. Spectrograms Displaying Spirantization of a Voiced Alveolar Plosive, [dz] (left) and [D] (right)



The spectrogram on the left displays intense frication in higher regions of the spectrum with three obvious, though unusual, release bursts, which may point to hesitation. The voice bar is barely visible which may point to word-initial devoicing, even though the environment is fully

voiced. In the spectrogram on the right there is a clearly visible voice bar, the energy is situated in the lower region of the spectrum and the intensity is weaker. It seems interesting to note that the final segment in the word “cat” is heavily fricativized pointing to a strident fricative of strong intensity.

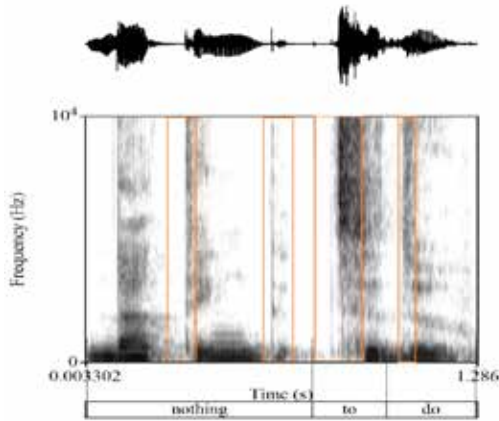
Figure 3. Spectrograms Displaying Spirantization of a Voiceless Alveolar Plosive, [ts] (left) and [T] (right)



The spectrogram on the left is fairly informative in several aspects. The spirantized voiceless alveolar is evident by the presence of the release burst, high-intensity noise and the absence of a voice bar. One may assume that the following alveolar fricative in the word “spot” might have triggered the spirantized pronunciation, yet there is a clear blank area in the spectrogram indicating a pause between words. The spectrogram on the right displays only one word, the variant being voiceless dental fricative which is evident by the absence of a voice bar and weak-intensity noise in the lower regions of the spectrum. This example is particularly relevant because it underlines a possible explanation for the presence of spirantization. Namely, examples of “ght” combinations in spelling exhibit spirantization in the corpus almost invariably (“ht” being the reverse of “th”, resulting in frequent mistakes, as well). This could emphasize the significance of orthography in second language learning, the specific orthography of English being one of the possible causes triggering fricativization of plosives in Serbian-English interphonology.

Finally, Figure 4 illustrates both scenarios present among learners in the current sample, plosivisation of fricatives and fricativization of plosives.

Figure 4. Spectrogram Displaying Plosivization and Fricativization in the Serbian-English Interphonology



Firstly, the period of occlusion and the ensuing release burst indicate a voiceless plosive instead of a voiceless dental fricative in the word “nothing”, showing a typical differential substitute for /θ/. It seems interesting to note the release burst at the end of the same word demonstrating that the speaker is pronouncing [ŋ] instead of [ɲ], a frequent substitute likewise stemming from the specific orthography of English, different from the phonemic alphabet in Serbian. Furthermore, the initial segments of “to” and “do” display strong intensity of high-frequency noise pointing to spirantization.

Judging by the results of descriptive statistics and the acoustic measurements, a possible explanation is offered for the factors behind the presented examples of spirantization in the Serbian-English interphonological system. Instead of interpreting them as direct results of mother tongue interference, we argue that spirantization of alveolar plosives additionally stems from qualitative hypercorrection with learners seeking what they believe to be a more prestigious target form (in this case probably dental fricatives, or even aspirated plosives) and use them in the environments where these are not expected. However, since they are not native-like pronouncers of dental fricatives, they further overgeneralize the phonetic features, which results in other variants, such as [dz] and [ts]. There are no examples of spirantization in Serbian, especially not with alveolar plosives, and it is not fairly frequent in English, either. Therefore, mother tongue interference may not be at hand here, at least not directly and explicitly. The participants in the sample are at the late stage of learning (being at B2 level CEFR), which could additionally confirm the plausibility of hypercorrection interpretation (Eckman et al. 2013). Moreover, orthography is an important factor to be considered, especially in the examples of words ending in “ght”. Nevertheless, the interconnectedness of the transfer and

hypercorrection phenomena is by no means denied here, especially having the phonological system of Serbian affricates in mind.

## 7. CONCLUSION

The overall aim of the present paper was to investigate instances of spirantization in the interlanguage phonology of Serbian and English. More specific goals revolved around analyzing the frequency of occurrence and phonetic environment, as well as providing acoustic and articulatory descriptions of the spirantized variants in the chosen sample.

The findings obtained via quantitative and acoustic analysis of the examples in the corpus indicated that alveolar plosives are subjected to spirantization exclusively. No other place of articulation triggered spirantized variants among Serbian EFL learners. Both voiceless and voiced alveolar plosives were fricativized, which demonstrates that phonation does not play a significant role in determining the occurrence of the analyzed phenomenon. The phonetic environment seems to be an important stimulator of variability, since word-initial pre-vocalic and word-final positions triggered the highest percentage of occurrence of spirantization for both alveolar plosives. Spirantization was found particularly frequent in accented positions. Acoustic measurements of spectral moments displayed supporting evidence for spirantization further pointing to differences in duration and intensity.

Having in mind that the sampled population of learners was at a later stage in learning (not in the beginning phases), mother tongue interference could not be offered as a single source of explanation for spirantization, especially considering the fact that spirantization is absent from Serbian (L1) entirely and English (L2) for the most part. Qualitative hypercorrection was deemed more plausible in accounting for pronunciation variability, accompanied by specific spelling conventions in English as an externally driven factor.

The limitations of the present study mostly relate to the relatively small number of participants and particular methodological design eliciting spontaneous speech. Perhaps a more controlled testing format could have yielded different results. Future research should focus on other factors influencing instances of lenition in the Serbian-English interlanguage phonology, such as type and amount of input or language experience.

The results of the conducted research indicated that spirantization was not a frequent strategy for substituting target sounds. However, they pointed to the important factors contributing to the complexity of the interlanguage system showing a substantial degree of variability throughout the process of new category formation (Best 1994; Flege 1995; Best, Tyler 2007; Flege, Bohn 2021). Whether the goal is the ultimate attainment of native-like pronunciation or intelligible pronunciation, familiarization

with possible causes and effects of the dynamicity of interlanguage could offer insights enabling different approaches to second language acquisition and learning.

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**Даница М. Јеротијевић Тишма / О НЕОБИЧНОМ СЛУЧАЈУ СПИРАНТИЗАЦИЈЕ У СРПСКО-ЕНГЛЕСКОЈ МЕЂУЈЕЗИЧКОЈ ФОНОЛОГИЈИ**

**Резиме** / У раду се истражује подтип фонолошког процеса лениције, тачније, феномен спирантизације у српско-енглеском међујезичком систему. Током процеса спирантизације, пловиви се трансформишу у фрикативе, а фактори који изазивају измењене реализације могу да потичу из различитих извора, међу којима је најистакнутији интерференција матерњег језика. На пример, због специфичног изговора алвеоларних пловива и фрикатива у матерњем језику, шпански ученици који уче енглески као страни језик преносе дату особину на други језик, узрокујући тако да се сви звучни пловиви, без обзира на место артикулације, трансформишу у фрикативе (Зампини 2008). Међутим, фонолошки систем српског језика не карактеришу исти процеси, стога сматрамо да спорадична спирантизација у међујезичком систему није сасвим производ интерференције матерњег језика, већ може бити резултат других фактора као што је квалитативна хиперкорекција. Анализирани корпус добијен је снимањем спонтаног говора 15 српских студената англистике на терцијарном нивоу образовања. Истраживали смо случајеве спирантизације користећи методе акустичке анализе и спектрограмске илустрације користећи програм *Praat*, верзију 6.2.04. Утврђено је да су само алвеоларни пловиви (звучни и беззвучни подједнако) спирантизовани, и то најчешће у акценатованој позицији. Што се тиче фонетског окружења, спирантизација је најучесталија у иницијалној предвокалској позицији у речи, као и у финалној поствокалској и постконсонантској позицији. Акустичка анализа спектралних момената потврдила



је почетне претпоставке у вези са специфичностима спирантизованих варијанти [dz], [ts], [ð] и [θ]. Резултати имају важне педагошке импликације и пружају увид у сложеност међујезичких утицаја.

**Кључне речи:** спирантизација, српско-енглеска међујезичка фонологија, пловиви, фрикативи, африкате, хиперкорекција

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## **SEMANTIC FEATURES OF STANCE TAKING: AN ANALYSIS OF L1 SERBIAN/L2 ENGLISH WRITING AT THE TERTIARY LEVEL**

Stance taking is a topic of some interest in the L2 English language teaching and learning community. So far it has been analyzed in a variety of foreign languages. In the Serbian linguistic environment, it has been the focus of studies carried out by Blagojević (2004, 2009, 2010, 2011, 2012), and Veličković and Danilović Jeremić (2020, 2021), inter alia. Some of the reasons why it is a topic of interest are the various types of stance that can be assumed and the various types of both syntactic and lexical units that can be used to convey it. It is also a component of L2 writing that needs to be explicitly addressed in the EFL classroom. With that in mind, the aim of this study is to continue with the work previously done on a variety of syntactic units used to convey stance in the L1 Serbian/L2 English environment, by extending it to include lexical/semantic features associated with stance taking. In particular, the focus will be on adjectival and verbal collexemes (as per Wang et al. 2022), in combination with the introductory *it*-pattern. The analysis will be carried out on a corpus of expository essays written by fourth-year English language majors attending the University of Niš. The results should shed further light on where proficient L1 Serbian students of English stand on this particular topic, and combined with previous results, will clarify which steps need to be taken further.

**Key words:** stance taking, EFL writing, adjectival and verbal collexemes, the introductory *it*-pattern

### **1. INTRODUCTION**

The way L2 English learners write continues to be a topic of interest, and some of the reasons why include intercultural gaps and the specifics of Anglophone academic discourse. It is not often easy to express an opinion, i.e. stance in a foreign language (Hyland 2012), let alone in circumstances where far more than one factor needs to be taken into consideration (L2 proficiency, the medium, social dictates, polarity detection, even the Pollyanna principle). To date, stance has been studied both from the viewpoint of the grammatical structures used to convey it, and the lexical ones. In the Serbian linguistic environment, studies that focused on the latter include Blagojević (2004, 2009, 2010, 2011, 2012), Filipović et al. (2007), Veličković and Danilović Jeremić (2020, 2021), inter alia. Accordingly, the

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aim of this paper was to take a closer look at a corpus consisting of L2 English writing, produced by advanced learners of English at the tertiary level, to identify adjectival and verbal stance collexemes in combination with the introductory *it*-pattern and classify them in terms of the type of stance that they exemplify, as one of the crucial aspect of language use. The results are meant to assist both researchers and practitioners alike in their attempts to help L2 English writers broaden their range of possibilities in expressing stance and as a way of providing markers for the readers to interpret their meaning.

The variety of complements that a clause initial, introductory *it*-pattern can take may be an indication of an L2 English writer's level of proficiency (cf. Chandrasegaran & Kong 2006; Min et al. 2019) or an indication that further instruction is needed. The importance of studying stance in an L2 English environment is further supported by findings indicating that a continued negative stance expressed by the teacher can affect how learners respond to a particular subject (cf. Tainio and Laine 2015) and the fact that expressing stance is something L2 English learners are assessed on (cf. Chandrasegaran 2008; Lee & Deakin 2016).

The introductory *it*-pattern is particularly suited for determining an L2 writer's skills at language use considering the fact it consists of two subjects: the 'empty' introductory *it*, and a second notional subject which is usually incorporated within a complement *that*-clause, *wh*-clause, or infinitive clause. Preceding any of these clauses is an adjective which indicates the more subtle level of the stances adopted by the L2 English writer, offering once again further opportunity for the writer to express themselves and build a better rapport with the reader and for the assessor to evaluate their language use (Biber et al. 1999). To reiterate, the focus of this study are not the syntactic, but the lexical components of this particular structure:

“collexeme analysis assumes that the lexical items, which are significantly associated with the [introductory *it*] pattern, indicate its semantic connotations.” (Wang et al. 2022: 2)

## 2. THEORETICAL BACKGROUND

### 2.1. STANCE AND MODALITY

As defined and researched by Biber (2006; Biber & Finegan 1988, 1989; Biber et al. 1999), stance is the view, attitude, even judgment that a speaker/writer adopts regarding, in this instance, a particular proposition. It is an essential component of interpersonal communication. Crucial to our understanding of the phenomenon is the “Stance Triangle” (Du Bois 2007: 163):

“a public act by a social actor, achieved dialogically through overt communicative means, of simultaneously evaluating objects, positioning subjects (self and others), and aligning with other subjects, with respect to any salient dimension of the sociocultural field”.

Since stance is, therefore, also a social phenomenon, it is linked to certain norms which apply to broader behavior and means of address in social settings or the language we use and the way we behave in more specific situations, such as a classroom, a courthouse, the theatre, etc.

Wang et al. (2019) formulated a distinction that set the stage for the more modern approaches to the study of stance, one between sentiment polarity detection on the one hand, and stance detection on the other. While the former refers to the general popularity of a particular topic as viewed by society at large, the latter is a very clear indication of an individual's own perception of it, and position towards it.

Hyland (2015, 2012) gave a widely accepted definition of stance, one that relies heavily on establishing a relationship between a writer and a reader, often referred to as ‘authorial stance’. It is defined as being a complex phenomenon, consisting various dimensions such as personal/impersonal, present/absent, overt/covert, explicit/implicit, subjective/objective, involved/detached, or concrete/abstract.

Biber and Finegan (1989) determined instances of ‘faceless stance’ i.e. the absence of all stance features, in 65% of the samples in their corpus. Based on that, they drew the following conclusions: spoken language tends to express more affect than written and it is personal interaction that provides a suitable setting for stance markers rather than examples of academic writing. In addition, expository writing is taught as a more formal means of communication, with focus being on the proposition, rather than on the author's stance.

Stance is closely related to concepts such as *proposition* and *modality*, both of which require further clarification for the purpose of this paper. Propositions are statements of fact with no inferences meant to be derived from them, while at certain times the speaker/writer wishes to add a personal comment, express their attitudes towards propositions, indicate obligations, etc. (cf. Biber et al. 1999). In the English language, meanings related to modality mostly tend to include ability, permission, possibility (expressed using modal verbs such as *can/could*, *may/might*), advice and necessity (expressed using modal verbs such as *should*, *need*, *had better*), and even expressing future time (modal verbs such as *will/would*), while extended meanings do exist (Cowan 2008: 296 and on). Furthermore, modality functions along a scale, as can be seen in examples such as *I might do it*, as opposed to *I will do it*.

There are four types of modality, which mostly correspond to the four types of stance analyzed in this paper: epistemic, which indicates the speaker's (or in this case writer's) certainty about whether or not the proposition is truthful; deontic, which refers to duty/obligation or a lack

thereof as it pertains to the proposition itself; dynamic, which has to do with ability or maybe willingness as it pertains to individuals; and alethic modality, which does not take the speaker's perceptions into consideration, but instead objective facts or universal truths. Each of these types of modality can further be divided into subtler 'shades' of meaning. Furthermore, it is possible for more than one modality to be found within a single sentence, as in *The sailors might be allowed to take shore leave.*

## 2.2. STANCE AND THE INTRODUCTORY *IT*-PATTERN

One of the reasons why the introductory *it*-pattern has received much attention in studies devoted to stance is its complex internal structure. Its most frequent sub-patterns are the *it* verb-link adjective (ADJ) *to*-infinitive clause or the *it* verb-link adjective (ADJ) *that*-clause one. The clause itself is the extraposed subject, while the verb contains the speaker/writer comment on that subject clause. At the same time, the introductory *it* is 'an impersonal stance expression' which renders it a means of hedging, and a structure well-suited to academic writing (Bieber 2006). Due to its internal complexity, the pattern first provides a 'framework of interpretation' for the upcoming proposition. Herriman (2000) provided a classification of the different types of stance conveyed using this particular pattern: epistemic (conveying likelihood), deontic (conveying desire/need), dynamic (referring to laws and conditions), and evaluation (expressing value judgments).

Another seminal classification stems from Biber's 2006 taxonomy, based on the following semantic categories and exemplified in the following parts of speech: 1) epistemic certainty (e.g., *certain, obvious, apparent; naturally, surely; conclude, find*), 2) epistemic likelihood (e.g., *likely, probable; seemingly, probably; seem*), 3) attitude and emotion (e.g., *sad; sadly, fortunately; consider, believe*), 4) evaluation (e.g., *important*), 5) ability or willingness (e.g., *able*), 6) ease or difficulty (e.g., *easy, hard*), and 7) hedges (e.g. *a bit, a little*).

## 2.3. PREVIOUS STUDIES

Initially, Wang et al. (2019) took some key steps in introducing stance analysis into the field of data mining. Later, Wang et al. (2022) studied adjectival and verbal collexemes as a semantic means of expressing stance. In the case of epistemic stance, the authors recorded what they refer to as 'varying degrees of (inter)subjectivity' and confirmed the dominant positive 'likelihood judgment'; in the case of deontic stance, a predominant pattern of modal verb use was noted and confirmed scalar values of obligation and volition associated with this type of stance, in particular lower values when deontic stance is associated with the impersonal introductory *it*-pattern; in the case of dynamic stance, the idiomatic nature of the introductory *it*-pattern was determined, based on the 'difficulty-of-perfor-

mance assessment' linked to this stance and the circumstances required to realize the proposition; in the case of the evaluation stance, a certain conflation was noted between this type of stance and deontic stance, whereby the former conveys more politeness.

Alqurashi (2022) adopted the new approach to the study of stance, introducing it to fields of opinion mining and machine learning, as well as natural language processing. His research was based on the aforementioned distinction between sentiment polarity and stance in Arabic and analyzed stance taking by means of tweets on the topic of distance learning during the COVID pandemic.

Even more recently, Andries et al. (2023) took a multi-modal approach to stance taking. The necessity of this approach is explained both by the fact that language use is such that it is virtually impossible for us not to express attitudes (Jaffe 2009) and that language itself is situated in a variety of modalities (including visual and acoustic), where meaning is both conveyed and negotiated. Their systematic review, based on 244 articles, provided the following conclusions: that multimodal construction can foreground, mitigate, or intensify the stance adopted by the speaker; and that when conveying someone else's stance, which is not congruent with their own, there are gestures that speakers make use of to 'distance' themselves from it.

When it comes to the Serbian linguistic environment, Veličković and Danilović Jeremić (2020) attempted to fill the void in analyzing the pragmatic aspects of language use by analyzing stance devices used by a group of L2 English learners at the tertiary level. In that education setting, expressing opinions is a constituent part of academic writing courses. Their analysis included: sentence initial deictic *this/that* and demonstratives, the passive, pronouns, reported speech, nouns followed by *that* and a complement clause, adverbials, and impersonal structures. Impersonal structures, which correspond most closely to the introductory *it*-pattern analyzed in this study, were the third most frequently occurring language device used to convey stance.

The same group of authors, Veličković and Danilović Jeremić (2021), later analyzed stance markers in the work of L2 English learner beginner writers, sophomores learning to write expository paragraphs. Their analysis included stance markers classified by Min et al. (2019): epistemic certainty adjectives (e.g., *apparent, certain, obvious*), epistemic likelihood adjectives (e.g., *likely, possible, probable*), attitude and emotion adjectives (e.g., *annoyed, disappointed, nervous*), evaluation adjectives (e.g., *appropriate, bad, important*), ability or willingness adjectives (e.g., *able, anxious, careful*), ease or difficulty adjectives (e.g., *difficult, easy, hard*), epistemic certainty adverbs (e.g., *actually, certainly, definitely*), epistemic likelihood adverbs (e.g., *apparently, perhaps, probably*), attitude adverbs (e.g., *amazingly, essentially, fortunately*), style adverbs (e.g., *according to, generally, usually*), epistemic certainty verbs (e.g., *conclude, notice, prove*), epistemic

likelihood verbs (e.g., *assume, guess, seem*), attitude verbs (e.g., *agree, expect, feel*), desire and intention verbs (e.g., *decide, hope, want*), causation and effort verbs (e.g., *enable, manage, require*), and communication verbs (e.g., *claim, insist, say*). Their results indicated that the most frequently occurring lexico-grammatical stance device noted in the sample of paragraphs were stance adjectives (approximately 44%), while stance verbs came in third with approximately 26%. Of the stance adjectives, the most frequently occurring were adjectives that represent the writer's judgment (approximately 48%). Of the stance verbs, the most frequently occurring were communication verbs (approximately 46%).

The aim of this paper is to review several of the identified tendencies that have emerged, such as that the epistemic stance is most closely related to *that*-nominal clauses (Wang et al. 2022) in a sample of L2 English L1 Serbian student writing. Furthermore, since certain patterns have been identified for collexemes, so another aim was to determine which patterns are characteristic for this sample of the L1 Serbian/L2 English population of student writers.

### 3. THE METHOD

#### 3.1. MATERIALS

For the purpose of this study, a total of 172 essays were analyzed for the presence of introductory *it*-patterns and any accompanying adjectival or verbal collexemes. The essays were all written as part of the final English language exams (Contemporary English Language 7 and Contemporary English Language 8) that fourth-year students at the Department of English, Faculty of Philosophy, University of Niš, Serbia are obliged to take. Both are mandatory courses. The essays were compiled during the 2020, 2021 and 2022 exam terms (January, April, June, September, October). In sum, 78 opinion essays written as a requirement for the CEL 7 exam, and 94 comparison and contrast, and cause and effect essays, written as course requirements for the CEL 8 exam were analyzed. All of the essays were approximately 300 words long, as stipulated in the instructions, and the students had 70min to complete them. The corpus consisted of approximately 51,500 words.

#### 3.2. THE METHOD

The author read all the essays and made notes of any examples of the studied pattern. *It* pronouns that referred back to antecedents were excluded, as were phrases such as *when it comes to*. If a single sentence contained two instances of the desired patterns, each was counted separately. Sentences in question form, or sentences containing a negative were included in the final analysis. Any presence of an intensifier was also



recorded (as per Paradis 2001) to indicate scalarity. Furthermore, the introductory *it*-patterns need not have been in sentence initial position, but at the beginning of a clause.

Not all of the 172 essays contained examples of the studied pattern and collexemes. In sum, 86 examples were noted and included in the final analysis. They were each individually analyzed, the collexemes in the introductory *it*-pattern determined and then classified based on the four stance types (epistemic, evaluation, dynamic, and deontic). Identification of the stance in question was not always easy, as certain overlaps can be noted. For example, Wang et al. (2022: 2) state the potential difficulty in classifying adjectives such as *possible* and *impossible* as indicators of ‘ease’ rather than ‘possibility’ of the proposition being enacted. Thus, a certain level of subjectivity or interpretation was required during the classification process.<sup>2</sup>

#### 4. RESULTS AND DISCUSSION

The first part of the analysis included determining the component elements of each introductory *it*-pattern. The structures and the frequency of their occurrences can be seen below, along with illustrative examples for each sub-pattern extracted from the samples of student writing. The sub-patterns are listed in descending order of occurrence in the corpus.

<b>LV + adj + infinitive clause</b>	<b>33</b>
<i>(it is safe to assume that one person will experience the same thing)</i>	
<b>LV + adj + <i>that</i>-clause/<i>wh</i>-clause</b>	<b>13</b>
<i>(it is clear that I have changed the way I perceive university studies)</i>	
<b>Initial <i>It</i>-pattern + verb (<i>strike, say, take, hurt, get</i>) + clause</b>	<b>11</b>
<i>(it strikes me that the majority of students...)</i>	
<b>LV + adj + PP + infinitive phrase</b>	<b>9</b>
<i>(it is easier for them to study and prepare for the exams)</i>	
<b>LV + intensifier + adj + infinitive phrase</b>	<b>6</b>
<i>(it is never too late to start getting your life together)</i>	
<b>modal verb + passive infinitive + <i>that</i>-clause</b>	<b>4</b>
<i>(it needs to be said that they constantly need to do research)</i>	
<b>LV + intensifier + adj+ <i>that</i>-clause</b>	<b>3</b>
<i>(it became more apparent that world issues and events will continue to affect languages)</i>	
<b>modal verb + verb (<i>seem, happen, take</i>) + <i>that</i>-clause/as if</b>	<b>3</b>
<i>(it may seem that my approach to studying has changed)</i>	

2 I would like to thank the anonymous reviewer who suggested researcher triangulation be included in further studies, to avoid the subjectivity. I hope this advice will be helpful to other researchers doing follow-up studies.

<b>LV + PP + infinitive</b> ( <i>it is up to people to decide</i> )	<b>2</b>
<b>modal verb + verb + PP + that-clause</b> ( <i>it should go without saying that there have always been...</i> )	<b>1</b>
<b>verb (go) + PP + that-clause</b> ( <i>it goes without saying that nothing would be the same</i> )	<b>1</b>

The second part of the analysis included determining the type of stance of each adjectival and verbal collexemes as either epistemic, evaluation, dynamic, or deontic. The results can be found below, with an illustrative but not exhaustive list of examples taken from the samples of student writing. The types of stance are listed in descending order of occurrence.

<b>Epistemic stance</b> ( <i>clear, seem, apparent, say, usual, clear, late, assume, take, evident, certain, inevitable, strike, inevitable, neglected, undeniable, obvious</i> )	<b>29</b>
<b>Dynamic stance</b> ( <i>safe, easy, difficult, hard, impossible, simple, possible</i> )	<b>24</b>
<b>Evaluation stance</b> ( <i>vital, important, good, hurt, impressive</i> )	<b>22</b>
<b>Deontic stance</b> ( <i>need, may, essential, get, should</i> )	<b>11</b>

In general, this particular population of L2 writers do not excessively use the introductory *it*-pattern to convey their stance. In fact, the number of examples included in the final study did not even add up to one example per paper on average. The ones that were noted in the sample essays were rarely in sentence-initial position and were preceded at least by an adverbial. The most frequently occurring sub-pattern was the *it* verb-link adjective (ADJ) *to*-infinitive clause (38.4%), followed by the *it* verb-link adjective (ADJ) *that*-clause pattern (15.11%) which occurs only slightly more frequently than the *it* verb *that*-infinitive clause (12.8%).

The considerably frequent presence of stance adjectives also led to the most frequently occurring type of stance being epistemic (33.7%), followed by dynamic (27.9%) and evaluation stance (25.6%) which differed only slightly in terms of frequency of occurrence.

Based on these findings, it is possible to answer the posed research questions. Specifically, the sub-pattern of the introductory *it*-pattern that is most characteristic for this sample of the L1 Serbian/L2 English population of student writers is the *it* verb-link adjective (ADJ) *to*-infinitive clause. Furthermore, these findings do not confirm those of Wang et al. (2022), even though the most frequently occurring type of stance adopted by the members of this population is the epistemic stance. However, it is not most closely related to *that*-nominal clauses in this instance. This requires a further analysis of the sample itself.

The exceptionally low frequency of occurrence of this particular lexical means of expressing stance [or stance is general, based on Veličković and Danilović Jeremić (2020, 2021)] is an indication that the L2 English student writers either do not consider it important to do so, or are not aware that they should. It would, without interviewing members of this particular population, be impossible to state which of the two is the case, or whether language proficiency might also play a role in their performance. Baratta (2009) claimed that (student) writers do in a way “reveal” themselves through stance and might be hesitant to do so, or even consider that it is inappropriate in the register of an academic essay.

Based on the variety of sub-patterns used, if not their frequency, the expressed stance might be viewed as a specific feature of the participants' L2 English proficiency. The low level of occurrence, and the overall dominance of just one particular type of stance, at almost one-third of all the recorded types, indicates not only a lack of variety of personal input but may indicate that it could be considered to be of secondary importance. The avoidance seems not to be accidental, but quite deliberate, considering that similar results were determined by Veličković and Danilović Jeremić (2020, 2021). Support for this conclusion could be found in the work of Kärkkäinen (2003) who stated that since epistemic modality can be both personalized and impersonalized, L2 English writers have a choice when it comes to providing a framework for their propositions which might facilitate interpretation on the part of the reader. These options can be illustrated in the following examples (where p stands for the proposition):

1. It (*seems/appears*) to me *that* p – personalized
2. It (*seems/appears*) *that* p – impersonalized.

Similar conclusions regarding ‘depersonalized structures’ were noted by Lee and Deakin (2016), Ryshina-Pankova (2011), and Jiang (2017), inter alia, all of whom studied L2 English writing. However, there is reason to believe that the L2 English student writers’ performance in this instance could be influenced through explicit instruction.

The type of instruction this group of student writers received should also be taken into consideration. Since the studied population is made up of students attending the same department, they have been exposed to the same academic writing standards, being taught that formal register implies adopting an impersonal attitude, which they may be modelling. That more students of English of all age ranges are increasingly including impersonal pronouns or the passive in their writing has also been pointed out by Reilly et al. (2005), rendering impersonal stance the norm in academic writing in the L2 English population. Furthermore, Jiang (2017) also added cultural background to the mix, which cannot be avoided since the studies cited so far have focused on L2 English writers. Namely, the type and frequency of

stance markers used in the writers' L1 should also be taken into consideration, as well as whether their L1 prefers author references in the text itself.

## 5. CONCLUSION

In sum, the introductory *it*-pattern, by its very syntactic structure invites evaluation, one which can often be scalarized considering the variety of structures that can be used to complete it. It is therefore a suitable means of studying both types of stance that L2 English writers use, and as a means of assessing their language use. The low frequency of occurrence is a clear indication that more work needs to be done on teaching this particular population of L2 English learners to rely on these structures and also teach them about the variety of structures that can be used to achieve the goal of conveying stance. It would seem that modality is also a topic that these L2 English learners should be taught in more detail.

When we compare the findings of this study, the stance adjectives and verbs recorded for the selected population of L2 English writers were similar to those recorded earlier by Veličković and Danilović Jeremić (2020, 2021). A consistently limited range of stance markers seems to be identifiable in all the aforementioned studies. This can help us determine specific pedagogical implications. Explicit instruction seems to be key in clarifying the role that the author plays in written academic discourse, and in building rapport with the audience. A revision of the English language students' attitude towards the 'convention of impersonality' needs to be re-addressed, accompanied by specific examples of stance markers occurring in everyday language use. A variety of examples will also help the students consider using different options, options other than the sub-patterns where the complement is an infinitive clause or a *that*-clause.

Other implications include 'reworking' the coursebooks being used in the Serbian linguistic environment. For example, it might be beneficial for the students to 'model' other people's writing (Nunan 1989) when it comes to stance markers and devices.

When it comes to future studies, a considerably larger corpus is needed, and it should include writing samples from all the institutions of tertiary level education. An analysis of the course material used to teach academic English at this level would also provide good insight into the kind of foundation the students are building on.

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**Марта В. Величковић / СЕМАНТИЧКЕ ОДЛИКЕ ЗАУЗИМАЊА СТАВА ТОКОМ ПИСАЊА: АНАЛИЗА ПИСАНИХ РАДОВА СТУДЕНАТА АНГЛИСТИКЕ**

**Резиме** / Заузимањем става током писања (енгл. *stance*) међу студентима енглеског језика и књижевности истраживачи се често баве у области наставе страних језика. До сада се поменута тема обрађивала на узорку изворних говорника различитих (несловенских и словенских) језика. У српском језику, овом темом бавили су се, између осталих, Благојевић (2004, 2009, 2010, 2011, 2012), као и Величковић и Даниловић Јеремић (2020, 2021). Неки од наших мотива за наставак истраживања ове теме су различити начини на које се став током писања може заузети – било одабиром одређених синтаксичких јединица, било одређених лексичких јединица. То је истовремено и део писања на страном језику којим би се експлицитно требало бавити током наставног процеса. Самим тим, циљ овог истраживања био је да се настави са раније започетом анализом различитих синтаксичких јединица којима се заузима став током писања на страном језику, а које користе изворни говорници српског језика у настави енглеског као страног тако што је анализа сада обухватила лексичке и/или семантичке одлике које се доводе у везу са заузимањем става током писања. Пре свега, фокус је био на адјективним и глаголским колексемама (в. Wang et al. 2022) у комбинацији са потпорним *it*. Анализа је спроведена на корпусу есеја које су написали студенти завршне године основних студија Англистике Универзитета у Нишу. Резултати су дали прецизан увид у то колико су напредни студенти енглеског језика упознати са овим структурама и, сагледано заједно са претходним сазнањима, прецизирани су даљи кораци које би требало спровести у настави енглеског језика као страног на терцијарном нивоу.

**Кључне речи:** заузимање става током писања, адјективне и вербалне колексеме, потпорно *it*

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## **PRAGMATIC ASPECTS OF THE CONCEPTUAL METAPHOR *TIME IS A VALUABLE COMMODITY* IN SERBIAN AND ENGLISH<sup>2</sup>**

The conceptual metaphor *TIME IS MONEY* / (VALUABLE) *COMMODITY* is considered to be fairly new and its origins are a matter of debate. Some researchers believe that cultural changes brought about this particular conceptualization, while others claim that the inherent finiteness of time is the basis for viewing time as something valuable. The aim of this paper is to examine the pragmatic aspects of concretizations of the said metaphor in Serbian and English. Namely we aim to investigate, within the framework of cognitive-inferential pragmatics, the possibility of certain expressions being an instance of descriptive and/or interpretative use of language. The theoretical framework is relevance theory and two approaches to metaphoric expressions taken into account are explicature analysis and modified explicature analysis. The analysis comprises examples of conceptual metaphors *TIME IS A (LIMITED) RESOURCE* (since we believe it serves as a basis for further elaboration and profiling *value* when it comes to mapping on the examined target domain) and *TIME IS A VALUABLE COMMODITY* with special attention dedicated to examples of the conceptual metaphor *TIME IS MONEY*. The results show that speakers of English and Serbian conceptualize time in a similar way when it comes to the source domains *RESOURCE* and *VALUABLE COMMODITY* (attested metaphors include *TIME HAS A PRICE*, *TIME IS FOR SALE*, etc.). When it comes to the pragmatic aspects of our analysis, the results point to the adequacy of both interpretative and descriptive approach to the interpretation of metaphoric expressions, depending on the entrenchment and routinization of an expression.

**Key words:** conceptual metaphor, *TIME*, *RESOURCE*, *VALUABLE COMMODITY*, cross-domain mapping, explicature approach, modified explicature approach, ad hoc concept

### **1. INTRODUCTORY REMARKS**

The conceptual metaphor *TIME IS MONEY* / (VALUABLE) *COMMODITY* is considered to be fairly new.<sup>3</sup> Lakoff and Johnson (1980/2003: 139–146) state that great cultural changes can be regarded as a consequence of the introduction of novel metaphors such as the abovementioned *TIME IS MONEY*.

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3 Compared to other conceptualizations of the target domain time (e.g. time is a container, time is a moving object, time is a devourer, time is a healer, etc.).

Conceptual metaphors TIME IS MONEY, TIME IS A LIMITED RESOURCE and TIME IS A VALUABLE COMMODITY are coherent since, in the society we live in, time is deemed a limited resource and limited resources are indeed a valuable commodity. This coherent system of conceptual metaphors is the basis for a coherent system of metaphorical expressions such as *waste time, spend time, (not) have (enough) time, invest time* etc. (Serbian: *tračiti vreme, uložiti vreme, gubiti vreme, imati/nemati (dovoljno) vremena*, etc.). These metaphoric concepts are suitable for the cultures they arise from, but the same source domains would not be a part of concretization of the target domain TIME (Lakoff and Johnson: 1980/2003: 7–8) since time is not viewed in terms of valuable commodity universally across all societies.

On the other hand, Klikovac (1998: 36) states that cultural change has led to the creation of the conceptual metaphor TIME IS MONEY, which is a very distinct conceptualization from, for example, mappings of domains such as MOVEMENT OR HORIZONTAL AXIS onto the domain TIME, which are grounded in our bodily experience and that this is the reason why it has emerged fairly late in human history and does not occur in all cultures. Evans (2003: 100–101) points out the notion of *finiteness* as being the grounds for the existence of the cross-domain mapping between COMMODITY and TIME. Namely, the finiteness of time intervals stems from the conceptualization of those intervals as CONTAINERS, and he illustrates this implied finiteness with the following example (taken from Evans 2003: 100):

(1) Time is running out for those trapped beneath the earthquake rubble.

The time interval in this example (within which the survivors have to be found) is limited, hence the implied finiteness which in turn provided the basis for the emergence of a new lexical concept. Namely, even though in this example it is the context that generates the conceptualization of time as being limited, eventually this brought about the conceptualization of time as commodity precisely due to the continued use of the lexeme *time* in the abovementioned sense, since that which is finite is also considered to be valuable (Evans 2003: 100–101).

There can be more than one explanation for the creation of a new meaning, which reflects the different directions and ways a certain meaning was created and elaborated (Evans 2003: 102). This particular conceptualization (COMMODITY) could have developed from various experiences that ground and reinforce the meaning of *value*. For example, the amount of money in exchange for labor is measured in relation to intervals such as day, hour etc. On the other hand, since there is a correlation between achieving a goal and the amount of time available for that, the meaning of *value* is necessarily tied to *time*. Since a certain amount of time is needed to achieve a certain goal the lack of time is tied to inability to achieve the said goal and greater amount of time to greater possibility of achieving the said goal (Evans 2003: 102). The meaning of *value* is present even when the

context does not imply finite duration (see examples below, taken from Evans 2003: 101, our emphasis):

- (2) My psychiatrist's time is so expensive!
- (3) Time is money. So start an Equitable 2000 Personal Pension Plan now.
- (4) The advertisers bought more air time for their ads.

In the examples above, time is profiled as an entity which possesses value, without the requirement to be conceptualized as an entity that exists in limited amounts. As such, time can be expensive and even bought or sold (as in example (4)).

Regardless of the issue of origin of conceptualizing TIME in terms of (VALUABLE) COMMODITY, it can be concluded that this cross-domain mapping is productive in both examined languages (Manojlović 2021). The focus of this paper is not the cognitive linguistic approach to metaphoric expressions but the cognitive pragmatic approach to the interpretation of utterances containing such expressions. The reason for such an analysis is the growing number of papers that aim at reconciling these two approaches (Tendahl and Gibbs 2008; Tendahl 2009; Wilson 2011; Rasulić and Mišković-Luković 2021; Manojlović 2022 in print etc.) and the research presented in this paper will hopefully contribute to this discussion.

## 2. CORPUS AND METHODOLOGY

Since the aim in this paper is the examination of pragmatic aspects, we will not deal with cognitive-linguistic aspects of analyzed expressions. Namely, the examples analyzed in this paper are taken, without adaptation, from a cognitive linguistic research (Manojlović 2021). The corpus of the said study comprises five novels in English and five in the Serbian language, two scientific studies in each language and newspaper articles in both English and Serbian (see Sources). The corpus was chosen based on the search for time-related lexemes in two electronic corpora and constructed to represent texts of similar content and scope in Serbian and English.<sup>4</sup> The examples excerpted for the said study (and analyzed in this paper) include expressions with the lexemes *vreme* and *time*, as well as other lexemes in both languages denoting various time intervals. The total of 114 examples was checked using MIPVU (Steen, Dorst et al. 2010). This procedure was chosen (over MIP) primarily because it does not require the investigation into historical order of meanings (for deciding about what the basic meaning is) and the addition of a step pertaining to words used for lexico-grammatical substitutions. It should be noted here that the step pertaining to direct metaphors had to be omitted since the contribution of

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4 For detailed account of the process used for choosing the texts and the description of corpus see Manojlović 2021.

such expressions to the explicature is entirely different (for detailed explanation see Manojlović 2022). After comparing contextual meaning of each relevant lexical unit from the said 114 examples with their basic meaning we have determined that in all excerpted examples these two meanings differ, and that contextual meaning could be understood in terms of the basic meaning.<sup>5</sup>

After completing the procedure described above the examples were analyzed in terms of their pragmatic contribution to the proposition expressed. Namely, the goal was to determine whether the examined constituents contribute to the truth conditions of the overall utterance by investigating whether they are examples of descriptive or interpretative language use. Precise demarcation was not possible for all expressions since mental lexicon differs from what can be found in dictionaries and the division between descriptive and attributive concepts can depend heavily on background knowledge, communal common ground and the level of routinization.

Since the focus is to test the applicability of the relevance-theoretic approach to metaphor treatment, the next two chapters will briefly present the main tenets of the theory and how it can be applied to the study of metaphoric expressions.

### 3. RELEVANCE THEORY AND METAPHOR

According to relevance theory, human cognition tends to be geared towards the maximization of relevance (the cognitive principle of relevance) and every ostensive act of communication carries the presumption of its own optimal relevance (communicative principle of relevance). Relevance is not subject to quantification and the simplest way to define it is to observe it as a relation between the cognitive effort needed for arriving at the intended interpretation and the cognitive effects achieved – relevance is proportional to cognitive effects and inversely proportional to cognitive effort. Assuming that the ostensive stimulus is relevant enough to be worth the processing effort and the most relevant one according to the speaker's abilities and preferences, the hearer tests the interpretive hypotheses in order of their accessibility and stops when the interpretation that satisfies the expectation of relevance is reached, or when such interpretation cannot be reached (*the least effort strategy*).

The initial input for pragmatic inference is the logical form which is a schematic semantic representation of a sentence and the output is a fully fledged proposition. This proposition is the basic explicature of an utterance if it is indeed communicated by the speaker (and not, for example, unexplicated proposition expressed as is the case in ironic utterances).

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5 In cases where RMS did not offer conclusive results internet search was used as a secondary source for basic meaning, since it can show the contemporary language use.

Pragmatic processes involved in the development of the basic proposition are reference assignment, disambiguation (both processes featured in Grice's construct *what is said*), saturation (a process whereby a conceptual slot in the decoded logical form is filled), free enrichment (the process of conceptual enrichment of a constituent based on narrowing of meaning) and ad hoc concept construction (a pragmatically adjusted lexical concept which becomes the conceptual constituent of the proposition intended by the speaker).

Within the relevance-theoretic approach to communication, two approaches to metaphoric expression stand out – explicature analysis (EA) and modified explicature analysis (MEA).<sup>6</sup> EA is a lexical pragmatic approach (Sperber and Wilson 1986/95; Carston 2002a, 2010) according to which there is a continuum of cases from literal use of language, through approximation and hyperbole, to metaphor. It is only a matter of degree of parting from the encoded concept, and on this continuum the metaphoric expressions represent the communicated concept that departs the most from the encoded concept. Another important assumption within this approach is that interpretation is contextually conditioned (Wilson 2011: 202), which means that, depending on the context, the same utterance can be interpreted in various ways. So, EA presumes that figurative use of language represents the most prominent example of linguistic underdetermination. i.e., that it illustrates, in a very obvious way, the difference between what is said and what is communicated<sup>7</sup>.

This approach has three basic assumptions: 1) the use of metaphor is considered to be a part of a continuum containing other examples of loose use of language; 2) interpretation of metaphoric expressions is an entirely inferential process that does not require associative mapping from one domain onto another; 3) deriving the emergent property does not require special interpretative mechanisms compared to those needed for the interpretation of literal expressions (Wilson and Carston 2006).

According to EA, the pragmatic processes of narrowing (strengthening) and broadening (loosening) of meaning are treated in the same way – as pragmatic enrichment of the basic proposition of an utterance (Mišković-Luković 2013: 50). See the following example (all the examples in this chapter are taken (and translated) from Manojlović, in print)

(1) Marko is a machine.

Given that both processes – narrowing and broadening – are treated in the same way, and that both processes contribute to the explicit content of an utterance, the result is the following explicature:

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6 For the explanation of the two other (earlier) approaches to metaphor within inferential pragmatics – implicature analysis (Grice) and modified implicature analysis (relevance theory) – see Mišković-Luković (2013).

7 According to relevance theory, *communicated* means that the speaker is committed to the truth of the proposition or the propositional constituent.

(1a) MARKO<sub>x</sub> IS A MACHINE\*\*

X stands for the pragmatic process of reference assignment, while the symbol ‘\*\*’ marks the ad hoc concept which is the result of pragmatic processes of narrowing and broadening. The encoded concept MACHINE is narrowed in such a way that only certain encyclopedic information are chosen – those that are relevant for arriving at the intended interpretation. Depending on the context, these may include quick, efficient, precise (excluding those pertaining to the more mechanical aspect of machines, such as having bolts, screws, etc.).<sup>8</sup> The encoded concept MACHINE is broadened (loosened) so that it can refer to (certain) people. Based on the described ad hoc concept formation process, the addressee can arrive at the following contextual assumption (1b) and contextual implication (1c):

(1b) MACHINE\*\* IS EFFICIENT, QUICK, PRECISE (etc.)

(1c) MARKO<sub>x</sub> IS EFFICIENT, QUICK, PRECISE (etc.)

Within MEA (Mišković-Luković 2013, 2015), metaphoric expressions are considered as interpretative use of language (in the same way irony is), which relieves it from truth-conditional constraints (Mišković-Luković 2013: 54). Note that in EA metaphoric expressions are examples of descriptive use of language which means that they contribute to the truth conditions of the proposition expressed. The frequent use of certain metaphoric expressions leads to routinization, since it contributes to their cognitive entrenchment, which, in turn, contributes to decrease in the cognitive effort needed for their interpretation (Mišković-Luković 2014: 353). According to MEA, metaphoric expressions are attributive concepts – a kind of ad hoc concept where the speaker disassociates from the descriptive content of the lexical concept and ascribes it to someone else (the hearer, a third party, people in general or herself at another time) (Mišković-Luković 2015: 129). Hence, the basic proposition of the utterance in (1) would be:

(1d) ‘Marko<sub>x</sub> is “a machine” (as one would say or think)’

The communicated ad hoc concept (attributively used in this case) can be modulated in the same manner which EA proposes, with the difference being that it remains an interpretatively used propositional constituent and does not contribute to the truth-conditional content of the utterance (Rasulić and Mišković-Luković 2021: 29). The implicatures within EA and MEA are generated in the same way, depending on the context.<sup>9</sup>

8 It is important to note here that in a different context other encyclopedic information could be relevant – such as cold, without emotions, constantly working, etc.

9 For examples of generating an implicated premise and implicated conclusion within this line of approach to metaphor see Manojlović, in print.

#### 4. CONCEPTUAL METAPHOR, DESCRIPTIVE AND INTERPRETATIVE APPROACH

As previously stated in the introductory section, the cognitive pragmatic and cognitive linguistic approach are compatible, and the tendency in recent research of metaphoric expressions has been to develop a unified and explanatorily adequate approach.

In the simplest terms, according to cognitive linguistics, a conceptual metaphor is a cross-domain mapping, i.e. mapping of certain elements of the conceptual structure of the source domain (which is commonly more concrete) onto the target domain (which is commonly more abstract). These mappings are usually grounded in our bodily experience, but not necessarily. For instance, the utterance in (1) from the previous section would be an example of a conceptual metaphor *PEOPLE ARE MACHINES*, which is grounded in our socio-cultural experience within the metaphoric system *GREAT CHAIN OF BEING* where, among other mappings, the domain *OBJECT* is mapped on the domain *HUMAN* (Rasulić and Mišković-Luković 2021: 32).

It has been pointed out that cognitive pragmatics deals with linguistic metaphors, while the subject of cognitive linguistics are conceptual metaphors (Mišković-Luković 2015: 128). These are not necessarily irreconcilable. For example, conceptual integration (or blending) theory (Grady et al. 1999) succeeds in explaining mappings typical for so-called linguistic metaphors, since in those expressions direct cross-domain mapping is problematic because the element that is to be mapped onto the target domain does not exist in the conceptual structure of the source domain (e.g. the element of *incompetence* in the expression *This surgeon is a butcher*). This is resolved by the introduction of two more domains – generic and blended. The generic space contains elements that the two input mental spaces (source and target) have in common, while the blended space contains a novel structure with the relations that are absent from the input mental spaces individually.

In recent research, a link between deliberate metaphor and interpretative use of language has been pointed out (Manojlović 2022). In deliberate metaphor theory (Steen 2008, 2011, 2015; Reijnierse et al. 2019), the communicative dimension becomes increasingly relevant and is important in determining the distribution of deliberate metaphors and those that are not within different texts and registers. In relevance theory, the focus is precisely on communication and the communicative value of expressions and utterances. Therefore, this approach aims at explaining the pragmatic processes that guide inference and communication, including the production and interpretation of metaphoric expressions and utterances containing them. Having the relevant aspects of both approaches in mind, the following conclusion can be drawn: deliberate metaphors can be said to be instances of interpretative language use, and due to repetitive use in a certain language, culture or community these expressions can become

routinised and cease to be used attributively (Manojlović 2022: 224-225). Having become instances of descriptive use of language, these expressions might lose the status of deliberate metaphor. So, there is a continuum between the expressions that are distinctly metaphorical (and used with that intent) and those that are not perceived as being metaphorical (either by the speaker or by the hearer, or both). This stratification can be used to explain the contribution that metaphoric expressions have to the basic proposition of an utterance (Manojlović, in print). The importance of routinization has been pointed out (Mišković-Luković 2013, 2015; Rasulić and Mišković-Luković 2021) – however, in what way and to what extent this frequent and prolonged use of an expression can affect its interpretation is a much more difficult task.

Establishing a clearcut demarcation between descriptive and interpretative use of language is not only (nearly?) impossible, but unnecessary (Manojlović in print). There is an important question raised by deliberate metaphor theory – are all metaphoric expressions equally metaphorical to everyone (Steen 2011). While the same expression can be perceived by one participant in communication as used metaphorically, for someone else it will not require the activation of the source domain. Certain expressions are not problematic in this respect. For instance, the use of prepositions is widely considered as non-deliberate – hence the descriptive use of language (Steen 2015: 67; Bach 1994: 148), since their meaning is highly schematic and abstract and their contribution to a given proposition is pragmatically determined. On the other end of this continuum, we would find expressions that are pronouncedly metaphorical, as is the case with example (1) in section 2. What remains questionable is the status of other (un)metaphorical expressions along this continuum. The solution is to treat certain expressions as potentially both descriptive and interpretative use of language, depending on the speaker's and hearer's abilities and preferences (Manojlović, in print). It is not unusual that the same concept is descriptive for some speakers, while attributive for others.<sup>10</sup> For example, the acquisition of new words follows the same path – from an attributively used concept, to a fully-fledged descriptive one.

If a hearer is exposed to a novel metaphor or expression, he/she has not heard or seen before, it is safe to assume that the given expression will be interpreted by accessing information within the conceptual address of an attributively used concept that are relevant for the given context. This interpretatively used propositional constituent will have no contribution to the truth conditions of the basic proposition. He/she can then continue to use this expression without fully developing the descriptive concept, which still remains an instance of interpretative language use. By frequent usage it becomes stored in the cognitive system of the speakers of a given language/community, i.e., the conceptual address becomes filled with in-

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<sup>10</sup> For an illustration and additional explanation of simultaneous attributive and descriptive use of both metaphoric and non-metaphoric expressions see Manojlović, in print.



formation (linguistic, logical and encyclopedic entry). Such concept is now used descriptively, or, in cognitive-linguistic terms, does not require cross-domain mapping.

In the following analysis of linguistic concretizations of the conceptual metaphor TIME IS A VALUABLE COMMODITY, the expressions will be analyzed according to the descriptive vs interpretative distinction criterion. Three groups of expressions are singled out – those that are used descriptively, those that are used interpretatively and those that can be analyzed both within the EA and MEA framework.

## 5. ANALYSIS

As previously stated, the examples analyzed in this paper were taken from a cognitive-linguistic study, without adaptation, organized in keeping with the source domains (taken from the same study, without adaptation). The expressions were, however, checked according to MIPVU (Steen, Dorst et al. 2010) to confirm that they are indeed examples of (indirect<sup>11</sup>) metaphor. We will start the analysis with examples of expressions pertaining to qualities that are characteristic for, but not necessarily limited to, VALUABLE COMMODITY or, rather, VALUABLE RESOURCE. These expressions refer to certain general properties of a resource, they are very frequently used in language, and expected not to be interpreted metaphorically due to their level of routinization.

Various expressions attested in the Serbian language present a common manner of talking about time and time intervals, hence are used descriptively. These expressions include *biti raspoloživ*, *imati višak*, *nedostajati*, *štedeti*, *iskoristiti*, *(u)trošiti*, etc. We shall illustrate this with only a few selected examples:

1) Kao svaki dokoni bonik, bio se suočio sa viškom slobodnog vremena [...] (Dem 19) / Broj kandidata podnosilaca pojedinih biračkih lista određuje se zavisno od raspoloživog vremena za predstavljanje [...] (Pol) / Bila je ideja da se uradi sportska edicija, u 10 knjiga, ali se posle iskustva sa ovom zbog ogromnog utroška vremena i sredstava odlučilo da broj bude prepolovljen [...] (Pol) / Na ovaj način se, čulo se prilikom jučerašnjeg izlaganja, umnogome štedi vreme neophodno za pregled pacijenata. (Pol) / Preostaje da se preostalo vreme do olimpijskih okršaja iskoristi na najbolji način. (Pol) / Nije imalo smisla saslušavati ga više, trošiti energiju, vreme i opremu. (Ars 122) / Tamo će je čekati mladić koji se upravo, kao i ona, osetio sam straćivši vreme na čitanje iste knjige. (Pav 284) / Vreme sam utrošio na konstruisanje cipela za hodanje po vodi. (Bas 278) / Срећом, двостепена организација чини језике

11 Since the analysis conducted in this paper is cognitive-pragmatic the so-called *direct* metaphors (Steen, Dorst et al. 2010) could not be taken into account as they are treated completely differently within this framework (for more detailed account of the distinction between simile and metaphor within frameworks of relevance theory and deliberate metaphor theory see Manojlović 2022).

ванредно економичним системима, који омогућају корисницима огромне уштеде у времену и напору. (Bug 72)

It could be argued here that these expressions and their different meanings in a given context are instances of contextual modulation. This does not negate the underlying cross-domain mapping, but it does, however, point to the fact that they are necessarily instances of descriptive language use. We shall illustrate this with the following example taken from 1):

1a) Na ovaj način se, čulo se prilikom jučerašnjeg izlaganja, umnogome štedi vreme neophodno za pregled pacijenata.

1b) NA OVAJ NAČIN SE, ČULO SE PRILIKOM JUČERAŠNJEG IZLAGANJA, UMNOGOME ŠTEDI VREME NEOPHODNO ZA PREGLED PACIJENATA.

The focus in the explicature in 1b) is the communicated (ad hoc) concept ŠTEDI'. This propositional constituent is broadened so that the meaning of the encoded concept ŠTEDI' (*to be rational in spending money, material, etc.*, RMS: 1004 (our translation)) can refer to things other than money and material.

However, even in this group of expressions in which time is ascribed general properties of a resource, there are some with a greater level of defamiliarization which can be instances of descriptive use of language for some and interpretative for others. This has to do either with the lexeme which denotes the time interval (as in 1c)), or with the lexeme that indicates the source domain (as in 1d)).

1c) Čitav jedan septembar noći nabraćemo usput odavde do Topčisaraja, a od Aja Sofije do Vlaherene troše već oktobar. (Pav 267)

1d) Tako se stvara zagrobna zaliha vremena, a time se objašnjava mogućnost komunikacije s umrlima. (Bas 188)

In 1c) the propositional constituent in question could be TROŠE' or "troše" (as one would say or think). Similarly, in 1d) the propositional constituent in question could be ZALIHE' or "zalihe" (as one would say or think). Namely, even though the verb *trošiti* is very commonly used with certain lexemes denoting time and time intervals (e.g. *trošiti dane*, *trošiti vreme*, etc.), with the lexeme denoting a month the overall expression is less entrenched and routinized, and therefore can represent interpretative use of language for some speakers. On the other hand, the expression in 1d) is not frequently used with temporal expressions and can be analyzed both within EA and MEA approach.

A very similar situation was attested in the English language when it comes to expressions in which time and time intervals are ascribed general properties of a resource. The most frequent lexemes are *spend* and *waste*, and these are used exclusively descriptively, due to their recurrent pairing with lexemes denoting time and time intervals. Other attested expressions

include *take (up), make (up), provide, save, use, be/have left, rest, amount*, etc. Some of the expressions are listed below:

2) Reaching the water's edge, the warrior spent several moments walking slowly back and forth [...]. (Kaz 273) / Tell your chauffeur to go far away and spend an hour. (Fitz 92) / There are many who think that all language learning is a waste of time. (Crys 15) / Well then, let's waste no more time, for this talk was only to satisfy custom. (Kaz 353) / He could use the time to catch up on all the things he'd failed to do yesterday. (Sim 147) / Don't want to take up what's left of your morning. (Urs 221) / He would have a nice little cottage at point D, with axes over the door, and spend a pleasant amount of time at point E, which would be the nearest pub to point D. (Ad 11) / There were only ten minutes left. (Sim 16) / "I thought I'd save time for everyone by asking you now." (Urs 94)

As was the case with the examples excerpted from Serbian texts, due to routinization in the cognition of the speakers, these expressions are used descriptively, and the resulting ad hoc concepts are constituents of the proposition expressed (or basic explicature) and hence represent a part of the truth-conditional content. We shall illustrate this with the following example taken from 2):

- 2a) Don't want to take up what's left of your morning.
- 2b) DON'T WANT TO TAKE UP WHAT'S LEFT OF YOUR<sub>x</sub> MORNING.

The encoded concept TAKE UP (*to occupy entirely or exclusively; fill up*, MWD) is slightly broadened so that it can apply to the temporal notion. It can be argued here that there is no ad hoc concept formation in the strict sense, but, rather, that this is a case of contextual modulation. This can be confirmed by the fact that this meaning is listed in some dictionaries (*to fill an amount of space or time*, LD, CD, MD). What can be claimed with certainty is that the said concept is used descriptively and forms part of the truth-conditional content.

However, if a certain expression is not frequently paired with time expressions it opens up a possibility for it to be analyzed as an instance of interpretative use of language:

- 2c) Especially in languages which have never been written down, or which have been written down only recently, language is the repository of the history of a people. (Crys 20)

In 2c) the concept REPOSITORY could be an instance of descriptive use (resulting in the ad hoc concept REPOSITORY'), or interpretative (resulting in propositional constituent "repository" – as the speaker would say or think).

It can be concluded that referring to time and time intervals as valuable in terms of general properties of a resource is very common in both analyzed languages, resulting in the prevalent descriptive use of the con-

cepts involved. The second group of examples comprises expressions where time and time intervals are conceptualized not merely as a resource, but more specifically as having value. Apart from expressions with the lexemes *zlatan* in Serbian and *golden* in the English language, several other lexemes were attested – *zadužiti*, *uložiti*, *investicija*, *zaloga*, *kapital*, *pozajmiti*, i.e. *owe*, *pay off*, *treasure*, *cherish*, *put in*, etc.

3) Beograd je napustila u ono doba o kom se sad tamo govori kao o „zlatnom“ – krajem sedamdesetih. (Ars 208) / To je moglo da nas podseti na 19. vek, taj „zlatni vek“ koji je u Srbiji pokazao da je moguće da ljudi različitih političkih orijentacija [...] (Pol) / Ostaće u knjigama iz ove maglovite šahovske sadašnjice prošlog meseca su otišla još dva velikana njenog zlatnog doba. (Pol) / WHEN CBS first broadcast “Death of a Salesman” in 1966, critics hoped its substantial ratings might ignite a new golden age of television. (NYT)

When it comes to expressions with *zlatan* and *golden*, they are descriptively used with time expressions and the resulting ad hoc concepts ZLATAN´ and GOLDEN´ would be loosened not to refer only to that which is made of gold but to a period of time that is special in a certain way, usually by being advantageous or promising. On the other hand, expressions with other attested lexemes ascribing value to time and time intervals are not solely instances of descriptive use of language.

4) Ne može zadužiti večnost onaj ko nije zadužio svoje vreme. (Bec 44) / U nju je uloženo, kako kažu autori, mnogo rada i vremena i 45.000 maraka. (Pol) / Što se Kruševca tiče bila je to sjajna investicija u budućnost vaterpola, igralo se pred prepunim tribinama, možda se tu i tada rodio još jedan vaterpolo centar – nadajmo se da jeste. (Pol) / U situaciji u kakvoj smo ne možemo više sebi dozvoliti luksuz da zapostavljamo poljoprivredu koja je bogomdana zaloga naše bolje budućnosti. (Pol) / Njemu je prošlost jedini kapital [...]. (Бас. 337) / Tako se Al Saferov život sastojao delom iz života drugih ljudi, koji su mu pozajmljivali po nekoliko svojih sedmica naizmenice. (Пав. 232)

Here it is a matter of degree of routinization that will determine whether an expression is used exclusively attributively, or whether it can be analyzed within both the EA and MEA framework. For instance, the following example taken from 4) is an instance of an attributively used concept:

4a) Tako se Al Saferov život sastojao delom iz života drugih ljudi, koji su mu pozajmljivali po nekoliko svojih sedmica naizmenice.

4b) Tako se Al Saferov život sastojao delom iz života drugih ljudi, koji su mu „pozajmljivali“ (as the speaker would say or think) po nekoliko svojih sedmica naizmenice´

In example 4a) we can see the defamiliarization that is to have aesthetic and literary effect. This is the reason why the propositional constitu-

ent in question is an instance of interpretative use of language and does not affect the truth conditions.

Certain expressions can be analyzed as either interpretative or descriptive use of language. We illustrate it with the following example taken from 4):

4c) Njemu je prošlost jedini kapital.

4d) NJEMU<sub>x</sub> je PROŠLOST JEDINI KAPITAL<sub>1</sub>

4e) 'Njemu<sub>x</sub> je prošlost jedini "kapital" (as one would say or think)'

According to the EA approach, the encoded concept *KAPITAL* (*the value or set of all economic goods used for production, which bring the owner surplus value or profit*, RMS 657 (our translation)) is broadened so it can apply to a temporal concept and the resulting explicature is the one in 4d). Here the communicated concept *KAPITAL<sub>1</sub>* is a descriptively used propositional constituent and hence a part of truth-conditional content. According to the MEA approach, the said concept would be used attributively, resulting in the explicature in 4e). This interpretatively used concept would not affect the truth conditions of the overall proposition expressed.

Similarly, expressions in the English language containing lexemes ascribing value to time and time intervals, other than the lexeme *golden*, are not solely instances of descriptive use of language.

5) You put in six or eight years at the Music Syndicate conservatory, didn't you? (Urs 141) / He looked at his watch as if there was some pressing demand on his time elsewhere. (Fitz 91) / They know this is to come, and so must cherish the earlier days of the siege, when the enemy first pay the price for what they will later do. (Kaz 162) / We don't remember our fierce quarrels or the small moments we enjoyed and treasured. (Kaz 51) / [...] weak with the thankfulness that it had not happened, that the years on that fantastic rifle range had at last paid off. (Sim 192) / I dare say your brother owes him and Father Ninian his life. (Kaz 228)

As can be seen from the expressions in 5), there is no clearcut distinction between those that are necessarily instances of descriptive use of language and those that are not. For instance, the lexeme *treasure* in the example below (taken from 5)) could be used descriptively so that the encoded concept *TREASURE* (*to keep and care for something that is very special, important, or valuable to you*, LD) would result in an ad hoc concept *TREASURE<sub>1</sub>* or, on the other hand, the same concept could be used attributively which would result in a propositional constituent "treasure" (as one would say or think), which would have no bearing on the truth conditions. We assume here that it is far more likely that the said concept would be used descriptively, since the pairing of the verb *treasure* with certain time expressions is not infrequent.

5a) We don't remember our fierce quarrels or the small moments we enjoyed and treasured.

Another important group of examples are those in which time and time intervals are conceptualized as having a price. As was the case with the previous group of examples (in 4) and 5)), the level of routinization will determine whether a concept is an instance of descriptive or interpretative language use. The same expression can be interpreted differently depending on the context.

6) Najpre je još u Carigradu morao dati da mu se odseče ruka, jer je jedan od moćnih ljudi na grčkom dvoru platio suvim zlatom drugu veliku hazarsku godinu ispisanu na poslanikovoj levoj šaci. (Pav 74) / Ne pristajem na neke velike polemike u vašoj rubrici, vreme nam je odveć skupo da bismo ga lako traćili. (Pol) / Kada bih poverovao u vašu priču, zašto bih kupovao dan koji već imam? (Pav 109) / Očekuje se da u zapadnom delu Nemačke ove godine bude ostvareno 1,62 milijarde plaćenih prekovremenih sati rada, što je za 6,3 odsto više nego lane. (Pol) / Shevek's costly day with Veia had taken most of his ready cash, and the taxi ride in to Nio took ten units more. (Urs 233) / Martin's reaction is funny so it manages to be a tender moment that doesn't get cheapened by something didactic or predictable. (Ad 273) / He demands this, and cares not whether our errand is well done, or if his life is given at a good price. (Kaz 298) / [...] considering proposing to advertisers and agencies that they could do so during UPN prime-time series as a bonus for buying large blocks of time to run traditional commercials during regular breaks. (NYT) / [...] an agency that specializes in buying commercial time and ad space for marketers. (NYT) / Another executive who buys commercial time at a media agency said he believed the ad bug could appear on a network [...] (NYT)

We grouped the examples excerpted from Serbian and English texts together, since they can be analyzed jointly due to the observed similarities. Namely, apart from the expression *kupovao dan* in Serbian, which is not an instance of a commonly used expression, but, rather, another expression used for achieving a literary effect, and which is used interpretatively (“kupovao” (as the speaker would say or think)), the status of other expressions in 6) depend heavily on the context (or co-text). For example, in the context of paid labor (expression *plaćenih prekovremenih sati rada*) or in the context of advertising (*buys commercial time, selling your time and buying large blocks of time*), expressions that represent the cross-domain mapping between COMMODITY WITH A PRICE and TIME are not instances of interpretative use of language and are part of truth-conditional content. On the other hand, there are expressions, for instance, with lexemes *skupo* and *costly* where both EA and MEA could be applied. So the propositional constituents could be, respectively, *SKUPO*’ or “skupo” (as the speaker would say or think) and *COSTLY*’ or “costly” (as the speaker would say or think).

The final group of expressions are examples of the conceptual metaphor TIME IS MONEY. In the selected corpus of English language only two ex-

amples were attested, both with lexeme *life* denoting time period (As if one could earn beauty, or life! (Urs 167) / And if that fellow bravely buys your escape, even with his own life, you must grasp it gratefully. (Kaz 184)). In Serbian, however, more expressions were found with different levels of defamiliarization, or different degrees of routinization:

7) Vreme devalvira i nastaje inflacija: umesto 24 časa ljudi su imali na raspolaganju 1.240 minuta; po prvi put se javlja dosada, smrtni greh *accediae* koji će kasnije dovesti civilizaciju Zapada na ivicu propasti. (Bas 189) / Ali nije trebalo čekati dugo da i minut devalvira, pa da uznapredovala veština izgradi časovnik koji će pokazivati i sekunde. (Bas 190) / [...] upita Pavle Kuzmič Gribojedov, filozof, osuđen na pet godina, plus dodatnih pet zarađenih u logoru. (Bas 207) / Danas, godinu dana nakon „Dahićevog spiska“, sarajevski nezavisni mediji konstatuju da se praktično gotovo ništa nije promenilo i da je tek poneko od njih „završio u zatvoru za dela koja ga neće u tom zatvorenom prostoru koštati puno vremena“. (Pol) / Ovom prilikom tražimo od Vlade Republike Srbije da ispravi ovu nepravdu i da našoj deci koja su bez stanova, omogući da im se u cenu stana uračunaju godine koje smo mi ostvarili, uplaćujući u stambeni fond a stanove nismo dobili. (Pol)

From the examples above, the first two, with the lexeme *devalvira*, stand out as clear examples of interpretative use of a concept. The attributive concept that is a propositional constituent of the explicature in 7a) does not affect the truth conditions. On the other hand, the idea of *earning time* is not so unusual in the context of jail time and that is the reason that the example with the expression *zarađenih* can have explicature 7b) (in line with EA) and 7c) (in line with MEA), depending on the level of familiarity or entrenchment of the given expression for certain speakers or hearers.

7a) 'Vreme „devalvira“ (as one would say or think)'

7b) [...] OSUĐEN NA PET GODINA, PLUS DODATNIH PET ZARAĐENIH\*\* U LOGORU

7c) ' [...] osuđen na pet godina, plus dodatnih pet „zarađenih“ (as one would say or think) u logoru'

When it comes to the other two attested expressions in Serbian, it is safe to assume that they represent instances of descriptive use of language due to their frequency of use (as is the case with *koštati puno vremena*) or the specific context (buying a real estate one has previously been paying a certain amount of money over a period of time).

## 6. CONCLUSION

Since the expressions analyzed in this paper were examples of a very frequent and productive cross-domain mapping between VALUABLE COMMODITY and TIME, it was expected for the majority of them to be instances of descriptive use of language due to the level of routinization and cognitive

entrenchment. Among the expressions in which time and time intervals were ascribed general properties of a resource nearly all attested expressions proved to be instances of descriptive language use and their interpretations yield ad hoc concepts that form part of the truth-conditional content. There was a small number (e.g. expressions with *zaliha* and *repository*) whose interpretation could follow both EA and MEA.

In the second group of examples comprising expressions where time and time intervals are conceptualized not merely as a resource, but more specifically as having value, only expressions with adjectives *zlatan* and *golden* were indisputably instances of descriptive language use, while certain examples represented the interpretative use of concepts (e.g. *pozajmljivali po nekoliko svojih sedmica*), with other examples falling somewhere in between. Apart from being ascribed value, time and time intervals were found to be conceptualized as having a price. In this group of examples the vast majority could be both interpretative and descriptive use of language, depending on the context.

Lastly, we have analyzed the expressions where the metaphor TIME IS MONEY is realized. Only two examples were attested in the English language (an expanded corpus would certainly yield different results) and the analysis of expressions in the Serbian language provided evidence that, even though it is common to speak about time as money, depending on the lexemes used and the context of the utterance, not all of them can be said to represent descriptive use of language.

Finally, it is important to note that despite the frequency of use and consequent transition into descriptive language use, the underlying cross-domain mapping is not questioned.

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**Нина Ж. Манојловић / ПРАГМАТИЧКИ АСПЕКТИ ПОЈМОВНЕ МЕТАФОРЕ  
ВРЕМЕ ЈЕ ВРЕДНА РОБА У СРПСКОМ И ЕНГЛЕСКОМ ЈЕЗИКУ**

**Резиме** / Појмовна метафора ВРЕМЕ ЈЕ НОВАЦ / (ВРЕДНА) РОБА сматра се метафором новијег датума у поређењу са неким другим међудоменским пресликавањима. Неки научници сматрају да се разлог појаве овакве концептуализације времена налази у културолошким променама, док други виде инхерентну финитност временских интервала као основ за посматрање времена као нечега вредног (као што је сваки ресурс који постоји у ограниченим количинама). Циљ овог рада јесте испитивање прагматичких аспеката конкретизације наведене појмовне метафоре у српском и енглеском језику. Наиме, циљ је да се у оквирима когнитивно-инференцијалне прагматике испита да ли су одређени изрази употребљени дескриптивно и/или интерпретативно. Теоријски оквир је теорија релеванције, а два приступа узета у обзир при анализи јесу експликатурна и модификована експликатурна анализа. Корпус анализе чине примери појмовне метафоре ВРЕМЕ ЈЕ (ОГРАНИЧЕН) РЕСУРС (јер сматрамо да управо ова концептуализација служи као основ за даљу елаборацију и профилисање *вредности* када говоримо о пресликавању на испитивани циљни домен) и време је вредна роба уз неизоставно пресликавање ВРЕМЕ ЈЕ НОВАЦ. Резултати указују на то да говорници српског и енглеског језика концептуализују време на сличан начин када су у питању испитивани изворни домени. Када говоримо о прагматичким аспектима анализе, резултати указују на адекватност и дескриптивног и интерпретативног приступа, а у зависности од похрањивања и рутинизације датог израза.

**Кључне речи:** појмовна метафора, ВРЕМЕ, РЕСУРС, ВРЕДНА РОБА, међудоменско пресликавање, експликатурна анализа, модификована експликатурна анализа, ад хок концепт

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## **MORPHOLOGICAL ANALYSIS IN THE SERBIAN EFL LEARNING CONTEXT: INSIGHTS FROM THINK-ALLOUD PROTOCOLS<sup>2</sup>**

Word-building or morphological analysis features prominently in the EFL/ESL teaching literature as an effective vocabulary learning strategy (cf. Gairns & Redman 1986; Nation 2001; Nunan 1995; Oz 2014) which enables learners to decipher the meaning of new lexical items by breaking them down into constituent morphemes. While L1 speakers can rely on this strategy upon encountering unfamiliar words from an early age (Anglin 1993; Clark 2001), the use of word-building in the field of EFL acquisition appears to be an under-researched topic (cf. Ward & Chuenjundaeng 2009; Diaz Contreras 2018). Therefore, the aim of this paper is to contribute to the growing body of literature on the development of morphological awareness in non-native contexts by investigating the way Serbian B2-level learners (CEFR) attempt to figure out the meaning of morphologically complex words, namely derivatives comprising one, two or three derivational affixes. Think-aloud protocols revealed that the upper-intermediate Serbian L1 English L2 learners mostly employed morphological analysis with multimorphemic words (i.e. those containing two or three derivational affixes) while bimorphemic words were often regarded as unanalyzable lexical units. Also, the data collected indicated that the learners rarely drew analogies between unknown words and words of similar morphological structure. The ensuing pedagogical implications and possible teaching interventions will be discussed.

**Key words:** word-building, morphological awareness, EFL learners, think-aloud protocols, teaching

### **1. MORPHOLOGICAL AWARENESS IN L1 AND L2 LEARNERS**

Besides compounding and conversion, derivation represents one of the three most productive morphological processes in English (Lieber 2009). Although its core vocabulary is Anglo-Saxon, English has over time borrowed a wealth of foreign words, most notably French, Latin, and Greek, which have enriched its derivational system with non-native roots and affixes (cf. van Gelderen 2006). Although the total number of derivational affixes remains a matter of controversy, according to certain conservative estimates there are more than eighty affixes, some more productive

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than others (cf. Marchand 1969; Stockwell & Minkova 2001; Hay & Bayeen 2002).

The abundance of prefixes and suffixes enables native speakers to form new words (e.g. *rawist*, *Trumpism*, *unfriend*) whose meaning can easily be understood because they contain familiar bases and affixes. Research has shown that native speakers can, from an early age, draw analogies with the existing words (e.g. *elitist*, *Bushism*, *unbreak*) and rely on morphological analysis, i.e. the process of breaking down words into morphemes (e.g. *raw* + *-ist*, *Trump* + *-ism*, *un-* + *friend*), to unlock the meaning of unfamiliar words (cf. Anglin 1993; Nagy, Diakidoy & Anderson 1993). This process is implicitly acquired in L1 children at a very young age - derivational affixes start to be increasingly used in novel formations around the age of three, after established words have been analyzed and some meaning assigned to affixes (Clark 2001). Elementary school children, when asked to define the meaning of unknown derivatives, resort to thinking about the familiar elements contained in them: for instance, when faced with 'priesthood' they will say that they know what a priest is (Anglin 1993: 101). In other words, they possess morphological awareness, that is, the knowledge of the inflectional and derivational forms of base words. As Carlisle (1995: 94) put it, morphological awareness (MA) is "children's conscious awareness of the morphemic structure of words and their ability to reflect on and manipulate the structure". Well-developed MA facilitates the development of reading and writing skills in English L1 children (Kieffer & DiFelice Box 2013; Liu & McBride-Chang 2010; White, Power & White 1989).

Little is known, however, about how morphological awareness affects L2 learning. The few studies that have been conducted suggest that there is a correlation between vocabulary size and mastery of affixes (Mochizuki & Aizawa 2000; Danilović, Dimitrijević Savić & Dimitrijević 2013): the larger a learner's vocabulary is, the better his/her knowledge of prefixes and suffixes. Also, even though there is an abundance of studies pertaining to vocabulary learning strategies that counter in the role of morphological analysis, none of them have to date focused on the way L2 learners attempt to decode the meaning of complex words presented out of context. In other words, to our knowledge, no one has modelled their research on Anglin's (1993) seminal paper. The present paper aims to fill this void by using think-aloud protocols with Serbian upper-intermediate EFL learners.

In the following section we will briefly discuss the nature of the English lexicon and the nexus between vocabulary and derivation before proceeding to discuss the methodological aspects of our research, as well as the results and their pedagogical implications.

## 2. THE INTERRELATEDNESS OF DERIVATION AND VOCABULARY IN L1 AND L2 ACQUISITION

Etymologically speaking, the very rich English lexicon is multilayered. The most frequent words in English – articles, prepositions, pronouns or conjunctions - are of native origin. So are many other short words that typically denote everyday objects and ideas, e.g. *house, child, water, tree* or *love*. On the other hand, borrowings from Latin tend to be multisyllabic, contain prefixes and/or suffixes, and add varying degrees of formality to the language, e.g. *differentiation, insularity, provincialism*. Many of them are widely used in specialized domains, such as various academic disciplines, as indicated by the Academic Word List (Coxhead 2000) which contains 90% of word families whose origin can be traced to Latin, Greek, or French.

A word family represents an important concept in the studies of lexical acquisition. It refers to “a base word and all its derived and inflected forms” (Bauer & Nation 1993: 253), e.g. *invest, investor, investment, investing, invests*. All the members of a word family are closely related in form and meaning. For this reason, it is commonly assumed that, in theory, knowing a word entails knowledge of its word family members. As O’Dell (1997: 277) put it: “the student who knows the word *translate* can certainly understand, and also probably invent, such words as *mistranslate, re-translate, untranslatable, translator, co-translator, translation, and mistranslation*.” In practice, nevertheless, even native speakers have difficulties in the production of word family members (Schmitt & Zimmerman 2002). Non-native speakers are, naturally, even more likely to face challenges in this respect (Schmitt 1999; Dimitrijević Savić & Danilović 2010; Danilović 2013). Instruction in the formation of derivatives, therefore, seems invaluable in the L2 classrooms. A survey of Finnish L2 textbooks revealed, though, that instruction on derivation was sparse while exercises were plentiful (Myry 2016). This finding supports the thesis held by some authors (e.g. Lopez-Jimenez 2009; Schmitt 1997) that the communicative approach to language teaching has undermined the value of explicit lexical instruction. How do the aforementioned empirical data fit in with strategies and techniques for vocabulary teaching devised by specialists in the field?

With so many morphologically complex words in English, vocabulary learning task facing non-native speakers of English might seem daunting. Not all the words are equally useful, though. Given that approximately 2,000 most frequent words enable a learner to understand at least 80% of the running words in any text, experts nowadays suggest that these words deserve all kinds of attention in the language classroom (cf. Carter 1998; Nation 2005). On the other hand, time and effort should not be wasted on low-frequency words. Instead, learners should be equipped with strategies for coping with them. These include, inter alia, guessing from the context, using a dictionary, or applying the word-part strategy (Nation & Newton

1997). The word-part strategy has also been named ‘word-building’ (Ward & Chuenjundaeng 2009). It entails two steps: (1) breaking down complex words into parts, for which recognition of affixes is a prerequisite, and (2) relating the meaning of the word parts to the meaning of the word, for which knowledge of the meanings of affixes is a prerequisite (Nation 2001: 278).

Bearing in mind that the use of the word-part strategy in EFL learners appears to be an under-researched topic, this paper will explore whether Serbian B2-level learners (CEFR) rely on it when encountering unfamiliar, morphologically complex words. Consequently, the results will indicate whether the word-part strategy deserves a more prominent place in the EFL classroom.

### 3. METHODOLOGY

#### 3.1. PARTICIPANTS

Six first-year students of the English department at the Faculty of Philology and Arts, University of Kragujevac, voluntarily participated in the study. They had spent at least eight years studying English in a formal learning context prior to enrollment in English language and literature program. Their L1 was, without exception, Serbian while their mean age was 19.02. Although their proficiency level was assessed as B2 by means of an entrance exam that they had all successfully passed, the participants differed with regard to vocabulary size, speaking skill, and morphological awareness, as became evident when the interviews were conducted. Hence, when the transcript of the interviews was being analyzed, we divided the students into two groups depending on their performance: the more (G1) and less morphologically aware group (G2).

#### 3.2. RESEARCH INSTRUMENTS

Think-aloud protocols, also known as verbal reports, are extensively used in the field of second language research when researchers wish to gather information about the way people approach problem-solving activities (Gass & Mackey 2011: 55). In line with Anglin’s (1993) work in the field of L1 acquisition, we decided to test our learners’ ability to decompose unknown words into morphemes by choosing derivatives of varying degrees of structural complexity: six words that contained one derivational affix (e.g. *competitive*, *suspicious*, *patriarchic*, *staggerer*, *clerkship*, *hideosity*), six words that contained two derivational affixes (*talkativeness*, *unbribeable*, *recklessly*, *explorational*, *impassibility*, *abstractionism*) and, finally, six words that contained three derivational affixes (*mischaracterization*, *intransitivity*, *encapsulated*, *strengthlessness*, *disestablishmentarianism*, *environmentalist*). Most of these words were borrowed from Anglin (1993). A few were



excerpted randomly, though, from the Merriam-Webster online dictionary (namely, *mischaracterization*, *encapsulated*, *strengthlessness*, *environmentalist*, and *disestablishmentarianism*).

### 3.3. PROCEDURE

The data was collected during the final few weeks of the first semester so the learners' use of morphological analysis would not be compromised by the course in English morphology which they were to take in the second semester. The author of this paper doubled as the interviewer.

To understand what was expected of them, the participants were first introduced with the purpose of the study and then asked an introductory question whose purpose was to demonstrate what the task was going to be like (i.e. What does the word 'container' mean?). The participants were encouraged to think aloud about each word they heard and share their thoughts about its meaning with the interviewer. They were informed that the words were going to become more and more complex as the interview progressed but at the same time prompted to give as sincere answers as possible. When the participants failed to provide an answer to the question "What does X mean?", they were asked "Can you tell me anything else about the word X?" or "Could you use it in a sentence?". If they still could not guess the meaning of the target word, the interviewer would move on to the next question.

Example: *clerkship*

I: The next word is *clerkship*. What does the word *clerkship* mean?

N5: It's a noun. It has the same ending like relationship. So, well...maybe if...I could say it has to do with maybe a group of people, more than one person. What did you say, again?

I: Clerkship.

N5: Hmm. Clerk. Clerk. Well, aren't clerks people who work in...I don't know... with papers, documents, with administration?

I: Mhm.

N5: So, maybe, it's staff. A group of people doing their job. Maybe.

The conversation was purposely conducted in English for two reasons: (1) because the learners' level of proficiency (B2 CEFR) enabled them to speak, more or less, fluently in English, and (2) so the learners' attention would be focused on English words, and thus implicitly, on their inherent structure. In other words, had the learners been given an opportunity to switch to their L1 (Serbian), they might have resorted to translating the target words which would have, inadvertently, compromised the main purpose of the interviews. The students did, as a matter of fact, try to explain the meaning of certain cognate words by mentioning what they mean in their L1 (e.g. *patriarchic* – *patrijarhalan*), which indicates that they were using a range of strategies in deciphering the meanings of the target words.

The participants' consent to being recorded was acquired beforehand. The digital recordings were later transcribed and meticulously analyzed. All the interviews were conducted in one of the teaching cabinets at the Faculty of Philology and Arts in Kragujevac, outside of regular classes. Each interview lasted approximately 20 minutes.

#### 4. RESULTS AND DISCUSSION

In the beginning stages of the interview, the participants were asked to define the meaning of derivatives with only one derivational affix, i.e. *suspicious*, *competitive*, *patriarchic*, *staggerer*, *hideosity*, and *clerkship*. Having completed the task, they would move on to morphologically more complex words, namely, those with two (*unbriable*, *recklessly*, *talkativeness*, *magnetization*, *explorational*, *abstractionism*) or three derivational affixes (*mischaracterization*, *strengthlessness*, *environmentalist*, *encapsulated*, *intransitivity*, *disestablishmentarian*). The following procedure was consistently applied: the teacher would read the target word slowly off a piece of paper, repeat it if necessary but would not show it to the students. The students would then attempt to explain the meaning of the word in their own words.

As far as derivatives with a single affix are concerned, if the students knew their meanings, they would share their thoughts with the interviewer straight away, often using target words in illustrative sentences. This pattern was observed with the first target word, *suspicious*, whose meaning was fairly easy for the students to define.

N1: Suspicious. Well, it's someone who...who is not sure in something and has...he has some doubts. For example, you can be suspicious about your husband if he goes out every night.

N2: Suspicious? It should be something...that we don't think is correct and if we say, for example, suspicious person...we think he didn't do something right or correct. We don't trust them.

N3: Hmm...suspicious. OK. Well, to be suspicious of something means... maybe not to be certain about something that we...maybe...suspicious... maybe somebody told us something but we are not certain whether it's true or not and we are suspicious of the fact that we were told.

N4: We use it when we're not sure about something so we have a doubt. We don't trust someone or don't believe them.

For the next target word, *competitive*, the students mostly relied on its morphological relatedness to the verb *compete* or the noun *competition*. They were, obviously, thinking about the familiar word-family members and using a 'part to whole' approach, that is, a single component was first discussed before the meaning of the derivative was arrived at.

N1: Competitive. I can connect it with competition. And it's something...for example, sport competition or...people who try to make themselves better or to win something. So, a person who likes to be a part of competition is competitive.

N2: It means that...we like to compete. It's used for people. People who like to compete, it's like a virtue or something.

N3: It's someone who's willing to...to compete. Who likes to compete. To win, to be the first.

When discussing the next word, *patriarchic*, we noticed that the two students with more advanced morphological knowledge attempted to decode its meaning by taking into consideration the meaning of the base, *patriarch*:

N1: Patriarchic. It had something to do...well, not with father, but maybe it's...I'm not sure how to explain that. Patriarch. It's something that...a man, like, father is more important than women, in a way.

N2: [...] It's related to the head of the family, patriarch.

The next three words, *staggerer*, *hideosity*, and *clerkship*, provide an even clearer insight into the differing approaches taken by the two groups of students: the less competent students mostly claimed that they had never come across the target derivatives or established a mistaken semantic link with other lexemes (e.g. *clerkship* – *ship*, *hideosity* – *idiot*, *hideosity* – *hide*), prompted by phonological associations:

N4: [staggerer] I heard that word before but I am not sure of its meaning.

N5: Staggerer [silently]. I just don't get any ideas. I can't remember, no.

N4: [hideosity] I don't know. I've never heard it. No, really. I have no idea.

N6: [clerkship]...Well, I hear ship so it could be about a ship, maybe some supplies on it.

On the other hand, the students whose morphological awareness was more developed, even when they were not absolutely certain what the target words or their bases meant, showed that they were able to decipher the meaning of constituent morphemes. They did so by drawing analogies with other words that contained these very same morphemes or by decomposing the words into morphemes and then thinking about their meanings and their contribution to the meaning of the target derivative.

N1: Staggerer. It's a person. It sounds like a teacher or singer or...it is a person but I don't know what this person does...stag...stagger. I haven't heard anything similar to it so I cannot relate it to anything. It's a person who staggers, who does something.

N2: Hideosity. Something hideous. Well, it's a noun. I'm not sure what hideous means but it's about that. A thing which is hideous.

N3: Clerkship. It could be something about clerks. Yes. It's maybe some clerk who works somewhere. So, it's...like a state of...clerkship. Of being a clerk.

It is worth pointing out, however, that even these students sometimes found it difficult to break down the target derivatives into morphemes or search for meaningful semantic associations.

N2: [staggerer] Hm...stag....well, I don't know if it's connected but I heard about stag party.

N1: [clerkship] This word is not familiar to me. But...clerk is, like, a noun. I've heard of a name, Clerk, too. A personal name. But not clerkship.

The next segment of the interview featured even more complex words, that is, those containing three morphemes (predominantly suffixes). Once more, as was the case with simpler words, we noted that the students did not hesitate in explaining the meanings of words familiar to them (e.g. *recklessly*, *talkativeness*). Moreover, some students did divide the target derivatives into morphemes, focusing on the bases *reckless* and *talkative* or the root (e.g. *talk*) although they obviously knew what the words meant without the explicit use of this strategy.

N1: Recklessly. It's used for someone...someone who doesn't care too much about something. Like, you do things without taking care.

N3: Recklessly. OK. It's an adverb. I know its adjective is reckless. For example, don't drive recklessly means pay attention when you're driving, do not talk on the phone, do not drink alcohol, do not do something else. Pay attention. Be cautious.

N4: Talkativeness. It's the ability of some person to talk, to chat or...to speak a lot.

N3: [talkativeness] It's someone who is communicative, talks to people. That's the meaning of talkative, the adjective. And talkativeness is being able to communicate, to talk a lot, like it's one of your characteristics. For our job, for example, talkativeness is very important.

When it comes to the adjective *unbriable*, however, we noticed that all the students attempted to perform a morphological analysis, but more or less successfully. The students whose morphological awareness was less developed mentioned the meanings of prefixes, suffixes, and roots, yet could not understand the meaning of the word *bribe*, so they failed to decipher the meaning of the derivative *unbriable*.

N5: I know it's something opposite because of the preposition un-...unbriable...but I don't know what it means.

N6: Hm...it must be something...ability...no ability to do something but...I'm not sure what bribe could mean.

On the other hand, the students whose morphological awareness was more developed either knew what *bribe* and *bribeable* meant and linked the members of this word family with the prefix *un-* that they did not mention explicitly or started the analysis of the meaning of the word from this prefix and ended their explanation by pointing out the meaning of the root.

N1: Well, it's a person who doesn't take bribe, who doesn't take money to do something.

N2: It's when someone is not bribeable, so they don't take money to do or not do something. Politicians or police officers in movies are unbribeable, you can't buy them, they don't take bribes.

Also, we noticed that the students whose morphological awareness was poorly developed exhibited insecurity when performing a morphological analysis and defining the meaning of the derivative *explorational*. This time they mistakenly divided the word into morphemes or explained its meaning although they knew how to use it in an exemplary sentence.

N4: Explorational. It doesn't have something to do with the verb explain, no? I haven't heard that word before. [...] Does it have something to do with rations? No? Explorational. If I could recall what is exploration, I would know.

N5: To explore, to find something and...for example, if we use it in a sentence, we can describe something which can be...found out or which we could explore. Like, this place could be explorational, it could be explored.

In contrast, the students in the more advanced group tried to decode the meaning of *explorational* by focusing on the lexical link between this derivative and its semantic network: first they would mention the meaning of the base *exploration* or the root *explore*; then they would illustrate the use of the word family members by creating sentences or clauses connected with the semantic field of 'travel' (e.g. *explorational journey*, *trip*, *voyage*).

N2: It's something about research, exploration. I could go on an explorational voyage, to find new lands, for example. I mean, Columbus went on that kind of voyage, to find new information, new land.

When it comes to the trimorphemic derivative *magnetization*, almost all the students employed the strategy of morphological analysis, establishing links between *magnetization* and the meaning of its root, *magnet*. In addition, the students whose morphological awareness was more developed, brought up the verb *magnetize* and associated *magnetization* with the processes typical of the field of physics.

N1: It probably has something to do with magnets. It's a noun. If it has to do with magnets then it's...to magnetize something is...maybe to...to magnetize a surface or something...means to make it become magnetic. And magnetization is the process of doing that.

The less morphologically advanced group of students attempted to establish some meaningful associations, but with less success, all the while not considering the meaning of the target word in a broader context of its use or register. They explained that they did not know what the meaning of the word was or were unsure about it. We can, therefore, surmise that the unknown lexeme was examined in isolation and not linked with any existing knowledge. A single student did, however, establish a lexical connection between *magnetization* and iron and metals, yet avoided a morphological analysis altogether.

N5: Magnetization. It's something about magnets. Yes. Maybe...magnitude...magnetization. No. I honestly don't know.

N6: I'm not sure but I can try to explain. To guess. Well, I associate it with iron, for example, maybe. Two negative or two opposite sides that are connected...are together. So, it's about that...about metals...connected because of magnetization.

Finally, to decode the meaning of the last trimorphemic word, *abstractionism*, all the students performed a morphological analysis. They mostly concentrated on the meaning of the root *abstract*, establishing a link between the derivative and artistic or literary movements, but not mentioning the suffix *-ism*.

N4: Abstractionism. It is maybe connected with something which is abstract or something which we cannot touch or see. So, abstractionism is maybe something in arts where they draw abstract pictures.

It is worth noting, though, that a single student whose morphological awareness was more developed did approach this task in a different order, thinking first about the final morpheme *-ism*, and then about the root *abstract*.

N2: It could be a movement or something. In literature. Or something like that. I think so because of the *-ism*. We learnt so many *-isms* in literature, for example. And if it's...abstractionism...it maybe means not realistic. It has to do with something abstract.

The final segment of the interview featured the oral presentation of very complex words, consisting of four morphemes. As was the case with other lexemes, regardless of the structural complexity of these derivatives, if the students were familiar with them, they would explain their meaning to the interviewer immediately (e.g. *environmentalist*).

N3: Environmentalist is a...I think it's a person who...has a lot to do with environment. Ecologist, I think. Something similar.

N4: It's a person who is involved with...some...some ecological organizations. It's a person who is trying to save environment, nature.

The students analyzed other lexemes of this sort, for the most part, by identifying the base or the root. When the less advanced group applied the word-building strategy, this occasionally resulted in false reasoning about the meaning of certain morphemes or the inability to draw a conclusion about the meaning of the target derivative based on the meaning of the constituent morphemes. What is more, new word family members were created in this process (e.g. *capsulization*, *capsulated*).

N4: Mischaracterization. Missing of characterization. I can just guess, really. Something miss, something... like... which we don't have.

N5: Strengthlessness. Strength. It seems familiar to me but...strengthlessness. I can't make a guess. Really.

N6: Encapsulated. Hm...first of all, capsulated, I think it has something to do with closed, not open. And encapsulated, that means that...something is, to put it simply, open or not closed. I think so because of capsulization.

N5: Intransitivity. The word transitive is familiar to me so I believe it has something to do with the transitivity...yes, but I cannot quite remember any example or explanation for it.

N4: Disestablishmentarian. It is something that is not established. Establishment...and it means that is not adopted, not...something which is not accepted maybe. But I'm not sure. It's a long word.

If we take into consideration the fact that a student whose morphological awareness was more advanced initially thought that the form *encapsulated* had a negative meaning, it becomes clear that homophonous prefixes, such as *in-* and *en-*, can complexify the comprehension of new words for L2 learners.

N2: Encapsulated. I know it has a negative prefix but it seems to me...I don't know. I would say that it's...it doesn't have a negative meaning, maybe. It looks like something is in the capsule. Something like that. It can be in a capsule, in a way.

From a morphological standpoint, the analysis of very complex lexemes clearly indicated that the advanced students know the meanings of affixes or attempt to draw analogy with other words in order to arrive at the meaning of the target derivatives.

N1: Strengthlessness. It's something without strength. I know that strengthless means not having strength.

N2: Mischaracterization. It's a noun again. And the prefix *mis-* shows us that it's...OK, it's the opposite. I mean, like *miscalculate* or *mislead*. Something that is wrong.

N3: Intransitivity. Well, maybe something about objects. When a verb is transitive it is followed by object. So the opposite is intransitive, when the verb has no object next to it.

N1: Disestablishmentarian. It's related to politics. It's, perhaps, a person who doesn't approve of establishments. I don't really know what establishment means here but I know the negative prefix, *dis-*.

Taking into consideration the aforementioned verbal reports, we can conclude that the students seldom relied on analogy as a possible problem-solving strategy that could have assisted them in deciphering the meaning of the target derivatives. In other words, it seems that, despite having reached the B2 (CEFR) level of English competence, the L2 students are not aware of their knowledge of numerous lexemes whose morphological components are identical. It is precisely this implicit knowledge that could be activated in contact with unknown words. For instance, the lexeme *disestablishmentarian* contains the same suffix *-ian* as do the words *librarian*, *electrician*, *optician*, *musician*, *politician* or *technician*, at least some of which the students must have been introduced to in their English classes. It is worth noting, though, that the phonetic realization of the suffix *-ian* /ɪən/ in *disestablishmentarian* is the same only in the word *librarian*, so this lack of phonetic similarity could have resulted in poor recognition of the link between words containing this element. Anglin (1993) also noticed that native speakers of English rarely relied on analogy as a strategy for deciphering the meaning of unknown words. Those who did employ it were higher grade students. It is possible, therefore, that the level of L2 competence of our students is currently too low for them to be able to observe the similarities between morphological elements and attempt to use this sort of knowledge in order to decode the meaning of unfamiliar words. For this reason, various word comprehension strategies should be developed in students, including the establishment of links between the old and the new knowledge, i.e. the inference of meaning by drawing analogy with words of a similar morphological structure. Such an approach to vocabulary acquisition promotes learner autonomy, enabling learners, in combination with other vocabulary learning strategies (e.g. reliance on the context or morphological analysis), to become more successful at comprehending unknown words (cf. Nation 1990, 2001).

On the other hand, it seems that certain students, predominantly those whose morphological awareness is more developed, have already started applying their knowledge in practical tasks. They are able to identify morphemes in derivatives and to presume, based on the meaning of roots (or bases) and affixes, what the meaning of morphologically complex words is. In relation to this, it is worth noting that all the students made



use of morphological analysis, as a tool for deciphering the meaning of words presented during the interview, but with differing degrees of success and differing consistency. Faced with bimorphemic words, the students whose morphological awareness was underdeveloped rarely attempted to divide these derivatives into morphemes. Even when they did so, they were often moving along the wrong lines, claiming they had never heard of the word constituents, so they failed to see their interrelatedness with either the concepts or words that might have been familiar to them.

The results of our analysis showed that the trimorphemic and quadrimorphemic derivatives presented a challenge for our students who did try to break these words down into constituent morphemes but, given that they lacked explicit derivational knowledge, did not succeed in decoding their meaning. Consequently, if we would like to improve our students' understanding of unfamiliar words, they need to become acquainted with the fact that English contains many derivatives composed of recurring affixes whose meaning can be analyzed by considering the meaning of word family members or other words containing the very same affixes. Also, students should be provided with explicit explanations concerning individual derivational affixes (i.e., their function and meaning), especially the most frequent ones. Moreover, their morphological knowledge could be developed and consolidated by means of various classroom games and activities (cf. Danilović Jeremić 2018).

Students who possessed more advanced morphological knowledge were much more successful at defining the meaning of the target derivatives. They showed that they (mostly) knew what the meanings of roots and bases were. When in doubt, they made use of morphological analysis and relied on their knowledge of lexical categories as well as the meaning of derivational affixes. All of this could imply that the more developed morphological awareness of L2 students is, the better their comprehension of unknown words, which is in line with the results and recommendations of other researchers in the fields of both L1 acquisition (Roberts 1965; Carlisle 1995, 2000; Nunes et al. 2006) and L2 acquisition (Gairns and Redman 1986; Nunan 1995; Nation 1994, 2001).

## 5. CONCLUSION

The aim of this study was to explore how B2-level (CEFR) Serbian EFL learners decode the meaning of unknown, morphologically complex words. This was achieved by means of a think-aloud protocol conducted in line with Anglin's work (1993) in the field of L1 acquisition. The results have shown that Serbian EFL students use morphological analysis as a tool for deciphering the meaning of unfamiliar words but do not do so consistently. Those students whose morphological awareness was more developed employed this strategy much more frequently than others. Moreover,

they occasionally drew analogies about the meaning of the target derivatives either by relying on their knowledge about the words of similar structure or by connecting the derivatives with other words within the same lexico-semantic field. On the other hand, the students whose morphological awareness could be considered less developed did not depend on these strategies; when faced with trimorphemic or quadrimorphemic derivatives they attempted, for the most part, to analyze their meanings by decomposing the derivatives into their constituent morphemes yet failed to do so successfully because they lacked specific knowledge about the meaning of derivational affixes or roots.

We can conclude that, if our aim is to enable our students to grapple with unknown words, we need to equip them with explicit knowledge relating to the meaning and function of individual derivational affixes. Therefore, in an instructional EFL setting, the word-building strategy should be combined with concrete explanations affix-wise. In doing so, instructors can draw on the Bauer and Nation (1993) seven-band list that groups derivational affixes according to their frequency, productivity, predictability, and various kinds of regularity, with the lower-level affixes being covered before the higher-level ones. Furthermore, the introduction of a whole range of strategies for coping with unfamiliar words (cf. Schmitt 2000) would certainly make it possible for students to approach them from a variety of angles and, consequently, better understand their meaning.

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**Jelena R. Danilović Jeremić / MORFOLOŠKA ANALIZA I UČENICI ENGLESKOG JEZIKA KAO STRANOG KOJIMA JE MATERNJI JEZIK SRPSKI: UVIDI NA OSNOVU TEHNIKE GLASNOG RAZMIŠLJANJA**

**Rezime** / Raščlanjivanje reči ili morfološka analiza pominje se u relevantnoj literaturi posvećenoj usvajanju engleskog kao drugog/stranog jezika kao efikasna strategija koja ima značajnu ulogu u učenju vokabulara (v. Gairns & Redman 1986; Nation 2001; Nunan 1995; Oz 2014). Ona omogućava učenicima da otkriju značenje novih reči tako što ih dele na sastavne elemente, tj. prefikse, sufikse i korene. O sposobnosti izvornih

govornika engleskog da koriste ovu strategiju, već od ranog uzrasta, dosta se pisalo (v. Anglin 1993; Clark 2001) dok primeni morfološke analize u oblasti usvajanja engleskog kao stranog jezika nije posvećeno mnogo pažnje (v. Ward & Chuenjundaeng 2009; Diaz Contreras 2018). Sledstveno tome, cilj ovog članka je da doprinese rastućem broju radova koji se bave razvojem svesti o morfološkoj strukturi reči kod neizvornih govornika engleskog time što će istražiti načine na koje učenici engleskog kojima je maternji jezik srpski, sa kompetencijama na nivou B2 (ZEO), pokušavaju da protumače značenje složenih reči (derivata sa jedan, dva ili tri afiksa). Primena tehnike glasnog razmišljanja otkrila je da su ispitanici mahom pribegavali podeli reči na morfeme pri susretu sa višemorfemskim derivatima, tj. onima koji su sadržali dva ili tri derivaciona afiksa. S druge strane, dvomorfemski derivati su često tretirani kao nedeljive leksičke celine. Prikupljeni podaci ukazuju još i da su ispitanici retko primenjivali analogiju kao sredstvo za inferiranje značenja nepoznatih derivata, odnosno nisu pokušavali da se oslone na reči slične morfološke strukture. U skladu sa dobijenim rezultatima prokomentarišaćemo pedagoške implikacije i predložiti vidove nastavnog delovanja koji bi mogli da unaprede pedagošku praksu.

**Ključne reči:** morfološka analiza, učenici engleskog jezika kao stranog, tehnika glasnog razmišljanja, nastava

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## **EXPLORING ADJECTIVAL FREE ADJUNCTS: A CROSS-LINGUISTIC STUDY OF ENGLISH AND SERBIAN**<sup>2</sup>

The paper examines adjectival free adjuncts in English and Serbian using a double and bidirectional corpus consisting of novels and their translations in both languages. The objectives of this study are to describe the formal and semantic characteristics of adjectival free adjuncts and to compare these constructions in the two languages based on their translational equivalents. The analysis of adjectival free adjuncts in English and Serbian demonstrates that they can be considered formally and semantically equivalent constructions, as evidenced by nearly 85% of cases showing absolute alignment in translation. In the remaining cases, adjuncts are conveyed through other phrases and clauses. In the translation from English to Serbian, translators resort to non-finite and relative clauses when the adjective is accompanied by a longer complement in English. On the other hand, when rendered into Serbian, adjuncts may change position or be translated as full adverbial clauses with an explicit conjunction to avoid ambiguity. In a number of instances, the comma is omitted in translation, indicating the close relation between adjectival free adjuncts and depictive secondary predicates.

**Key words:** adjectival free adjunct, secondary predicates in English, predicate attribute, verbless clause

### **1. INTRODUCTION**<sup>3</sup>

Over the course of time, free adjuncts have garnered scholarly attention due to their distinctive syntactic and semantic properties. This linguistic construction serves as an optional element within a sentence, providing supplementary descriptive information about the main clause. Approaching them from diverse theoretical and empirical perspectives, numerous academics have conducted extensive investigations into free adjuncts, with topics ranging from differentiating between arguments and

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adjuncts (Dowty 2003), establishing distinctions among various classes of adjuncts (Fabricius-Hansen and Haug 2012), and examining the potential syntactic positions of adjuncts (Ernst 2001). Despite the amassed knowledge and different terminologies, which may partially or entirely overlap, the question of adjuncts is still engaging, especially in cross-linguistic investigation, and in relation to other similar constructions, such as secondary predicates.

The term free adjunct seems to be preferred over adverbial clause, dependent adjective clause, absolute clause, complement clause, converb, which are just some of the labels used in English literature to refer to prosodically detached non-finite or verbless units that are structurally and semantically similar to the matrix clause. To avoid ambiguity and narrow down the research, the paper will deal only with adjectival free (i.e. detached) adjuncts, and exclude such constructions as absolute clauses and participial free adjuncts (the interrelation with the given categories is to be discussed in the following section).

The description of adjuncts as peripheral sentence constituents with adverbial meaning has been extensively documented within individual languages (Ernst 2001; Piper et.al 2005). However, a comparative examination of these constructions in Serbian and English remains unexplored, potentially due to their surface-level similarity in terms of syntactic positioning and semantic contribution. This paper seeks to address the research gap by investigating adjectival free adjuncts in both English and Serbian, utilizing a corpus consisting of novels in the two languages and their respective translations. The primary objectives of this inquiry are to compare adjectival free adjunct in English and Serbian, assess potential alterations in meaning and position during translation, analyze the choice of translation equivalents, and ascertain the underlying reasons for such choices. Another goal is to determine which sentence position is favored by adjuncts and verify previous assertions regarding the preference for final position of free adjuncts in English. More importantly, this study aims to explore potential overlaps with other related constructions in both languages, ultimately shedding light on how translators perceive adjuncts in relation to the meaning of the matrix clause.

The following section elaborates on terminology and definitions of a free adjunct in English and Serbian linguistics, as well as related constructions.

## 2. ON FREE ADJUNCTS IN ENGLISH AND SERBIAN

Quirk et al. (1985:1124–5) and Huddleston and Pullum (2002: 1267) employ the term *verbless clause* to define an optional sentence constituent that is typically realized through a participle form or without a verb. It is not introduced by a conjunction and does not inherently signal



a specific semantic relationship<sup>4</sup>. Therefore, its meaning, often related to time, condition, cause, etc., is contextually determined. The authors distinguish *absolute clauses* as a type of subordinate clause with an overt subject, which may be different from the subject of the matrix verb<sup>5</sup>, making them syntactically more independent from the main clause. On the other hand, other subordinate clauses establish a connection with the main clause through an implicit co-referential subject, controlled by the finite verb in the main clause. Absolute clauses shall not be considered here for two reasons: i) the overt subject implies a different syntactic structure, even though they may, as in the case of free adjuncts, incorporate non-finite and non-verbal predicates (such as noun phrases, prepositional phrases and adverbs), and ii) absolutes may be 'augmented' or introduced by a conjunctive preposition (*with* most often) (Kortmann 1991: 11), the distinction we are not interested in pursuing here.

The verbless clause can be realized with or without a modifier in the form of an adjective, as can be seen in the examples below. To avoid ambiguity, a more precise term *adjectival free adjunct* is used to refer to verbless clauses.

*Rather nervous*, the man opened the letter.  
The man, *rather nervous*, opened the letter.  
The man opened the letter, *rather nervous*.

The semantics of free adjuncts in general is characterized by a multitude of potential interpretations and expressions. Quirk et al. (1985: 1124), Huddleston and Pullum (2002: 669), as well as Biber et al. (1999: 201) in the *Longman Grammar of Spoken and Written English*, argue that the sentence position has effect on its interpretation. Specifically, an initial position implies background information, a medial position is typical of parenthetical elements, and a final position, is reserved for semantic supplements. From the previous examples, it can be observed that the verbless clause (i.e. adjectival free adjunct) is closely related to the non-restrictive relative clause, particularly in the medial position, as it condenses the copulative verb and the relative pronoun. For instance, "The man, who was nervous, opened the letter" (Quirk et al. 1985: 425). The adjective in the initial position may well be interpreted as the cause or the background circumstance. The claims about adjunct semantics in relation to their position do not seem to be grounded in an extensive empirical research. One such attempt was Behren's (1998) investigation of participle *-ing* adjuncts. She was able

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4 Interestingly, the same term *verbless clause* is used in Biber et al. (1999: 201) to denote clauses without an overt *to be* verb and with a subordinator (although, whether, if possible). To indicate adjuncts loosely attached to the core of the clause describing the subject referent, the authors use the term detached predicatives (Biber et al. 1999: 136–137).

5 *Tom having knocked on the door*, James instantly called Anabel would be an example of different subjects, while (some authors (see van de Pol and Hoffman 2016), consider adjectival predicates, as in *She left the party*, her heart heavy, as a subtype of absolute clauses.

to conclude that adjuncts in the final sentence position denote causative event or an elaboration, while initial adjuncts are generally vague (Behren 1998: 205). Furthermore, Behren observed that the meaning depended on whether the information was contextually new or given, and whether the events in the free adjuncts was culminating or non-culminating.

Regardless of the position, non-finite free adjuncts may encode causal, temporal, conditional, and concessive meaning (Curme 1931: 154–157). Adjectival free adjuncts may also describe attendant circumstances that are co-temporal with the event in the matrix clause, which is a matter of pragmatic inference (Huddleston and Pullum 2002: 669). In other words, the meaning of adjectival free adjuncts are indicative of the dual connection with both the subject and the predicate—they provide a description of a participant of the matrix clause that is bounded by or simultaneous with the matrix verb. In this sense, adjectival free adjuncts are comparable with depictive secondary predicates.

In *Semantic Variability of Absolute Constructions*, Stump (1985) provides a first semantic analysis of free adjuncts, focusing specifically on those that exhibit adverbial and clause-like functions, i.e. non-finite types. His observations, however, hold true for the adjectival type as well. Within this subset, Stump makes a significant observation that the temporal and conditional interpretations are only possible for what he refers to as weak free adjuncts. According to the author, weak and strong categories of free adjuncts and absolute constructions are directly related to lexical surrounding guiding the interpretation; hence, the adjunct meaning may depend on whether the controlling clause has a habitual or generic interpretation, or whether it contains modal verbs or certain adverbial expressions of frequency. Consider the following examples from Stump (1985):

Standing on a chair, John can touch the ceiling. (weak adjunct)

Having unusually long arms, John can touch the ceiling. (strong adjunct)

In the first example, the weak adjunct is interpreted as a precondition for the matrix predication. It signifies a temporal framework within which the controlling clause holds true. Therefore, only during the act of standing on the chair can John touch the ceiling. On the other hand, the strong adjunct in the second example contributes a causal meaning to the sentence. It implies that John can touch the ceiling because he has long arms. Paraphrases arise directly from the meaning of the adjunct – more specifically, from its lexical core – which is why strong adjuncts typically involve predicates of individual-level, i.e. permanent, inherent characteristics, while weak adjuncts feature predicates of state-level, i.e. temporary characteristics.

In summary, the semantic contribution of orthographically detached adjectival adjuncts is heavily contingent upon pragmatic inferences and the lexical meanings of the adjacent elements.

The term free in the linguistic category of adjuncts suggests a defining characteristic of this category. It is possible to delineate a distinction between adjuncts and secondary predicates, as orthographically detached and attached elements, by observing their meaning when negation is applied. The following examples provided by Simpson (1983: 412) indicate that secondary predicates can undergo either a general or partial negation, resulting in two possible interpretations – that the subject left calmly (i.e. not angry) or did not leave at all. On the other hand, a comma-separated adjunct is not subject to negation, and the only possible interpretation is that the subject did not leave. In this case, it is possible to consider the detached adjunct as the cause of the departure.

He didn't leave outraged. → a) He didn't leave at all. b) He left calm.  
He didn't leave, outraged. → He didn't leave (because he was outraged).

In summary, the term *adjunct* is typically examined in conjunction with complements, and these elements are generally recognized as supplemental components of a sentence. Their primary function is to introduce informational complexity into sentences. Notably, the orthographic separation is what diverges free adjuncts from other adjuncts such as temporal adverbs (e.g., *yesterday*) and subordinate clauses of adverbial meanings. Within the category of free adjuncts, a further classification can be made into absolute and verbless clauses. Absolute clauses contain an explicit subject along with either a participle as their verb or no verb at all, while verbless clauses lack both a subject and a verb of their own.

The following section will examine the related structures in Serbian.

The structural-semantic correspondent of English adjectival free adjunct can be found in Serbian *appositive* (*apozitiv*) or *adjectival apposition* (*pridevska apozicija*), which Piper and Klajn (2013: 310) define as a detached adjectival specification that is usually used after the noun it determines, and agrees with the noun in gender, number, and case if it has those grammatical categories. It can also appear in the indefinite form if it distinguishes aspect, as illustrated by the following examples (Piper et al. 2005: 72).

Moj kolega, *iznenađen*, nije imao vremena da reaguje.  
Mačka, *uplašena*, jurne na vrh drveta.

Similar to the instances in English (*Rather nervous, the man opened the letter*), we observe that appositives comprise adjectives and their modifiers, and are set apart by a comma.

It is important to note that *appositive* differs from *apposition* (*apozicija*) in that the governing word of the apposition is a noun (e.g. *Milan, doktor hemijskih nauka, došao je do važnog otkrića.*), although a nominal phrase

may occur in the appositive as a complement of an adjective, as in the following example:

Doktor, *umoran* od dežurstva, došao je kući (The doctor, *tired* from duty, goes home).

Stevanović (1974: 55–57) considers that appositives appear in series, less frequently as individual words, they agree with the noun they modify, and that they are related to the predicate, usually as a cause (e.g. *Umoran od dežurstva, došao je kući.*). In terms of independence, they are similar to apposition and are thus adjuncts. The appositive, as differs from the depictive secondary predicate<sup>6</sup> (the term he uses is *atributsko-priloška odredba*) in that the latter is characterized by a double relation, with the predicate and the noun, that conditions the meaning of a temporary characteristic, i.e. attendant circumstances.

The appositive in Serbian can be preposed, postposed, or even fragmented, but it is intonationally and positionally detached (Subotić and Petrović 2000: 1148). However, despite this claim, it is important to note that the question of detachment, prosodic or orthographic, remains unclear.

While the English sources, as we have seen, establish the distinction between secondary predicates and free adjuncts on the grounds of orthography, in Serbian this question is quite undefined. For example, Piper and Klajn (2013), in the same grammar book, initially define the concept of appositive and secondary predicate (i.e. predicative attribute) in such a way that they only formally distinguish them, relying on punctuation as a defining mark – the appositive is detached, which simultaneously weakens its connection with the verb and increases its autonomy. However, they later indicate that the predicative attribute can also be used as an appositive, intonationally or punctually detached from the governing predicate (Piper and Klajn 2013: 294). We encounter the same, more extensive, conclusion in *The Syntax of the Simple Sentence*, where it is stated that “the appositive used in front of the noun it determines is actually a predicative attribute used in the position in front of the subject (if the subject is overt) and in front of the verb predicate” (Piper et al. 2005: 72). It remains unclear why only the initial, and not the medial position, is associated with the predicative attribute, especially because they encode the same meanings.

Babić (2004: 161) emphasizes that the question of distinguishing between appositives (i.e. free adjuncts) and secondary predicates is still open, as these constructions are not precisely differentiated by most authors. Both secondary predicates and appositives are categorically identical and formally bound to the noun. Thus, their differentiation “relies on semantic principles, allowing the interpreter to assess the degree of dependence/independence of this category with respect to the verb, as well as the type

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6 For example, *Došao je umoran* mirrored in English as *He arrived tired*.

of adverbial meaning". The relationship between these categories holds particular significance in our research, as the examination of translation equivalents will reveal certain instances of overlap between them.

### **3. METHODOLOGY AND CORPUS**

Given the characteristic presence of free adjuncts in prose style, our analysis focuses on novels written in English and Serbian, along with their translations. The utilization of a bidirectional and bilingual corpus allows us to examine the semantic relationship between the adjuncts and the matrix clause in both English and Serbian, as well as to identify any potential formal-semantic shifts in translation. The discrepancies observed in the translations are expected to reflect systemic differences or stylistic adjustments. Employing analytical-descriptive methodology, our aim is to explore the degree of correspondence in the category of adjectival free adjuncts across both languages.

The corpus comprises of 102 examples derived from English novels and 198 examples from Serbian novels, which, together with their respective translations, yields 600 examples. It is important to note that the example extraction did not include the entire novels, but an equal number of pages in both languages (500 per language). The intention behind this approach was to elucidate the prevalence of adjectival free adjuncts, ultimately leading to the identification of a frequency mismatch. This discrepancy suggests that the chosen Serbian prose writers employ this construction with greater frequency. It is important to note that we do not assert the universal applicability of this claim; rather, our interest lies in observing how a sample of authors, selected at random (listed at the end of the paper), utilize this construction.

The examples were classified on the grounds of their position in the sentence (initial, medial or final) and complexity (adjectives with or without modifiers), paired with the translation equivalents, which were subsequently analyzed in terms of their position and shifts from the original parts of speech.

The limitation of this study lies in the fact that the corpus on which these phenomena were analyzed is moderately sized, and it would be beneficial to verify the results on a larger and more diverse corpus.

### **4. ANALYSIS AND DISCUSSION**

#### **4.1. FORMAL AND SEMANTIC PROPERTIES**

Based on the examined corpus, the following table shows which sentence position is preferred by adjectival free adjuncts in both languages.

	initial	medial	final
English	21.56%	27.45%	50.98%
Serbian	17.17%	51.5%	31.31%

Table 1. Positions preferred by free adjuncts

Within the English section of the corpus, the occurrence of free adjuncts is distributed relatively evenly between initial and medial positions, with a slight preference for the medial position. However, the final position significantly surpasses both initial and medial positions in terms of frequency, due to the endweight principle, referring to the observation that more complex sentence constituents tend to follow simpler or lighter ones (Quirk et al. 1985: 425). Furthermore, this principle is related to the fact that English sentence is end-focused, meaning that communicatively new and important information is reserved for the end of a sentence.

Apparently, adjectival adjuncts in medial and final position are combined with other expressive means, such as absolute and participial clauses (e.g. *her head down* in (1)), to achieve a participant description, as in the following example.

1. Then continues backwards, drawing more rectangles, so there is a pyramid of them, [...], her left hand braced flat on the floor, her head down, *serious*. (EP: 15)

More often, however, the analyzed examples end with one detached adjective or coordinated adjectives, which could either be interpreted causally with respect to the event in the matrix clause, or as a depiction of the matrix subject or object.

2. Still Anna stared at me, *still surprised, still suspicious*. (S: 238)
3. Halder had stood, *miserable and helpless*, while above their heads the fireworks had whooshed and banged. (F: 252)

The same holds true for the initial sentence position where the adjunct complexity ranges from a single adjective, to a combination of serial or coordinated adjectives, or even an adjective followed by a prepositional phrase.

Conversely, in the Serbian section of the corpus, free adjuncts exhibit a preference for the medial position, with almost the same percentage observed in the English final position. In contrast, approximately one third of the examples conform to the sentence-final pattern, whereas the initial position continues to be the least preferred option among Serbian free adjuncts.

4. *Mokri i umorni od rada*, trojica seljaka sada pregovaraju sporo, lukavo, zaobilazno. (D: 54)
5. Pošto je Bajica, *zatečen iznenadnom izjavom*, nemo gledao u prijatelja, ovaj je probao da se našali. (HB: 103)

6. [...] čudio se Milan, *iskreno zadivljen Gedinom ličnošću*. (KMM: 100)

In addition to functional and formal similarities, adjectival free adjuncts in Serbian and English demonstrate identical semantic realizations. Regardless of their position within the sentence, this type of adjuncts can convey two meanings: cause or reason, and accompanying circumstances or, more precisely, describe the psychological or emotional state of the participant in the action or their position and appearance. The meaning associated with cause or reason can be easily extracted using an adverbial clause of reason, while in the second case, adjectival free adjuncts resemble secondary predicates and can be rephrased using a copular verb and an overt subject. In the latter case, adjectival free adjuncts are perceived as co-temporal with the main clause event, and may be either subject or object-oriented.

To investigate the factors influencing the two meanings obtained through reconstruction, we examined the types of verb situations in the matrix clause. Based on the analyzed corpus, it can only be stated that the interpretation depends on the meaning of the adjectival phrase and the overall meaning of the sentence, particularly whether a causal relationship can be established through pragmatic inference and encyclopedic knowledge.

The following example, therefore, allows for only a causal interpretation, merely on account of knowing that one must be awake to watch the light.

7. Ponekad noću, *trgnut iz sna*, Rudi je posmatrao bele plamenove... (RP: 76–7)  
Sometimes at night, *aroused from his sleep*, Rudi would watch the white flickering... (RPE: 90)

In other instances, we would have to rely on the previous context. Deriving on the life experience, the adjectival phrase *full of shame* in the following example might be understood as the reason why the participant nodded. On the other hand, it is equally possible that its sole function is to depict the mental state of the participant.

8. *Full of shame*, he nodded, and she let him go. (A: 57)  
*Duboko posramljen*, on klimnu glavom, i ona ga pusti. (AS: 53)

#### 4.2. ENGLISH INTO SERBIAN TRANSLATION

The vast majority of translated correspondences exhibit a complete overlap in both form and meaning, while also maintaining the original punctuation. The set of examples provided below serves as an illustration of this.

9. *Unable to push her tongue against the word*, Briony could only nod... (A:14)  
*Nemoćna da reč prevali preko jezika*, Brajoni uspe samo da klimne glavom... (AS: 17)
10. She glanced away, *exasperated*, but then looked back with an intensity that made him difficult to meet her eyes. (F: 210)
11. Ona odvratila oči, *razdražena*, ali onda se ustremila na njega pogledom tako intenzivnim da ga je bilo teško podneti. (FS: 183)
12. Helder looked at him for a moment, *unwilling to believe what he was hearing*.... (F: 242)  
Halder ga je nekoliko trenutaka samo gledao, *nerad da poveruje u to što je čuo*. (FS: 212)

A mere 15 examples, constituting approximately 14.7%, exhibit certain shifts during the translation process. These shifts can be categorized into two groups: a) modifications of the part of speech, such as transforming an adjective into a noun, adverbial phrase, or prepositional phrase, and b) the explication of meaning through the use of non-finite or finite clauses, specifically relative clauses or adverbial clauses. Such deviations from the original text's formal structure are particularly noticeable when dealing with participial adjectives or adjectives followed by a complement. In such instances, the adjective tends to be translated as a clause.

For example, the adjective *bored* below was translated into Serbian in the form of a finite clause of reason, since Serbian does not have a corresponding, stylistically fitting adjective.

13. Abruptly, *bored by his own creation*, Pili dropped the crayons and dived under the bed. (F: 343) Najednom, *pošto mu je dosadilo sopstveno stvaralaštvo*, Pili odbaci bojice i zaroni pod krevet. (FS: 295)

Example (14) also illustrates the use of a finite clause in translation that cannot be attributed to a lexical gap, but rather to the translator's stylistic preference.

14. [...] after I dropped Pat off at nursery school, *worried sick about how he was doing, worried sick that he might be crying again*. (MB: 103)  
[...] nakon što odvedem Pata u obdanište, *brinem do ludila kako mu je tamo, žderem se da li opet plače*. (MBS: 94)

What is important to note is that free adjuncts of a simple structure tend to be mirrored in translation, as can be seen in (15).

15. Malik woke up, *afraid*. (DS: 176)/ Malik se probudio, *uplašen*. (DSS: 150)

Nevertheless, when the same adjective is complemented by an infinitive, translators resort to non-finite clauses (i.e. *glagolski prilog sadašnji*):

16. [...] and I shook my head, *afraid to speak*. (MB:140)  
[...] a ja sam odmanuo glavom, *plašeći se da progovorim*. (MBS: 126)



The adjective *uplašen* in Serbian can be complemented by *od+genitive* phrase (e.g. *Upašen od krvi, okrenuo je glavu*) or by a finite clause introduced with *da* (e.g. *uplašen da ga ne čuju, sakrio se od vojnika*). Although there are formal correspondences for the adjective *afraid* in Serbian, the use of non-finite forms as translational equivalents appears to be a matter of stylistic preference.

The same tendency is present in examples containing adjectives *unable* and *uncertain* when accompanied by verb complements:

17. *Oh God, Oh God*, Yossarin had been pleading wordlessly as he dangled from the ceiling of the nose of the shop by the top of his head, *unable to move*. (22: 57)  
*O, bože, o, bože*, zazivao je Josarian nemo dok je visio prilepljen na teme o plafon nosa aviona *ne mogavši da se pomakne*. (22S: 55)
18. March was in a daze, *uncertain what was dream and what reality*. (F: 371)  
Mart je bio ošamućen, *nije mu bilo jasno šta je san, a šta java*. (FS: 319)

Another interesting example involves the past participle *unanswered*, which also has an adjectival correspondent in Serbian (*neodgovoren*), yet it is rendered as a finite relative clause, due to collocational preferences in Serbian. Specifically, the adjective *neodgovoren* (*unanswered*) collocates with the noun (*telefonski*) *poziv* (*phone call*). The noun, however, is only implied in the source example, rendering the adjective impractical for the translator to retain it in the translation.

19. He [...] and listened to the electronic purr of the telephone ringing, *unanswered*. (F: 154)  
[...] i osluškivao (je) elektronsko predenje njenog telefona *koji je zvonio u prazno*. (FS: 138)

Occasionally, presumably for stylistic reasons, translators opted to dislocate the adjunct to another position, as in (16):

20. It was wheeled in, *covered by a sheet*, on a metal trolley. (F: 56)  
Dokotrljaše ga unutra (telo) na metalnim kolicima sa četiri točka, *prekriveno čaršavom*. (FS: 58)

In summary, in translated cases where morpho-syntactic changes occur in relation to the source language, it is possible to observe that these deviations do not arise from systemic disparities between languages, but rather stem from occasional lexical mismatches and the stylistic choices of the translator.

### 4.3. SERBIAN INTO ENGLISH TRANSLATION

Similarly to the English language, only 21 examples or 10.6 % involves transforming the adjective into a prepositional, adverbial or nomi-

nal phrase (examples 21–23), or expanding the adjective into an absolute or participial clause (example 24).

21. *Teški sami sebi*, hapsenici izazivaju svoje sapatnike ili stražare koji su u tim danima i sami razdražljivi i kivni na sve. (PA: 23)  
*A burden to themselves*, the prisoners provoked each other or the guards who were equally irritable during these days. (PAE: 154)
22. *Neposredan i otvoren*, fra Petar mu je govorio: ... (PA: 48)  
*In his direct and open way*, Fra Peter remarked: ... (PAE: 170)
23. *Nasmijao se, učtiv, ljubazan*. (DS: 132) He laughed, *politely, kindly*. (DSE: 155)
24. *Začuđen*, proverio sam. (HB: 134) *Thinking it strange*, I checked. (HBE: 163)

Across all these instances, the overwhelming majority of translation choices consistently demonstrate an inclination towards achieving a more idiomatic and authentic tone. For instance, in scenario (21), although it was possible to retain the adjectival phrase, the use of a noun phrase effectively communicates the intended meaning.

While in the Serbian-English portion of the corpus, clauses are employed for bridging the lexical gaps and for stylistic reasons, in English translations, clauses are utilized to explicate meaning. Although it is possible to preserve the adjunct as it is, the use of finite or non-finite, relative or adverbial clauses aims to avoid ambiguity and facilitate text comprehension (examples 25–26).

25. *Verovala je u njega naročito onda kada on nije nimalo verovao u sebe, opsednut strahovima*. (KSZ: 65)  
She believed in him particularly when he did not believe in himself at all, *when he was overwhelmed by fears*. (KSZE: 54)
26. *Mislim da je to jedna od lepših stvari, kad dođeš prvi put u neki grad, i, besposlen, ideš iz ulice u ulicu*. (K: 115)  
I think it's one of the nicest things, when you go to a town for the first time, and *you're idle*, you go from street to street. (KE: 119)

In two instances, transforming an adjectival adjunct into a completely new sentence was observed. Interestingly, this technique is not present in English into Serbian translation, possibly because the word order in Serbian is less strict, with the case system and noun agreement allowing the reader to relate adjuncts to participants. In this particular case, the adjectival adjunct is in the final position, separated from the controlling subject by two relative clauses modifying the object of the preposition *among*. Had the translator preserved the original word order, the adjunct would be interpreted as describing the people in the street.

27. *Krenuo sam, ne dižući očiju, između ljudi što su stajali na sokaku i ispraćali me čuteći, prevaren i postuđen*. (DS: 122)

Without raising my eyes I walked on, among the people standing in the street and watching me silently. *I had been tricked and humiliated.* (DSE: 141)

#### 4.4. THE GREY AREA

While the comma is commonly seen as a marker for identifying free and bound adjuncts in English literature, its presence or absence does not necessarily impact the semantic status of these linguistic units. Rather, it primarily highlights a looser association with the predicate. In both sections of the corpus, there are examples that are translated not as free adjuncts but as secondary predicates (i.e., predicative attributes in Serbian), resulting in the omission of the comma. As previously said, both categories denote attendant circumstances or describe one of the participants, and are perceived as simultaneous with the matrix clause event. This subsection focuses on transitional categories, with the objective of elucidating the linguistic motivations underlying such shifts.

In the examples (28) and (29) below, the adjectival free adjuncts after the verbs of speaking are, according to our corpus, always separated by a comma in English, which is not necessarily the case in Serbian. The cited examples are from the same novel, i.e. they represent translations by a single author who, in one instance, opts to retain the comma, while in the other, omits it. This can be explained by a sense of a stronger connection between the predicate and the participial adjective *taken aback* than is the case with the phrase *dead calm*. The reason for this is likely a stronger collocational bond in the first example.

28. 'Well,' I said, taken aback. (MB: 64) „Pa”, rekoh iznenađen. (MBS: 62)
29. [...] I said, dead calm. (MB: 144) [...] rekao sam, mrtav hladan. (MBS: 129)

A similar phenomenon is observed in the subsequent examples, where the adjunct in English, formally detached, is translated as a predicate attribute (i.e. depictive secondary predicate). Such deviations have been noticed in simple adjuncts, realized as an individual adjective.

30. *Bewildered*, they watched me drive past their gate... (MB: 67)  
Gledali su *zapanjeni* kako vozim pored njihove kapije... (MBS: 64)

With the exception of the first example in the following set, where the verb in the matrix predicate indicates motion, in most cases, the “conversion” occurred with verbs of physical state, and one verb of perception, specifically those where the secondary predicate is prototypically realized in English (see Tošić Lojanica 2018).

31. To su ispričali mami i meni kad su se vratili kući, *umorni od svega*, ali, kako su smatrali, skoro obavljena posla. (P: 151)

- They told that to mom and me when they returned home *tired of their labours*, but, as they thought, their work was almost done. (PE: 143)
32. [...] most koji se isticao, *beo i lak*, na svojih jedanaest lukova... (D: 67)  
[...] the bridge, standing out *white and delicate* with its eleven arches. (DE: 67)
33. [...] Dušan je sedeo pored nas, *nimalo zbunjen*, naprotiv, spreman da nam pripadne sav... (L: 100) Dusan was sitting beside us *not at all confused*, on the contrary, ready to belong to us completely... (LE: 81)
34. I baka je vrisnula kad je ugledala Johanu kako zuri u nju, *ukočena od straha*. (KMM: 187)  
The grandmother screamed too when she saw Johana stare at her *petrified with fear*. (KMME: 154)

It would be expected that, in situations where adverbial meaning is not implied, which often occurs with free adjuncts in initial position, translators would allow themselves to disregard punctuation in the source text in order to successfully convey complex sentence structures. However, the examples provided for both translation directions are not demanding in that regard, yet a “reclassification” of the construction is present. One possible explanation is that the frequency of a specific construction in both languages – considering the type of verbs and accompanying adjectival adjunct – influences the translators, who, perceiving their close semantic connection, establish a closer syntactic relation as well.

## 5. CONCLUSION

The analysis of adjectival free adjuncts in English and Serbian has demonstrated that they can be considered formally and semantically equivalent constructions, as evidenced by the nearly 85% rate of absolute matching in translation. In the remaining cases, adjuncts are rendered through different phrases and clauses, for reasons other than systemic disparity. Specifically, in the translation from English to Serbian, translators resort to non-finite and relative clauses when the adjective is accompanied by a longer complement in English. Conversely, when rendered into Serbian, adjuncts may change position or be translated using a full adverbial clause with an explicit conjunction to avoid ambiguity, which is resolved in Serbian through cases and agreement with the governing noun.

Furthermore, we have shown that in certain situations, translators omit the comma, thus transforming a free adjunct into a bound one. Specifically, in both languages, adjectival adjuncts separated by a comma may have adverbial meaning of cause, but also attributive meaning when they provide a closer description of the subject or object of the sentence, referring to their mental state or physical appearance. In the latter case, especially with verbs of bodily position, speech, and occasionally motion, the adjunct becomes attached to the governing verb in translation. To clarify,

in such scenarios, free adjectival adjuncts assume the role of secondary predicates, as these represent the prototypical contexts in which the secondary predicates are employed.

As Himmelmann and Schulze-Berndt (2005: 20) point out, adjuncts are treated completely independently of the secondary predicate, as if there is no awareness that they are essentially the same phenomenon. The results presented in this study indeed affirm a close association between free and bound adjectival adjuncts in both English and Serbian. The bilingual and bidirectional corpus has granted us insight into how proficient users (translators) of both languages perceive adjectival adjuncts and their orthographic (dis)connections, a determination that would be unattainable through an analysis of individual languages alone. As emphasized by Babić (2004: 161), the delineation of free and bound adjectival adjuncts remains challenging due to the quest for establishing clear formal and semantic criteria. The conclusions drawn herein are intended to serve as a foundation and an invitation to approach this matter from a less rigid theoretical standpoint, one that embraces the perspective of gradient categories.

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- EPS:** Majkl Ondatje (1997) *Engleski pacijent*, Beograd: Narodna knjiga – Alfa (prev. Ivana Damjanović).
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**Tiana M. Tošić-Lojanica / SLOBODNI ADJUNKTI PRIDEVSKOG TIPA U ENGLISKOM I SRPSKOM JEZIKU**

**Rezime** / Na dvostrukom i dvosmernom korpusu sačinjenom od romana na engleskom i srpskom, i njihovih prevoda, u radu se analiziraju slobodni adjunkti pridevskog tipa. Ciljevi rada su opis formalnih i semantičkih karakteristika slobodnog pridevskog adjunkta, te upoređivanje predmetnih konstrukcija u dva jezika na osnovu prevodnih ekvivalenata. U tom smislu, u radu se analiziraju potencijalna odstupanja od forme i značenja u prevodu. U analizi se, neizbežno, dotičemo srodne kategorije predikatskog atributa.

Analiza pridevskog slobodnog adjunkta u engleskom i srpskom pokazala je da se zaista mogu smatrati formalno i semantički podudarnim konstrukcijama, što dokazuje i skoro 85% slučajeva apsolutnog poklapanja u prevodu. U preostalim slučajevima,

adjunkti se prenose drugim frazama i klauzama. U smeru prevoda sa engleskog na srpski, prevodioci pribegavaju nefinitnim i relativnim klauzama kada je pridev praćen dužim komplementom u engleskom jeziku. Sa druge strane, prilikom prevoda na srpski, slobodni pridevski adjunkti mogu promeniti mesto ili biti prevedeni punom adverbijalnom klauzom sa ekspliciranim veznikom da bi se izbegla dvosmislenost. U izvesnim primerima se brisanjem zapete slobodni adjunkti pretvaraju u vezane, naročito uz glagole položaja tela, govorenja i, ređe, kretanja.

**Кljučне речи:** bezglagolske klauze, slobodni adjunkti, sekundarni predikat, gradjentnost

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## ZERO-DEGREE INTENSIFIERS WITH SERBIAN AND ENGLISH COMPARATIVES

While degree intensifiers marking minimum comparative degrees have been an inevitable topic in both grammatical and linguistic literature, the possibilities of using adverbs to signify the zero value appear to have been systematically avoided. This gap in the current literature served as a main motivation for this analysis. The paper aims at identifying and analyzing intensifiers used with comparatives by focusing solely on the adverbial lexemes which are used to signify the zero-degree, i.e. to cancel or nullify a comparative degree. The independent corpus analyses were conducted on annotated electronic corpora: *Corpus of Contemporary American English* (COCA) and *Korpus savremenog srpskog jezika* (KSSJ). *Englesko-srpski paralelni korpus* (ESPK 2012) is used for demonstrating the observed similarities and differences. Based on the criteria introduced by Đorđević (2004), the contrastive analysis conducted here can be classified as an independent, theoretical, structural, and descriptive contrastive study. The findings prove that the lexical repertoires of both languages include adverbial devices used with comparatives which alleviate comparative degree to the zero value. In addition, we can make a differentiation between two lexico-semantic sub-categories of such lexical devices: those signifying the absolute zero value and those marking the borderline, i.e. limitary values.

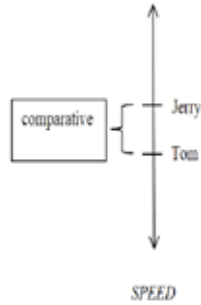
**Key words:** modifier, intensifier, adverb, degree, Serbian, English

### 1. INTRODUCTION

Comparatives (e.g. *faster*) are used to express the differences in properties (e.g. speed) between the entities being compared (*Jerry* and *Tom*): *Jerry*<sub>comparee</sub> *is faster than Tom*<sub>standard of comparison</sub>. The properties (e.g. speed) are expressed by an adjective or an adverb (e.g. *fast*). The utterance is valid if the degree to which Jerry is fast is higher than the degree to which Tom is fast.

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Comparatives refer to the difference in those degrees by asserting its existence. However, there are numerous linguistic devices (predominantly adverbs and particles), which modify comparative degree in that they can quantify it, emphasize it, intensify it, etc.

A modifier is a lexical unit used to specify, supplement, intensify, i.e. to modify the other lexical unit (Bošnjaković 1980: 17). Comparative modifiers can modify comparative degree in numerous different ways since they introduce new semantic components characteristic for the particular lexical coinages (Kuljanin 2017: 75). In other words, modifiers bring their unique semantic and pragmatic contributions and thus particularize a comparative degree.

Terms *modification* and *modifier* are closely related to *intensification* and *intensifier* so they are frequently used interchangeably. However, we should draw clearer lines between two categories. Namely, the concept of intensity is a complex cognitive and linguistic phenomenon that is most commonly divided into two opposite trends: *alleviation* and *amplification* (Edel 1992: 602). The lexemes used to alleviate or amplify intensity, i.e. degree of scalar lexical items are intensifiers (also known as *adverbs of degree*, *degree adverbs*, *degree adjuncts*, *degree particles*). D. Bolinger (1972: 17) uses the term intensifier for all lexemes which grade a property on an imaginary scale, either upwards or downwards. Hence, modification includes, but also surpasses, intensification.

For instance, the Serbian focal particle *sve* (*sve bolje* (*i bolje*)) modifies comparative degree in that this lexical coinage signifies a continual increase or decrease of intensity, quantity, etc. (Kuljanin 2017: 78). In other words, the unique combination *sve* + *comparative* is used to express changes in intensity of any property in different spatial and/or temporal circumstances (Piper et al. 2005: 853). A contrastive analysis of Serbian and English has shown that identical effects are generated in lexical coinages *ever* + *comparative*: e.g. *ever better* (Josijević 2020b). Similarly, the Serbian focal particle *što* modifies comparative meaning (*Trči što brže*) in that the coinage is used to express *limitary superlative possibility* (Piper et al. 2005:

862; Kuljanin 2017: 91–94).<sup>2</sup> In semantic literature, these forms are better known as *modal superlatives* (Schwarz 2005; Romero 2010; Alrenga & Kennedy 2013; Romero 2013). Also, the Serbian focal particle *još* has been recognized as a lexical device which can have a comparative form in its focus. In such lexical coinages, comparatives have entailments (*Mika je još viši od Jove* ⊢ ‘Mika je visok’). They do so even with open-scale gradable adjectives which otherwise do not generate such entailments (*Mika je viši od Jove* ~ ⊢ ‘Mika je visok’) because there is always a certain set of entities that neither an adjective nor its antonym are applicable to, i.e. there are people who are neither good nor bad or neither tall nor short (Ivić 2007). The same features have been attributed to Serbian particle *čak* and English particle *even*: *Mika je čak viši od Jove* ⊢ ‘Mika je visok’ and *Mike is even taller than John* ⊢ ‘Mike is tall’ (Josijević 2022).

These three examples prove that modification is a broader category which does not include only intensification and/or adverbial modifications. Very frequently, it is a particle that takes the main role in modifying the semantic structure of the lexeme it precedes. In conclusion, intensification is only one form of modifying meanings of lexical units so intensifiers are a subclass of modifiers: modifiers of intensity or degree modifiers. With comparatives, intensifiers modify comparative degree in that they enable grading within comparative degree (Kuljanin 2017: 76).

Intensification has been an inevitable topic in all current grammatical<sup>3</sup> literature and pertinent studies. As will be demonstrated in the next section of the paper, amplification, including the minimalization of degree, has always been included. On the other hand, the possibility of using adverbial intensifiers to cancel degree, i.e. to express the zero degree, has been rarely mentioned. In this paper, we shall establish this category as a separate lexico-semantic class of degree adverbs. The term *zero-degree* adverbs is coined and used here as a label for this type of comparative intensifiers.

## 2. ON ADVERBIAL INTENSIFIERS IN THE CURRENT LITERATURE

Since *Degree Words* by D. Bolinger (1972) was first published, the interest in semantic aspects of scalar expressions has been thriving per-

2 Semantically equivalent forms in English are formed by joining modal verbs or adverbs with equative structures: e.g. *Run as fast as possible* and *Run as fast as you can* (Josijević 2021); or with superlatives themselves: e.g. *the fastest possible* or *the fastest you can* (Schwarz 2005; Romero 2010; Alrenga & Kennedy 2013; Romero 2013).

3 The following grammatical literature was consulted: Stevović 1960; Stevanović 1979; Mrazović & Vukadinović 1990; Stanojčić & Popović 2000; Simić 2002; Klajn 2005; Piper & Klajn 2013; Zandvoort & van Ek 1975; Quirk & Greenbaum; Quirk et al. 1985, Greenbaum & Quirk 1991; Palmer et al. 2002; Huddleston & Pullum 2002; Eastwood 2002; Downing & Locke 2006; and Altenberg & Vago 2010.

sistently. Different aspects of different categories of scalar expressions have been examined from different theoretical and methodological perspectives (e.g. Doetjes 2004; Neelman et al. 2004; Kennedy & McNally 2005; Morzycki 2008; Beltrama & Bochnak 2011). Most papers focus on a small-scale repertoire of adverbial intensifiers and, more frequently than not, in specific lexical coinages. Comparative, but also positive, forms of adjectives have not been subjected to any extensive analysis yet. For instance, R. Nouwen (2008) analyzed *very*, *quite*, *too*, *more* и *enough* with positives. C. Kennedy and L. McNally (2005) focused on *well*, *much* и *very* with deverbal adjectives. C. Rotstein and Y. Winter (2003) examined the lexical coinages of *slightly*, *nearly*, *completely*, *almost* и *very* with total and partial adjectives.

D. Bolinger (1972: 17) classifies English intensifiers into four categories (given in descending order): *boosters* (e.g. *terribly*), *compromisers* (e.g. *fairly*), *diminishers* (e.g. *little*), and *minimizers* (e.g. *a bit*). Quirk et al. (1985: 445–449) treat an intensifier as any lexeme having the effect to “increase or decrease” the property expressed by a lexeme it modifies. Their typology starts with three most general groups: *emphasizers*, *amplifiers*, and *downtoners*. In contrast to amplifiers and downtoners, *emphasizers* are said to co-occur with non-gradable adjectives. This class includes, inter alia, adverbs like (a) *actually*, *certainly*, *clearly*, *definitely*, *indeed*, *obviously*, *plainly*, *really*, *surely*, *for certain*, *for sure*, *of course* and (b) *frankly*, *honestly*, *literally*, *simply*, and *fairly*. The former group is said to express the comment that what is being said is true, while the latter group includes the lexical items conveying the speaker’s assertion that his words are the unvarnished truth (ibid.: 583). Amplifiers upwards and downtoners scale downwards from an assumed standard or a norm (Quirk et al. 1985: 589–591). Such scaling requires that the lexical item to which intensifier applies is gradable. Amplifiers are further divided into *maximizers* (e.g. *completely*) and *boosters* (e.g. *very much*). Boosters denote a higher point on the scale and maximizers strive toward the upper extreme:

- (a) BOOSTERS: *badly*, *bitterly*, *deeply*, *enormously*, *far*, *greatly*, *highly*, *intensely*, *much*, *severely*, *strongly*, *terribly*, *violently*, *well*, *a great deal*, *a good deal*, *a lot*, *by far*
- (b) MAXIMIZERS: *absolutely*, *altogether*, *completely*, *entirely*, *extremely*, *fully*, *perfectly*, *quite* (also a compromiser), *thoroughly*, *totally*, *utterly*, *in all respects*

Downtoners are further divided into *approximators* (e.g. *almost*), *compromisers* (e.g. *kind of*), *diminishers* (e.g. *partly*), and *minimizers* (e.g. *hardly*) (Quirk et al. 1985: 597–601). Approximators serve to express an approximation to the degree or force expressed by a scalar term: *almost*, *nearly*, *practically*, *virtually*, etc. Compromisers have a slight lowering effect: *kind of*, *sort of*, *quite*, *rather*, *enough*, *sufficiently*, *more or less*, etc. Diminishers mean ‘to a small extent’ and, thus, scale downwards. They are divided into

expression *diminishers* (e.g. *mildly, partially, partly, quite, slightly, somewhat, in part, in some respect, to some extent, a bit, a little, least*) which seek to express only part of the force (i.e. degree) of the lexical item they modify; and *attitude diminishers* (e.g. *only, merely, simply, just*) which seek to imply that the force expressed by a lexeme they modify is limited. Minimizers mean 'not to any extent' and they include: *negatives* (e.g. *barely, hardly, little, scarcely*) and *non-assertives* (e.g. *in the least, in the slightest, at all, a bit*). Huddleston and Pullam (2002: 721–725) propose the following classification of degree modifiers: *maximal* (e.g. *absolutely, completely*), *mutual* (e.g. *deeply, greatly*), *moderate* (e.g. *partly, quite, rather*), *paucal* (e.g. *a bit, a little*), *minimal* (e.g. *hardly, scarcely*), *approximating* (e.g. *almost, kind of*), and *relative* (e.g. *enough, sufficient*).

First, we must note that these classifications are general in that they refer to intensifiers used with any scalar lexeme. When it comes to intensifiers of comparative and superlative degree, the overviews of intensifiers are substantially less extensive. Grammars only mention a handful of such terms, usually the same ones: *very, much, little*, etc. (Quirk & Greenbaum 1976: 135; Quirk et al 1985; Downing & Lock 2006). The same trend is evident in linguistic literature. Most papers and studies focus on intensifiers used with positives (Bolinger 1972; Paradis 1997, 2000; Hackl 2000; Meir 2003; Rett 2008; Jung 2009; Wittouck 2011; Romero 2012; Su 2016). The most extensive overview we have found is the one offered by E. M. Benzinger (1971: 43–48) who categorizes intensifiers of gradable adjectives into four categories based on their distribution and frequency. Some intensifiers are used with only with positives (*awful good – \*awful better – \*awful best*): e.g. *awful, awfully, extremely, fairly, good and mighty, more, most, pretty, quite, real, right, so, terribly, too, and very*. Some are used with comparatives only (*\*a lot good, a lot better, \*a lot best*): e.g. *a (whole) lot, far, much, still*. One group of intensifiers can be used with both positives and comparatives (e.g. *rather good – rather better – \*rather best*): e.g. *a good/great deal, quite, (quite) a bit, rather, some, somewhat*. Finally, there are intensifiers which can be used with all three degrees (i.e. positives, comparatives, and superlatives): *somehow good – somehow better – somehow best*. These include, inter alia, *way, even, far and away, just, more or less, only, really, somehow, and simply*.

None of the authors mentioned above has acknowledged the existence of zero-degree adverbial intensifiers used with comparatives. The most extensive and comprehensive study on manner adverbs in the Serbian language proposes a complex typology of eleven lexico-semantic categories of manner adverbs (Ristić 1990). For the purposes of this paper, only the seventh class is relevant – *adverbs signifying degree or intensity* (Ristić 1990: 112–131). They are divided into six categories based on their integral seme: (1) 'high degree', (2) 'excessive degree', (3) 'complete degree', (4) 'incomplete degree', (5) 'sufficient degree', and (6) 'low degree'. The adverbs used to annul comparative degree are not included.

The recent studies have provided some insight into this category of adverbial intensifiers. S. Kuljanin (2017: 103) mentions that Serbian adverb *ništa* can be used to cancel comparative degree, and J. Josijević (2020a: 166) adds *nimalo* to the list. The latter author compares and contrasts both forms with their English equivalents – the pronominal adverbs *none* and *no*. Even though the semantic potentials of the given lexemes have been acknowledged, neither of the studies proposed their establishment as a separate class of intensifiers and hence no term for them has been introduced yet. This paper will argue that the current degree scale, i.e. *maximum – high – moderate – low – minimum*, should also include *zero-degree* adverbs.

### 3. METHODOLOGICAL PRELIMINARIES

Since the insight into the repertoires of zero-degree intensifiers provided by all current studies is limited, this paper aims at expanding the list of lexical items bearing the aforementioned lexico-semantic features. Namely, comparatives serve to signify the differences in the degrees of any property expressed by an adjective or adverb found in or exhibited by the entities being compared (i.e. *comparee* and *standard of comparison*). For instance, if we say that X (i.e. a comparee) is fatter than Y (i.e. a standard of comparison), a comparative form marks that the property (i.e. weight) is present in a higher degree in X entity. This paper will focus solely on those intensifiers which reduce those differences in property degrees to the zero value.

Independent corpus analyses were chosen here in order to avoid the limitations of working on parallel corpora. First, the preliminary tests have shown that the largest available electronic parallel corpus, *Englesko-srpski paralelni korpus*, would limit our findings since the majority of intensifiers detected in the monolingual corpora of both languages are not attested with a sufficient number of examples. This state of affairs conflicts with the main goal of this paper – to record as many intensifiers of the selected type as possible and hence to expand their current descriptions. Second, the given corpus comprises the translated material. The choices made by translators in choosing the equivalent in a target language (L2) can be affected by the original form used in a source language (L1). Independent corpus analyses, on the other hand, allow us to examine the desired lexemes in their natural habitat, i.e. as being unmotivated by any source language. Finally, the preliminary tests have shown that comparative intensifiers are sometimes neglected in translation, i.e. they are left untranslated or mistranslated, which might be an interesting topic for some future studies.

The independent corpus analyses were conducted on the annotated monolingual electronic corpora: *Corpus of Contemporary American English*

(COCA) and *Korpus savremenog srpskog jezika*. Both corpora are tagged. In COCA, the following annotation was used:

COCA	KSSJ
ADV _jir	[pos="ADV"] [pos="A"] "od"
ADV more ADJ	[pos="ADV"] [pos="A"] "nego"

The given tags isolated ADV + \_jir (synthetic comparative) or more ADJ (analytic comparative) sequences. The limit was set at 5000 hits. Since *Korpus savremenog srpskog jezika* (KSSJ) does not have a tag for comparative only. Since the preliminary search conducted by combining two conditions [pos="ADV"] [pos="A"] provided more than 60,000 hits for ADV + ADJ sequences, we opted for more restrictive searches. Namely, we included both options for standards of comparison (*od* and *nego*; the equivalents to English *than*).

Based on the criteria proposed by R. Đorđević (2005), the contrastive analysis conducted here can be classified as an independent, theoretical, structural, descriptive contrastive study. The equivalence is established based on the lexico-semantic features derivable from the dictionary definitions. Four dictionaries are used: *Rečnik srpsko-hrvatskog književnog jezika* (RMS 1990, six-volume dictionary), *Rečnik srpskoga jezika* (RSJ 2011, edited and revised edition), *Oxford English Dictionaries* (OED, online edition), *Cambridge Dictionary* (CD, online edition). The parallel electronic corpus, *Englesko-srpski paralelni korpus* (ESPK) is used for the sole purpose of demonstrating the observed similarities and differences in two languages.

#### 4. ZERO-DEGREE COMPARATIVE INTENSIFIERS

The extended analysis of comparative intensifiers allowed us to detect a handful of adverbial devices which precede comparative forms and modify their meaning in that they cancel their intensity. It is not surprising that the findings suggest that these intensifiers are not numerous since they are competing with negation via negative predications. If, for instance, we take two pronominal adverbs *no* and *nimalo* (*Tom is no faster than Jerry* and *Tom je nimalo brži od Džerija*), it becomes more evident that semantically speaking, these utterances are synonymous to sentences in which the negation of comparative forms is realized by negating the predication: *Tom is not faster than Jerry* and *Tom nije brži od Džerija*. The only difference is that the negation with negative pronominal adverbs is more emphatic, and thus stylistically marked.

In addition, the adverbial intensifiers identified in this analysis prove that zero-degree comparative intensifiers are not a uniform class. There are two subcategories: (1) intensifiers signifying the absolute zero level, i.e. the complete non-existence of any difference in property degrees

exhibited by entities being compared, and (2) intensifiers which mark the borderline values, i.e. the degree values close to the limit which divides equatives and comparatives. The following sections shall also emphasize the formal, i.e. categoral, differences between these two classes.

#### 4.1. THE ABSOLUTE ZERO VALUE

The functions of the pronominal adverb *ništa* in cancelling comparative degree have been already acknowledged (Kuljanin 2017: 103). *Ništa* is defined as: (*adverbial meaning*) *ni u kojoj meri, nimalo, nikako* (RSJ 2011: 822), meaning 'not to any measure', 'not to any extent', or 'not in any way'. The use of *ništa* is also attested in our sample:

Sudeći prema izgledu, ni kuća ne izgleda *ništa* starija od svog vlasnika. Lazarovi prijatelji, [...], nisu bili *ništa* kooperativniji. [...] video sam toliko jezera i ovo nije *ništa* čudnije [...]. Biti u Londonu, to nije *ništa* utešnije [...]. Izabela mi nije *ništa* bliža od nje [...]. Patos umetnosti nije *ništa* potrebniji od patosa patnje ili patosa želje. [...] način na koji su epidemije tome doprinosile nije *ništa* strašniji od drugih. Pričalo se da on nije *ništa* sposobniji od svog učitelja, da je samo spletkaroš. (KSSJ)

The potentials of *nimalo* to reduce comparative degree to the zero value have been already recognized in J. Josijević (2020a). The adverb is defined as *ni u kojoj meri, ni najmanje* (RMS III 1990: 784), meaning 'not to any measure' or 'not at least'. This sample abounds in *nimalo* + comparative forms:

Bio je to konjički polk, *nimalo* gori od Harahovih kirasira. Na samom vrhu, stvari su *nimalo* jednostavnije. Ali zbog toga mu je *nimalo* lakše: vest ga je itekako pekla. Sreski špijun Aleksa Žunić nije *nimalo* lošiji obaveštajac od zapadnjačke paradigme. [...] onda naša objektivna realnost nije *nimalo* istinitija od nerealne prošlosti. Efikasnost njene terapije danas nije *nimalo* manja, ako ne i veća, od terapijskih procedura internističkih grana. Pitanje da li je iskustvo prethodilo predstavi jamačno nije *nimalo* razloženije od poznatog pitanja [...]. Diktatura hrišćanstva nije *nimalo* zahvalnija od diktature proletarijata [...]. (KSSJ)

This analysis reveals that *ne*, a negative particle equivalent to *no*, has the identical semantic potential. As a comparative modifier, it cancels comparative degrees:

Očekujemo, do kraja godine, rezultate *ne* lošije nego prošle godine. I saznajući da uzima časove *ne* duže nego Vera [...]. Sekundarna odlika, mada *ne* manje izražena po intenzitetu jeste toplije vreme od proseka. Drugi, *ne* manje problematični primeri oštećenja postali su rutinski. Piće je bilo donekle nalik na najjeftinije vrste konjaka, zlatnožute boje i *ne* gušće od vode. Jedan laki lanac zamenjivao sa drugim, *ne* težim, [...]. [...] dokaz nadležnog organa uprave o izmirenju poreza, *ne* stariji od šest meseci. [...] može na svoj zahtev da radi sa skraćenim radnim vremenom, ali *ne* kraćim od polovine punog radnog vremena. (KCCJ)



Finally, this analysis detected that several more negative pronominal adverbs can be used for the same purposes, including *niukoliko*, *nipošto* and *nikako*:

[...] a sedeti u sobi nije bilo *niukoliko ugodnije* nego ležati na balkonu, u zimskom kaputu [...]. [...] to ih ne bi učinilo *niukoliko manje prijatnim*. [...] ali *nipošto manja* od drugih. [...] devojne *nipošto starije* od dvesta meseci. [...] i kiridžije neće *nipošto veći* put učiniti. [...] ali *nikako manje važan* element triatlona [...]. (KSSJ)

*Niukoliko* is defined as *ni u kojoj meri, ni najmanje* (RSJ 2011:820), *nipošto* as *ni u kom slučaju, nikako; ni u kojoj meri, nimalo* (ibid.: 821), and *nipošto* as *ni u kom slučaju, nikako; ni u kojoj meri, nimalo*. All three adverbs mean: 'not to any measure', 'not at least', 'not in any case', 'not to any extent', 'not at all', or similar. In addition, the negative prefix of negative pronouns, *ni-*, is used independently from the second part of the pronominal compound, divided by a preposition in dependent cased forms: *ni u(po) čem(u)* ('not in anything', 'not in any aspect'). This form has been also attested as a premodifier of comparative forms: e.g. *Ona nisu ni u čemu privilegovanija od mojih drugih slika*. Theoretically speaking, phrases like *ni u kojoj meri* ('not to any extent/measure/degree') and *ni na koji način* ('not in any way') should be possible in this context. However, not a single example with comparatives is attested in the selected electronic corpus. It is important to note that all aforementioned negative adverbs can be used in negative (1) and affirmative sentences (2):

- |              |   |                    |
|--------------|---|--------------------|
| (1) Tom nije | <i>ništa (nimalo/niukoliko/nipošto/niukoliko)</i> | brži od Džerija.   |
| 'Tom isn't   | <i>not to any extent</i>                          | faster than Jerry' |
| (2) Tom je   | <i>ništa (nimalo/niukoliko/nipošto/niukoliko)</i> | brži od Džerija.   |
| 'Tom is      | <i>not to any extent</i>                          | faster than Jerry' |

In affirmative sentential contexts (2), comparatives are negated solely by negative pronominal adverbs. In negative sentences (1), it is a negative *verbum finitum* that negates a comparative degree, while negative adverbs serve as mere *emphasizers*.<sup>4</sup> In other words, only in the former case we can treat these negative adverbs as zero-degree comparative intensifiers. Finally, the given degree intensifiers are found in both up-scale (e.g. *privilegovanija*) and down-scale (e.g. *manje prijatnim*) grading, i.e. with both comparatives of superiority and inferiority, respectively.

In English, comparative degree can be canceled with *none*, a negative pronominal adverb (Josijević 2020a: 166–168), meaning: *by no amount; not at all* (OED). A real plenitude of examples is attested in the *Corpus of Contemporary American English*:

4 Serbian, not only allows, but most commonly requires negative concord, i.e. double negation, with negative pronominal *ni-* lexemes (pronouns, determiners, and space and time pronominal adverbs).

Though he, *none the better*, knew of men who were brutes with women. And if all goes well, the outside world will be none the wiser. Yet in the estimation of the authors, these ladies were none the worse for that. [...] but I count myself *none the poorer* for having passed on the shot. [...] we should be *none the wiser* if we could name them, they themselves none the more honourable. They talk bad about the UN but support it *none the less*. But it is *none the less extraordinary* to see those twelve private credit monopolies [...]. The study of the uncivilized will be *none the less valuable* [...]. [...] we are facing a hidden, but *none the less formidable* crisis [...]. [...] but the memories struck by 167 these photos are *none the less vivid*. (COCA)

The use of the definite article *the* is mandatory in this context, i.e. *none* is always followed by the definite article (*none + the + comparative*): *none the wiser*. The same semantic feature has been attributed to the negative adverb *no* (Josijević 2020a: 166–168), meaning *not*, *not any* (CD), *not at all*, and *to no extent* (OED).

Those bastards, they're *no better* than animals. No, my French is *no better* than my English. I am *no weaker* than a diabetic who takes insulin daily. I am on *no firmer* ground scientifically than those who believe mobile phones are harmful. I bet he was *no uglier* than that boy there. Prudence became *no more dangerous* than any squirming child. She is *no more mysterious* and complex than any other person. They are addictive, but *no more harmful* than caffeine. This is *no more surprising* than the fact that Los Angeles has a hockey team. Indeed, his tone was more serious, but the story was *no less enthralling*. The Strokes' guitarist compiled a solo debut that's sweeter and mellower but *no less appealing* solo. Lesser known but *no less spectacular* than the famed Tetons [...]. (COCA)

This analysis indicates that there are idiomatic intensifiers which have a semantic potential of annulling comparative degree – *by no means + comparative* and *no way + comparative*:

[...] Foxconn is *by no means worse* than Nokia [...]. Roger is by no means worse than AT&T. [...] that are *by no means stronger* than you without damaging the safety net. Leaner, but *by no means meaner*. In the hierarchy of evils, talking with Iran is *no way worse* than war engulfing the most strategically important region in the world. Glory is evil and powerful; and in *no way prettier* than me. Our colonialism is *no way milder*; it is total. I am in *no way luckier* than you or smarter than you.

The idiomatic expression *by no means* is defined as: *not at all*, *not in any way* (OED), *in no way*, and *certainly not* (CD). *No way* is also an idiom used informally, which means: *no or not in any way* (OED). It also appears as a compound adverb *noway*, meaning *in no way*, *respect*, or *degree*; *not all*; *nowise*. As illustrated in the examples above, all lexical devices modify both synthetic and analytic comparatives; and both comparatives of superiority and inferiority.

In both languages, negative pronominal adverbs can be used to negate comparative degree and hence reduce it to the absolute zero value. Once they do so, a comparative construction loses its comparative meaning. Semantically speaking, it becomes an equative. In other words, by negating that there is any difference in property degrees exhibited by the entities being compared, we assert that the degree is equal. The following examples from the chosen electronic parallel corpus testify to this fact:

- (1) All the continents and oceans of Earth appeared *no larger than India* [...].  
 → Svi kontinenti i okeani Zemlje izgledali su veliki kao Indija [...].  
 (2) Charles is *as bad as* any of them.  
 → Čarls je *ništa bolji od* drugih. (ESKP)

The example (1) demonstrates that the English form *no + comparative + than* is translated with the Serbian equative construction, i.e. positive + *kao*. The second example illustrates the equivalence between the English equative construction (*as + positive + as*) and Serbian comparative construction (i.e. *bolji od*) negated by the negative adverbial *ništa*.

In addition to pronominal adverbs which as comparative premodifiers signify the absolute non-existence of any difference in property being expressed by an adjective or an adverb, we have found a few adverbs in both languages whose contributions are somewhat different.

#### 4.2. LIMITARY ZERO-DEGREE INTENSIFIERS

A certain set of adverbs in both languages has the power to cancel comparative degree, but has an additional semantic component bearing the meaning that the level of the property expressed by an adjective or an adverb given in its comparative form is very close to the limit. In other words, if zero-degree adverbs signify the absolute non-existence of any difference in property, limitary zero-degree adverbs additionally signal that the difference in property degrees between the comparee and the standard of comparison in question is almost, nearly existent. They indicate that a comparee is on the point of surpassing its standard of comparison in property degree.

The corpus analysis of the Serbian language indicates that the following adverbs have the aforementioned semantic potential: *bezmalo*, *gotovo*, *skoro*, *zamalo*, *umalo*, *maltene*.

On kaže da je džak bio *bezmalo* viši od tog krupnog lica. Ali Fenja se od tog izlaska uplašila *gotovo* više nego kad je maločas utrčao i jurnuo na nju. Znam *skoro* više o njoj nego o Srbiji gde sam rođena. Beše to *skoro* veličanstvenije od lica anđela koji su ga slušali. [...] a koji su, međutim, *skoro* stvarniji i od same stvarnosti. Samo nas nekolicina smo u tome bili *umalo* uporniji [...]. Ponovo sam debitovala, a u književnim sam krugovima *maltene* više bila poznata kao zabranjeni pisac nego kao pisac. [...] dobija *maltene* veću platu od onog koji radi [...]. (KSSJ)

The adverbs are defined as follows: (1) *bezmalo* as *gotovo*, *skoro*, *zamalo*, *umalo*, *maltene* (RSJ 2011: 70); (2) *gotovo* as *skoro*, *bezmalo* (ibid.: 205); (3) *zamalo* as *umalo*, *skoro*, *gotovo* (ibid.: 384); (4) *maltene* as *gotovo*, *skoro* (ibid.: 660); (5) *skoro* as *bezmalo*, *gotovo* (ibid.: 1208); (6) *umalo* as *skoro*, *gotovo*, *zamalo*. It is evident that the selected dictionary defines the adverbs via the synonymous lexemes, which this analysis has found to cancel comparative degree. They all mean: 'almost', 'nearly', 'lacking a little', 'close to', and similar.

Three English adverbs, i.e. *almost*, *nearly*, and *practically*, are detected in our sample. They have the same semantic potential to cancel comparative degree while still emphasizing that the value on the scale is close to the limit, i.e. the borderline dividing the non-existence of any difference in property degrees exhibited by the entities being compared:

[...] it is a shinier, louder, *almost happier* place. The dead face a little fleshier, *almost healthier*. The sound is *almost freer* than later work by the group. Car running is both high and well-known to allow between the two aspects for *nearly greater* abuse when met. The cable's dock connector will look *nearly bigger* than the Nano itself. Why, you are *nearly shorter* than my waist! For starters, the kids I baby-sit every Wednesday are *practically taller* than I am. Why doesn't rational mind come to the conclusion that that risk is practically lower than breathing? (COCA)

*Almost* is defined as *nearly*, *nearly but not quite* (CD); *nearly* as *almost*, *or not completely*, *almost but quite*, *close to* (CD); *practically* as *almost or very nearly* (CD). Based on the definitions, *practically*, as very nearly, seems to be the closest to the limit.

Limitary zero-degree comparative intensifiers cancel comparative degree, i.e. they establish equative relations between the entities being compared. However, they contain the additional sense signifying that the conditions for comparative degree are almost met. Interestingly, with equatives they seem to do the opposite:

- (1) Tom je *skoro* (*zamalo*, *maltene...*) brz kao/koliko (i) Džeri.
- (2) Tom is *almost* (*nearly*, *practically*) as fast as Jerry.

In both cases, there are inferences that Jerry is faster than Tom. As with comparatives, these intensifiers additionally signal that the difference in the property (e.g. speed) being compared between two or more entities is slight, almost approximate. It may be also interesting to note that the adverb *approximately* has not been detected in comparative constructions other than those that have numerical values as standards of comparison (e.g. *approximately more than 20,000 dead*; *than 60% of overweight*; *than 4 times*; *than \$4 million*, COCA). However, it is detected in equative constructions which imply comparative degree:

U. S. Department of Agriculture also is looking into industry complaints that retail pork prices are *approximately as high as* a year ago. In the deep dermis, elastic fibres were rare and *approximately as thick as* those in the middle layer. Most of them are *approximately as stylish as* a burlap sack with handles. I am still convinced that if we don't assume malice, symmetric encryption is *approximately as safe as* asymmetric for this particular scenario. Eating pineapple when your lips are burnt is *approximately as painful as* giving birth to triplets. [...] his new girlfriend is *approximately as gorgeous as* Gwyneth Paltrow. Once it gains altitude, it appears *approximately as bright as* the zero-magnitude stars Arcturus and Vega. (COCA)

These findings suggest that positive intensifiers should deserve closer inspection, too. They should be examined more thoroughly in the future.

### 4.3. THE CONTRASTIVE ANALYSIS

This paper first focused on zero-degree intensifiers. All lexical coinages with comparative forms are mutually synonymous to one another in that they all have identical semantic contributions, and as such, they are equivalent to the adverbial devices described for the other language. The examples retrieved from the chosen electronic parallel corpus provide evidence for such claims:

(1) Amelia deserves *no better*.

→ Amelija ne zaslužuje *ništa bolje*.

(2) I meant to go with you, Charles, for I am *no more useful* than you at home.

→ Nameravam da idem sa tobom, Čarlse, jer nisam *nimalo potrebija* kod kuće nego ti.

(3) [...] the former of whom had particularly set her heart upon going, and the latter *no less anxiously* placed his upon pleasing her [...].

→ Na savetovanju u četiri oka između Izabele i Džejmsa na kome se ona naročito zalagala za to da se ide, a on se *ne manje zalago* da njoj učini radost [...]. (ESPK)

The same English form (*no + comparative*) is translated with: *ništa + comparative*, *nimalo + comparative*, and *ne + comparative*.

Since English does not allow negative concord in this context, the comparative can be also canceled with negative predication. Commonly, the adverb *any* appears as an emphazier in this context.

The Canadians are *not any better*. She was *not any more attractive* than most of the other women here. [...] but it's *not any clearer* if it's going to help him politically either. [...] the new connector is *not any faster* than the old one. It's *not any nicer*, believe me, but there's more intentionality to it. A man is *not any godlier or holier* or more successful because he decided to learn to play the guitar. It's *not any grander or prettier* than that. Men are *not any brighter*. I have about as much hair as last year, and it's *not any grayer*. His walk was *not any more brisk* than usual [...]. (COCA)

It is important to note that *any* does not have power to cancel comparative degree on its own so it cannot be treated as a zero-degree intensifier. It is rather a mere emphasize. The electronic parallel corpus provides an interesting example:

- (1) They were there every day, but that *did not make it any less annoying*.  
→ [...] ali njihova pojava *nije bila ništa manje neprijatna*. (ESPK)

A negative predicate (*did not make*), followed by *any* + comparative form (*less annoying*) is translated into Serbian with a negative predicate (*nije bila*) followed by *ništa* + comparative (*manje neprijatna*). Since negative predication (*nije bila*) is primarily responsible for negating comparative degree, *ništa* serves as a mere emphasize in this case. However, it can be used as a zero-degree intensifier in this context with affirmative predication: *ali njihova pojava je bila ništa manje neprijatna*.

Since English does not allow negative concord here, a phrasal zero-degree intensifier, i.e. *by no means*, has an equivalent form with negative predications: *not by any means*. Semantically speaking, this structure is equivalent to all sentential structures with zero-degree intensifiers (or emphasize) and comparatives.

## 5. CONCLUDING REMARKS

This analysis aimed at detecting and analyzing the comparative intensifiers which have semantic potentials to cancel comparative degree in the Serbian and English language. This class of intensifiers is termed as zero-degree intensifiers. The findings indicate that there are two sub-categories of zero-degree intensifiers: absolute zero and limitary.

Absolute-zero intensifiers cancel comparative degree, and actually transform comparative structures into equatives. In Serbian, they can be used with both affirmative and negative predicates. In the former case, they are responsible for negation and true zero-degree intensifiers. In the latter case, it is negative predicates that are primarily responsible for negating the existence of comparative degree, so these negative adverbs serve as mere emphasize, i.e. they just amplify, emphasize the negation.

Limitary zero intensifiers cancel comparative degree, and thus express equations between the properties. However, they also carry additional meaning – that the value is very close to the limit needed for the existence of comparative degree. The findings also indicate that the same set of adverbial intensifiers can be used with positives, i.e. in equative constructions. These forms carry inferences about the existence of comparative degree.

Finally, we shall conclude that despite the real abundance of literature on degree adverbs, comparative and superlative intensifiers remain

relatively under-researched. The numerousness of available lexical items, in addition to the fact that they are used for subjective evaluations and estimations, and can as such exhibit a high level of *semantic imprecision*, makes this category very intriguing. As such, it deserves more attention in the future.

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**Jelena M. Josijević, Sanja S. Markeljić / INTENZIFIKATORI NULTOG STEPENA UZ KOMPARATIVE U SRPSKOM I ENGLESKOM JEZIKU**

**Rezime** / Intenzifikatori kojima se označava minimalni stepen do sada su bili neizbežna tema u gramatičkoj i lingvističkoj literaturi. Sa druge strane, mogućnost upotrebe priloških intenzifikatora za označavanje nultog stepena nije dobila zasluženu pažnju. Uočena praznina u dosadašnjoj literaturi poslužila je kao glavna motivacija za ovaj rad. Cilj rada je identifikacija i analiza intenzifikatora koji se upotrebljavaju uz komparative, a koji se koriste za označavanje nultog stepena, tj. poricanje komparativnog stepena. Nezavisne korpusne analize sprovedene su na anotiranim elektronskim korpusima: *Corpus of Contemporary American English* (COCA) i *Korpus savremenog srpskog jezika* (KSSJ). *Englesko-srpski paralelni korpus* (ESPK 2012) koristi se samo za ilustrovanje uočenih sličnosti i razlika između dva jezika. Na osnovu kriterijuma koje daje R. Đorđević (2004), kontrastivna analiza može se odrediti kao nezavisno, teorijsko, strukturalno i deskriptivno kontrastivno proučavanje.

Rezultati ukazuju da leksički repertoari oba jezika raspolažu priloškim i fraznim sredstvima koja se javljaju uz komparative, a koja umanjuju komparativni stepen do nulte vrednosti. Uz to, u okviru ove klase mogu se izdvojiti dve leksičko-semantičke podvrste intenzifikatora nultog stepena: intenzifikatori koji označavaju vrednost apsolutne nule i granični intenzifikatori nultog stepena. Prvi su u oba jezika zamenički odrični prilozi. U srpskom jeziku, u zavisnosti od toga da li je predikat potvrđan ili odričan,

могу се третирати као интензификатори нultог степена или као пuki емфатички изрази. Други су чисти прилози и поред порицања компаративног степена имају додатна семантичка обељежа да је степен разлике врло близу, тик уз граничну вредност компаратива. Иста прилошка средства беље се и уз позитиве, а у том случају имплицирају компаративности.

**Кључне речи:** модификатор, интензификатор, прилог степена, српски језик, енглески језик

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## THE PRODUCTION OF HIGH BACK VOWELS: A CONTRASTIVE STUDY OF AMERICAN ENGLISH AND STANDARD SERBIAN<sup>2</sup>

This paper reports on the findings of a contrastive study of American English high back vowels /u, ʊ/ and Serbian vowel /u/ produced by ten male native speakers of Serbian. Previous research (Marković 2009a; Bjekić, Čubrović 2021; Čubrović 2019, 2017; Dančetović, Nešić 2017) has indicated that the differences in quality between the English high back vowels /u/ and /ʊ/ are often poorly detected by Serbian speakers. Therefore, the overall aim of the present research is to observe the acoustic properties of high back vowels in the given languages, so as to determine whether or not our subjects can adequately produce the L2 vowels with respect to both quality and quantity, and whether they can differentiate them from their L1 categories. The research subjects were first instructed to read a set of 13 monosyllabic English words representing the high back vowels /u, ʊ/ in different phonetic environments. The second task called for the subjects to read a set of 13 Serbian words representing the vowel /u/ in short and long stressed syllables. The collected speech samples were then analyzed acoustically using *Praat*, version 6.2.13 (Boersma, Weenink 2022). The statistical analysis of the acoustic measurements was performed using *R*, version 4.2.1 (R Development Core Team 2022). The results suggest that, in terms of quantity, in the speech of Serbian students, the lax vowel, in particular, bears more resemblance to the subjects' L1 category, rather than the targeted vowel. The analysis of the formant data indicates that, although our subjects' L2 categories differ from those of native speakers, the quality of GA high back vowels our subjects produce does not reflect the quality of their L1 categories.

**Keywords:** vowel quality, vowel quantity, monophthong, high back vowels, General American, Standard Serbian

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## 1. INTRODUCTORY REMARKS

It has been well documented in EFL literature that *Standard<sup>3</sup> British* and *Standard American* are the two varieties<sup>4</sup> studied by most foreign learners (Trudgill, Hannah 2008: 6; Algeo 2006: 1). This is partly because these are the reference accents for nearly all teaching materials on English pronunciation, both in the UK and the US, as well as internationally (Ashby 2011: 11). With regard to the Serbian educational context, almost all teaching materials have British English as their reference accent (Paunović 2011; Jerotijević Tišma, Karavesović 2019; Čubrović, Bjelaković 2020). However, in recent years, there has been a growing body of experimental studies (Stojić 2017; Čubrović, Bjelaković 2020; Janevska 2022) reporting the advance of the American variant among Serbian students, not only in informal domains, but also institutionally. This growing exposure to American English has led, at least in part, to a change regarding the students' preferred pronunciation model. Namely, a study carried out by Stojić (2017: 312) showed that up to 61.7% of Serbian students reported using the American variety, compared to the author's earlier study (1997), where only 15.8% of the respondents opted for the said variant. In a more recent study (Janevska 2022: 167), 64% of Serbian students labeled their own accent as American. There are several consequences of this change, one of them being the need to focus more on analyzing our students' success when trying to approximate the American Standard, since, according to the latest data, approximating this particular variety seems to be the students' ultimate objective.

Also, we must not overlook the fact that attaining a native-like accent remains a high priority goal for Serbian students (Janevska 2022: 166), despite the insistence of certain scholars (e.g. Jenkins 2006) that a more simplified variety, such as *ELF (English as a Lingua Franca)*, should be a more realistic goal for EFL learners. Nevertheless, there is some truth to the general observation that, regardless of the students' inclination towards a specific native model, more often than not, EFL learners fail to attain the preferred English variety. Researchers generally agree that this is partly due to the fairly frequent transfer of L1 categories (Flege 2002: 224; Liu 2011: 118; Chuan 2010: 101). Consequently, vowel studies have

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3 *Standard pronunciation* is the pronunciation most commonly taught in formal language instruction, especially in countries where English is a nonnative language (Bussmann 1996: 1117; Quirk et al. 1985: 7). It is the variety which has been codified in dictionaries, grammars and usage handbooks (Biber et al. 1999: 18) and is customarily regarded as the pronunciation of the educated class (Bussmann 1996: 1117).

4 *Varieties* (or *dialects*) differ among themselves in terms of their syntax, lexicon, morphology and pronunciation (Wells 1982: 3; Carr 2008: 8). If we speak of different *accents*, we typically refer solely to pronunciation differences (Wells 1982: 3). However, in this paper, the terms *variety* and *accent* will be used synonymously, since we only wish to describe Serbian and English with respect to their phonetic properties. Also, the term *accent* will not be used here in its other sense, i.e. as a synonym for *stress* (ibid.: 2).

focused on contrasting vowel inventories of various languages in the hopes of getting a better understanding of the nature of such transfer.

Given the prevalence of American English among Serbian students, this research focuses on the analysis of the quality and quantity of *General American* vowels /u/ and /ʊ/ (hereafter GA)<sup>5</sup> and Serbian vowel /u/. The analysis carried out in this study focused on these particular vowels since there has been a number of research papers (Marković 2009a; Bjekić, Čubrović 2021; Čubrović 2019, 2017; Dančetović, Nešić 2017) indicating that Serbian students have particularly hard time noting the quality differences between these target sounds. Therefore, we primarily wish to see whether or not our subjects can adequately produce the L2 vowels with respect to both quality and quantity, or whether the reasons underlying their failure stem from the aforementioned phonetic transfer. Before we do so, however, it is necessary to briefly take a closer look at the vowel systems of Standard Serbian and General American, which are discussed in the succeeding segment of this paper.

### 1.1. THE VOWEL SYSTEM OF GENERAL AMERICAN AND STANDARD SERBIAN

In general, the GA vowel system comprises sixteen vowels /i, ɪ, e, ε, æ, a, u, ʊ, o, ɔ, ʌ, ɜ, ə, aɪ, aʊ, ɔɪ/ (Giegerich 1992: 47), although in some dictionaries and usage handbooks (e.g. Wells 1982: 120; Cassidy 1985: xiii) the vowel inventory of GA is described as comprising fifteen vowel phonemes. The difference is essentially made on the basis of whether or not the vowel /ə/, which is restricted to unstressed syllables (Wells 1982: 120), is included. Vowel inventories are customarily organized into pairs, or sets, in terms of the high–low and front–back dimension, or the long–short opposition (Giegerich 1992: 48). Thus, some scholars (ibid.: 58) have suggested that it may be possible to establish a structured system with the following pairs of GA vowels: /i/-/ɪ/, /e/-/ε/, /a/-/æ/, /u/-/ʊ/, /o/-/ʌ/. In each pair, the left-hand member is longer than its right-hand counterpart and can end syllables, while the one on the right cannot. The remaining vowels (/ɔ/, /aɪ/, /aʊ/ and /ɔɪ/) are not organized into pairs, i.e. they do not have a phonetically similar counterpart which is restricted to closed syllables (ibid.). This is why Wells (1982: 120), for instance, distinguishes between *checked vowels* (/ɪ, ε, æ, ʌ, ʊ/), which cannot occur in a stressed monosyllable that is open, and *free vowels* (the remainder), on which there are no such constraints.

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5 *General American* (abbreviated to GA) is a term that denotes a range of American accents which are broadly similar (Carr 2008: 62). This accent conveys almost no information regarding the speakers' regional background and is defined as not being the Southern US accent (which covers the area from Virginia to Texas and southwards), nor the accent spoken in the northeastern seaboard of the USA (New York City, Boston and New England) (Cruttenden 2001: 85; Crystal 2008: 207; Carr 2008: 62; McMahon 2002: 69). It is the most widely spoken variety in the US (applied to the two-thirds of the American population) and the American accent most commonly taught to EFL learners (Wells 1982: 1). Other terms for GA are *Network English* and *Network Standard* (Crystal 2008: 207).

Still, the vowel inventory of GA is more commonly described as consisting of *lax vowels* /ɪ, ɛ, æ, ʌ, ʊ, ə/, *tense vowels* /i, ɑ, ɔ, u, ɜ, e, o/, and *wide diphthongs* /aɪ, aʊ, ɔɪ/ (Jones 2006: x). Lax vowels generally occupy a lower position in the vowel space, they are made with less oral tension and they typically do not end syllables (Yavaş 2011: 79). Conversely, tense vowels have a higher tongue position, are longer compared to the lax vowels, and their production usually involves greater muscular effort (ibid.). As for the front–back dimension, GA vowels can be classified as: *front* /i/, /ɪ/, /e/, /æ/, /ɛ/; *central* /ʌ/; or *back* /u/, /ʊ/, /o/, /ɔ/, /ɑ/ (ibid.: 78). With regard to the high–low dimension, there are: *high vowels* /i/, /ɪ/, /u/, /ʊ/; *mid vowels* /e/, /ɛ/, /o/, /ɔ/; and *low vowels* /æ/, /ɑ/, /ʌ/ (ibid.: 79). Further distinction can also be made on the basis of lip rounding, resulting in categories like *rounded* (/u/, /ʊ/, /o/, /ɔ/) and *unrounded* vowels (the remaining). It is widely observed that dialectal variation in English pertains more to the differences in vowel, rather than consonant inventories (Yavaş 2011: 77). One of the most notable phonemic differences between GB<sup>6</sup> and GA is that the vowel /ɒ/ does not occur in GA. Therefore, words like *lot* or *salt* usually have /ɑ/ or /ɔ/ instead (Cruttenden 2001: 85; McMahon 2002: 75, 95). Moreover, unlike in GB, in GA there are no centering diphthong phonemes (McMahon 2002: 80). In fact, the traditional description of GA vowels lists only three diphthongs: /aɪ, aʊ, ɔɪ/ (Yavaş 2011: 78). Given that the diphthongal movement in /eɪ/ and /oʊ/, although present, is not as noticeable in GA, as it is in GB, these are treated as tense vowels /e, o/, rather than diphthongs (Jones 2006: ix). When it comes to vowel duration, the long/short distinction, typical of GB vowels, is not present. This is quite evident in the symbolization of tense vowels, in that they are represented without the length mark /:/. Namely, the duration is conditioned by phonetic environment (Yavaş 2011: 80; Wells 1982: 120; Jones 2006: ix; Collins, Mees 2013: 159), and so, GA vowels are essentially longer in stressed, open syllables, and before voiced consonants (Yavaş 2011: 80–81). For the present study, it is important to note the following: a) /u/ is classified as tense, while /ʊ/ is a lax vowel; b) the tense vowel is slightly diphthongal (Yavaş 2011: 85); c) the fundamental difference between /u/ and /ʊ/ lies primarily in the way they are positioned in the vowel space, i.e. their spectral features.

The vowel inventory of Standard Serbian is traditionally described as comprising five vowel segments /a, e, i, o, u/, i.e. two *front* vowels /i, e/, two *back* vowels /u, o/, and one *central* vowel /a/. These vocalic segments are additionally categorized according to the high–low dimension, giving rise to two *high* vowels /i, u/, two *mid* vowels /e, o/ and one *low* vowel /a/ (Miletić 1952: 17; Simić, Ostojić 1996: 178). The back vowels tend to be rounded, although this is not their defining feature, it is, in fact, regarded as redundant (Subotić et al. 2012: 44). Although Serbian vowels can all be realized as short and long, their length is not a phonemic feature

6 In this paper, the term *General British* (GB, for short) will be used to refer to the Standard British pronunciation model.

(Marković, Sredojević 2021: 53–54). Rather, it is a prosodic phenomenon (ibid.). The accentual system of Standard Serbian comprises four accented prosodies that are further distinguished on the basis of quantity and quality, giving rise to: *long falling* /ˈ/, *short falling* /˘/, *long rising* /ˊ/ and *short rising* prosodime /˘ˊ/ (Petrović, Gudurić 2010: 117; Subotić et al. 2012: 98). Falling accents are typically tied to monosyllables, whereas the rising accents stretch over two syllables, with the first one being perceived as stressed (Sredojević, Marković 2020: 35). However, it is important to note that accent type (rising/falling) does not exhibit a substantial influence on the quality of Serbian vowels, while accent quantity does (Lehiste 1977: 31; Marković, Sredojević 2021: 56; Marković, Bjelaković 2006: 342). Consequently, scholars like Čubrović (2015: 203) argue that, when contrasting vowel inventories, it is often advisable to divide Serbian vowels into short and long subsystems, for the sake of ensuring a more reliable comparison with other vowel systems.

Experimental studies (Marković, Sredojević 2021: 70–72; Marković, Bjelaković 2006: 341–342) suggest that the main quality difference between the /u/ vowel in short and long syllables is achieved by a slight centralization of the short variant. Still, this difference is not big enough to yield a substantial quality difference (Marković, Bjelaković 2006: 341), and so, the short and long variant occupy much of the same area in the vowel space (Marković, Sredojević 2021: 71). As a consequence of the insufficient quality differences, the differences in duration between these vowels are much more pronounced (Marković, Bjelaković 2009: 153–155).

## 2. A REVIEW OF THE RELEVANT LITERATURE

In general, contrastive studies of Serbian and English (Marković 2009a; 2009b; Paunović 2011; Dančetović 2017; Dančetović, Nešić 2017; Bjelaković 2018; Sudimac 2016) have largely shown interest in exploring the Standard British pronunciation model. As mentioned before, in the introductory section of this paper, this can be attributed to the prevalence of the British variant with regard to the teaching materials Serbian students are exposed to through formal education. Although such studies are of great value, this paper will not include a detailed overview of their findings. Rather, we will focus more on the contrastive studies that are of more crucial importance to this particular research, i.e. the studies that pertain to the vocalic system of American English. We will, however, only point to the research findings in relation to the high back vowels.

In one of her papers, Čubrović (2017: 63) explores acoustic features of nine American English monophthongs /i, ɪ, ε, æ, ʊ, u, ʌ, ɑ, ɔ/ produced by ten male native speakers of Serbian living in the United States, and four native speakers of American English (AE, henceforth). The subjects' age ranged from 35 to 44. Their task was to read the following monosyllabic

words representing the nine target vowels: *beat, bit, bet, bat, but, boot, put, bought* and *pot*. These words were embedded in the frame sentence “Say \_\_\_\_ again”. The author’s (ibid.: 64–65) findings indicated that Serbian speakers show a strong tendency towards merging the American high back vowels /ʊ/ and /u/. In fact, the subjects were unable to recognize the quality differences between these sounds, which was particularly evident from the lower  $F_1$  values for /ʊ/. Consequently, the vowel /ʊ/ was much higher and closer to /u/ in the vowel space. Another observation made by the author (ibid.: 65) was that the subjects relied more heavily on phonetic duration when trying to differentiate between the two target sounds.

A later study conducted by Čubrović (2019) delves more deeply into the relationship between duration and vowel quality of AE vowels. Nine monophthongs, which were the subject of the author’s previous study (2017), were analyzed in the context /bVt/, and were embedded in the same carrier sentence as in the previous research. The original intent of this study (2019) was to observe the role vowel duration plays in distinguishing between AE vowels. Ten male native Serbian speakers residing in the US, as well as five native speakers of AE, took part in the research (ibid.: 19). Somewhat of the same pattern is observed, compared to the earlier study (2017), in that the subjects were unable to produce the AE vowels /ʊ/ and /u/ without a substantial degree of overlap. Namely, the difference between the tense and lax vowel was essentially made on the basis of vowel duration. Average duration for the tense and lax AE vowel in the speech of Serbian informants was 154.5 ms and 80.3 ms, respectively (Čubrović 2019: 22). What was particularly interesting was that the vowels produced by Serbian EFL speakers were consistently longer in duration compared to the measured values for native AE speakers (ibid.: 26). However, the native speakers in this research came from the North-East of the US.

In a study she coauthored with Čubrović, Bjekić (2021) observed the quality of nine AE vowels /i, ɪ, ε, æ, ʊ, u, ʌ, ɑ, ɔ/ produced by nine native Serbian speakers. The obtained formant frequencies were compared with the reference values for nine male AE speakers, adapted from an earlier study done by Čubrović (2016). The group of informants was dialectally homogeneous since all subjects came from Čačak, a city in central Serbia (Bjekić, Čubrović 2021: 67). Furthermore, they were all students of Technical College of Vocational Studies, and their age ranged from 19 to 21. The informants produced monosyllabic words with CVC structure, where the initial consonant was either /b/ or /p/ and the final consonant was /t/. The test words were embedded in a frame sentence “Say \_\_\_\_ again”. General conclusion of the authors’ (ibid.: 69) findings was that there is no clear distinction between AE vowels /ʊ/ and /u/ since the two categories overlap in the vowel space of Serbian EFL learners. Therefore, Bjekić and Čubrović’s (ibid.: 75–76) observation was that their subjects did not produce the appropriate quality of this tense/lax pair. Also apparent was the



speakers' tendency to rely heavily on durational properties, as was reported in the previously discussed studies (Čubrović 2017; 2019).

Differences in the production of high back vowels in native and non-native speech were confirmed in yet another study conducted by Nikolić (2016). The analysis carried out in this research consisted of comparing the acoustic properties of vowels produced by Serbian EFL speakers (n=2) and native AE speakers (n=2). The subjects were instructed to read a short story and a dialogue. Unlike the aforementioned studies, this one did not reveal significant differences in the production of the target vowels, or rather, the differences were not strong enough to afflict the overall intelligibility (ibid.: 96–97). However, it is important to note that the measurements were made from a relatively small group of female informants (only 4 speakers, in total). Therefore, the small number of informants might have yielded such results.

The examination of the existing contrastive studies seems to point to the fact that Serbian EFL speakers essentially do struggle when trying to pronounce the American high back vowels, primarily with regard to vocalic quality. The current findings suggest that, more often than not, in the speech of Serbian learners, there are no clear distinctions between the tense/lax pair. This appears to be attributed, in part, to the issue of L1 transfer. Nevertheless, since there is evidence suggesting that this might not always be the case, an attempt was made in the present study to observe the acoustic properties of high back vowels in Standard Serbian and General American in the hopes of obtaining additional evidence to substantiate the existing claims.

### 3. METHODOLOGY

#### 3.1. SUBJECTS

The participants were English-major students at the Faculty of Philology and Arts, University of Kragujevac. The total sample size consisted of 10 male students (mean age 20.5), who were all native Serbian speakers. The sample was homogeneous in terms of variables like sex and the participants' native language. However, it was not homogeneous when it came to the level of undergraduate study. More specifically, there were 5 first-year students and 5 second-year students who took part in the present research. Still, since previous studies on the production of English monophthongs by Serbian speakers (Dančetočić, Nešić 2017: 278; Dančetočić 2017: 366) revealed no noticeable differences in terms of phonological competences for students of different study levels, this particular dissimilarity was disregarded. Moreover, despite the different study level, all students were familiar with the basics of English pronunciation through courses like *English Phonetics* (first-year students) and *English Phonology* (second-year

students). Although the informants had no experience of visiting or living in an English-speaking country, they have spent on average 12.9 years learning English institutionally. In view of the goal of this research, only those students whose preferred pronunciation model was GA were accepted as research subjects. The subjects' participation in the research was voluntary.

### 3.2. RESEARCH INSTRUMENT AND PROCEDURE

The subjects were first asked to respond to a questionnaire which was designed in order to gather their demographic data. The elicitation of speech data consisted of two tasks: 1) reading a list of monosyllabic English words (n=13) which were embedded within the frame sentence "I say \_\_\_\_\_ *oddly*"; 2) reading a list of monosyllabic (n=6) and disyllabic (n=7) Serbian words embedded within the carrier sentence "Kaži \_\_\_\_\_ *opet*". The frame sentences were used in order to minimize the likelihood of test words being pronounced with the rising intonation pattern, commonly used for reading lists (Ivić, Lehiste 2002: 10; Sredojević 2017: 28). Moreover, when reading a list of words, speakers tend to pronounce the words with a lower pitch and a longer vowel (Ladefoged 2003: 7). Thus, using a carrier sentence guarantees a more stable pronunciation (ibid.: 8). Except for being asked to use a normal speaking rate when reading the sentences, the subjects were not given any special instructions. For both English and Serbian words, the phonetic context was identical. The only difference was that the English words were all monosyllabic, while Serbian words were both monosyllabic and disyllabic. Ideally, it would be best for the words to have the same number of syllables. However, this condition could not be met since, in some instances, there were no Serbian words available where the analyzed vowel was in monosyllables beginning and ending with the same consonant as in the English test words. Therefore, we prioritized controlling for contextual effects on vowels in both languages, since different phonetic context in one language or another can result in a false description in terms of the vocalic quality (Ladefoged 2003: 6; Hillenbrand, Clark 2001: 760). As discussed previously, accent type does not affect the quality of Serbian vowels (Lehiste 1977: 31; Marković, Sredojević 2021: 56; Marković, Bjelaković 2006: 342). Hence, all Serbian words in this research had only falling accents (short and long). The test words were: *cook, could, stood, hook, push, book, took, goose, soon, stoop, sued, mood, boon, kùk, kùd, tùd, hùkće, pùška, bükva, štùka, gùst, sùnce, tùp, sùd, mùdro, and bùnda*.<sup>7</sup>

Originally, there were two more words – *too* and *tù*. However, these were excluded from the analysis since the syllables were open. Namely, the vowels of the words in the frame sentences would run into the vowels of the test words. As a consequence, there would be no separation between the words, and it would be nearly impossible to determine the boundary

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7 On the reading list, these test words were presented in random order.

between the segments (Ladefoged 2003: 8). The exclusion of these words then led to a slight imbalance in the number of test words where the observed vowels were in long (n=6) and short (n=7) syllables. Originally, the number of tokens was 260 (13 English words × 10 speakers + 13 Serbian words × 10 speakers). However, for some words it was difficult to identify a steady-state time for spectral analysis since there were continuous changes in the formant frequencies. For this reason, 24 tokens were excluded from the subsequent analysis, leaving a total of 236 analyzed tokens. Only a single repetition of each vowel (within the frame sentence) per speaker was analyzed.

### 3.3. MEASUREMENTS AND STATISTICAL ANALYSIS

The collected speech samples were analyzed acoustically using *Praat*, version 6.2.13 (Boersma, Weenink 2022). The first two formants ( $F_1$ ,  $F_2$ ) were measured at the most steady-state time, which was, in fact, the interval near the middle of the vowel (Ladefoged 2003: 105; Peterson, Barney 1952: 181–182; Johnson et al. 1993: 704). It is often the case that the first two formants alone are enough for vowel characterization (Gudurić 2004: 51; Ladefoged 2003: 105). Apart from the formant frequencies, we measured vowel duration, i.e. vowel quantity. Vowel duration measurements included only the vocalic segment, i.e. they did not include the initial burst that is associated with the release of a consonant (Hillenbrand, Clark 2001: 750). The segmentation was done manually, referring to the instructions outlined by Ladefoged (2003: 94–103) and, since our informants were all male speakers, we adjusted the frequency range at about 4000 Hz (ibid. 109).

The statistical analysis of the obtained acoustic data was performed in the *R* statistical program (R Development Core Team 2022, version 4.2.1). That included generating descriptive (calculating mean scores and SD), as well as inferential statistics (conducting statistical tests). Since most of the data in our research was not normally distributed<sup>8</sup>, the *Mann–Whitney U test*<sup>9</sup> for independent samples was used for determining whether there is statistically significant difference between different sets of data. *The Independent Samples t-test* was used for the comparison of the normally distributed data sets. The differences were considered as statistically significant if the p-value was less than 0.05 (Larson-Hall 2015: 65).

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8 The *Shapiro–Wilk test* was used in order to check the data for normality. This test is commonly used with group sizes under 50 (Larson-Hall 2015: 119). The p-value of less than 0.05 indicated that the data were not normally distributed, in which case the non-parametric test was used. By contrast, if the p-value was above 0.05, the data were considered to be normally distributed, which resulted in the use of a parametric test (ibid.).

9 Also known as the *Wilcoxon Rank Sum Test* (Turner 2014: 120).

## 4. RESULTS AND DISCUSSION

### 4.1. VOWEL QUANTITY

In order to observe whether there is any evidence favoring the view that the duration of Serbian students' L2 vowels is largely reflective of their L1 vocalic quantity, it is necessary first to turn to the results of the acoustic measurements pertaining to the duration of the Serbian /u/ vowel in long and short syllables. *Table 1* provides an overview of those results.<sup>10</sup>

Table 1. Durational differences between the long and short realization of /u/ in Standard Serbian

parameter	syllable	$\bar{X}$	SD
duration [ms]	short	93.10	30.78
	long	149.43	40.14

The values, shown in *Table 1*, suggest that, in Standard Serbian, there is a durational difference between the long and short realization of the high back vowel. Namely, the duration of the long and short vowel in the speech of our subjects is 149.43 ms and 93.10 ms, respectively. The quantitative difference in duration is 56.33 ms. The findings presented here are consistent with the aforementioned studies on vocalic quantity in Standard Serbian (Marković, Bjelaković 2009), in that they further corroborate the widely held viewpoint that the durational differences between the two variants of the high back vowel are indeed quite pronounced.

The data on the quantity of the tense and lax GA vowel in the speech of our subjects are presented in *Table 2*.

Table 2. Durational differences between the tense/lax GA vowel produced by Serbian speakers

parameter	vowel	$\bar{X}$	SD
duration [ms]	lax	98.19	30.95
	tense	179.8	40.33

As can be seen, in the speech of Serbian students, the tense GA vowel is significantly longer compared to its lax counterpart. More specifically, the measured duration for the lax vowel was 98.19 ms, whereas the length of the tense vowel was 179.8 ms. The quantitative difference in duration is 81.61 ms. It is reasonable to assume then that such results are indica-

10 The results presented in *Table 1* (as well as in *Table 2*, *Table 4* and *Table 5*) are restricted to the values obtained by calculating descriptive statistics. Namely, the primary purpose of the present research was to contrast the high back vowels in GA and Standard Serbian, which is why the phonetic context was identical for the analyzed words in the given languages. However, the phonetic context was not identical for Serbian words in short and long syllables (nor the GA lax and tense vowels). For this reason, the inferential statistics was left out for these data sets.

tive of the L1 transfer. Namely, the data on the durational characteristics of GA high back vowels produced by native speakers suggest that these vowels are minimally affected by duration, simply because the differences in quality are large enough to yield a successful differentiation between the two vowels (Ćubrović 2019: 18). Our subjects, however, show a rather different tendency, i.e. their production of the tense/lax pair mirrors their production of the Serbian /u/ vowel in long and short syllables, which is quite evident in the pronounced durational difference. It is interesting to note that the quantitative difference between the tense and lax GA vowel is even greater than the quantitative difference between the Serbian /u/ vowel in short and long syllables.

However, a closer comparison between the values for Serbian vowels and GA vowels reveals that the transfer is more evident for short vowels (see Table 3).

Table 3. Durational differences between Serbian and GA vowels

parameter	language	realization	$\bar{X}$	SD	U	p
duration [ms]	Serbian	short	93.10	30.78	2063	0.224
	English	lax	98.19	30.95		
	Serbian	long	149.43	40.14	746	0.009
	English	tense	179.8	40.33		

Namely, a significant difference ( $p=0.009$ ) may be observed in the average duration of the Serbian /u/ vowel in long syllables and the GA tense vowel, while the values for the short vowels do not seem to differ significantly. In fact, the GA lax vowel is only 5.09 ms longer compared to the Serbian /u/ vowel in short syllables. Given that the average duration for /u/ for native GA speakers is approximately 166.2 ms (Hillenbrand, Clark 2001: 752), the obtained results seem to suggest that, in terms of quantity, in the speech of Serbian students, the lax vowel bears more resemblance to the subjects' L1 category, rather than the targeted vowel.

The reference durational value for the tense vowel is 203.6 ms (ibid.). The obtained durational value for the tense vowel in our research seems to be indicative of a somewhat successful attainment of the GA tense vowel quantity. More specifically, the difference in duration between the GA tense vowel in the speech of our research subjects and the Serbian /u/ vowel in long syllables is 30.37 ms. Conversely, the difference between the tense vowel produced by our participants and the reference value for native GA speakers is 23.8 ms. It is evident that the durational value for /u/, as produced by Serbian speakers, does differ from the reference value for native speakers, which is why we cannot speak of a conclusively established category. However, since the category is closer to the target value in duration, than it is to the L1 value, we can assume that the subjects are, to a certain extent, capable of differentiating between the L1 and L2 category.

### 4.2. VOWEL QUALITY

We will first turn to the question of vowel quality in Standard Serbian. Average formant frequencies for the Serbian vowel /u/ in long and short syllables are displayed in *Table 4*.

Table 4. Mean  $F_1$  and  $F_2$  values for Serbian /u/ vowel in long and short syllables

parameter	syllable	$\bar{X}$	SD
$F_1$	short	340	33.99
	long	340	42.51
$F_2$	short	761	106.74
	long	736	96.59

In summary, the data in *Table 4* confirms the observations which have previously been reported in studies on vocalic quality of Serbian vowels which suggest that there is only a slight difference in the  $F_2$  values (Marković, Sredojević 2021; Marković, Bjelaković 2006). In other words, the short variant of the /u/ vowel in Standard Serbian is centralized to a small degree, compared to its long counterpart. Nevertheless, the difference (25 Hz) is rather insignificant, and so the long and short realization of the /u/ vowel generally occupy the same area in the vowel space (see *Figure 1*).

Figure 1. Average  $F_1$  and  $F_2$  values for the Serbian /u/ vowel in short and long syllables



As the results concerning the vocalic quality show, the /u/ vowel in short syllables is practically indistinguishable from the realization in long syllables. Since the spectral differences are not as obvious, the distinction between the two realizations is essentially made on the basis of vowel duration (see *Table 1*). As Marković and Bjelaković (2009: 153–155) have previously pointed out, the differences in duration are more pronounced

for those vowels that do not exhibit major quality differences. The results presented here corroborate that claim.

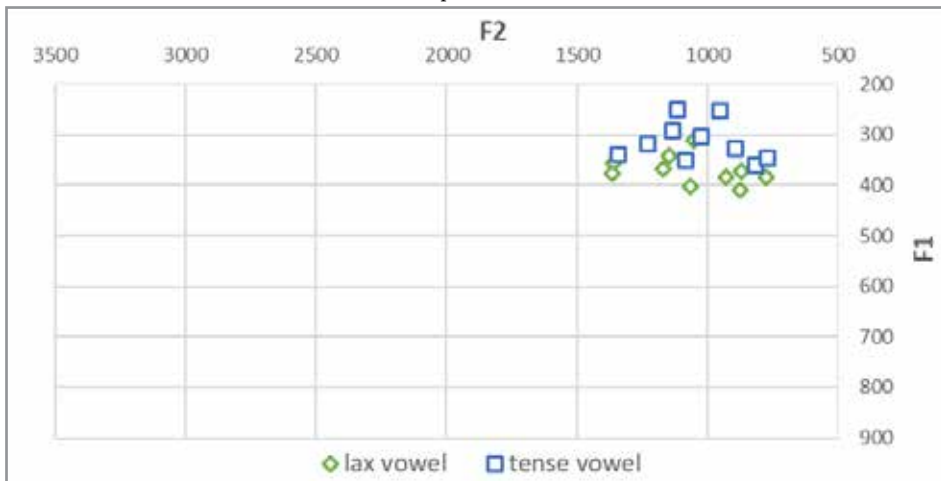
Table 5 compares formant values for the tense/lax GA pair produced by Serbian speakers.

Table 5. Mean  $F_1$  and  $F_2$  values for GA tense and lax vowel in the speech of Serbian students

parameter	vowel	$\bar{X}$	SD
$F_1$	lax	370	39.87
	tense	314	46.11
$F_2$	lax	1061	247.48
	tense	1038	268.07

The data presented here indicate that there is a considerable degree of openness when it comes to the GA lax vowel. More specifically, the formant values for the lax vowel are higher than those obtained for the tense vowel, and this difference averages 56 Hz. The values for the second formant are expectedly lower for the tense vowel, suggesting a more peripheral position in the vowel space. Conversely, the lax vowel is slightly more centralized. However, this particular difference (23 Hz) is rather small. Therefore, we can say that our subjects distinguish between the GA tense and lax pair primarily on the basis of tongue height. Figure 2 presents this data graphically.

Figure 2. Average  $F_1$  and  $F_2$  values for the GA tense and lax vowel produced by 10 Serbian speakers



Despite the higher  $F_1$  values for the lax vowel, which is indicative of a more open articulation, there is still some degree of overlap in  $F_1$ - $F_2$  space. If we were to compare formant frequencies of the tense and lax vowel ob-

tained in our study with those of native GA speakers, we would note that our students generally produce these vowels with a smaller degree of openness. Namely, native GA speakers<sup>11</sup> produce the high back vowels with an average F<sub>1</sub> frequency ranging from 515 Hz to 556 Hz for the lax vowel, and 422 Hz to 478 Hz for the tense vowel (Labov et al. 2006: 90, 102). As for the second formant, our subjects produce the lax vowel with a smaller degree of centralization, compared to native speakers, whose values typically range from 1404 Hz to 1575 Hz (Ibid: 91). With regard to the tense vowel, the average F<sub>2</sub> frequency for native speakers ranges from 1620 Hz to 2000 Hz (Ibid: 103), which is notably higher compared to our subjects' values. This suggests that, like the lax vowel, the tense GA vowel produced by our students is less centralized than the vowel produced by the native speakers.

In order to see whether our subjects' L2 vowels differ from their L1 categories, we compared the results of the acoustic measurements for both languages. Those results are presented in *Table 6*.

Table 6. Mean F<sub>1</sub> and F<sub>2</sub> values for GA tense/lax vowel and Serbian /u/ vowel in short and long syllables

parameter	language	realization	$\bar{X}$	SD	test	p
F <sub>1</sub>	Serbian	short	340	33.99	U=1153	<b>0.002</b>
	English	lax	370	39.87		
	Serbian	long	340	42.51	t=3.0062	<b>0.003</b>
	English	tense	314	46.11		
F <sub>2</sub>	Serbian	short	761	106.74	U=545.5	<b>0.007</b>
	English	lax	1061	247.48		
	Serbian	long	736	96.59	t=7.5149	<b>0.003</b>
	English	tense	1038	268.07		

What the values presented here seem to suggest is that the GA lax vowel /ʊ/ is generally more open and centralized than the Serbian /u/ vowel in short syllables. We could argue that the quality difference between the short/lax realization of the high back vowel in Serbian and English could perhaps be attributed to the aforementioned lack of distinction between the two concerning the vocalic quantity. In other words, since there

11 In *The Atlas of North American English*, Labov, Ash and Boberg (2006: 148) list several US dialects: The West, Canada, The South, The Midland, The Inland North and North Central. Zsiga (2013: 432) notes that "if any area [out of these] can be characterized as "General American", it is the Midland" area. The author (ibid.) further states that this particular area "most closely matches the American English vowel charts printed in textbooks". Hence, the F<sub>1</sub> and F<sub>2</sub> values cited here as reference values represent the formant frequencies which predominate in the Midland dialect. The reference values for the tense vowel generally pertain to the contexts where the said vowel follows non-coronal consonants, since most of our test words contained the tense vowel in such consonant environments.



are no notable durational differences (see Table 3), the spectral differences are quite pronounced. This is reflective both in the  $F_1$  and  $F_2$  values, i.e. in vowel openness and vowel centralization. The same is true for tense vowels, i.e. the subjects do differentiate between the L1 and L2 category in terms of their spectral characteristics. More specifically, the Serbian /u/ vowel in long syllables is positioned lower in the vowel space compared to the GA tense vowel. Statistical difference is evident, yet again, for the  $F_2$  values, suggesting that the GA tense vowel exhibits greater degree of centralization.

Generally, the short/lax and long/tense realizations of the high back vowels differ both in vowel openness and vowel centralization, which seems to indicate that Serbian EFL students' L2 categories do not, in fact, mirror their L1 categories. This is shown in Figure 3.

Figure 3. Average  $F_1$  and  $F_2$  values for the GA tense/lax vowel produced by Serbian speakers and Serbian /u/ vowel in short and long syllables



## 5. CONCLUDING REMARKS

The fundamental question we sought to address in this research was whether Serbian students are capable of differentiating the GA high back vowels from their L1 categories in terms of both quantity and quality. We also wished to see whether our students can adequately produce the quality and quantity of L2 vowels. The examination of the existing empirical literature points to the fact that Serbian students do not seem to perceive the quality differences between GA vowels /u/ and /ʊ/. Consequently, the differentiation between these target vowels is frequently made with regard to vocalic quantity. So as to find evidence to substantiate these views, recordings of 10 male Serbian speakers producing the high back vowels were analyzed.

Given that the distinction between the long and short variant of Serbian high back vowel /u/ is made on the basis of durational, rather than spectral differences, it was reasonable to assume that our subjects might rely on the exact same strategy when trying to distinguish between the GA vowels. The acoustic analysis revealed that, when it comes to vocalic quantity, our subjects' tense vowel was significantly longer compared to the lax counterpart. The quantitative difference was 81.61 ms. Contrary to our subjects' tendency, the literature on the durational characteristics of GA high back vowels usually reports smaller quantitative differences (37.4 ms) (Hillenbrand, Clark 2001: 752), simply because there are rather prominent quality differences between /u/ and /ʊ/. We then decided to compare the obtained data on duration for Serbian vowels and GA vowels produced by our speakers in order to check if the duration of the GA vowels reflected the duration of our subjects' L1 high back vowels. A significant difference was observed in the average quantity of the Serbian /u/ vowel in long syllables and the GA tense vowel, while the values for the short vowels did not differ significantly. In other words, in the speech of Serbian students, the lax vowel bore more resemblance to the subjects' L1 category, rather than the targeted vowel.

Spectral analysis of our subjects' L1 high back vowels corroborated the findings of several previous studies (Marković, Sredojević 2021; Marković, Bjelaković 2006). More specifically, our results revealed that the long and short realization of the Serbian /u/ vowel occupy much of the same area in the vowel space. Given our subjects' tendency to exhibit a rather large durational difference between GA vowels /u/ and /ʊ/, we assumed that the differences in quality would be minimal, as some previous studies have indicated. Contrary to our expectations, the results of the acoustic analysis showed that our subjects do, in fact, distinguish between the tense/lax pair, however, this distinction is made solely on the basis of vowel openness. Nevertheless, the quality of the tense/lax pair did not mirror the quality of these vowels produced by native GA speakers. Namely, our students generally produced the L2 vowels with a smaller degree of openness. As for the second formant, our subjects produced both the lax and the tense vowel as less centralized, compared to native speakers. Although there are notable differences in terms of the obtained formant frequencies, it is also evident that the L2 categories our subjects produce differ from their L1 categories, both with respect to vowel openness and vowel centralization.

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**Марија Н. Јаневска / ПРОДУКЦИЈА ВИСОКИХ ВОКАЛА ЗАДЊЕГ РЕДА: КОНТРАСТИВНА АНАЛИЗА АМЕРИЧКОГ ЕНГЛЕСКОГ И СТАНДАРДНОГ СРПСКОГ ЈЕЗИКА**

**Резиме** / У раду су представљени резултати контрастивне анализе високих вокала задњег реда /u ʊ/ у америчком варијетету енглеског језика и вокала /u/ у српском језику. Анализиране вокале реализовало је 10 информатора мушког пола који су изворни говорници српског језика. Претходна истраживања (Марковић 2009а; Бјекић, Чубровић 2021; Чубровић 2019; 2017; Данчетовић, Нешић 2017) показала су да српски говорници не успевају да препознају квалитативне разлике између енглеских вокала /u/ и /ʊ/. Стога, циљ тренутне анализе био је сагледати акустичке карактеристике поменутих вокала у датим језицима како би се утврдила способност наших студената да адекватно продукују циљне вокале у погледу квантитета и квалитета. Од испитаника се најпре захтевало да прочитају 13 једносложних речи на енглеском језику где су се вокали /u/ и /ʊ/ налазили у различитом фонетском контексту. Затим су испитаници изговарали 13 речи на српском језику у којима се наглашени вокал /u/ налазио под дугим и кратким акцентом. Снимци су акустички анализирани у програму *Praat*, верзија 6.2.13 (Бурзма, Вининк 2022). Вредности добијене на основу акустичке анализе обрађене су статистички у програму *R*, верзија 4.2.1 (R Development Core Team 2022). Резултати показују да је квантитет енглеског вокала /ʊ/ у изговору српских испитаника ближи квантитету српског вокала /u/ него типичној вредности за поменути вокал код изворних говорника енглеског. Резултати анализе вокалског квалитета сугеришу да наши испитаници не супституишу енглеске вокале категоријама из свог матерњег језика, иако квалитет високих вокала не одговара у потпуности квалитету који је типичан за изворне говорнике енглеског.

**Кључне речи:** вокалски квалитет, вокалски квантитет, монофтонг, високи вокали задњег реда, општеамерички варијетет, стандардни српски језик

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## **EXAMINING SERBIAN EFL LEARNERS' METAPHORIC COMPETENCE: METAPHOR IDENTIFICATION AND TRANSLATION<sup>2</sup>**

The paper presents the results of a study devoted to the examination of students' metaphoric competence. The participants received no precoding training, or structured metaphorical input. The study was based on *The Economist's* climate change coverage, a film titled "Climate change technology: Is shading the earth too risky?", which was a part of an English composition assignment. We transcribed the oral data and, following the MIPVU (Steen 2010), identified sentences which contained at least one lexical unit that was metaphorically used. The students were asked to complete a questionnaire that was organized in accordance with our research goals. Namely, our study tested the students' ability to distinguish between metaphorical and literal meaning in order to check their intuitions about what constitutes a metaphor. They were also asked to translate the given sentences into Serbian so that we could examine how they deal with metaphor in translation. The results suggest that the differences in translation are caused by the availability of the conventionalized metaphorical senses across the SL and TL lexicon. The research offered insight into students' metaphoric competence prior to any exposure to Conceptual Metaphor Theory (Lakoff, Johnson 1980), which could be contrasted with the results obtained after a structured metaphorical input.

**Key words:** metaphoric competence, metaphor identification, metaphor translation, Serbian EFL learners, Conceptual Metaphor Theory, news discourse

### **1. INTRODUCTION**

Over the past several decades, metaphor scholarship has advanced significantly, so much so that the claim about the pervasive role of conceptual metaphor would probably be harder to dispute than to accept. The growing body of theoretical and empirical research, ranging from verbal (see Lakoff, Johnson 2003 [1980]; Kövecses 2000; Gibbs 2017) to non-verbal and multimodal discourse (see Forceville, Urios-Aparisi 2009; Forceville 2020; Tseronis, Forceville 2017; Navarro i Ferrando 2019), substantiates this claim. Since its ubiquity is no longer a controversial issue, recent analyses focus on other matters, such as genre or medium-specific man-

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ifestations of metaphors (see Forceville, Urios-Aparisi 2009), the interaction between metaphor, register and word class (see Krennmayr 2011), or the functions of different metaphor types (e.g. Bogetić 2017). Yet, precisely because of its ubiquity and its potential to shape and represent ideologies (Goatly 2007), it is of the utmost importance that we continue to explore metaphor and develop *metaphoric competence*.

Metaphoric competence is a cognitive skill which involves metaphor comprehension, interpretation, and production, and it develops with age (Littlemore 2008: 295–296). Following Littlemore and Low (2006: 268), we use the term in a broad sense, i.e. “to include both knowledge of, and ability to use, metaphor”. Such skills, as noted by Littlemore (2010: 289), contribute to one’s grammatical, illocutionary, discourse, sociolinguistic, as well as strategic competence<sup>3</sup>. In addition, it has been argued that metaphoric thinking presents a practice in which language learners engage more frequently than native speakers (Littlemore 2006: 272), which is why foreign language metaphoric competence development should receive more attention. The existing literature shows that vocabulary remains the “area most conducive to teaching items as metaphor in the language classroom” (Low 2008: 223). Our recent review (Janevska 2021) of the studies that question the relationship between metaphorical input and foreign language teaching process reveals that this is also true of Serbian educators. Another area of research that has attracted attention over the years is metaphor translation. Reflections on the interlingual translation of figurative language (see Eco 2014; Steen 2014; Kövecses 2014; Arduini 2014; Shuttleworth 2014) reveal that the differences between the source (ST) and target text (TT) can be attributed, in part, to the differences in cultural-ideological traits (Kövecses 2014: 32), the availability of conventionalized metaphorical senses across the source and target language lexicon, or the overall ST and TT discourse properties (Steen 2014: 12). The present study addresses the following question raised by Steen (*ibid.*: 16):

If metaphors are not always recognised as metaphors by readers, that is, if metaphors do not always cause readers to set up cross-domain mappings in their minds, then not every metaphor in a ST requires a metaphor in a TT. In other words, some metaphors may be more metaphorical than others. Which metaphors might these be?

In a chapter on the impact of metaphor on teaching and learning process, Low (2008: 222) points out that, in terms of metaphoric competence, learner differences and the possible transfer of metaphor preferences across languages remain a largely unexplored territory (a point also made by Littlemore 2006). In fact, some attempts (see Johnson 1989; Littlemore 2010) have been made to explore the possible link between metaphor interpretation and production behavior in first and second language.

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3 See Littlemore and Low (2006) for a more detailed discussion on the role of metaphor in communicative language ability.



These studies tend to compare metaphor interpretation abilities of native and non-native speakers. Yet, unlike previous studies (e.g. Littlemore 2010), we shall not focus on decontextualized novel linguistic expressions, nor the transfer of the metaphoric skills from one's mother tongue to their second language. Rather, we observe one aspect of metaphoric competence in an EFL context (for the English–Serbian language pair), that is, the student's ability to distinguish between literal and metaphorical meaning in the ST. Instead of focusing on how professional translators deal with metaphor (like Steen 2014), we explore how this is done by the third-year university students of English. We start by considering the issue of metaphor recognition, after which follow some remarks on metaphor translation. The paper ends with recommendations for future research.

## 2. DATA AND METHODOLOGY

The participants were 27 (22 female, 5 male) third-year university students of English studying at the University of Kragujevac. Before participating in the study, the students were informed that their participation was voluntary, and that the study would take place during class time. Since the focus of interest was on metaphor recognition by a lay audience, the fact that the participants received no precoding training was considered an advantage. Such a decision was motivated by our goal to explore whether learners were able to spot metaphor without explicit instructions, i.e. without being provided with the cognitive linguistic definition of metaphor.

The study was based on *The Economist's* video on solar geoengineering, titled *Climate change technology: Is shading the earth too risky?*, which was discussed in an English composition class. This means that the students were familiar with the context surrounding the decontextualized sentences included in the questionnaire. The original material, presented in spoken mode, was transcribed for our purposes, and MIPVU (Steen et al. 2010) was applied to this text. Namely, for each lexical unit in the text, we established its *contextual* and *basic meanings*, and when the two were sufficiently distinct but the contextual meaning could be understood in comparison with the basic meaning, we marked that unit as a *metaphor-related word* (MRW). To illustrate, let us consider the expression *worth* in the following example: *Is solar geoengineering worth the risk?* The basic meaning<sup>4</sup> of *worth* has to do with concrete entities that have a value in money, when applied to an action or a plan, such as solar geoengineering, it indicates that it is important and necessary because one could gain something from it. A plan, or an action, involves the use of resources which have monetary value and can be used up. In the like manner, the outcomes of our actions can be either favorable, or they can result in depletion of those

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4 [https://www.macmillandictionary.com/dictionary/british/worth\\_1](https://www.macmillandictionary.com/dictionary/british/worth_1), pristupljeno 15.12.2022.

resources, which allows us to assess their worth. Hence, we marked this unit as a MRW. By applying the procedure, we were able to single out 21 sentences for our questionnaire. The number of metaphor-related words per sentence ranged from one to four lexical units. While most of them were indirectly used (*indirect metaphor*, as in: “As the debate *heats up* [...]”), there were three examples in which the cross-domain mapping was expressed by direct language (*direct metaphor*, as in: “It would be like *living underneath a hundred-ton boulder ready to fall at any time.*”).

The study is based on the responses to a written questionnaire that had three segments (see Appendix). Firstly, the students were provided with a set of sentences and were asked to make a yes/no decision about their metaphoricity. We decided not to underline the metaphoric linguistic expressions to ensure that the students’ intuition would not be impaired by the explicit mention of the locus of metaphor. Instead, the first task was phrased as follows: “Judge whether the following sentences contain word/words that is/are used metaphorically”. The second task called on them to translate the given sentences into Serbian so that we could see if they would retain the metaphorical expression in the TT. The final task was designed to check their understanding of what the term *metaphor* means. For this reason, we asked the students to define the term in their own words. The placement of this task (at the very end) was deliberate, i.e. we wanted the students to lean on their intuition when deciding on metaphoricity, and *then* reflect on their understanding of the term. For reasons of space, the details concerning the last task will be discussed elsewhere. Since conceptual metaphor was not covered in courses that the students took at the time, we expected them to interpret metaphor as a poetic or rhetorical device. That is, we expected low recognition scores.

### 3. RESULTS AND DISCUSSION

#### 3.1. METAPHOR RECOGNITION

Out of all metaphorically used words in the sentences, the lexical units in the indirect metaphor category belonged to four word classes, predominantly verbs (18 instances in total), followed by a small proportion of nouns and prepositions (5 instances each), and one adjective. Conversely, in the direct metaphor category, two instances of direct comparison were signaled<sup>5</sup>, i.e. the units that belong to the direct mapping were preceded by a word that functions as a signal of a cross-domain mapping (an MFlag) (*like* and *kinda*), and one was unsignaled<sup>6</sup>. The present section questioned whether the recognition of these metaphor-related words could be attributed to the respective word classes and the presence of metaphor

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5 See sentences 4 and 21 in the Appendix.

6 See sentence 13 in the Appendix.

signals. This assumption is motivated by the fact that content words (such as nouns, verbs, adjectives, and adverbs) represent “relatively easy cases of metaphor identification” because their meanings tend to be highly concrete and precise, whereas grammatical words (like prepositions) have highly abstract meanings (Pragglejaz 2007: 28–29), and metaphor signals “alert the language user to the fact that some form of contrast or comparison is at play” (Steen et al. 2010: 40).

The previously mentioned example (1) containing the metaphorically used adjective *worth* was not recognized as such by the vast majority of students (out of 27 participants, 24 voted “no”). Nor were the italicized metaphorically used nouns in the expressions: “it is their *job* to stand up for their way of life”, “the *message* this research project sends out”, and “Dr. Harrison’s *vision* for Marine Cloud Brightening”. The only sentences that were circled as metaphorical contained nouns *reverse gear* (18) (21 voted “yes”), used to indicate a way to reverse the solar geoengineering, and *front line* (6) (22 voted “yes”), used to signify a position where the Saami people directly deal with the effects of climate change. The contextual meaning of the lexical unit *reverse gear* is unconventionalized, and therefore more easily identifiable. The contextual meaning of *front line* can be found in dictionaries, but its basic WAR sense was probably accessed when the participants circled this sentence as metaphorical, because these remarks were made in the context of the effort to combat climate change. Prepositions *behind*, *from*, *about*, *into*, and *in* presented another category of false negatives, or examples that would be marked as metaphorical based on the procedure, but were not recognized by the participants. The examples in which the metaphoricity was expressed predominantly through verbs were largely taken to represent instances of literal meaning. Although their contextual meanings are conventionalized, their recognition score ranged from conventionalized cases that do not involve personification, which received 18.5 negative votes on average (such as: “the technology *aimed at* counteracting one global problem” in 17, or “Dr. Harrison’s vision [...] is *targeted*” in 19), to those that do (such as: “solar geoengineering [...] could rapidly *halt* rising temperatures” in 3; “A complaint from the Sami *ensured* [...]” in 8; “the Saami council *objects*<sup>7</sup> to the message this research project *sends out*” in 9, “the technology could *discourage* the urgent need” in 10; “*stifling* research into solar geoengineering” in 15, “everything would *go back* to normal” in 20), in which case the minimum number of negative votes was 17, the maximum 24. On the other hand, the portion of verbs that appeared in sentences that were circled as metaphorical received 19.5 votes on average. They include the following expressions: “as the debate *heats up*” (5), “If the fossil fuels industry *leans back* just a little and *says* ‘we’ll wait and see a bit’” (12), “the risks of solar geoengineering must be *weighed against* the chance it could save millions” (14), and “the technology [...] could *stoke*

7 The metonymic reading is likewise possible. In that case, the linguistic expression *objects* would not be marked as metaphorical.

international conflict” (16). It is possible that the effect of imagery and the more bodily-related basic meanings of these verbs prompted the students to identify these sentences as metaphorical, given that it is fairly easy to visualize, for instance, the activity of stoking a fire and correlate it with disagreement, or to picture the act of measuring the heaviness of objects and correlate that with the act of carefully considering things. This extends to personification as well. While both examples (9 and 12) present instances of *personification-with-metonymy*<sup>8</sup>, the contrast between the basic human sense and the contextual non-human sense for the entity that is personified is more evident in the case of *the fossil fuel industry* than it is in the case of *the Sami council*, despite the fact that both are used to represent people who work in the industry or are council members. The only borderline case (with equal number of positive and negative votes, since one student gave no reply) represented the act of stopping the climate action as pushing the pause button on a CD or DVD player (“The notion of a plan B might *put* a pause on the needed climate action”).

The two sentences which contained signaled direct metaphors were recognized by the majority of the participants, the unsignaled one, on the other hand, was not. The direct metaphor with the MFlag *like* (4) described the solar geoengineering termination shock as *living underneath a hundred-ton boulder ready to fall at any time*. The one with the MFlag *kinda* (21) compared solar geoengineering to *a thin end of the wedge*, the definition<sup>9</sup> of this idiom was provided in the footnote of the questionnaire. Out of the 27 participants, 19 recognized the former direct metaphor (4) and 24 recognized the latter (21). The unsignaled one (13) equated a *notion* (of fossil fuel industry “leaning back”) with *the thing that makes us not reach Paris agreement*, i.e. an OBSTACLE, which was invisible to almost twice as many students (17 replied “no”, 9 replied “yes”, and one gave no reply), despite the fact that it also contained an indirectly used metaphorical linguistic expression *reach*.

The recognition scores for the metaphorical use of prepositions (*behind, from, about, into, in*) were the lowest among the four word classes. This would suggest that the participants focused more on the abstract relations that they denote (e.g. temporal for *in*, or ‘concerning a particular subject’ for *about*), rather than on their basic spatial meanings. Yet, the category of content words reveals that the participants’ ability to distinguish between metaphorical and literal language was more likely motivated by the degree of conventionality, because the sentences with highly conventionalized contextual meanings of the adjective (*worth*) and nouns (*job, vision, message*) were not circled as metaphorical. The verbs present a category for which it was considerably more difficult to draw conclusions about the

8 For more information on the proposed typology of four different types of personification occurring in natural language data, see Dorst et al. (2011).

9 The *Macmillan Online Dictionary* defines it as: “something that is unimportant but will have serious, usually bad, effects in the future”.

tendencies in the behavior of the participants. The metaphoricity of a vast majority of sentences with metaphorically used verbs was not recognized, despite the fact that most of these sentences involve personification, and the lexical units belong to content words with conventionalized meanings. We would perhaps expect the contrast between the human source domain and non-human target domain to be more evident to our participants. However, Dorst et al. (2011: 174–175) note that the diverse nature in linguistic form, conceptual structure and communicative function of personification make the identification of this type of metaphor challenging even for metaphor analysts. Their study (Dorst et al. 2011: 188) on the recognition of personification in fiction excerpts by non-expert readers found that the recognition score was merely 35.7%, despite the fact that the students were provided with the definitions and examples of the terms *metaphor* and *personification*. Although the results seem to confirm the hypothesis that MFlags aid metaphor recognition by non-expert audience, it could also be motivated by the nature of the source, given that the lexemes *wedge* and *boulder* belong to concrete entities that are more readily contrasted with abstract targets, while the lexeme *thing* represents a vague term. This highlights the need to consider different variables, in Dorst et al.'s (2011: 180) terms “inherent properties” (i.e. word class, nature of the source, and nature of the target), when drawing conclusions about factors that affect metaphor recognition.

### 3.2. METAPHOR TRANSLATION

Exploring whether the participants were aware of the metaphorically used language was necessary for our second research goal. Namely, we wished to determine if metaphor recognition correlated with metaphor translation. It has previously been noted by Steen (ibid.: 17–18) that *deliberate metaphors*, i.e. the ones that are processed by cross-domain mapping and that explicitly instruct the addressee to think of one thing (say, an ARGUMENT) in terms of another (WAR), require metaphorical translation in the TT, while non-deliberate ones do not. Similes and novel metaphors, therefore, tend to be translated as verbatim metaphors because they represent instances of “clearly metaphorical metaphors” (Steen 2014: 17; 22). We analyzed our data with this claim in mind, while also relying on the list of the most recurring procedures for metaphor transfer provided by Schäffner (2014: 76). These include: (i) metaphor into same metaphor (i.e. *direct translation*); (ii) metaphor into different metaphor (i.e. *substitution of the image in the source text by a target language metaphor with the same or similar sense*); (iii) metaphor into sense (i.e. *paraphrase, shift to a non-figurative equivalent*); (iv) *deletion of metaphor*; (v) use of a metaphor in the target text for a non-metaphorical expression in the source text (i.e. *non-metaphor into metaphor*); and (vi) addition of a metaphor in the target text without any linguistic motivation in the source text (i.e. *0 into metaphor*). We pres-

ent the results of our analysis according to this typology, and discuss the examples in the order in which they were listed in the questionnaire.

Although not recognized for its metaphoricity, the italicized linguistic expression in the example (1) “Is solar geoengineering *worth* the risk” represented an instance of direct translation, given that there is an equivalent metaphorical rendering in Serbian. It was therefore translated as: “Da li je solarni geoinženjering *vredan* rizika?”. The metaphorically used preposition in (2) “That’s the simple idea *behind* solar geoengineering” was also translated into the same TL metaphor “To je jednostavna ideja *iza* solarnog geoinženjeringa” by the vast majority, because the TL conventionalized metaphorical sense of the preposition *iza* captures the same use. There were, however, suggestions which included the verbs *nalaziti se* (Eng. *to be*) and *stajati* (Eng. *to stand*) along with the preposition: “To je jednostavna ideja koja *stoji iza* solarnog geoinženjeringa/*Iza* solarnog geoinženjeringa *se nalazi* jednostavna ideja”. These verbs did not provide much in terms of meaning, since the “hidden reason” sense was expressed by the preposition itself. Only one student chose to make this sense more transparent by including the verb *kriti se* (Eng. *to hide*): “To je prosta ideja koja *se krije iza* solarnog geoinženjeringa”. Particularly interesting were the suggestions which involved case-encoded metaphoricity: “To je osnovna ideja/suštinna/prava zamisao *solarnog geoinženjeringa*”. Out of the three suggestions, only the last one, i.e. “prava zamisao”, captures the “hidden reason” sense. Here, the ST THE HIDDEN REASON FOR SOMETHING IS THE ENTITY AT THE BACK OF A THING OR A PERSON metaphor was not translated as such, but replaced with the domain of POSSESSION, or genitive case. For that reason, we treat these instances (of case-encoded metaphoricity) as the result of the *metaphor into different metaphor* procedure, because of the substitution of the image in the ST by a different TL metaphor. The conventionalized personification in (3) “Solar geoengineering is a radical response which could rapidly *halt* rising temperatures” was translated as *zaustaviti* or *sprečiti*, that is, the equivalent target language rendering (i.e. *direct translation*): “Solarni geoinženjering je radikalni/drastican odgovor koji bi brzo/naglo mogao da *zaustavi/spreči* /može *zaustaviti* povećanje temperature”. Other possibilities for the word *response* included the lexemes *rešenje* (Eng. *solution*), *odlučka* (Eng. *decision*), and *mera* (Eng. *measure*). Sentence (4) which contained a direct metaphor “It would be like *living underneath a hundred-ton boulder ready to fall at any time*” was translated verbatim, as suggested by Steen (2014). Apart from several variations for the words *boulder* (translated either as *kamen*, *stena*, or *gromada*) and *fall* (Ser. *pasti*, *srušiti se*, *obrušiti se*), most of the translations suggested by the students resembled the sentence: “To bi bilo/Bilo bi kao *da živimo/živite ispod stene teške hiljadu tona koja/kamena teškog hiljadu tona koji može pasti svakog trenutka*. In the majority of the renderings provided by the students the MFlag *like* was replaced with its Serbian equivalent *kao*, which was followed by the verb *živeti* (Eng. *to live*). Yet, in two similes the MFlag and the word class were different: “Bilo

bi nalik/slično životu ispod stene od stotinu tona koja je spremna da padne/se obruši bilo kad". That is, the MFlag *like* was translated as *similar to*, and was followed by a noun *life*. Both solutions, however, retain the ST direct metaphor which was recognized by the students. For the conventionalized phrasal verb in (5) "As the debate *heats up*" the students primarily chose to translate the metaphor into a different metaphor, i.e. to substitute the image in the ST by a TL metaphor with the same or similar sense. For that reason, the most common rendering was: "Kako se debata *zahukta-va*", where the tension and complexity of the situation are expressed via expression that belongs to the domain of MOTION, instead of the domain of TEMPERATURE. The instances of the *direct translation* were far less frequent, they included the expressions: "Kako se debata *zakuvava*" (Eng. *to boil*), "Kako se debata *zagreva*" (Eng. *to grow hotter*), or "Kako se debata *usija-va*" (Eng. *to blaze*), whose basic temperature meanings are closer to the original. Still, the Serbian literal equivalent of *heat up – zagrejati se*, does not comprise the suitable conventionalized metaphorical sense that could capture the ST's use ("if a situation heats up, it becomes dangerous or full of problems", *Longman*, sense 2), which could explain why the ST linguistic expression was predominantly not translated as the same TT linguistic expression. The contextual meaning of *front line* in (6), "The Saami people are on the *front line* of climate change", is conventionalized and it reads: "a leading or important position in an activity" (*Macmillan*, sense 3), and it contrasts with the basic, military sense: "the area where two armies face each other and fight during a war" (*Macmillan*, sense 1). The Serbian literal and figurative meanings are the same, that is, they allow the same comparison, hence the direct translation: "Sami su na *prvom frontu/na prvoj liniji fronta* protiv klimatskih promena". There were other suggestions, such as the ones below:

Sami su na *prvoj (odbrambenoj) liniji* u borbi protiv klimatskih promena.  
 Narod Sami predstavlja *prvu liniju odbrane* protiv klimatskih promena.  
 Sami su vodeći narod u *borbi* protiv promene klime.  
 Sami narod se *bori* u *prvim redovima* protiv klimatskih promena.

These citations confirm our hypothesis that the war sense was accessed when the participants circled this sentence as metaphorical. Having watched the video, the participants were aware of the fact that no actual fighting took place, which made the contrast more apparent. The phrase *to be in/at/on the front line* could also stand for the position where one is most likely to be criticized or attacked (*Macmillan*, sense 2), and seven of our participants evidently relied on this meaning when they translated the sentence: "Sami narod je prvi na *udaru* klimatske promene/Narod Sami je prvi na koje *utiču* klimatske promene". Since the testing area covers the territory where the Saami people live, they are both the first ones to experience the effects of climate change and the ones who fight to stop the

research project, because they fear that it would stop the need to reduce greenhouse gas emissions, which makes both interpretations acceptable.

In the case of (7) “It is their *job* to stand up for their way of life” the metaphorical linguistic expression was translated directly, as the same lexeme can express this meaning in Serbian: “Njihov *posao* je da se založe/zauzmu za svoj način života”. Some participants opted for other lexemes that have the same *duty* sense, such as *odgovornost* (engl. *responsibility*), *zadatak* (engl. *task*), and *dužnost* (engl. *duty*). This particular sentence was interesting because the participants relied on another procedure for metaphor transfer when they were dealing with the phrasal verb *to stand up for*. Both *Longman* and *Macmillan* online dictionaries list only one sense, which means that it counts as the basic meaning of the phrasal verb. Because the contextual and basic meanings are the same, this lexical unit cannot be marked as metaphorical. When translating this sentence into Serbian, some participants opted for the non-metaphorical equivalents *zauzeti se/založiti se*, but there were also those who chose the metaphorical expression *boriti se* (engl. *to fight*) in the TT for a non-metaphorical expression in the ST. In other words, they turned the *non-metaphor into metaphor*. Another sentence (8) which was metaphorical solely on account of the preposition (*from*), but was invisible to the students, corroborates the statement that the abstract meanings of prepositions tend to be directly accessed. This is evident in the translation: “Žalba/Primedba (*pripadnika*) Sami saveta je osigurala/se pobrinula/postarala da balon ne poleti/da projekat ne otpočne”. Contrary to its basic spatial meaning (“starting at a particular place or position”), in this context, *from* is used to say who sends or gives something. Its translation included the change of indirect metaphor into inflectional metaphor (case-encoded metaphoricity). The ST also contained the lexical unit *ensure* which has a non-human basic meaning listed in the *Macmillan* online dictionary<sup>10</sup>, but since *people* normally make sure that something happens, we take the human sense as basic and mark the unit as metaphorical due to personification. The student’s translations exhibited the same structure. The sentence (9) contained the greatest number of MRWs (four), belonging to three different word classes: “The Saami council *objects* to the *message* this research project *sends out about* climate change”. Most of the translations proposed by the students were of the following structure: “Sami savet se *ne slaže sa porukom/ suprotstavlja/protivi poruci/ buni* protiv *poruke* koju ovaj istraživački projekat/ovo istraživanje *šalje/promoviše o/u vezi sa* klimatskim promenama”. The two cases of metaphor-with-metonymy were transferred onto the TT (*ne slaže/suprotstavlja/protivi/buni* in the case of the Saami council, and *šalje/promoviše* in the case of the research project). The preposition *about* (“concerning or relating to a particular subject”, *Longman*, sense 1) was replaced with its literal Serbian equivalent *o/u vezi sa*, so was the lexeme *message* for which there

10 The two examples that serve to illustrate the meaning are: *The lifejacket had almost certainly ensured her survival/ Our new system ensures that everyone gets paid on time.*



is a Serbian word that captures the same contextual meaning – *poruka*. This means that the MRWs from the ST were translated directly. Judging from the translations, the remaining eight participants were aware of the metonymy in the case of *the research project*. That is, they understood that the researchers (“projektni tim”) themselves were the ones who were trying to get this message across to the public, so they opted for the shift to a non-figurative equivalent (*metaphor into sense*): “Savet naroda Sami se *protivi poruci koju projektni tim* šalje o klimatskim promenama”. The basic sense of *discourage* in (10), “This technology could *discourage* the urgent need to reduce greenhouse gas emissions”, is human: “to persuade someone not to do something, especially by making it seem difficult or bad” (Longman, sense 1). But its non-human sense is also conventional: “to make something less likely to happen”<sup>11</sup> (Longman, sense 3), which makes it an example of a conventionalized personification. The Serbian translation contained the same metaphor type (personification): “Ova tehnologija bi mogla da *demotiviše/obeshrabri* hitnu potrebu/*odvрати* od hitne potrebe za smanjenjem efekata staklene bašte/da se smanji emisija gasova sa efektom staklene bašte”. The difference between the two languages lies in the fact that the Serbian equivalents *demotivisati*, *obeshrabriti*, and *odvratiti* refer to human agents and patients, which makes the given example an instance of a novel personification since the agent is non-human (*technology*). As predicted by metaphor analysts (Steen 2014), the novel metaphor in (11) “The notion of a plan B might *put a pause on* the needed climate action” was largely translated verbatim: “Ideja o postojanju plana B/rezervnog plana bi mogla da *pauzira/stopira* potrebnu klimatsku akciju“. Apart from representing the attempt to stop the climate action as the act of pushing the pause button on a CD or DVD player, the participants also provided the rendering which centered on the notion of physical movement: “Sama ideja o planu B možda *zaustavi/bi mogla zaustaviti/da zaustavi* potrebne klimatske akcije”, because the basic sense in the dictionary for the Serbian verb *zaustaviti* (engl. *to stop*) reads: “to stop somebody from moving” (RSJ 2011: 405). Therefore, they substituted the image in the ST by the TL one with a similar sense. The situation was somewhat similar in the case of the next example (12): “If the fossil fuel industry *leans back* just a little and *says* ‘we’ll wait and see a bit’”. The four metaphorically used verbs represent cases of personification-with-metonymy, and three of them (*say*, *wait*, and *see*) were replaced with the equivalent source domain language in Serbian (i.e. *kazati*, *sačekati*, and *videti*, respectively). The differences concerned the expression *lean back*, as the following examples illustrate:

Ako industrija fosilnih goriva *zastane/se zaustavi* na kratko i *kaže* „hajde da *sačekamo* malo i *vidimo*“ [...].

Ako se kompanije fosilnih goriva *povuku* nazad i *kažu* „*sačekaćemo* i *videti*“ [...].

11 As in: “Aspirin may discourage tumor growth in some types of cancer”.

Ukoliko/Ako se industrija fosilnih goriva *opusti* i kaže „sačekaćemo još malo i videti“ [...].

Ako industrija fosilnih goriva iole *popusti* i kaže „videćemo“ [...].

The students' decision not to use the literal Serbian equivalent of *lean back* is most likely motivated by the fact that the verb *nasloniti se* does not comprise the suitable metaphorical sense that could fit this context (see full entry in RSJ 2011: 779). In fact, the contextual and basic meaning in the original (ST) are the same: “to sit or lie in a comfortable relaxed way” (*Longman*), but the basic meaning of the Serbian equivalent lacks this notion of comfort and relaxation/control, and focuses more on the notion of support. Since the act of leaning back indicates a relaxed state, it is possible to infer the intended meaning – to reduce fossil fuel emissions. Therefore, they probably chose to substitute this verb with verbs that are close to the original in meaning. One group opted for the verbs denoting movement *zastati*, *zaustaviti se* (engl. *to stop moving*), and *povući se* (engl. *to back away*), which are the linguistic manifestations of the conceptual metaphor TO REDUCE FOSSIL FUEL EMISSIONS IS TO STOP MOVING. The other group chose expressions *opustiti se* (engl. *to relax*) and *popustiti* (engl. *to relax your grip/hold*), which represent manifestations of the TO BECOME MORE AGREEABLE TO THE IDEA OF CUTTING FOSSIL FUEL EMISSIONS IS TO RELAX (YOUR GRIP/HOLD) conceptual metaphor.

The previously mentioned direct metaphor NOTION IS A THING (AN OBSTACLE) in (13): “That notion might be *the thing that makes us not reach Paris agreement*” was largely translated in the exact same words: “Taj pojam bi mogao da bude *ono što nam neće dozvoliti da stignemo do Pariskog sporazuma*”. Some of the variations included the use of lexemes *ideja* (engl. *idea*) and *pomisao* (engl. *thought*) for the lexeme *notion*, as well as the noun *stvar* for the vague term *thing*. Instead of merely equating a NOTION to an OBSTACLE, some students highlighted its causative role by opting for the Serbian noun *razlog* (engl. *reason*): “To bi mogao biti *razlog zbog kojeg neće moći doći/stići do Pariskog sporazuma*”, or by paraphrasing it: “Zbog te ideje možda ne *stignemo do Pariskog sporazuma*” – in which case the direct metaphor is replaced by an indirect one. Even the directly expressed metaphorical comparisons contained the lexical unit *reach* (Ser. *dostići*, *doći do*, or *stići do*), which was metaphorical because the basic meaning, “to arrive somewhere” (*Macmillan*, sense 1), contrasted with the contextual meaning, “to achieve something” (*Macmillan*, sense 3). In both languages, therefore, REACHING AN AGREEMENT IS REPRESENTED AS REACHING THE DESTINATION. There was only one exception in our data set. Namely, there was a shift to a non-figurative equivalent in the TT (*metaphor into sense*): “Ta ideja može biti *ono što će nas sprečiti da potpišemo Pariski sporazum*”. The careful consideration of the risks of solar geoengineering was represented in the ST as discovering their weight (“The risks of solar geoengineering must be *weighed against* the chance it could save millions from heatwaves.”).

The students substituted the metaphorical expression with the non-metaphorical one, using the verb *uporediti* (engl. *to compare*): “Rizici se moraju *uporediti* sa šansom da bi solarni geoinženjering mogao spasiti milione od toplotnih talasa”, which shows that they focused more on the overall sense of the sentence. In fact, Serbian language does contain the literal equivalent of the verb *to weigh*, i.e. *izvagati*, with the same basic meaning, but this word does not have a suitable conventionalized metaphorical sense as the prepositional verb *weigh against* (*Macmillan*, sense 2). In 15, “*Stifling* research *into* solar geoenjering now could increase the risk of negative consequences *in* the future”, the prepositions were replaced with corresponding Serbian prepositions. That is, *u* for “*in* the future”, because the same conceptual metaphor TIME IS A CONTAINER is present in both Serbian and English, and *o* for “research *into* solar geoenjering”, since it is the Serbian equivalent for talking about that which someone is trying to find out information about. *Stifling*, however, was translated either directly: “*Gušenje/Prigušivanje* istraživanja *o* solarnom geoinženjeringu bi moglo da poveća rizik od negativnih posledica *u* budućnosti”, or by resorting to the non-metaphorical equivalent: “Obustavljanje istraživanja *o* solarnom geoinženjeringu bi moglo povećati rizike od negativnih ishoda *u* budućnosti”. In the first case, the translation remains more true to the ST, with the same contrast between the basic (“to stop someone from breathing”) and contextual meaning (“to stop something from developing normally, to stop research”), while in the second this meaning is paraphrased as “to stop doing research”. Out of 27 students, 22 recognized the metaphorical use in 16, opting for the synonymous TL expressions which all belong to the domain of FIRE that was present in the ST:

Tehnologija dizajnirana da spusti temperature bi mogla da *potpali/rasplamsa/raspali* međunarodni sukob.

Tehnologija koja je stvorena da spusti temperature samo bi *dolila ulje na vatru* po pitanju međunarodnih sukoba.

The other renderings contained the non-metaphorical expressions, such as: “Tehnologija koja je stvorena/dizajnirana da spusti temperature bi mogla izazvati/podstaći konflikt svetskih razmera”.

The prepositional verb *aim at* (in 17) was predominantly rendered in precisely equivalent language in Serbian (*metaphor into same metaphor*), as the basic (“to choose the place, person etc. that you want to hit or reach and point a weapon or another object towards them”, *Longman*, sense 3) and contextual meaning (“to try or to intend to achieve something”, *Longman*, sense 1) in the TL are the same: “Tehnologija koja *ima za cilj/nastala sa ciljem/koja cilja na* to da se zaustavi jedan svetski problem mogla bi stvoriti druge”. Only two students turned the metaphor into sense: “Tehnologija osmišljena/stvorena za rešavanje jednog globalnog problema može prouzrokovati nove”. In 19, “Some fear being locked into solar geoenjering without the *reverse gear*”, two lexical units had the potential to be treated

as MRWs – *lock into* and *reverse gear*. Yet, according to the procedure, the phrasal verb *lock into* would not be marked as a MRW because only one, abstract sense is listed in the dictionary (“to involve someone or something in a system, plan etc. in such a way that they cannot easily escape from it”, *Macmillan*, sense 1) and its contextual meaning does not contrast with it, but is very closely related to it. The students captured this meaning in the TT by words like *zarobiti*, *zaključati*, *zaglaviti*, whose basic meanings denote the state of being trapped in a container (room). As the solar geoengineering represents the container in this example, these verbs should be treated as metaphorical linguistic realizations of the conceptual metaphor SOLAR GEOENGINEERING IS A CONTAINER. Therefore, the participants used a metaphor in the TT for a non-metaphorical expression in the ST (i.e. they turned the *non-metaphor into metaphor*). *Reverse gear*, on the other hand, shows that they relied on the opposite technique, *metaphor into sense*, because the contrast between the way to reverse the solar geoengineering and the position of the gears in a vehicle that make it go backwards was paraphrased as follows: “Neki se plaše da će biti *zaključani* u solarnom geoinženjeringu bez opreme kojom bi se *povratilo* prethodno stanje/koja može da *ga preokrene/opcije* da se taj postupak *obustavi*”. This is probably due to the fact that the Serbian literal equivalent *rikverc* does not comprise the suitable conventionalized metaphorical sense. Some of the students kept the metaphorical sense by opting for the noun *povratak* (engl. *return*): “Neki se boje da ne budu *zaključani/zarobljeni* u solarnom geoinženjeringu bez *povratka*”, thus comparing the reversal of solar geoengineering to the act of going back to a place. The MRW *vision* in (19) “Dr. Harrison’s *vision* for Marine Cloud Brightening is *targeted* and temporary”, whose metaphoricity arises from the contrast between the ability to see and the idea of what something should be like, was replaced with Serbian equivalents which do not have more basic meanings, and are therefore non-metaphorical: *ideja*, *zamisao*, *vizija*. The effect solar geoengineering has on a limited area, expressed in the ST via lexical unit *targeted*, was translated as “dr Harisonova vizija je *usmerena* i prolazna/privremena/kratkog roka”. Highly conventionalized phrasal verbs, such as “go back” in (20) “Everything would *go back* to normal”, are particularly difficult to recognize, especially by non-expert audience, particularly when they are a part of common expressions like “to go back to normal”. In our study, 24 students failed to see the connection between the spatial sense “returning to a place” (*Longman*, sense 1) and to “make a situation the same as it was before” (*Longman*, sense 2). In fact, they opted for the same expression in the TL, “Sve bi se *vratilo* u normalu/*normalizovalo* nakon par dana”. The final example (21) contained an idiom which was a part of the signaled direct metaphor. MIPVU (Steen et al. 2010: 81) treats idioms as a stretch of text with each component representing a separate lexical unit, because most idioms are decomposable. In this respect, it is easy to compare “a thin end of the wedge”, which is used for splitting wood, to dangerous effects of a practice such as solar geoen-

gineering. Among the suggested renderings were: “Moja jedina briga je da bi ovo mogao biti samo početak/početak nečeg većeg/katastrofe”. They thus substituted the image in the ST (*wedge*) with a different one (the *beginning*/cause of something that will have serious, negative effects) that has a similar contextual meaning. Four participants produced verbatim translations of the ST's metaphorical use: “Moja jedina briga je da bi ovo na neki način bio oštar deo klina/ poput tanjeg kraja klina”, these alternatives were closer to the original.

The instances which the students managed to recognize include: the signaled direct metaphors with concrete sources (*boulder* and *wedge*), lexical units with conventionalized contextual meanings belonging to the domains of HEAT (*heat up, stoke*), WAR (*front line*), and WEIGHT (*weigh against*), a novel personification (*put a pause on*), a novel metaphor (*reverse gear*), and a personification-with-metonymy (in the case of *the fossil fuel industry*). These were all largely translated using the equivalent TL expressions (*direct translation* technique). The students did produce verbatim translations of similes and the novel metaphor, thus confirming Steen's earlier claim (2014). However, a much larger sample is needed in order to establish that metaphor recognition correlates with metaphor translation, since there were lexical units in our study that were part of the sentences which the students circled as metaphorical, like *weigh against*, but were translated using the non-metaphorical equivalent. The use of metaphor was comparable between English (ST) and Serbian (TT) in the case of lexical units for which there was an equivalent metaphorical rendering in the TL, while the cases where a word's literal translation could not capture the ST's use were translated either by turning the *metaphor into sense*, or *metaphor into different metaphor*.

#### 4. CONCLUDING REMARKS

Metaphor recognition by non-expert audience, specifically Serbian EFL learners, was observed in this study with reference to variables *word class* and *metaphor signaling*. We sought to determine whether there is any interaction between these variables and metaphor identification, that is, if sentences which contain metaphor signals and metaphorical linguistic expressions that belong to a particular word class are recognized more often than others. The results show that parts of speech that are classified as grammatical words, in our case – prepositions, are less frequently detected than content words (verb, noun, or adjective). Yet, word class and MFlags alone do not determine students' ability to distinguish between literal and metaphorical language. Other variables, primarily the *degree of conventionality* and *the nature of the source*, prove to be equally relevant factors. It has repeatedly been found that the more conventionalized the metaphor is, the more it is processed by categorization, “due to the emergence of an ab-

stract superordinate category that covers both the source and target term” (Dorst et al. 2011: 179; Krennmayr 2011: 239, 242). This makes our results on metaphor recognition without a structured metaphorical input in line with those of other researchers (e.g. Dorst et al. 2011: 188) who provide the participants with a brief description of what is meant by the term *metaphor*. Interestingly, Littlemore’s (2010: 295) study showed that student responses could correlate with *metaphor goodness* instead of *comprehensibility*. In other words, rather than judging whether there is a relationship between two elements of a sentence, the students in her study judged the quality of the metaphors. This indicates that, even when the participants are provided with the definition of metaphor<sup>12</sup>, they might not carry out the procedure that is suggested in the rubric. Therefore, while defining metaphor in cognitive linguistic terms has the potential to increase the chances of metaphor recognition, it does not automatically guarantee it. In our case, the numbers were relatively low in percentage terms (42.86%), since less than a half of the sentences were recognized as metaphorical. Still, the analysis showed that the students were able to spot certain instances of metaphorically used language (primarily the signaled direct metaphors with concrete sources, novel metaphor/personification, sentences containing expressions whose conventionalized contextual meanings belong to the domains of HEAT (*heat up, stoke*), WEIGHT (*weigh against*), and WAR (*front line*)) without the definition. In this particular study, the differences in translation seemed to be caused by the availability of the conventionalized metaphorical senses across the SL and TL lexicon. Whether the students are actually aware of the conceptual metaphors that govern their choice of a specific linguistic manifestation is a separate research question.

Given that the goal of this study was merely to check whether the participants perceive metaphor and to determine which metaphors they tend to translate, we did not pinpoint the exact location of the MRWs. This, we feared, would have made the participants aware of the metaphorical reading. Although the majority of the sentences used in the questionnaire were short, making it easy to judge which lexical unit displays metaphorical use, the arguments regarding the metaphoricity of words that belong to a particular word class would have been more compelling had we asked the participants to circle the words which they judged to be metaphorical. This has to be recognized as a limitation of the study and should be corrected in future research. In addition, comments could be provided by the participants so that their decisions could be more evident to the metaphor analyst. Instead of calling on them to make a binary decision, the participants could be given more freedom, since Littlemore’s (2010: 298) pre-piloting showed that “participants found it easier to make their choice from a continuum of responses rather than to have to make a yes/no decision”. Such

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12 For instance, in the study carried out by Littlemore (2010: 306), the students were given the following explanation: “A metaphor is a statement which is not literally correct, but which establishes a relationship between two parts of a sentence”.

information could be especially useful when studying metaphor interpretation, but it was not included in our analysis since metaphor translation was our primary focus of discussion.

The information on this matter, i.e. metaphoric competence prior to a structured metaphorical input, could help language instructors predict or point out truly problematic cases which require more attention when teaching metaphor. Evidently, prepositions present a highly abstract category whose metaphoricity is often overlooked because their abstract contextual meanings are accessed directly. The degree to which the contextual meaning of a lexical unit is conventionalized, as much prior research and the present study show, represents another crucial factor, as students tend to notice novel metaphors and regard the conventional ones as a typical way of speaking about target concepts. Therefore, reflections on the relation between metaphor and these other variables are of great value in this regard. Translating the cross-domain mapping from a ST to a TT involves different considerations, some of which can be genre-specific (e.g. when translating poetry or classic texts) (Steen 2014: 21). Our study focused on news discourse, but it would be interesting to explore the same topic in different types of discourse in the future.

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## APPENDIX

1. Judge whether the following sentences contain a word/words that is/are used metaphorically.

2. Translate the sentences into Serbian.

1. Is solar geoengineering worth the risk?                    **YES**    **NO**

**Translation:** \_\_\_\_\_

2. That's the simple idea behind solar geoengineering.        **YES**    **NO**

**Translation:** \_\_\_\_\_

3. Solar geoengineering [is] a radical response which could rapidly halt rising temperatures.

**YES**                    **NO**

**Translation:** \_\_\_\_\_

4. It would be like living underneath a hundred-ton boulder ready to fall at any time.

**YES**                    **NO**

**Translation:** \_\_\_\_\_

5. As the debate heats up, [...].        **YES**    **NO**

**Translation:** \_\_\_\_\_

6. The Saami people are on the front line of climate change.

**YES**                    **NO**

**Translation:** \_\_\_\_\_

7. It is their job to stand up for their way of life.                    **YES**    **NO**

**Translation:** \_\_\_\_\_

8. A complaint from the Saami council ensured it (the balloon) didn't take off.

**YES**                    **NO**

**Translation:** \_\_\_\_\_

9. The Saami council objects to the message this research project sends out about climate change.

**YES**                    **NO**

**Translation:** \_\_\_\_\_

10. This technology could discourage the urgent need to reduce greenhouse gas emissions.

**YES**                    **NO**

**Translation:** \_\_\_\_\_

11. The notion of a plan B might put a pause on the needed climate action.  
**YES**            **NO**  
**Translation:** \_\_\_\_\_
12. If the fossil fuels industry leans back just a little and says “we’ll wait and see a bit” [...].  
**YES**            **NO**  
**Translation:** \_\_\_\_\_
13. That notion might be the thing that makes us not reach Paris agreement.  
**YES**            **NO**  
**Translation:** \_\_\_\_\_
14. The risks of solar geoengineering must be weighed against the chance it could save millions from heatwaves.  
**YES**            **NO**  
**Translation:** \_\_\_\_\_
15. Stifling research into solar geoengineering now could increase the risk of negative consequences in the future.  
**YES**            **NO**  
**Translation:** \_\_\_\_\_
16. The technology designed to cool the climate could stoke<sup>1</sup> international conflict.  
**YES**            **NO**  
**Translation:** \_\_\_\_\_
17. The technology aimed at countering one global problem could create others.  
**YES**            **NO**  
**Translation:** \_\_\_\_\_
18. Some fear being locked into solar geoengineering without the reverse gear.  
**YES**            **NO**  
**Translation:** \_\_\_\_\_
19. Dr. Harrison’s vision for Marine Cloud Brightening is targeted and temporary.  
**YES**            **NO**  
**Translation:** \_\_\_\_\_
20. Everything would go back to normal after a few days.

YES NO

Translation: \_\_\_\_\_

21. My only concern is that this would kinda be a thin end of the wedge<sup>2</sup>.

YES NO

Translation: \_\_\_\_\_

### 3. How would you define the term *metaphor* in your own words?

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1 If you stoke a fire, you add coal or wood to it to keep it burning.

2 Something that is not important by itself but will have serious, usually bad, effects in the future.

**Тамара Н. Јаневска** / МЕТАФОРИЧКА КОМПЕТЕНЦИЈА УЧЕНИКА ЕНГЛЕСКОГ ЈЕЗИКА КАО СТРАНОГ: ИДЕНТИФИКАЦИЈА И ПРЕВОЂЕЊЕ МЕТАФОРИЧКИХ ЈЕЗИЧКИХ ИЗРАЗА

**Резиме** / Рад је посвећен испитивању метафоричке компетенције српских студената англистике. Студенти који су учествовали у истраживању нису раније били изложени метафоричком инпуту и теорији појмовне метафоре (Лејкоф и Џонсон 1980). Истраживање се заснива на видео-снимку британских недељних новина *The Economist* који говори о значају соларног геонжењеринга. За потребе истраживања, изворни текст је најпре транскрибован, а затим је примењена процедура за идентификовање метафоричких језичких израза (MIPVU, Стен и др. 2010). На тај начин је издвојено неколико реченица које су садржале барем један метафорички употребљен израз. Упитник на коме се базира истраживање се састојао из три целине. У овом раду износе се запажања везана за прва два задатка. Први задатак је осмишљен како би се утврдила способност ученика да уоче реченице које садрже изразе који се могу сматрати метафоричким. Други циљ био је испитати да ли се, и у ком случају, језичке метафоре из изворног текста на енглеском језику губе приликом превођења на српски језик. Добијени резултати се могу упоредити са резултатима након излагања метафоричком инпуту, чиме би се стекао потпунији увид у процес развоја метафоричке компетенције.

**Кључне речи:** метафоричка компетенција, идентификација метафоричких језичких израза, превођење метафора, ученици енглеског језика као страног, теорија појмовне метафоре, новински дискурс

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## GRAMMATICAL AND LEXICAL ASPECT IN ENGLISH AND SERBIAN: A CONTRASTIVE LITERATURE REVIEW<sup>2</sup>

The paper presents a contrastive literature review of the grammatical and lexical aspect in English and Serbian. The motivation behind choosing this subject matter was found in the inconsistency that led scholars to class linguistic phenomena related to the grammatical and lexical features of verbs in the same category. Namely, the category of grammatical aspect was approached in different ways for a long time, various meanings were attributed to this category, and new terminology was introduced so as to describe language phenomena related to this grammatical category in a more detailed way. This resulted in the study of the lexical aspect as a subcategory of the grammatical aspect. Therefore, the primary goal of this review paper is to gain insight into the current tendencies related to the grammatical and lexical aspect, as well as to provide a systematic presentation of the approaches to the grammatical and lexical aspect in relevant English and Serbian literature and grammar books. The research revealed that the category of lexical aspect was often studied within the category of grammatical aspect due to its distinctive features *stativity*, *dynamicity*, *punctuality*, and *durativity*, which make it similar to the category of grammatical aspect. However, contemporary authors in both languages make a clear distinction between these two categories, emphasizing that grammatical aspect is a grammatical and a subjective category because it is expressed by verbal inflectional morphology and periphrases and because it reflects the speaker's viewpoint on a situation, whereas lexical aspect is expressed by the verb meaning and verbal derivational morphology, thus being considered an objective category.

**Keywords:** grammatical aspect, lexical aspect, *Aktionsart*, contrastive analysis, English, Serbian

“The study of aspect has been likened to a dark and savage forest full of obstacles, pitfalls, and mazes which have trapped most of those who have ventured into this much explored but poorly mapped territory”.

### 1. INTRODUCTION

The term *aspect* was introduced to the Western grammatical tradition in the 19<sup>th</sup> century from the study of Slavic grammar and it corresponded

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to the Russian word *vid* which is also used in Serbian. *Aspect* is considered to be the fitting choice of translation because its root *spect-* means 'see, look (at), view', so *vid*, *vision*, *view*, etc. are regarded as cognates (see Binnick 1991: 136). The logic behind using the terms *aspect* and *vid* in language studies in English and Serbian respectively is that they refer to different ways the same situation may be *viewed*: as a complete whole (*perfective aspect*) or as a structure (*imperfective aspect*). Presenting a situation as a single unanalyzable whole means that the segments comprising the situation are not made explicit, i.e. the beginning, middle, and end of the situation are rolled into one and the situation seems to be looked at from outside. If a situation is presented as a structure, it means that it is viewed from inside, so imperfective aspect is crucially concerned with the internal temporal constituency of the situation (see Comrie 1976: 3, 4).

The problem that arises when analyzing aspect in the two languages primarily results from different ways this category is marked. In Serbian, aspect is overtly and morphologically marked; in English it is not. Serbian verbs express aspectual differences in their base form (e.g. *čitati*<sub>IMPERF</sub><sup>3</sup> – *pročitati*<sub>PERF</sub>; *pisati*<sub>IMPERF</sub> – *napisati*<sub>PERF</sub> – *ispisati*<sub>PERF</sub> – *ispisivati*<sub>IMPERF</sub>), whereas English do not. In Serbian, as in other Slavic languages, aspect is conventionally associated with prefixation. If prefixes are added to the imperfective stem (or root), the imperfective verb often becomes perfective. However, there are certain verbs (such as the verb *ispisivati* already shown above) which contain a prefix and are still imperfective. This phenomenon is known as *secondary imperfectivization* because an imperfective verb becomes perfective after adding a prefix, and then, after adding a suffix, it becomes imperfective again. Furthermore, there are certain verbs such as *dati* (E. *to give*), *reći* (E. *to tell*), *skočiti* (E. *to jump*), etc. which do not have any prefixes, but are still perfective. In some situations, aspect can be even affected by the accent of a verb (e.g. *pàsti* – *pásti*). Finally, even though prefixes and suffixes often formally indicate the aspect of a particular verb phrase, there are *bi-aspectual* verbs which can formally refer to both perfective and imperfective aspect. Because of its fully grammaticalized marking, Slavic aspect is considered to be the prototypical example of aspectual systems (see Binnick 1991: 136–137; Novakov 2005: 44).

Even though in a language such as English the imperfective/perfective opposition has not been grammaticalized, there is a corresponding grammaticalized opposition: *progressive/non-progressive*. The progressive roughly corresponds to the imperfective (e.g. *Oni su čitali*. vs. *They were reading*.), whereas the non-progressive roughly corresponds to the perfective (e.g. *Oni su pročitali*. vs. *They read*. or *They have read*.). Therefore, it is possible to indicate certain aspectual meanings, for instance, completion or incompleteness, in English, but such indication is optional. In English, completion is normally, but not necessarily, expressed using the non-progressive for *She read the book*. is neutral in this regard. *She read the book in*

3 IMPERF stands for IMPERFECTIVE ASPECT, while PERF stands for PERFECTIVE ASPECT.

*under an hour.* is an instance of the non-progressive referring to a finished situation. On the other hand, *She read the book for a few minutes, but soon got tired of it.* illustrates the non-progressive referring to the activity that has not been finished. Particles can also indicate completion (e.g. *eat up*, *read through*, etc.), but their use is not mandatory. In Serbian, as in other Slavic languages, aspectual distinctions are mandatory and they are shown in the form of the verb (see Comrie 1976: 7; Binnick 1991: 139).

There are other complications in the field of aspectology which are not necessarily related to cross-linguistic differences. Brinton (1988: 1) points out that there is uncertainty regarding the definition of aspect as well as the object of research within this category because various diverse phenomena are all subsumed under the label of *aspect*. Different approaches to aspect contribute to this confusion as well because some of them concentrate on the overt grammatical form, while others focus on the lexical and semantic features of verbs. However, she concludes that these difficulties in the study of aspect can successfully be overcome under three conditions: if the dual nature of aspectual category is recognized, if the variety and pervasiveness of aspectual forms are identified, and if their specific contribution to aspectual meaning is understood.

Brinton recognizes the importance of separating grammatical features of a verb and its lexical and semantic characteristics. She embraces a widespread opinion that aspect refers to the speaker's perspective on a situation because the speaker chooses to portray an event as completed (perfective aspect) or as ongoing (imperfective aspect), or as beginning (*ingressive*), continuing (*continuative*), ending (*egressive*), or repeating (*iterative* or *habitual*). On the other hand, inherent features of a situation such as *stativity*, *dynamicity*, *punctuality*, *durativity*, (*un*)*boundedness*, *iterativity*, etc. should be analyzed within the category of *Aktionsart*. *Aktionsart* is a loan term from German coined by Agrell (1908) to cover the lexicalization of various 'kinds of action' such as *terminative*, *resultative*, *delimitative*, *perdurative*, *iterative*, *semelfactive*, *attenuative*, *augmentative* (see Filip 2011: 1187). Since it encompasses the study of inherent features of a verb, it is considered to be an inherent or semantic aspect. The relationship between aspect and *Aktionsart* can be explained in the following oppositions: grammatical vs. lexical, subjective vs. objective, aspect vs. character, and viewpoint vs. situation aspect. Aspect is considered a grammatical category because it is normally expressed through verbal inflectional morphology and periphrases, while *Aktionsart* is a lexical category because it is expressed through the lexical meanings of verbs, as well as through derivational morphology. Aspect is subjective because it depends on the viewpoint of the speaker, whereas *Aktionsart* is objective because it refers to the nature of the event. Finally, Brinton (1988: 3) argues that the distinction between these two categories is crucial and that when analyzing aspect, the interaction between these two categories must be taken into consideration.

Since the clear distinction between aspect and *Aktionsart* has not always been recognized in many major publications in the field in English and Serbian, the main aim of this paper is to provide a review of relevant papers, monographs, and grammar books in the two languages in order to show the way these two categories were presented and studied. There are contrastive studies in the field, but they do not deal with general characteristics of aspect and *Aktionsart*. Instead, the majority of these works represent empirical studies which focus on particular phenomena within aspectology. For example, Novakov focuses on different aspects of telicity in English and Serbian (2007, 2009, 2016a, 2016b, 2017), English multi-word verbs and their Serbian equivalents (2018, 2019), as well as English progressive aspect and its Serbian equivalents (2021); Milivojević analyzes the analogy between particles of phrasal verbs in English and prefixes of Serbian perfective verbs (2007) and different features of English and Serbian pairs of ingressive aspectualizers (2021a, 2021b); Kljakić (2020) compares English and Serbian aspectualizers and the *Aktionsart* of their complements, etc. However, having searched through the digital repository of libraries in Serbia, we have noticed a lack of contrastive review papers on the issue of aspect and *Aktionsart*. To the best of our knowledge, there are a handful of such publications: Novakov (1988, 2005) and Petrović (2013). Despite being a more recent paper, the latter represents a review of the former. The current review paper is going to include previously reviewed works for two main reasons: 1) they represent the foundation of the domain of aspectology and should not be excluded from the study; 2) the aim is to track changes that occurred from early to recent publications. Therefore, a modest contribution of this paper is the incorporation of more recent publications that have not been reviewed in a contrastive manner.

The paper is structured as follows. The first section represents an introduction to the topic, which considers the differences between aspect and *Aktionsart* and their most general differences in English and Serbian. The second and third sections revise the major existing literature on the topic, from the early studies to the most recent developments, with the idea of tracking the major changes that took place. The fourth section presents the contrastive studies referred to in the previous paragraph. Finally, the fifth section briefly summarizes the results of the review and suggests possible avenues for future work.

## 2. ASPECT AND AKTIONSART IN ENGLISH LITERATURE

In *The Philosophy of Grammar* (1924), Otto Jespersen refers to both aspect and *Aktionsart*. He uses the terms synonymously even though he claims that there are authors who use them for different phenomena: “[...] a subject that has already been touched upon and which has been very warmly discussed in recent decades, namely what has generally in English



been called *the aspect* of the verb, and in German *aktionsart*, though some writers would use the two terms for two different things" (ibid.: 286).

Jespersen recognizes aspect as an idea which is fundamental and clear in Slavic languages. Furthermore, he identifies problems that scholars faced when they began to find similar aspectual meanings in other languages because many of them set up a terminology of their own. As a result, they ended up with long and complicated lists of terms and definitions related to the verb aspect (ibid.).

The four possible expressions of *aspects* that Jespersen distinguishes are the ordinary meanings of the verb itself, the occasional meaning of the verb as occasioned by the context or situation, a derivative suffix, and a tense-form (ibid.). On the grounds of this, it follows that he did not separate lexical and grammatical verb features.

Jespersen (ibid.: 287) comes up with his own aspectual classification because he purposefully rejects bringing together different phenomena under a single class (aspect) or two classes (aspect and *Aktionsart*). Since he claims that these different phenomena should be distributed into completely different pigeonholes, he suggests seven aspectual oppositions: *aorist/imperfect*, *conclusiveness/inconclusiveness*, *durativity/punctuality*, *completion/incompletion*, *stability/change*, *implication/non-implication*, and the distinction between *what takes place only once* and *repeated happenings*.

Finally, Jespersen considers his classification more appropriate than the *imperfective/perfective* classification because, according to him, this distinction and the notions themselves have a definite sense only in Slavic languages.

EtskoKruisinga dedicates an entire chapter to aspect in his grammar book *A Handbook of Present-day English* (1931). He recognizes the confusion when it comes to this topic, which he ascribes to the absence of forms that clearly express the contrasting aspects in English. He states: "aspect is a translation of a term used in Slavonic grammar to denote the meaning of a verbal *form* in so far as it expresses whether the speaker looks upon an action in its entirety, or with special reference to some part (chiefly the beginning or end)" (ibid.: 221).

The author (ibid.: 221) starts the discussion on aspect by referring to Slavic languages, claiming that aspect is an inherent characteristic of Slavic verbs. He also adds that Slavic verbs are inherently either imperfective or perfective, which means that Slavic languages distinguish between imperfective and perfective aspect. Kruisinga illustrates the difference between these two types of aspect by contrasting two verb phrases: *to sit* and *to sit down*. The imperfective aspect is expressed by the first verb phrase, while the perfective is expressed by the second. Kruisinga emphasizes that the English equivalents are not the same as Slavic because in English *to sit* and *to sit down* are considered two separate actions, while in Slavic they are seen as two aspects of the same action. Therefore, Slavic verb phrases necessarily express aspect and the choice of one aspect over the other is a

matter of usage, while English verbs (e.g. *give, lend, revenge, explain, greet*, etc.) are neutral in terms of aspect in the vast majority of cases.

An important point in Krusinga's reflection on aspect is the introduction of a new term – *character* (ibid.: 230–231). Namely, he states that the verb pairs such as *to crack – to crackle, to climb – to clamber*, etc. represent different, but related actions. What is different about them is their character. He states that the difference of character is *objective*, while the difference of aspect is *subjective*. The aspect/character opposition defined in this way can be considered a precursor of aspect/*Aktionsart*.

Krusinga makes reference to *inchoative* aspect, claiming that it is used for verb phrases that denote the beginning of an action: *to catch the sight of, to take possession of*, etc. He also states that sometimes two completely different verbs may reflect aspectual differences: *to live* (imperfective) – *to settle* (perfective), *to say* (imperfective) – *to tell* (perfective), etc. Finally, he considers “the verbal form in *ing*” the only form in living English which expresses aspect. He explains that its true aspectual nature can be fully understood when compared to the verbal stem and the simple predicative verbs (ibid.: 232, 235, 237).

In *A New English Grammar* (1955), Henry Sweet studies aspect in a close relationship to tense. For instance, he distinguishes between *complete* and *incomplete* tenses (e.g. *The clock has just struck twelve.* vs. *The clock is striking twelve.*). He also refers to *tense-aspect* as a separate category and pays special attention to *duration*. The author (ibid.: 101–103) concludes that duration does not necessarily depend on, or is conditioned by grammatical forms. Rather, it can depend on the meaning of the verb phrase (e.g. *fell down* is an instance of a short tense, while *lay down* represents a long tense). The author emphasizes that the long tenses are either *continuous* or *recurrent*, denoting repetition, habit, etc. On the other hand, there are *point-tenses* which are used when narrating a succession of occurrences. Finally, he refers to *inchoative tenses* which express the beginning of an action or an attempted action.

According to Sweet (ibid.: 103) a tense which was originally meant to express distinctions of time may come to imply a variety of special meanings. So, the present time is normally incomplete, the past time is normally, though not necessarily, complete, and the future time is uncertain. The author claims that these implied meanings make it difficult to compare tenses in various languages as well as to define their exact meanings.

Another crucial distinctive feature of tenses that Sweet addresses is *definiteness*. The author makes a correlation between *definiteness* and *duration* and observes that the shorter a tense is, the more definite it is in duration and its relation to the past, present, or future. On the other hand, long tenses, continuous or recurrent, are indefinite (ibid.).

While grammarians primarily focused on aspect as a grammatical category, language philosophers focused on verb semantics. Language phi-

losophers came up with various verb typologies, and such verb typologies in fact represent typologies of *Aktionsart* (see Brinton 1988: 23).

The essential distinction in the grammar of natural languages between actions that involve some kind of motion with an end or limit (e.g. *leave, find, die*) and those without (e.g. *walk, see, know*) is based on Aristotle's dichotomy between *kinesis* ('motion', 'change') and *energeia* ('actuality', 'actualization', 'activity') (see Filip 2011: 1186–1187). This kind of dichotomy served as a starting point for works of language philosophers such as Ryle (1949), Vendler (1957), and Kenny (1963).

Vendler's classification has enjoyed the most widespread use. He comes up with a verb typology which consists of four classes: *activities* (e.g. *walk, run, push a cart, etc.*), *states* (e.g. *want, love, hate, etc.*), *achievements* (e.g. *recognize, reach, start, etc.*), and *accomplishments* (e.g. *run a mile, grow up, recover from an illness*). His classification can be defined by means of semantic features such as *stativity, durativity, and telicity*. In accordance with these features, activities are characterized by [-stativity], [+durativity], and [-telicity], i.e. activities imply a process, consist of equal successive elements, can last for a certain amount of time, do not imply a goal, and do not have a natural final segment in which the situation ends. States are characterized by [+stativity], [+durativity], and [-telicity], i.e. states are homogenous, which means that they do not imply a process, they do not consist of segments, and they do not strive towards a goal or a natural endpoint, but rather indicate the duration of a particular situation. Finally, accomplishments and achievements are both characterized by [-stativity] and [+telicity], which means that they imply a process and strive towards a goal, but accomplishments are durative and therefore characterized by [+durativity], while achievements are instantaneous and characterized by [-durativity].

Brinton (1988: 28–31) points out some weaknesses of the verb typologies. Namely, she claims that Vendler failed to place his study in a wider linguistic context and that he generally ignored the influence of aspect. In addition, she notices a tendency to speak in terms of types of verbs, rather than in terms of 'categories of verb predication', which means that we must recognize that *Aktionsart* is a feature of the entire sentence and that it is difficult to specify the 'basic' *Aktionsart* of any verb. Finally, there is a failure to recognize *agency* as a feature separate from aspect.

In *A Course in Modern Linguistics* (1958) Hockett compares *tense, mode, and aspect*. He claims that "tenses typically show different locations of an event in time", while "aspects have to do, not with the location of an event in time, but with its temporal distribution or contour" (ibid.: 237). The author observes that English verbs have inflections for present and past time, whereas future time is expressed by other means. To the contrary, English does not have inflectional aspects, but the aspectual contrasts are shown in the structure of the verb phrase: *he sings - he is singing,*

*he has sung - he has been singing, he sang - he was singing, he had sung - he had been singing* (ibid.).

It seems that Hockett's attitudes on tense and aspect are by far most similar to contemporary attitudes. He shows the aspectual differences using simple, progressive and perfect aspect, even though he does not label them as such explicitly.

According to Curme (1966: 55), "aspect indicates the aspect, the type, the character of the action". Curme distinguishes among three types of aspect: *terminate aspect*, *progressive aspect*, and *point-action aspect*. Curme emphasizes that terminate aspect "takes the common verb form and represents an action as a whole, as a fact, habitual, customary, characteristic, or as a general truth" (ibid.). Progressive aspect, on the other hand, represents an action in progress or "as going on". Point-action calls attention to either the beginning or the end of an action. Therefore, there are two subtypes of this aspect: *ingressive aspect*, which refers to the initial phase of the action and *effective aspect*, which calls attention to the final stage of the action, or the result/goal that has been reached. (ibid.: 56)

Curme (ibid.: 259) claims that terminate and progressive aspects represent the main aspects. While the common form of the verb is normally used to represent an objective state of affairs (e.g. *There he comes.*), the present participle, which is in the progressive form, has descriptive force (e.g. *He is coming down the road.*) In other words, "Both the simple and the progressive form represent the acts as habitual, but the latter has the warmth of feeling in it" (ibid.: 260) The author further elaborates on this "warmth of feeling" by saying that we consider the progressive a modal form expressing "joy, sorrow, pleasure, displeasure, praise, censure, also emphasis, implying that the person in question is convinced of the truth or importance of the statement".

One of the essential studies in the field of aspectology is *Aspect: An Introduction to the Study of Verbal Aspect* (1976) by Bernard Comrie. It's a typological study in which the author compares aspect in English and other languages such as Russian, French, Spanish, and Italian. This study is one of the essential ones because Comrie defines aspect in a general way and that kind of definition is applicable in languages such as English, which does not have formal markers of aspect, and Russian, in which aspect is an inherent verbal feature. Namely, he refers to aspect as "different ways of viewing the internal temporal constituency of a situation" (ibid.: 3).

According to Comrie, the main aspectual meanings in English are *perfective* and *imperfective* and this aspectual opposition was referred to in the introduction of this paper. He explains that "the perfective looks at the situation from outside, without necessarily distinguishing any of the internal structure of the situation, whereas the imperfective looks at the situation from inside, and as such is crucially concerned with the internal structure of the situation..." (ibid.). Comrie emphasizes that the difference between perfective and imperfective aspect is not objective, but rath-

er subjective because the speaker chooses the way they want to present the situation. Finally, the author dedicates an entire chapter to aspectual meanings. Namely, he makes a distinction between *punctual* and *durative*, *telic* and *atelic*, and *stative* and *dynamic* situations (ibid.: 41–51). He considers such oppositions “inherent aspectual (i.e. semantic aspectual) properties of various classes of lexical items” and observes their interaction with other aspectual oppositions (i.e. perfective and imperfective). It is interesting to note that even though he includes semantic features of verbs in his analysis of aspect, he does not refer to them as *Aktionsart*. What is more, he explicitly uses the term *Aktionsart* in a footnote claiming that in addition to aspect, some linguists use this term as well. He explains that this German word stands for ‘kinds of action’. In regard to the main difference between aspect and *Aktionsart*, Comrie claims that aspect is “grammaticalization of the relevant semantic distinctions, while *aktionsart* represents lexicalization of the distinctions, irrespective of how these distinctions are lexicalized” (ibid.: 7).

Finally, Comrie introduces the third aspectual meaning, *the perfect*, as in *John has read the book*. Comrie states that the perfect is quite problematic for two main reasons: there are studies which do not regard it as aspect and the definition of aspect given above cannot be really interpreted to include it as an aspect. On the other hand, the perfect cannot be regarded as tense either, mainly because it is incompatible with past and present tense adverbials (ibid.: 5–6). Since Comrie sees aspect as different ways of representing the internal temporal constitution of a situation, he classifies the perfect as a different kind of aspect because it does not tell us anything about the situation itself, but rather relates it to a preceding situation (ibid.: 52). He identifies different kinds of perfect aspect: *perfect of result*, *experiential perfect*, *perfect of persistent situation*, and *perfect of recent past*. Finally, he shows that perfect aspect can be combined with the imperfective and perfective.

Zandvoort writes about verbs in the first part of his grammar book *A Handbook of English Grammar* (1977). However, he does not really pay much attention to aspect. The author contrasts *the present participle*, claiming that it refers to an action represented as being in progress and having a certain duration, and *the plain infinitive*, which represents the action as such, either because its length is considered irrelevant, or because it actually occupies just a moment. (ibid.: 33). He then explicitly points out that such difference is sometimes called aspect. He claims that the aspect expressed by the present participle is called *imperfective* or *durative* and that the aspect expressed by the infinitive is called *perfective*.

In his publication *Word Meaning and Montague Grammar* (1979) David Dowty deals with certain problems centering around the semantics of the so-called *Aristotelian* verb classification, which is, in fact, the distinction among states, activities, accomplishments, and achievements in Vendler’s terminology. One of the main goals of his work is to present analyses

of this classification relying on the framework of generative semantics and syntactic and semantic framework developed by Richard Montague and his associates, as well as the grammatical constructions which provide the diagnostic tests for differentiating among these classes in English.

When it comes to the diagnostic tests, Dowty (ibid.: 55) compares states and activities first. He suggests that only non-statives can occur in the progressive, as complements of verbs such as *force* and *persuade*, as imperatives, and with the adverbials like *deliberately* and *carefully*. Next, he (ibid.: 56–57) compares activities and accomplishments. Namely, activities and accomplishments appear with different types of adverbials: accomplishments normally take the adverbials with *in* (e.g. *in an hour*), while activities can only take the adverbials with *for* (e.g. *for an hour*). Almost parallel to these constructions are the constructions with *spend* and *take*. Accomplishments appear with both of these verbs (e.g. *John spent an hour painting a picture.*, *It took John an hour to paint a picture.*), while activities appear only with *spend* (e.g. *John spent an hour walking*). In terms of entailments of these verbal situations, there is a noticeable difference. The following applies for activities: *If John walked for an hour, at any given time during that hour it was true that John walked*. However, the same cannot be stated for accomplishments: *If John painted a picture for an hour, then it is not the case that he painted a picture at any time during that hour*. In addition to this, if *walk* is an activity, then *John is walking* entails that *John has walked*, while if *paint a picture* is an accomplishment, then *John is painting a picture* does not entail that *John has painted* the picture. Finally, only accomplishments can occur as complements of the verbs such as *finish*. When it comes to achievements, they normally appear with *in* and *took*-phrases and they are unacceptable with verbs like *finish* and *stop*. Finally, certain adverbial phrases, such as *attentively*, *studiously*, *vigilantly*, *conscientiously*, *obediently*, *carefully*, etc. are anomalous with achievements because they combine with verb phrases that imply duration (ibid.: 58–60).

Dowty also lists some problems with Vendler's classification. Some of these problems are related to indefinite plurals and mass nouns (ibid.: 62–65). For instance, accomplishments which take plural direct objects become activities (e.g. *John is painting a picture.* vs. *John is painting pictures.*). Dowty confirmed that we cannot talk about the *Aktionsart* of a single verb, but of an entire verb phrase or clause.

Carl Bache (1982) discusses the differences between aspect and *Aktionsart* and presents his viewpoint in relation to other attitudes existing in the literature. When it comes to the precise differentiation between these two categories, Bache concludes the following:

*Aktionsart* concerns the procedural characteristics (i.e. the 'phasal structure', 'time extension' and 'manner of development') ascribed to any given situation referred to by a verb phrase whereas aspect reflects the situational focus with which a situation is represented. Sometimes the speaker/writer has a 'subjective choice' between two ways of representing the situation

(in cases of pure aspectual opposition), sometimes he MUST choose one or the other way of representation (in cases where the aspects function in different ways in relation to tense and Aktionsart). This interpretation of the difference between aspect and Aktionsart is thus stated not in terms of 'subjectivity' versus 'objectivity' but rather in terms of what might be called 'quasi-subjectivity' and 'quasi-objectivity' (ibid.: 70–71).

In terms of terminology, Bache observes the very term *Aktionsart* and compares it with other existing terms such as 'inherent meaning' and 'aspectual character' used by scholars such as Comrie and Lyons. He explains that these scholars avoid the term *Aktionsart* because they consider it confusing. However, he is of the opinion that terms 'inherent meaning' and 'aspectual character' cause no less confusion and therefore encourages keeping the term *Aktionsart* until a better term, which would cover the aspect-independent, 'quasi-objective' nature of the relevant distinctions, is proposed. (ibid.: 71).

*A Comprehensive Grammar of the English Language* (1985) by Quirk, Greenbaum, Leech, and Svartvik is one of the most influential grammar books of English. These authors claim that aspect is a grammatical category which reflects the way in which the verb action is *regarded* or *experienced* with respect to time. They identify two aspect constructions in English: *the perfective* and *the progressive*. The perfective is used when an action is viewed as complete, while the progressive refers to actions in progress. In addition, they use the word *simple* to describe a verb phrase totally unmarked for aspect. In other words, in this grammar book, *simple aspect* refers to those actions that are considered *perfective* in other grammar books. Furthermore, the term *perfective* used in this grammar book refers to actions considered *perfect* in other books, for example in Comrie's.

Present perfective (also called the Present Perfect) is considered to refer to past events with current relevance because it is used for *state(s) leading up to the present, indefinite event(s) in a period leading up to the present, and habits (i.e. recurrent events) in a period leading up to the present*. (ibid.: 192). The past perfective (i.e. the Past Perfect) has the meaning of 'past-in-the-past' because it can be seen as an anterior version either of the present perfective or of the simple past. (ibid.: 195)

When it comes to the progressive, it indicates an action in progress at a given time. The authors emphasize three basic meaning components of the progressive: *the happening has duration, the happening has limited duration, the happening is not necessarily complete* (ibid.: 198). Finally, they discuss the perfective and perfective progressive combinations (ibid.: 210).

Palmer (1988: 54–56) identifies two main aspects, *progressive* and *non-progressive*. He explains that the progressive refers to an action that is in progress and that is in a sense durational, while the non-progressive just reports an action. He emphasizes that the non-progressive can also refer to actions with duration in cases when the meaning of the lexical verb includes a sense of duration.

As per other durational uses, Palmer points out that the progressive often suggests that the activity is not finished, whereas the non-progressive normally refers to completed actions. Moreover, the progressive does not imply unbroken activities and therefore can be used with adverbials and adjectivals *more and more, faster and faster*, etc.

He also claims that both the progressive and non-progressive can be used to refer to “action at the time indicated, to action in the future or to habitual (or repeated) action.” (ibid.: 56) Even the non-progressive can be used to refer to *non-habitual present*, despite the fact that its habitual use is most often emphasized. Some of the situations where the non-progressive, simple present, is used are the following: in a radio commentary where the commentator is reporting something that the audience cannot see, in demonstrations, where the audience can see what is happening, yet the commentator is reporting to avoid misinterpretations, where the words themselves form part of the activity they report, e.g. *I name this ship...*, and when reporting an action that contains an adverbial indicating the manner or the cause of the activity, e.g. *Yesterday he talked nonsense. Today he talks like an expert.*

When it comes to *habitual* meanings both the progressive and the non-progressive are possible. If the progressive is used, the adverbial is required (e.g. *those days, in those days*, etc.), and such progressive use implies that the habitual activity takes place over a limited period of time. The progressive is also used to refer to *sporadic* or *repeated* habitual activity, normally with a tone of disapproval: *The car's always breaking down.*

When referring to future actions, both the progressive and non-progressive need to be marked by an adverbial. The progressive is normally used to indicate a future prediction, or speaker's intention, while the non-progressive refers to an activity that is scheduled.

Finally, it is important to note that Palmer does not consider *perfect* to be an aspect, but a phase referring to an activity which happened before a particular moment and which lasts at least up to that point.

Brinton (1988: 52–57) observes that we need an aspectual theory which recognizes aspect and *Aktionsart* as two separate systems. An aspect model that she proposes consists of five categories: *perfective, imperfective, phase, habitual, and perfect*. The perfective views a situation as complete, total, whole, and it is most commonly expressed by simple forms. The imperfective views a situation as incomplete and it consists of two subcategories: *the progressive* and *the continuative*. The progressive views a situation as ongoing or progressing (and therefore incomplete), while the continuative views the situation as continuing rather than ending (and, again, incomplete). The progressive is expressed by *be + V-ing* and the continuative is expressed by *continue to V, V-ing* and *keep on V-ing*. When it comes to the phase aspects, Brinton observes them as a separate category which consists of *ingressive* and *egressive* aspects. They are expressed by a variety of *aspectualizers*: *start to V, V-ing; begin to V, V-ing* (ingressive), and *stop V-ing*;



*cease to V, V-ing; finish V-ing* (egressive). Habitual aspect views a situation as repeated on several occasions and it is expressed by simple forms, as well as by *(be) used to V* and *be accustomed to V*. Finally, the perfect has no subcategories and is expressed by *have V-en*.

Brinton's matrix of *Aktionsart* categories includes *states, achievements, activities, accomplishments, and series*. These types of situations can be determined based on the following distinctive features: *dynamicity, durativity, homogeneity, telicity, and multiplicity*. The final distinctive feature serves to differentiate series from activities: series can be described as [+multiple], whereas activities are [-multiple].

*Longman Grammar of Spoken and Written English* (1999) by Biber, Johansson, Leech, Conrad, and Finegan is another capital grammar book of English. The authors relate aspect to *completion or lack of completion* of events or states which a verb denotes. They distinguish between two types of aspect: *the perfect* which "designates events or states taking place during a period leading up to the specified time", and *the progressive* which "designates an event or state of affairs which is in progress, or continuing, at the time indicated by the rest of the verb phrase" (ibid.: 460). In this grammar book, aspect is dealt with in the same way as in Quirk et al. (1985). What is different about this book is that the authors provide a distribution of simple, perfective, and progressive aspect across registers and dialects.

There is a noticeable difference regarding aspect in the third capital grammar book of English, *The Cambridge Grammar of the English Language* (2002), by Huddleston and Pullum in comparison to the first two grammar books. These authors adopt Comrie's definition of aspect, make a clear distinction between form and meaning, and pay special attention to the terminology they use. Namely, they (ibid.: 117–118) differentiate between *progressive and non-progressive aspect*, and between *imperfective and perfective aspectuality*. *Aspect* is a term which refers to the formal system, while *aspectuality* refers to the meaning of the forms. Perfective aspectuality presents a situation as a complete whole, and it is viewed, as it were, from outside, without any reference to the internal temporal structure of the situation. Imperfective aspectuality, on the other hand, does not present a situation as a whole, but rather focuses on some element or segment of the internal temporal structure of the situation and is viewed from inside.

These authors (ibid.: 124–125) claim that in English, forms such as simple present and preterite, which refer to non-progressive aspect, can be used both perfectly and imperfectly. For instance, *He died last week.*, *I'll write again soon.*, *He reigned for a year.* would all be instances of non-progressive aspect used perfectly. On the other hand, examples such as *He lives in Bonn.* and *He often cycles to work.* would be instances of the non-progressive used imperfectly. Imperfectivity can be also expressed by the *be + gerund-participle* construction, which represents progressive aspect: *He is working*. This is an example of a dynamic situation presented as ongoing, or, in progress.

These authors make an explicit distinction between the terms *the perfect* and *the perfective*: “It will be clear, then, that ‘perfective’ has a quite different sense from ‘perfect’; in some works of English, however, ‘perfective’ is used with the meaning (following the most usual practice) we give to ‘perfect’” (ibid.: 124). Namely, they consider the perfect to be a tense. They compare it to the preterite (i.e. simple past) and say that both of these tenses express the temporal relation of anteriority (see ibid.: 139).

Finally, Huddleston and Pullum pay a lot of attention to lexical aspect. They refer to states, activities, accomplishments, and achievements and provide detailed explanations on linguistic differences among these situations. This is also an improvement in comparison to the previous capital grammar books which do not refer to lexical aspect as a separate category.

Susan Rothstein deals with lexical aspect in her monograph *Structuring Events: A Study of the Semantics of the Lexical Aspect* (2004). Rothstein emphasizes a difference between grammatical and lexical aspect in the introduction of her work. In terms of grammatical aspect, she embraces Comrie’s definition, and in terms of lexical aspect, she states the following: “Lexical aspect, sometimes called “Aktionsart” and corresponding to Smith’s situation aspect, covers distinctions between properties of event-types denoted by verbal expressions, which linguists have tried to capture by classifying verbs into verb classes” (ibid.: 1).

Rothstein’s verbal typology is based on Vendler’s typology, though, besides states, activities, accomplishments, and achievements, Rothstein introduces the fifth class known as *semelfactives*. Semelfactives are instantaneous just like achievements, but, in contrast to achievements, they are atelic. Their instantaneous character can be checked by using adverbials with a preposition *at*: e.g. *John coughed/winked at 10 p.m.*, and they are considered atelic because, unlike achievements such as *die*, *arrive*, etc., they do not bring about any change of state (ibid.: 28).

Rothstein provides a detailed and comprehensive study of aspectual classes. She dedicates entire chapters to achievements, accomplishments, resultative predication, as well as distinctive features such as *telicity*, *atomicity*, *quantization*, etc. One of the interesting problems that she brings about is the interrelation between grammatical and lexical aspect, i.e. the possibility of grammatical aspect affecting the *Aktionsart* of a situation marked by a verb. The problem concerns the use of achievements in the progressive. The author states that achievements are almost instantaneous and therefore should be incompatible with the progressive which refers to actions in progress and which should be restricted to activities and accomplishments. However, achievements occur in the progressive: *Dafna is finding her shoes.*, *The plane is landing.*, *Jane is just reaching the summit.*, etc. Rothstein explains that there are authors who suggest that achievements used in the progressive in fact represent disguised accomplishments (e.g. Verkuyl 1989), i.e. that progressive achievements shift into an accomplish-

ment reading (e.g. Mittwoch 1991). However, she dismisses this standpoint explaining that in that case accomplishments and achievements should behave in the same way in the progressive, which she shows is not the case. She agrees that the intuition behind this statement is right and she proposes a semantic account of what underlies it. Namely, the progressive does not treat the achievement as a special type of lexical accomplishment, but it triggers a type-shifting operation which results in an accomplishment being derived from the achievement (ibid.: 37).

In *Meaning and the English Verb* (2004) Geoffrey Leech provides a precise description of various aspectual meanings, listing the linguistic contexts in which they occur. He starts by defining aspect as different ways of representing a situation, and then represents numerous verb forms combining tense and aspect. The author first presents the Simple Present and the Simple Past tenses stating their different uses. Namely, Leech recognizes the *stative*, *habitual*, and *event* uses as the primary uses of the Simple Present tense. When it comes to the Simple Past tense, its basic meaning is referring to events that happened before the moment of speech. Leech makes a distinction between those that happen *simultaneously* and those, characteristic of narrative contexts, that happen *in sequence*.

In regard to the progressive, Leech points out that it is used to refer to *temporary* happenings, emphasizing features such as *duration*, *limited duration*, as well as *incomplete* happenings. Furthermore, he addresses the relationship between the progressive and different verb classes. Finally, the author considers the *habitual* or *iterative* use as well as the use of the present progressive to indicate future events as *other uses* of the progressive.

The next chapter deals with the *Present Perfect* and its uses such as *state-up-to-the-present*, *habit-up-to-the-present*, *indefinite past*, and *resultative past*. Then, the author introduces the *Past Perfect*, as well as the combination of perfect and progressive aspects. The last chapter relevant to our research presents expressions denoting future events, including modals, semi-modals, progressive and non-progressive forms of the present tense, as well as combinations of modals and progressive verb tense.

Since Leech studies aspect in combination with tense, it would be appropriate to point out Comrie's (1976: 5) position that these two grammatical categories are closely related to *time*, but in different ways. Namely, tense is a deictic category, which means that it locates situations in time, normally (but not exclusively) with reference to the present moment, while aspect is concerned with the internal temporal constituency of a situation. Therefore, aspect refers to *situation-internal time*, while tense refers to *situation-external time*.

### 3. ASPECT AND AKTIONSART IN SERBIAN LITERATURE

Aspect is dealt with in a similar manner in many grammar books of the Serbian language, including the contemporary ones. Namely, as it is going to be shown in the following paragraphs, linguists talk about two fundamental aspectual oppositions: *perfective* and *imperfective* as well as *bi-aspectual* verbs. The most frequent notions used to refer to these aspectual oppositions are *svršeni glagolski vid* (corresponding to *perfective*) and *nesvršeni glagolski vid* (corresponding to *imperfective*). These terms have a long tradition of use in Serbian. For example, Vuk Stefanović Karadžić (1814: 46–47) and Đuro Daničić (1850: 39–40) use terms such as *sovršitelni* and *nesovršitelni glagoli*. As Spasojević (2017: 230) shows in her paper dealing with Slavic aspectual terminology, these notions were introduced into Slavic grammar from the Latin language. Aelius Donatus, a Roman scholar from the 4th century, played a key role in establishing the terminology related to the category of verb aspect when his grammar book was translated into Russian in the 16<sup>th</sup> century. Melantije Smotricki made calques based upon Donat's terms *formae perfectae*, *formae frequentativae* and *formae inchoative*. He used the word *vid* instead of *formae*, and then created the term *совршенный вид* which corresponds to *formae perfectae*. However, the terms *svršeni* and *nesvršeni* refer to duration, and as it is going to be shown, duration is not the basic distinctive feature of the category of verb aspect. Therefore, some authors advise against using these terms.

Aleksandar Belić (2000: 218–219) differentiates between two types of aspect: *unbounded* or *imperfective* (S. *neograničeni*) and *bounded* or *perfective* (S. *ograničeni*). Unbounded aspect refers to actions that last without any interruption as in *spavati*, *pevati*, etc. (E. *to sleep*, *to sing*) or to those actions which are repeated *ad infinitum* like *kuckati*, *poskakivati* (E. *to keep on knocking*, *bouncing*). Accordingly, the author differentiates between two types of unbounded verbs: *durative* and *iterative*.

Bounded aspect refers to actions that always express one completed moment: the beginning or the end of an action, as well as an action understood to last for one moment only (i.e. a *momentaneous* action). Therefore, it includes verbs which are bounded or perfective in their meaning, like *sesti*, *pasti* (E. *to sit down*, *to fall down*), or verbs normally formed by prefixation, like *pisati* – *napisati* (E. *to be writing* – *to have written*).

Finally, Belić refers to the so-called *bi-aspectual* verbs. These verbs can express both perfective and imperfective aspect without any change in their form, and their exact aspect is determined in the linguistic context. Verbs such as *telefonirati*, *videti*, *čuti* (E. *to talk on the phone*, *to see*, *to hear*) are considered bi-aspectual.

Đuro Grubor (1953: 5–10) takes *completion* to be the main distinctive feature of aspect. He claims that an action that is incomplete, i.e. still in progress, is expressed by *imperfective* aspect, while the completed, i.e. finished action is expressed by *perfective* aspect. Moreover, he classifies verbs

into two types: *R-verbs* and *S-verbs*. The first refer to an action which develops or unfolds gradually, whereas the latter refer to states that do not involve any change. He combines these two types of aspect and two types of verbs and comes up with the following classification: *imperfective aspect of R-verbs*, *imperfective aspect of S-verbs*, *perfective aspect of R-verbs*, and *perfective aspect of S-verbs*. Imperfective R-verbs refer to actions that develop and unfold, while perfective R-verbs refer to the *amount* of action that has been completed. S-verbs do not involve any action, development, or completion, but they still have imperfective and perfective aspect. Namely, imperfective S-verbs denote a state somebody or something is in, while perfective S-verbs refer to the *amount* of time someone or something was in a particular state.

The author (ibid.: 5–6) refers to *perfectivization* and *imperfectivization* which are processes related to aspectual pairs. Aspectual pairs represent pairs of verbs which have the same meaning, but express different aspects. For instance, *pisati* (E. *to write*) is an imperfective verb which becomes perfective after adding a prefix – *napisati* (E. *to have written*). This is an instance of perfectivization. Imperfectivization is the reverse process, i.e. the process of creating imperfective verbs out of perfective.

Grubor (ibid.: 12–13) also presents a detailed list of aspectual meanings based on the degree of completion of the action. Some such meanings are *inchoative* which refers to the beginning of an action as in *pevati – zapjevati* (E. *to sing – to start singing*), *egressive*, which refers to the completion of the final stage of an action as in *graditi – dograditi* (E. *to build – to build on*), *diminutive*, which refers to actions which last shorter than a regular action denoted by a particular verb as in *zviždati – pozviždati* (E. *to whistle – to whistle for a short time*), *augmentative*, which refers to actions that are exaggerated as in *peći – prepeći* (E. *to cook – to overcook*), etc.

Furthermore, he (ibid.) classifies verbs into three groups depending on the *type* of action they denote. *Creative* verbs refer to the process of creation as in *graditi – sagraditi* (E. *to build – to have built*), *transformative* verbs refer to the process of change as in *orati – uzorati* (E. *to plow – to have plowed*), and *motive* verbs denote actions that refer to a change of place as in *ići – doći* (E. *to go – to come*). Finally, the author presents and elaborates on different combinations of these aspectual meanings and types of verbs.

According to Stevanović (1969: 508), aspect is a morphological category because aspectual differences are most often reflected in the verb form. However, it can also be regarded as a syntactic category because the exact aspect of bi-aspectual verbs is determined in the context, i.e. within a sentence.

Stevanović (ibid.: 513) considers *duration* to be the main distinctive feature of aspect. Therefore, he distinguishes between *imperfective* and *perfective* verbs (i.e. aspects) and he explains that the former refer to actions or processes with indefinite duration, while the latter normally refer to one completed moment of the action denoted by a verb. However, Stevanović

carefully goes on to explain that some perfective verbs also imply the time that passed before the moment of completion. For instance, verbs such as *pročitati*, *prevesti*, etc. (E. *to have read*, *to have translated*) include the process of reading, i.e. translating before the moment of completion has been reached. However, the author still emphasizes that the moment of completion is crucial.

Like Belić, Stevanović (ibid.: 513–514) also refers to two types of imperfective verbs: *durative* which denote an action with indefinite duration and without any interruptions such as *čitati*, *pevati*, *raditi*, *pisati*, etc. (E. *to read*, *to sing*, *to do*, *to write*), and *iterative* with indefinite duration and interruptions such as *skidati*, *spuštati*, *ulagati*, etc. (E. *to keep on taking off*, *to keep on putting down*, *to keep on investing*). In fact, according to Stevanović, durativity and iterativity are considered to represent the *character* (S. *lik*) of the imperfective verbs. In addition, Stevanović (ibid.: 515–518) specifies different characters of perfective verbs. For instance, there are *momentaneous* verbs (S. *trenutno-svršeni*) such as *trepnuti*, *kucnuti* (E. *to blink*, *to knock*), different types of *ingressive* verbs (S. *početno-svršeni*) which refer to different aspects of the beginning of an action such as *zapevati* (S. *to start singing*), and different kinds of *egressive* verbs (S. *završeno-svršeni*) which refer to different aspects of the end of an action such as *poginuti*, *proćerdati*, etc. (E. *to perish*, *to waste*).

Stevanović (ibid.: 518–521) also refers to *perfectivization* and *imperfectivization* and like many other linguists defines them as morphological processes for forming perfective and imperfective verbs. Perfectivization refers to adding prefixes (and some suffixes like *-nu*) to imperfective verbs in order to make them perfective, while imperfectivization refers to transforming perfective verbs into imperfective by means of changing the base of the perfective verbs.

Stevanović (ibid.: 521–524) finishes the discussion on the verb aspect by referring to *bi-aspectual verbs*. His explanation is the same as the one provided by Belić and other scholars dealing with Serbian grammar. Accordingly, he defines these verbs as the ones that have the same form for perfective and imperfective aspect, and whose exact aspect depends on the context.

Riđanović (1976: 2) claims that in Serbo-Croatian (SC), verbs are traditionally seen to belong to one of at least two verbal aspects: *imperfective* or *perfective*, depending on whether the action denoted by a verb is considered to be in progress or completed. In other words, according to Riđanović, *completion* is traditionally regarded as the main distinctive feature of aspect. The author also refers to the difference between *aspect* and *Aktionsart*. While the first notion refers to the two basic categories of Slavic verbs, those showing the action as completed or in progress, the second notion, taken from the German language, refers to semantic functions of verbs. In other words, aspect is related to grammar, while *Aktionsart* is related to lexicology (ibid.: 7). The author further explains that there

is a universal agreement on the number of aspects, as well as on the fact that they are affected by morphology, syntax, and semantics. However, one of the main points of disagreement refers to the number and nature of *sub-aspects* of the two major aspectual categories (ibid.: 75)

Riđanović (ibid.: 8–9) then provides a list of some of the most recognized *Aktionsarten* in SC such as *ingressive* (or *inceptive*, *inchoative*), referring to the beginning of an action as in *zapevati* (E. *to start singing*), *terminative*, which marks the end of a prolonged action as in *ispričati* (E. *to finish telling a story*), *resultative* which refers to an action whose end brings about a result as in *izgraditi* (*to build* lets say *a house*), *momentaneous*, referring to an action conceived of as taking place at a point in time as in *poznati* (E. *to recognize*), and *diminutive*, which denotes actions viewed with an endearment attitude or as ones that last for a short period of time, as in *kupnuti se* (E. *to take an enjoyable short swim*) or *popričati* (E. *to talk for a little while*). These represent the *Aktionsarten* of perfective verbs because they are incompatible with the idea of duration. On the other hand, *durative*, *iterative*, *indeterminate*, *determinate*, and *distributive* represent the *Aktionsarten* of imperfective verbs. Durative *Aktionsart* is used to refer to those actions that last without reaching a climax of any sort as in *disati* (E. *to breathe*), iterative *Aktionsart* refers to actions that exist by virtue of being composed of smaller segments of the same activity as in *koračati* (E. *to stride* or *make steps*) or to actions whose instances are repeated throughout a certain period of time as in *davati* (E. *to give habitually*), indeterminate denotes a multidirectional action as in *letati* (E. *to fly around*) and can be compared to its determinate counterpart as in *leteti* (E. *to fly in a particular direction*). Finally, distributive *Aktionsart* can occur with both imperfective and perfective aspect and it indicates that the performance of the action expressed by an intransitive verb is distributed among a number of subjects as in the imperfective-perfective pair *razboljevati se – porazboljevati se* (E. *to get sick*).

However, in terms of aspect, Riđanović departs from the widely accepted tradition in Slavistics and states that the major feature of the opposition between these two types of aspect should be *indivisibility* versus *divisibility* of the temporal dimension associated with the action and not imperfectivity versus perfectivity (ibid.: 83). Therefore, he suggests a new tripartite categorization of aspect in SC: *stative*, *cursive*, and *totive*. The first category includes verbs which denote properties, relations, and states, the second includes verbs referring to activities and processes (traditionally called imperfective), and the third includes the verbs traditionally referred to as perfective. Moreover, since stative and cursive are defined negatively in relation to totive, they can be labeled as *non-totive* (ibid.: 91).

This classification into stative, cursive, and totive aspects can be further classified. The further classification in fact represents *Aktionsart*. Namely, stative aspect is comprised of *permanent* and *non-permanent* stative verbs, cursive aspect consists of *generic cursive* on the one hand, and *specific cursive*, *durative*, *iterative*, and *distributive* verbs on the other hand,

while totive aspect can be divided into *extensive*, *terminative*, and *instantaneous*. Extensive are further divided into *simple-extensive*, *diminutive*, and *augmentative*, terminative are divided into *perfective*, *finitive*, *sative*, *majorative*, and *distributive*. Finally, instantaneous verbs can be classified into *simple-instantaneous*, *semelfactives*, *inceptive* (divided into *ingressive* and *inchoative*), *perfective*, *finitive*, *sative*, etc. Riđanović (91–112) provides detailed explanations of these *Aktionsarten* and summarizes them in a diagram.

Stanojčić and Popović (2005: 104) also take *duration* to be the main distinctive feature for determining aspect. They point out that Serbian verbs can be classified into three big categories: *imperfective*, *perfective*, and *bi-aspectual*. Imperfective verbs denote actions with indefinite duration, perfective verbs denote actions seen as completed or finished and bi-aspectual verbs can refer to both aspects.

These authors also discuss the character of verbs. Like previous authors, they agree that imperfective verbs can be classified depending on their character into *durative* verbs, i.e. the verbs with durative character and *iterative verbs* which are also indefinite in terms of duration, but which occur with interruptions. When it comes to the character of perfective verbs, these authors refer to the *momentaneous* verbs, *ingressive*, *egressive*, and *indefinite-perfective* verbs.

Klajn (2005: 105) also distinguishes between *imperfective* and *perfective* aspect. He claims that imperfective verbs denote actions in progress, as well as actions that last for some time in the past, present or future, without any limitation. In addition, the author states that almost all imperfective verbs can be used as *iterative*. For example, *Učenici pišu zadatak*. (E. *The pupils are writing a task.*) would be an instance of the verb *pisati* being used as imperfective, whereas *Pisaću ti svakog dana*. (E. *I'll write to you every day.*) would be an instance of its iterative use. In this example, iterativity has been achieved by the use of the adverbial *svakog dana*, but Klajn (ibid.) points out that there are verbs such as *večeravati*, *viđati* (E. *to keep on dining, to keep on seeing*) which have an iterative meaning.

Perfective aspect, on the other hand, refers to completed actions as in *Napisao sam pismo*. (E. *I wrote/have written a letter.*). Klajn (ibid.) refers to three subcategories of perfectivity: *momentaneous* verbs, different types of *ingressive* verbs, and *egressive verbs*.

Then, the author (ibid.: 106–110) introduces *bi-aspectual* verbs, aspectual pairs, as well as *perfectivization* and *imperfectivization*. The representation of verb aspect in this grammar book is almost the same as in other grammar books of Serbian. However, the author does not explicitly refer to lexical meanings, he does not refer to aspectual *character*, but he considers iterative, ingressive, egressive, momentaneous verbs as subcategories of imperfective and perfective aspect.

Pavica Mrazović and Zora Vukadinović (2009: 77) study *Aktionsart* and aspect as two separate categories. When it comes to *Aktionsart*, the authors use a Serbian term *akcionalnost* and explain that it refers to the



kind of action and to the combination of different semantic components expressed in the lexical meaning of a verb. They point out that lexical-semantic verb classes do not represent a grammatical system, but rather the nature of the situation expressed by a verb. In other words, *Aktionsart* is related to distinctive features such as *stativity*, *durativity*, and *punctuality* because of which it was studied as a subclass of aspect in many contemporary grammar books of Serbian. However, these authors make a clean-cut distinction between these two categories emphasizing that *Aktionsart* is a lexical-semantic category, whereas aspect is a grammatical category. They (ibid.: 78–80) present a long list of *Aktionsarten* such as *inchoative* or *ingressive*, *transformative*, *creative*, *egressive*, *resultative*, *semelfactive*, *sative*, *distributive*, *durative*, *iterative*, *punctual*, *diminutive*, *augmentative*, to name just a few.

In terms of aspect, the authors (ibid.: 80) explain that it represents a mandatory binary grammatical category (with the exception of *bi-aspectual* verbs). It involves verbs with the grammatical meaning of *perfectivity* as in *leći* (E. *to lie down*) and *imperfectivity* as in *ležati* (E. *to lie*). When defining these two types of grammatical meanings, Comrie's influence can be noticed. Namely, Mrazović and Vukadinović state that perfectivity refers to presenting a situation as a single indivisible whole with a clearly marked result or an achieved goal without emphasizing the duration of that situation. Imperfectivity, on the other hand, refers to those actions whose segments can be divided, lacking the final segment. Imperfectivity refers to durative or iterative processes, actions, or states, so the action cannot be understood as a single whole. Therefore, these authors, just like Riđanović, take *indivisibility* and *divisibility* as main aspectual features. In addition, Mrazović and Vukadinović explain that unlike *Aktionsart*, an optional semantic category which modifies and specifies the meaning of a verb, aspect is a mandatory grammatical category, which means that almost all verbs can be classified as either perfective or imperfective. For instance, ingressive, egressive or punctual verbs are perfective, while durative and iterative verbs are imperfective (ibid.: 81).

When it comes to terminology, the authors make several important comments. Namely, they point out that Serbian notions *trenutni* and *trajni glagoli* (E. *punctual* and *durative verbs*) should not be used because only a handful of perfective verbs such as *trepnuti*, *sesti* (E. *to blink*, *to sit down*) in fact last for one moment only. Many other perfective verbs like *napisati* (E. *to finish writing*, *to have written*) imply duration. Therefore, these perfective verbs can be modified by adverbials which also denote duration. Furthermore, they explain that the idea of duration is quite subjective. Consequently, they suggest a slightly modified classification. Perfective aspect includes verbs which denote an action perceived as a single whole, with a clearly defined goal or result as in *Otac je došao*. (E. *The father came/arrived*). Imperfective aspect can be divided into *habitual* and *durative*. Habitual aspect would include examples like *Prijatelj nam dolaze svako veče*.

(E. *Friends visit us every evening.*). Durative aspect can be divided into *non-progressive* which includes examples like *Dete spava.* (E. *The child is sleeping.*) and *progressive*, which denotes actions which unfold and develop, such as *Otac piše pismo.* (E. *The father is writing a letter.*).

Finally, the authors (ibid.: 84–90) also refer to *bi-aspectual* verbs and aspectual pairs. As other grammarians, Mrazović and Vukadinović explain that bi-aspectual verbs are the verbs which can be both perfective and imperfective and that their aspect is determined in the linguistic context. As per aspectual pairs, they are defined as pairs of verbs which have the same meaning and different aspect as *vratiti – vraćati, pogledati – poglédati* (E. *to return – to keep returning, to look at – to keep looking at*). Aspectual differences can be marked by adding prefixes, suffixes, or by changing the accent. However, the authors also refer to those verbs which do not have their aspectual pair, but are either only imperfective (S. *imati* – E. *to have*) or perfective (S. *briznuti u plač* – E. *to burst into tears*). Such verbs are called *imperfektivum tantum*, i.e. *perfektivum tantum*. In relation to aspectual pairs, Mrazović and Vukadinović comment on *prefixation, perfectivization, and imperfectivization*. They explain that prefixation is a lexical process because in many cases prefixes add a new meaning to a word, as in *pasti* (E. *to fall*) and *dopasti se nekome* (E. *to be liked by someone*) or they can modify the meaning of a word as in *pisati* (E. *to write*) and *napisati* (E. *to finish writing or to have written*). Perfectivization is a lexical-grammatical process because it involves changing the verb aspect by adding prefixes, which simultaneously change or modify the basic verb meaning. Imperfectivization is considered a grammatical process only because adding suffixes just changes the aspect, but the verb meaning remains the same.

Piper and Klajn (2013: 175) refer to aspect in a similar manner as Mrazović and Vukadinović (2009). Namely, they state that in Serbian, every verb is marked in terms of aspect which can be either *imperfective* or *perfective*. They explain that imperfective aspect does not contain any limit or goal towards which the action is directed as in *ležati, gledati, disati* (E. *to lie, to watch, to breathe*). *Iterative* verbs, i.e. verbs which denote a certain repetition, are also imperfective. However, they also point out that iterativity can be denoted by the verb itself as in *kuckati* (E. *to keep on knocking*) or by an adverbial as in *Pisaću ti svakog dana.* (E. *I'll write to you every day.*).

These authors (ibid.: 175–176) point out that aspectual meanings can be expressed by lexical and syntactic means. For instance, if an adverbial such as *svake subote* (E. *every Saturday*) is used in a sentence, the verb in that sentence needs to be imperfective. However, that is not necessarily the case because a sentence like *Svake subote upecao je ribu.* (E. *Every Saturday he caught a fish.*) is perfectly acceptable in Serbian.

Like Mrazović and Vukadinović, these authors refer to the category of *Aktionsart* which they also call *akcionalnost*. However, Piper and Klajn (ibid.: 176) explain that this category is a lexical-grammatical category quite close to the category of aspect and that it refers to the manner in

which the action is presented by means of prefixes and suffixes. They distinguish among three basic types of *Aktionsarten*: *temporal-phasal*, *quantitative*, and *resultative*. These basic *Aktionsarten* consist of various subtypes. For example, temporal-phasal *Aktionsart* includes sub-categories like *ingressive*, *finitive*, etc., quantitative *Aktionsart* involves sub-classes like *semelfactive*, *iterative*, etc., and resultative *Aktionsart* consists of sub-classes like *cumulative*, *sative*, etc.

The authors (ibid.: 177) also explain that aspect can be expressed by suffixes, prefixes, by changing the base of the verb, by changing the accent or by using aspectual verbs like *početi*, *prestati*, etc. (E. *to start*, *to finish*). Finally, their discussion on aspect also includes *bi-aspectual* verbs, aspectual pairs, as well as the processes of *imperfectivization* and *perfectivization* (ibid.: 177–180).

Finally, Marina Lj. Spasojević (2017: 229–230) systematized basic concepts and terms in the field of aspectology. She explains that introducing new terms related to studying aspect and *Aktionsart* is sometimes justified, but that in the vast majority of cases, new terms are mere calques for the already existing terms in Serbian grammar and that such accumulation of terminology represents one of the problems in this field. Then, the author refers to the term *aspektologija* (E. *aspectology*) and explains that it is a linguistic discipline which deals with the grammatical category of aspect, as well as with related lexical-grammatical categories like *Aktionsart* (which she refers to as *akcionalnost*), *telicity*, etc.

The author (ibid.: 230–231) then goes on to explain the etymology of the notions *glagolski vid* in Serbian and Slavic literature and *aspect* in other world languages. She also explains that in Serbian terms *glagolski vid* and *aspekt* are used synonymously, as well as aspectual oppositions *nesvršeno/imperfektivno – svršeno/perfektivno*. In terms of verb semantics (e.g. *ingressive*, *durative* verbs, etc.) she lists some terms used to refer to this category: *Aktionsart* (E. *aktionsart*), *vidski lik* (E. *character*), *podvid* (E. *sub-aspect*), *vrsta akcije* (E. *type of action*), *tip glagolske situacije* (E. *type of the verb situation*), *eventualnost* (E. *eventuality*), etc.

Spasojević (2017: 232) explains that aspect was normally studied in relation to the verb. However, some authors (e.g. Verkuyl 1972, 1993) introduced other elements like predicate and its arguments into the study of aspect as well. The term used in literature to refer to this kind of understanding of verb aspect, where aspectual characteristics can be expressed by other linguistic means is *aspectuality* (S. *aspektualnost*). On the other hand, Spasojević emphasizes that this term can be also used as a hypernym to include both aspect and *Aktionsart*. The same confusion can be noticed with the term *aspect* because in some traditions (e.g. Slavic) it is synonymous with the term *vid*, but in other traditions, it can refer to verb semantics, or it can be used as a hypernym for aspect and *Aktionsart*, or it can refer to any aspectual information.

#### 4. ASPECT AND AKTIONSART IN CONTRASTIVE STUDIES

As it was mentioned in the introduction of this paper, there are empirical studies that focus on particular segments of aspect and *Aktionsart* in English and Serbian. They are going to be presented in this section in a chronological order.

In *Telicity in English and Serbian* (2007), Novakov addresses telicity and its relation to verbal aspect, as well as the influence of the object NP on telicity. When it comes to English, the author makes several comments: telicity is not normally indicated at the lexical level; it could be cancelled when interacting with imperfective (specifically progressive) aspect; the perfective (i.e. non-progressive) implies the attainment of a goal which is why normally (though not exclusively) there is a correlation between telicity and perfectivity. Since in English telicity is not normally indicated at the lexical level, the object NP reinterprets telicity at the syntactic level.

In Serbian, on the other hand, telicity, as well as perfectivity, is already indicated at the lexical level. Therefore, perfective verbs are normally considered telic, while imperfective verbs are considered atelic. However, Novakov (2007: 305) explains that *pisati pismo* (E. *to write a letter*) represents a telic situation despite the imperfective verb, because the NP *pismo* (E. *a letter*) adds a goal to an atelic situation, making it telic, while imperfective aspect does not specify the attainment of the goal. However, in the conclusion of the paper, Novakov (2007: 306) states that the object NP does not reinterpret telicity at the level of syntax in Serbian, because telicity is fully determined at the lexical level, which contrasts with the previously mentioned statement. In subsequent papers (which are going to be addressed in the following paragraphs), the author proposes a theoretical framework including four different combinations of telicity and aspect, which seem to clarify this potential inconsistency.

Milivojević (2007) deals with English phrasal verbs and Serbian verbs with prefixes. More precisely, she analyzes the correlation between particles that, together with a lexical verb they follow, comprise a phrasal verb and prefixes of Serbian perfective verbs. The author claims that there is at least one crucial similarity between particles and prefixes: at the lexical level, both particles and prefixes mark *Aktionsart*, which is why they should be considered lexical or semantic, rather than aspectual (i.e. grammatical) markers. Moreover, particles and prefixes modify the verb meaning.

Milivojević further explains that particles can either slightly modify the original meaning of the verb as in *wake* – ‘to cease to sleep’ and *wake up* – ‘to become conscious again after being asleep’ or they can completely change the meaning of the original verb as in *write* – ‘to form letters or words on a surface such as paper’ and *write off* – ‘to decide that something is unimportant, useless, or unlikely to be successful and that is not worth further consideration’. In both cases, particles mark telic verb situations.

On the other hand, Serbian prefixes influence verb aspect. Not only do they turn an imperfective verb into perfective in the vast majority of cases, but they also influence the specific features of perfective aspect. In other words, based on the perfective prefix, the verb situation can be considered ingressive, effective, terminative, etc. Therefore, the author concludes that Serbian prefixes influence both aspect and *Aktionsart*. Finally, as regards the differences between particles and prefixes, the author shows that telic particles in English can be combined with the imperfective verb form, while perfective prefixes in Serbian cannot, except in cases of secondary imperfectivization.

In *Verbal Aspect and Telicity in English and Serbian* (2009), Novakov focuses on the interaction between telicity and aspect, emphasizing that telicity denotes the presence or the absence of a goal, while verbal aspect indicates boundedness, i.e. whether the existing goal has been reached. In other words, the author argues that it is necessary to include both the notion of boundedness (aspect) and telicity in order to fully interpret a verb phrase. Novakov analyzes different kinds of examples in both languages and tests the relationship between telicity and perfective and imperfective aspect, telicity and transitive verbs, telicity and punctual verbs, as well as some examples which are unspecified in terms of telicity. For example, *Ben filled the glass with water.* can be modified with *for*-adverbials, which indicate that the situation is atelic, as well as with *in*-adverbials, which refer to telic situations (Novakov 2009: 196). The author (2009: 196) concludes that in English, a verb situation can be telic, atelic, and neutral. Moreover, he states that non-progressive (perfective) situations are bounded, while progressive (imperfective) situations are unbounded. As per Serbian, the author (*ibid.*: 198) concludes that aspect, which is closely related to telicity, is determined at the lexical level, so telic situations are simultaneously perfective (and bounded), while atelic situations are imperfective (and unbounded).

In 2016, Novakov gets two more papers on the issue of telicity and aspect published. *Borderlines of Meaning – Verb Semantics and Verbal Aspect* (2016a) is a type of a review paper in which the author studies the relation between telicity and aspect (boundedness). He states that telicity should be considered a general semantic feature which refers to the presence or absence of a goal. On the other hand, boundedness should be separated from telicity, i.e. it should not be studied in relation to the goal/result, but in relation to the representation of a situation. As a result, Novakov (2016a: 38) suggests the following combinations: a) telic and perfective: the goal exists and it has been attained, there is a result; b) telic and imperfective: the goal exists, but it is not indicated that it has been attained; c) atelic and perfective: the goal is not present, so perfective aspect cannot indicate whether the goal has been attained or not; d) atelic and imperfective: the goal does not exist, and the imperfective does not indicate the attainment of the goal.

The author (ibid.: 39) refers to examples in English and Serbian: *Ona je punila bocu vodom* (E. *She was filling the bottle with water*), *Ona je napunila bocu vodom* (E. *She filled a bottle with water.*) Novakov explains that the first pair of sentences contains the imperfective verb phrases, but the situations are telic. In other words, the goal is present, but imperfective aspect does not indicate that it has been achieved. On the other hand, the second pair of sentences contains the perfective (and telic) verb phrases – the goal is present, and the perfective verbs indicate that it has been achieved, there is a result.

*Telicity and Perfectivity in English and Serbian* (2016b) is an empirical paper in which the author applies the theoretical framework presented in the previous paper and confirms the attitudes presented there. Based on the analysis that he conducted in this paper, the author (2016b: 404) confirms the existence of all four combinations in English (telic and perfective, telic and imperfective, atelic and perfective, and atelic and imperfective). When it comes to Serbian, the author (ibid.: 405) emphasizes the fact that aspect can be determined at the lexical level, so the question that he focuses on is how that fact affects telicity. The author confirms the following combinations in Serbian: telic and perfective (because all perfective verbs, the ones with and without a prefix, imply a goal), telic and imperfective (in situations when the goal is syntactically indicated as in *pisati pismo* – *write a letter*), and atelic and imperfective (which is quite frequent in Serbian). The only combination which cannot be found in Serbian is atelic and perfective. As it has been explained, perfective verbs always imply a goal which is why such verbs cannot be considered atelic.

In 2017, Novakov wrote another paper on telicity – *Components of English Telic Structures and of Their Serbian Equivalents*. The focal point of this paper is the influence of animacy, agentivity, and intentionality on telicity, as well as the kinds of goal realized in a given context (e.g. creation of a specific physical object, movement of an object to a certain position, changed mental state of the subject, etc.). The results of the research have revealed examples which include animate and inanimate subjects, which means that telicity is not conditioned by the animacy and intentionality.

Novakov also dealt with English multi-word verbs and their Serbian equivalents in two papers: *From Physical to Cognitive Space – English Multi-Word Verbs and Their Serbian Equivalents* (2018) and *English Particles Up, Off and Down in English Phrasal Verbs and Serbian Verb Prefixes: Spatial and Extended Meanings* (2019). These papers present a cognitive-semantic analysis of particles in English and prefixes in Serbian, which is not of particular importance for the topic we deal with in this paper. However, in the parts of the works that deal with English phrasal verbs and their semantics, the author (2018: 538; 2019: 224) points out that the literature considers whether the particles of English phrasal verbs convey aspectual or telic meaning.

Kljakić (2020) deals with aspectual verbs and non-finite complement constructions in English and Serbian in her PhD thesis. Her study included eleven aspectualizers: *begin, start, continue, keep, keep on, go on, resume, finish, stop, quit* and *cease* and corresponding Serbian phase verbs *početi/počinjati, nastaviti/nastavljati, ne prestati/ne prestajati, prestati/prestajati, prekinuti/prekidati*. One of the most important goals in this study was to determine situation types (i.e. *Aktionsarten*) of the phase verb complements. Accordingly, the author concludes that accomplishments, activities and states turned into activities or iterative achievements can function as complements of English phase verbs. When it comes to Serbian phase verbs, Kljakić points out that they had only imperfective, i.e. durative complements – activities and states in the analyzed corpus.

Milivojević also dealt with ingressive aspectualizers *start* and *begin* and their Serbian equivalents in two papers – *A Contrastive Account of Phase Verbs Begin and Start in English and Serbian* (2021a) and *The Event-Canceling Semantics of the English Aspectualizer Start and Its Serbian Equivalent Krenuti* (2021b)<sup>4</sup>. The first paper has three objectives: to establish a true linguistic equivalency between English phase verbs *begin* and *start* and Serbian phase verbs *početi* and *krenuti*; to refer to a class of atypical phase verbs where the verb *krenuti* belongs and its complementation; to provide a theoretical account for the combination of a phase verb and its complement from the perspective of Lexical-projectionist semantic model combined with Construction Grammar (see Milivojević 2021a: 209). Milivojević (ibid.: 215) concludes that even though these aspectual pairs are close synonyms at the lexical level, there is a difference between projected complements at the level of syntax. According to the equivalency of argument projections, the author proves that the true equivalent of the English verb *start* is the Serbian verb *krenuti*, which allows for perfective complementation. The account that Milivojević proposes in her paper also allows for an innovative representation of phase verbs in the lexicon, where a single lexical entry connects the possible meanings and argument structure for each phase verb.

The second paper (Milivojević 2021b) also revisits the issue of equivalency of the aspectual pair *start* – *krenuti*, but it also investigates the aspects of “additional” semantic features such as *causality* and *dynamicity*, as well as event initiation and event cancellation phenomena. Milivojević (ibid.: 43) concludes that *start* and *krenuti* are semantically marked for dynamicity and causality, that they can combine with the full range of aspectual arguments, and that in terms of phase, *start* is prior to *begin*, while *krenuti* is prior to *početi*. Finally, in terms the event cancellation, the author concludes that the prototypical event-cancellation in both languages constitutes an aspectual construction combined with a dynamic complement.

4 These two papers were then included in her monograph *Semantika i sintaksa glagolske fraze u engleskom i srpskom jeziku* (2021c).

Finally, Novakov analyzes English progressive aspect and its Serbian equivalents: *English progressive aspect: Trends, uses and Serbian equivalents* (2021). The author (2021: 162–163) identified different uses of progressive tenses. For instance, there were examples in which the present progressive referred to situations in progress at the point of speech, situations with limited duration, future situations, or to an emotionally colored tone. As regards possible new tendencies, Novakov states that the present progressive is sometimes used instead of the non-progressive to underline current, ongoing, often simultaneous events.

When it comes to the past perfect progressive, the author explains that it refers to past situations emphasizing temporary duration before another past situation. Novakov also identified sentences with the present perfect progressive which all referred to the situations that started in the past and continued up to the point of speech (the so-called perfect of persistent situation). There were examples which contained the future progressive referring to a temporary process going on around a point in the future, with some duration, or an ironic tone. Finally, the author identified the past progressive, which typically implied temporariness.

When it comes to Serbian equivalents, Novakov states that the present or future progressive were normally translated using Serbian imperfective verbs in the present tense. Moreover, the past perfect and past progressive were translated by *perfekat* (and not *pluskvamperfekat*), the future progressive was translated by Serbian *futur*, and the present perfect progressive was translated by the present of imperfective verbs.

## 5. CONCLUSION

As regards aspect in English, many scholars identify it as a category inherent in Slavic verbs. However, despite the fact that the imperfective/perfective aspectual opposition, the basic aspectual opposition in Slavic languages, is not grammaticalized in English, there is a corresponding grammaticalized opposition which expresses aspectual meanings found in other languages, including Slavic: progressive, roughly responding to perfective, and non-progressive, corresponding to imperfective. In terms of perfect aspect, it is quite problematic because different authors classify it within different categories (e.g. tense, aspect, phase). Comrie, for instance, considers it a special type of aspect because it does not tell us anything about the situation, but it connects the situation with another situation.

What is problematic about the field of aspectology is the accumulation of different terminology referring to the same phenomena, which was recognized in the reviewed works. Moreover, if we track changes from the early works until the most recent ones, we can see that the attitude on aspect has changed. Namely, many authors studied aspect in relation to completion, incompleteness, duration, etc., i.e. these were considered to



represent the main aspectual features. However, Comrie's work seems to have greatly influenced the understanding of aspect. As a result, scholars began to associate perfective aspect with presenting a situation as an unanalyzable whole and imperfective aspect with presenting a situation as a structure. This kind of definition is a product of a typological study and can therefore be applied to different types of languages.

In terms of aspect and *Aktionsart*, it was noticed that many grammarians, especially the early ones, did not separate grammatical and lexical verb features into two different groups, but they were rather intertwined. However, in more recent works, authors began to recognize grammatical and lexical features as two different types of verb features, but they also recognized the importance of the interrelationship of the two.

When it comes to aspect in Serbian, it was observed that it is presented in the same way in the majority of grammar books. Namely, authors normally differentiate between perfective and imperfective aspect or verbs and their characters, as well as bi-aspectual verbs. In addition to this, they often refer to perfectivization, imperfectivization, and aspectual pairs. Many authors take completion and duration to be the main distinctive features of aspect, which is obvious in their use of terminology: *nesvršeni* (referring to imperfective) translates to 'not finished' or 'incomplete' and *svršeni* (referring to perfective) translates to 'completed' or 'finished'. However, linguists agreed that duration and completion should not be considered the main aspectual features, but rather indivisibility and divisibility (which correspond to observing the situation as a whole or as a structure).

The study and presentation of *Aktionsart* in Serbian is similar as in English. Different *Aktionsarten* were studied and analyzed as sub-types of aspect or aspectual characters. However, in contemporary grammar books scholars distinguish between aspect and *Aktionsart* (referred to as *akcionalnost*).

When it comes to the contrastive papers, the authors made a clear distinction between aspect and *Aktionsart*. Furthermore, the majority of the contrastive papers included in this paper represent empirical studies that focused on particular phenomena in aspectology: telicity, aspectualizers, particles and prefixes, etc.

Finally, in terms of future avenues, we suggest that aspect and *Aktionsart* should be clearly separated, without disregarding their interrelationship. Noteworthy examples of such presentation can be found in Brinton (1988), Huddleston and Pullum (2002), Novakov (2005), Mrazović and Vukadinović (2009), and Piper and Klajn (2013).

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#### Katarina B. Subanović / PREGLED GRAMATIČKOG I LEKSIČKOG ASPEKTA U ENGLESKOM I SRPSKOM JEZIKU

**Rezime** / Predmet ovog rada jeste kontrastivni pregled literature o gramatičkom aspektu (tj. glagolskom aspektu/vidu) i leksičkom aspektu (tj. tipu glagolske situacije, odnosno akcionsartu). Osnovni razlog za odabir ove tematike u vezi je sa činjenicom da se godinama kategorija glagolskog vida tumačila na različite načine, pripisivala su joj se različita značenja, uvodili novi termini, a sve u cilju boljeg i preciznijeg opisa jezičkih pojava koje su se dovodile u vezu sa ovom kategorijom. Stoga je osnovni zadatak ovog preglednog rada pružanje sistematskog prikaza načina sagledavanja gramatičkog i leksičkog aspekta u relevantnoj literaturi u domenu aspektologije, kao i u kapitalnim gramatikama engleskog i srpskog jezika. Nakon pregleda relevantne literature, došli smo do zaključka da se kategorija leksičkog vida često izučavala kao vrsta gramatičkog vida zbog obeležja poput *stativnosti*, *dinamičnosti*, *punktualnosti*, *durativnosti* koja se često povezuju sa glagolskim vidom. Ipak, u savremenim gramatikama, autori prave jasnu razliku između leksičkih i gramatičkih obeležja glagola, ističući da je glagolski vid gramatička i subjektivna kategorija, jer se izražava flektivno i jer izražava perspektivu govornika, dok se leksički aspekt izražava derivacionim nastavcima ili značenjem samih glagolskih leksema, te se smatra objektivnom kategorijom.

**Кључне речи:** gramatički aspekt, leksički aspekt, akcionsart, kontrastivna analiza, engleski, srpski

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# ЧЛАНЦИ

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*Часопис за књижевност, језик,  
уметност и културу*

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## ON METALINGUISTIC LABELLING IN ENGLISH-SERBIAN CONTRASTIVE STUDIES

The paper provides an overview of current issues concerning the metalinguistic inventory used in contrastive investigations of contemporary English and Serbian. Modern contrastive linguistics (CL) has largely shifted its methodological focus from the elaboration of theoretical prerequisites towards matters connected with the electronic processing of large amounts of linguistic data. Consequently, a need to revisit the problems of terminological discrepancies found in different frameworks used for the description of the compared languages is deemed appropriate. Problems arise on at least four levels: 1. restrictions imposed by the structure of the two languages compared; 2. the model-specific use of particular terms; 3. a semantically associative, but potentially misleading interpretative potential of linguistic terms; 4. the inconsistent or underspecified use of the metalinguistic units pertaining to a particular level of linguistic analysis or respective linguistic traditions. Having investigated the observed pitfalls, a conclusion about the necessity for a more precise determination of CL metalinguistic apparatus and a possible meeting ground to overcome the obstacles by means of corpus linguistics is presented.

**Key words:** contrastive linguistics, English, Serbian, metalinguistic inventory, linguistic tradition, corpus linguistics

### 1. INTRODUCTION

As Prof. Ranko Bugarski rightly observed some 25 years ago in the Serbo-Croatian preface to the translation of David Crystal's *A Dictionary of Linguistics and Phonetics*, there had mostly been a poorly controlled terminological expansion pertaining to myriads of theoretical approaches and methodological viewpoints, which in turn led to immense profusion of terminological units to grasp and master (Kristal 1999: VII). To tackle the problem, numerous papers had been presented and entire academic panels organized (see Berić 1986: 373–408), providing invaluable contribution to the issue at hand. Today, with the unprecedented development of technology and ease of access to large amounts of available data, accompanied by a tendency for linguistic research to be more multidisciplinary, it is not surprising that the situation has become even more complex. So, how does this situation affect the area of English-Serbian (henceforth E-S) contrastive analysis, where not only languages are compared, but their descriptive

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(sub)systems as well? How are potential issues manifested and what can be done to mitigate them? Is there still any danger for an inexperienced linguist to make serious mistakes in language comparison due to terminological confusion? This paper aims to offer some answers to these questions by illustrating the issues on the E-S language pair and discussing a possible convergence point.

Since its very beginnings in the middle of the 20<sup>th</sup> century, one of the main methodological concerns and debates in CL as a whole has been the issue of compiling the appropriate descriptive inventory, a *sine qua non* of any scientific undertaking, which would equally be applicable to as many languages as possible. Such an inventory would comprise a uniform, consolidated and highly precise metalanguage (i.e. the language *about* a language) for the purposes of cross-linguistic description. The model for this was often sought in mathematics and formal logic as the exemplars of precision, conciseness, and unambiguity. As it happens, a descriptive linguistic apparatus is more often than not full of expressions from everyday life and even highly formalized approaches are not immune to this, employing a number of quite evocative metalinguistic labels. For example, most generative approaches use everyday expressions such as *tree*, *node*, *branching*, *raising*, or *government*, while cognitive linguistic models commonly make use of the terms *blended space*, *image schema*, *special scene* and the like. Of course, these terms have undergone a semantic shift to lose their everyday meanings and gain linguistic ones, but their associative undertones can still be discerned. The terms are usually combined with a specialized type of notation resembling mathematical or logical system of symbols (as is the case with generative approaches or categorial grammar), or with specialized terminological items such as *specifier*, *inflectional phrase*, *subcategorization*, *immediate constituent*, etc. As can be expected, the use of specialized terms is typically not an issue, and their meanings are easily accessible to the adherents of a particular linguistic approach or anyone familiar to the applied framework. However, linguistic terms which are also found in general vocabulary may pose considerable problems to the uninitiated audience belonging to other linguistic proclivities as they can be taken to mean something other than what has been intended.

In an ideal contrastive scenario, one would expect a full one-to-one semantic correspondence between labels designating comparison criteria<sup>2</sup> in respective languages. However, achieving this is highly unlikely due to various factors, so linguists usually resort to finding the most salient common denominator to serve as a basis for comparison in the two languages that are compared. The situation where descriptive terms are applicable universally or at least applicable to a vast number of languages is even more desirable, especially in linguistic typology, where the primary aim is

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2 Also called *tertia comparationis*, in the metalanguage of CL.



to classify a large number of languages into types based on a shared linguistic property.<sup>3</sup>

Numerous attempts to resolve the problem of universal linguistic labelling have been made but have achieved only partial success. Although functional concepts have been dealt with more precision and significant consolidation in this area has been made (see Croft 2016), there is still little consensus about the universal metalinguistic set serving as a standard terminological repository for semantic description. Initiatives such as NSM – Natural Semantic Metalanguage, an inventory of granular semantic features representing universal components of meaning (cf. Goddard and Wierzbicka 2014), were considered to be notable starting points, but in time manifested certain limitations in terms of their universal applicability (cf. Boas 2020).

Arguably, some areas of linguistics seem to be less problematic than others. As Haspelmath (2021: 35) observes, a good example of integrating objective criteria into the linguistic analysis are the areas of phonetics and phonology. In these disciplines the physical properties of speech sounds and related phenomena serve as universal touchstones of linguistic description, so Haspelmath proposes that the same principle be applied to morpho-syntactic phenomena (*ibid.*). Of course, some labelling variation exists in these disciplines as well, but the degree of differentiation appears to be much smaller than in other domains of linguistic description.

## 2. METALINGUISTIC LABELLING ISSUES IN ENGLISH-SERBIAN CONTRASTIVE STUDIES

Having briefly considered general aspects of metalinguistic labelling, we now turn to the situation in the E-S contrastive studies. The topics we discuss have been classified into four provisional domains,<sup>4</sup> dealing with structural, theoretical, traditional and semantic issues, each accompanied by concrete examples illustrating potential problems. It needs to be mentioned that this list is far from being exhaustive and that it merely serves as a general overview of the occurrences identified as potential sources of discordance.

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3 The most comprehensive repository of cross-linguistic features to date can be found at the recently implemented online platform *Grambank*, which provides a staggering amount of information about 2467 languages across the globe and covers 195 linguistic features in total. The current list is not final since new data is planned to be added to the repository. Source: <https://grambank.clld.org> (accessed: April 19<sup>th</sup> 2023).

4 The 'provisional' characterization of the classification stems from the fact that many examples can be classified within more than one group. Therefore, the choice to which group an example will belong was made by deciding where the example is most suitable to illustrate the matter at hand.

## 2.1. STRUCTURAL SPECIFICITIES

The easily observable fact that languages differ in their physical manifestations is widely acknowledged in all modern approaches to linguistics. For this reason, any attempt at a cross-linguistic comparison requires that a relevant metalinguistic inventory be precisely determined in terms of its scope and applicability, especially if the structure of one language considerably differs from the other.

When Serbian and English are concerned, one of the most illustrative phenomena in this respect is the lexical category of *determiners* (or *determinatives*). In a general linguistic sense, they represent the main exponents of the grammatical category of definiteness. In Serbian, this category can be expressed in numerous ways, for instance by using demonstrative or possessive pronominals (Piper et al. 2005: 919). However, the category is not firmly integrated into the grammatically system of the Serbian language because its exponents typically represent non-mandatory syntactic components. In most cases, an exponent of definiteness will typically have an optional, modifying status, used as the speaker sees fit when it comes to specifying the information about the nominal he or she is referring to. Furthermore, in traditional Serbian linguistics the term is generally accepted to denote lexical, not grammatical elements (cf. Piper et al 2005: 65). By contrast, English determiners, prototypically represented by articles, have a systemic, strictly grammatical status. Being inextricably connected with the entire class of nouns, they are essential elements in numerous syntactic environments. Due to different grammatical statuses of the units in the two languages, it is quite understandable that Serbian linguists found no reason to make a distinction between optional and obligatory uses of these adnominal structures, so the term *determinator* has been adopted in Serbian literature to include both of them.

In a monolingual context the previously mentioned situation would not be a reason for much concern for any of the two languages were it not for one of the most frequently used morpho-syntactic labels in generative approaches to linguistics – that of the Determiner Phrase (DP, cf. Bošković 2009). Within the major part of the generative-linguistic canon, it is posited that at some level of analysis all nominals are intrinsically accompanied by a determiner as an obligatory element, and that the determiner is the head of such phrases, forming a DP. In languages with articles this claim appears to be tenable. But, when it comes to languages without articles, such as Serbian, where the use of determiners is not structurally required, the use of the term becomes highly problematic. Without going into the discussion whether the existence of DP in Serbian is indeed warranted,<sup>5</sup>

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5 There are analyses trying to justify the existence of DP in Serbian and other Slavic languages, but considerable disagreements on the issue can be found even within generative framework itself (see Bošković (2009) for more details). The reason why the concept of DP has not gained considerable ground in Serbian linguistics can presumably be attributed to its dubious applicability to the Serbian language.

it can reasonably be expected that the use of the term in E-S contrastive investigations would in all probability require extensive and burdensome elaboration to merit its use in contexts where no articles can formally be found. To add to the confusion, certain analogous phenomena, although structurally very similar, can be classified into different syntactic categories. Again, the example of English determiners is instructional: *my/your/her/our/their* are commonly classified as possessive determiners in English, while corresponding forms *moj/tvoj/njegov/njen* and *suchlike* are generally considered to be possessive pronouns in Serbian (Piper et al. 2005: 580), making the entire determiner business quite hard to grasp for the uninitiated audience.

## 2.2. THEORY-SPECIFIC ISSUES

The choice of a theoretical model is one of the crucial steps in performing a contrastive analysis (Đorđević 2005: 71). It is posited that a contrastive investigation needs to be conducted within a single model in order to maintain methodological consistency and ensure the validity of the analysis. Nevertheless, problems may arise if the investigated phenomenon needs to be explained from different theoretical perspectives (ibid.). It is clear that the terminology valid for one language or approach cannot simply be mapped on to another, as was illustrated by the problem of DP discussed above. The issue is further complicated by the advent of new linguistic (sub)models, by certain terms falling out of use or by their undergoing semantic shift in one language, without doing so in the other. Furthermore, the use of various emblematic expressions in different theoretical frameworks may require a thorough explanation, burdening the exposition of the analysis and creating difficulties for the potential reader unfamiliar with the lingo.

To illustrate the particularity of the theory-specific application of a term, we can consider the term *spell-out* regularly found in English generative minimalist syntax (for a more detailed account of the term, see Elfner 2018). Due to its suggestive association with the expression *to spell something (out)* and its connection with the English writing system, along with the complexity of the phenomenon to which it refers within the minimalist framework, it is quite difficult to translate the term into Serbian, a language with no 'spelling' system as such. It could arguably be claimed that without a thorough familiarity with its exact use in English, the term itself is quite hard to explain without the elaboration of the entire mechanism of utterance production, making it even more problematic and semantically less transparent if rendered into another language.

The advent of practically every major linguistic approach, be it structural, generative, cognitive, or dependency model – to mention but a few, has led to the introduction of their own terminological subsystems. Along the way, the already existing terminological (sub)systems become incor-

porated into the new framework to varying degrees and sometimes with more specific uses. Still, some theory-neutral terms continue to persist unaltered, such as the ones denoting certain general notions like *subject*, *phoneme*, *clause*, *word-formation*, *polysemy*, and so on. On the other hand, new theoretical perspectives typically require that new terms be coined, or for some of the old ones to gain new uses for the novel concepts brought about by the fresh theoretical distinctions. To illustrate this, we can consider a highly specialised use of the term *phase* from the perspective of different theoretical standpoints and see that the use may vary drastically. In a more general sense found in most theoretical orientations, it refers to a phenomenon associated with aspectual investigations regarding temporal segmentation of predicates, exemplified by the use of so-called *aspectual verbs* such as *begin/continue/end* and their verb complements. On the other hand, in minimalist syntax *phase* is taken to be a chunk of syntactic derivations interacting with the domains of semantics and phonology (Elfnér 2018). Again, if the principle of adhering to a single model in analysis were followed, little confusion could be expected. But, in an easily imaginable scenario of not being aware of the differentiation about the specificities of the two uses, a Serbian researcher unaware of the distinction may inadvertently combine information coming from unrelated frameworks to gain false result and reach invalid conclusions.

Another important issue concerns the lack of standardization pertaining to translations of theory-specific terms. With no standardized mechanism in place, the choice of translating a terminological item into the target language is left to an individual user.<sup>6</sup> This problem may be attributed to vast proliferation of (superseding) theoretical approaches and their offshoots, which simply leaves no time for a specific expression to be established enough in the target language. Consequently, numerous terms do not live to be adopted as translations, while others which may have been translated simply fall out of use quickly, especially if they have to compete with the already entrenched homonymous traditional term. Even some terms central to a theory elude standardization. For example, the notion of *fuzziness*, extensively employed in cognitive-linguistic investigations, was adopted into Serbian in different ways: in the title of an influential book by Milorad Radovanović (Radovanović 2009), the term's adjectival morphological base *fuzzy* was phonologically adapted into Serbian as *fazi*, while the Serbian translators in Kristal (1999: 218) offer the calque *mutan*. The former translation solution is transparent only to individuals already familiar with the use of the expression in English publications and has apparently not lived enough to catch on in the Serbian environment. The latter option, on the other hand, has a questionable degree of acceptability, except again for a highly specialized linguistic professional working within the framework. To some extent, the expression *mutan* in Serbian has a

6 A problem identified quite a while ago by Bugarski (1986), and apparently in many respects still unresolved.

negative connotative potential, so if combined into a complex structure like *mutna lingvistika*, it may be taken to mean *dubious linguistics* rather than *fuzzy linguistics*. The situation is even more problematic if the abstract derived noun *fuzziness* is translated literally as *mutnost* or *mutnoća*, bordering on the full unacceptability in Serbian due to its unusual formal and semantic realization.

### 2.3. SEMANTICS OF LINGUISTIC LABELLING

Although readily apparent to a trained linguist, the issue regarding the surface semantic resemblance of analogous linguistic terms in source and target languages appears to have been somewhat under the radar in E-S contrastive studies. This is exemplified by pairs *possessive adjective* : *prisvojni pridev*, *perfect* : *perfekat*, *phrase* : *phrase*, and suchlike. What we have here is an apparent mismatch between the denotational content of each of these expressions because different linguistic traditions assign different meanings to them. In traditional grammatical and some contemporary ESL accounts,<sup>7</sup> the class of English 'possessive adjectives' comprises pronominal elements such as *my/your/his/her/its/our/their*, which do not correspond to elements dubbed *prisvojni pridevi* in Serbian. In other words, the English version is synonymous with a more modern term *possessive determiners*, while the Serbian expression, if understood as a calque, belongs to the class of adjectives proper. The term *perfect* has broadly been identified as an aspectual category in English, while in Serbian the term *perfekat* is used to denote the category of grammatical tense, irrespective of its aspectual (perfective or imperfective) status. Being the focal point of numerous E-S contrastive investigations, the terms are usually easily distinguished when theoretical analysis is concerned, but they are quite frequently a source of confusion in an ESL classroom, where the interference between the first and second language is quite prominent. The last pair manifests indeterminacy insofar as the terms have different senses in different contexts: the English term *phrase* is used in grammatical descriptions of multi-lexical clusters typically containing a syntactic head (for which the most common Serbian equivalent is *sintagma*), while in Serbian the term *fraza* can simply be understood as an idiom, a fixed expression – even by linguistically trained professionals.

There are cases when the general meaning of the traditional linguistic label is semantically highly suggestive, yet problematic in light of contemporary linguistic theory. For instance, it would be difficult to explain the 'pastness' of the *past participle* or 'presentness' of the *present participle* in isolation (cf. Kristal 1999: 256), which by analogy could also be said for their Serbian counterparts *prošli particip* and *sadašnji particip*. As the

7 The British Council's widely-known *LearnEnglish* web platform is an illustrative example: <https://learnenglish.britishcouncil.org/grammar/english-grammar-reference/possessives-adjectives> (retrieved on January 12<sup>th</sup> 2023).

examples below show, they can clearly be used in all temporal domains depending on the matrix verb (bold print), be it the past (examples 1a, 2a, italicized), present (examples 1b, 2b, italicized), future (examples 1c, 2c, italicized) or no time at all (all underlined segments in the examples below):

- (1) a) Burning/**burned** to the ground, the place *was starting* to look like a ghost town.
- b) Burning/**burned** to the ground, the place *is starting* to look like a ghost town.
- c) Burning/**burned** to the ground, the place **will be starting** to look like a ghost town.
- (2) a) Burning/**burned** to the ground, the place *was forgotten* in an instant.
- b) Burning/**burned** to the ground, the place *is forgotten* in an instant.
- c) Burning/**burned** to the ground, the place **will be forgotten** in an instant.

An experienced linguist would presumably easily avoid these pitfalls by specifying the intended interpretation, but the interpretative lapses do occasionally occur by association of the terms with the present/past time, ultimately leading to the invalidation of the research process owing to a false basis of comparison.

#### 2.4. LINGUISTIC TRADITION DISCREPANCIES

Last but not least, a question of different linguistic traditions also comes into play. This issue concerns the dominant and widespread use of labels within culturally or geographically connected linguistic backgrounds. Here, a high level of overlap in the use of specific terms may persist due to entrenched linguistic beliefs. Labels falling under this group in E-S contrastive context may share the phonological/graphemic form, but differ significantly in interpretation, making them metalinguistic *false friends*. Examples include pairs like *clause* : *klauza* or *gerund* : *gerund(ij)*. The cause of misinterpretation in the first pair is the restricted use of the term *klauza* in traditional Serbian linguistic accounts since it commonly, but not exclusively (cf. Piper and Klajn 2013: 258), refers only to dependent finite subject-predicate structures. The typical English use of the term *clause* extends its semantic scope to all subject-predicate constructions, i.e. both dependent or independent/finite or non-finite ones. The second example illustrates the problem of unstable use of the term *gerund* in Serbian, where it can be interpreted either as a participial structure (cf. Piper et al. 2005: 548) or nominal structure, where it may assume a slightly different morphological realization *gerundij* (cf. Kristal 1999: 256).

Other instances of this type are not related to the formal resemblance but can cause confusion because of the underspecified sense that a term carries in one linguistic tradition compared to the other. Examples like this include terms such as *sentence*: *rečenica* or *linguistic*: *lingvistički*. The first pair is frequently problematic because in English the term *sentence* typically refers to a hierarchically higher syntactic constituent than a clause, but its Serbian counterpart *rečenica* may denote both what is meant by a *clause* or a *sentence* in English. The distinction between the two Serbian expressions is often resolved by the use of a modifying element, namely *predikatska rečenica* (literally: *predicate sentence* [= clause]) and *komunikativna rečenica* (literally: *communicative sentence* [= sentence proper]). In the second example the English term is ambiguous between denoting something pertaining to language (Serb. *jezički*) or something pertaining to linguistics (Serb. *lingvistički*). A potential problem may arise if the linguistic description is given in English, but the Serbian reader cannot determine whether the term itself refers to the communication system or the academic discipline investigating it.<sup>8</sup>

As a final illustration for this group, we consider the situation where a well-established term denoting a grammatical category is used intralingually in a contradicting sense. For instance, the English term *gender*, used for the grammatical category most manifestly realized in (pro)nominals to mark biological sex distinctions (*male/female/sexless*), has the term *rod* as its Serbian equivalent. The Serbian label plays a much more important syntactic role of distinguishing among grammatical masculine/feminine/neuter forms and governs the grammatical agreement between several word classes – nouns, pronouns, adjectives and verbs. Yet, this is not the only use of the term *rod* in Serbian traditional linguistics. As a matter of fact, another category of a different type also uses the same expression, that of *glagolski rod* (Eng. literally: *verb gender*), but this time it refers to what is commonly understood as the (in)transitivity of verbs (see Piper et al. 2005: 182). Clearly, there is a conflicting situation between the two uses, which can easily be avoided if a generally more widespread Latinate term *transitivity* is opted for.

### 3. A POSSIBLE MEETING GROUND?

As the previous section shows, the problem of metalinguistic labelling in CL occurs across various domains of linguistic investigations. Numerous positions on the topic were taken in the literature, main issues were identified and discussed, but a sense of incoherence still prevails since most elaborations favour one approach or model to another, with little (if any) resolution. However, the advent of corpus linguistics, an area which

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<sup>8</sup> An alternative and less problematic term for associated with the noun *language* is *lingual*.

has gained immense traction in the last decades, has led to a shift from theoretical considerations towards the quantitative aspects of cross-linguistic investigations. Most importantly, not being a model or theoretical framework, it is predominantly a set of tools and procedures used to join the quantitative facets of linguistic research with the mechanisms of machine processing. As such, it is highly objectivized in terms of operational capabilities and is theory-neutral, because it deals only with empirically observable and measurable data. What separates corpus linguistics from other domains of linguistics mentioned in the previous section is its potential to accommodate existing modes of description and their metalinguistic inventories into the analytical framework suitable for machine processing, as deemed appropriate. In other words, since it is essentially a methodological discipline relying on machine processing of large quantities of linguistic data, it does not discriminate between the employed theoretical underpinnings as long as they do not conflict with the purely computational procedures used by the electronic device performing the quantitative processing. Contemporary corpus linguistics allows us to use not only raw linguistic material, but to combine it with additional descriptive content, the so-called *metadata*, for the purposes of easy identification and efficient retrieval of information. Nowadays, a widespread method to enter metadata is by applying the XML format, which allows for a linguistic label to be assigned flexibly in the process of *linguistic annotation*. Such annotation can be performed with few formal restrictions and is neutral in terms of theoretical or methodological inclination. The labels used for the annotation need not be dependent on a particular theoretical viewpoint, but their use must be consistent and frequent enough for the algorithm to be able to automatize the process of identifying the desired structure, which it often accomplishes with exceptional level of preciseness.<sup>9</sup>

Admittedly, corpus linguistics is far from being omnipotent and cannot give answers to numerous questions raised by theoretical linguistics, especially those connected with phenomena spanning beyond the surface representation. One of the major drawbacks of corpus linguistics is that it is based purely on formal units and operations, meaning that definite conclusions from the analysis cannot be drawn without human involvement in terms of interpretative and speculative potentials of conducting research. Furthermore, corpus linguistics is unable to handle what is *not* present in a corpus, however comprehensive it might be, as it cannot go beyond numerical calculations used to statistically represent the investigated phenomena (see McEnery and Hardie 2012 for more details). Nevertheless, a combi-

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9 McEnery and Hardie (2012) stated that the standard automatic part-of-speech identification error rate for English is between 3–5%, which can be considered a rather high level of accuracy. Considering the fact that this piece of information was presented more than a decade ago, it stands to reason to assume that with the significant rise in the processing power of modern computers and judging by the sophistication of contemporary electronic language models and their derivatives which are trained on vast amounts of linguistic material (such as the now tremendously popular ChatGPT), the current level of precision significantly exceeds the rate mentioned in the publication.



nation of quantitative information, on the one hand, and the linguist's interpretative prowess, on the other, does provide a rather solid baseline for linguistic comparisons. When it comes to advantages, the main one here is that the processing of data is not subject to personal preferences. It relies exclusively on machine operations, leaving the human factor to choose the type of descriptive labels according to their own preferences. The labels can be associated with formal, functional, semantic, discursive, stylistic or many other features and can later serve as the basis for the analysis. What is more, even models which do not acknowledge the purposefulness of corpus linguistics, as is the case with generative linguistics, can still find their way into the area of corpus linguistics. Evidence for this can be found in numerous syntactic parsers available on the Internet, many of which are based on generative-syntactic postulates, but essentially making use of the resources common for corpus linguistics.

#### 4. CONCLUSION AND PROSPECTS

What the examples presented above argumentatively indicate is that a full and comprehensive contrastive account should benefit greatly from employing a metalinguistic apparatus which is precise, unambiguous and which can be used in as broad a number of contexts as possible.<sup>10</sup> In an ideal situation the descriptive inventory for CL should be reduced to a minimal set of unequivocally and semantically transparent terms, which should also be limited to the least possible number of respective interpretations to avoid unnecessary evocative uses. At the same time, the inventory also needs to be balanced, that is as exhaustive as possible to encompass all relevant domains of use while not leaving much room for multiple readings or indeterminacies. Such inventory allows a contrastive linguist to use metalinguistic labels optimally, with the ultimate goal of achieving the highest level of scientific validity. This appears to be a daunting task with uncertain outcomes, but it is still a goal to strive after. When discrepancies between the uses of labels arise, an effort should be made to reconcile them, either by redefining the domains of concrete uses, or perhaps by updating or replacing the term(s) in one of the languages with the one in line with current findings. It is a process which involves considerable dedication, yet a systematic effort to accomplish this seems reasonably viable.

Metalinguistic labelling issues identified in the four groups of E-S contrastive contexts can be addressed in several ways, given here in no particular order of precedence. A possible terminological confusion can

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10 What needs to be mentioned is that the assumptions or suggestions made in this paper should not be understood as a prescriptivist call for an intervention in the strictest sense of the word. What is meant to be accomplished is merely a more exact specification of the metalinguistic inventory that could lead to more consistent, precise and consolidated research processes in a cross-linguistic context, validated by a broader applicability and reduced semantic variation in all domains of CL investigations.

always be avoided in a conventional way – in the form of a preliminary contrastive elaboration preceding the central analysis, that is by explicating the labels' obvious uses or by elucidating the particularities of notions used in an unconventional manner. Next, an increased effort can be made to standardize the terminology typically used in various frameworks, in full accordance with the modern advances in the study of language(s) – this could preferably be done by determining the core set of semantically stable labels applicable across domains, and then extending it to include variations specific to distinct areas of use. Another possible step may be to use linguistic internationalisms wherever possible. These can be classical terms (for example *case*, *oblique*, *declination*, *theme*, *morpheme*, and many others) since they have reached a level of usage where they are no longer confined to their languages of origin. There are many such terms from classical Latin or Greek, which, in the course of time, have been semantically adjusted to denote linguistic phenomena applicable across a great number of languages, including English and Serbian. Nevertheless, the adoption of internationally widespread set of metalinguistic labels sometimes involves breaking away from the custom of using traditional terms for tradition's sake. Finally, reliance on procedures which minimize the subjective aspects of analysis, but do not eliminate any applicable theoretical model *per se* – as is the case with corpus linguistics – may prove to be a fertile ground for an integrated approach to contrastive analysis and metalinguistic labelling in general.

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**Dejan M. Karavesović / O METALINGVISTIČKOM OZNAČAVANJU U ENGLSKO-SRPSKIM KONTRASTIVNIM ISTRAŽIVANJIMA**

**Rezime** / U radu se razmatraju aktuelna pitanja u vezi sa metalingvističkim izrazima koji su u upotrebi u kontrastivnim istraživanjima savremenog engleskog i srpskog jezika. Budući da je savremena kontrastivna lingvistika svoju pažnju preusmerila sa teorijskih razmatranja preduslova za sprovođenje kontrastivne analize ka pitanjima vezanim za obradu velike količine široko dostupne jezičke građe, javlja se potreba

za preispitivanjem problema vezanih za terminološka razmimoilaženja u kontekstu različitih istraživačkih okvira koji se koriste pri opisu jezika koji se porede. Problematična mesta se javljaju u barem četiri ravni: 1. ograničenja usled različitog strukturnog ustrojstva jezika koji se porede; 2. posebne upotrebe termina specifične za pojedinačne jezičke modele; 3. semantički sugestivan, ali potencijalno neprecizan interpretativni potencijal samih metajezičkih izraza; 4. nedosledna ili nedovoljno precizirana upotreba metajezičkih terminoloških jedinica koje se javljaju na određenim nivoima jezičke analize ili unutar konkretne lingvističke tradicije. Nakon što su moguća problematična mesta razmotrena, izveden je zaključak da je i dalje neophodno jasnije precizirati metajezički aparat specifičan za kontrastivna razmatranja, a predloženi su i odgovarajući koraci ka prevazilaženju aktuelne situacije.

**Кljučне речи:** kontrastivna lingvistika, engleski jezik, srpski jezik, metajezički inventar, lingvistička tradicija, korpusna lingvistika

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## **О СРПСКИМ НАРОДНИМ ГОВОРИМА НА КОСОВУ И МЕТОХИЈИ**

(ур. Зоран Кнежевић, *Резултати досадашњих и њавци будућих истраживања српских народних говора Косова и Метохије*, Београд: САНУ: Институт за српски језик САНУ, Косовска Митровица: Филозофски факултет универзитета у Приштини, 2021, 405 стр.)

Зборник радова *Резултати досадашњих и њавци будућих истраживања српских народних говора Косова и Метохије* објављен је 2021. године и представља резултат научне конференције истог назива, одржане 15. октобра 2019. године у просторијама Српске академије наука и уметности у Београду. Основни предмет зборника јесте осврт на до сада проучене и познате особине српских говора (призренско-јужноморавског, косовско-ресавског и зетско-сјеничког дијалекта) на простору Косова и Метохије, а дати су и бројни предлози за њихова будућа истраживања.

Зборник је настао са циљем да се представе досадашња научна сазнања и испитаност говора Косова и Метохије, те да се научна јавност усмери на решавање до сада неразјашњених проблема и прикупљање грађе на недовољно истраженим деловима овог простора. Због актуелне друштвене и политичке ситуације у проучавању народних говора важно је било истражити ово подручје и детаљно испитати особине присутних српских дијалеката, што је назначено и у самом зборнику унутар поглавља „Закључци са конференције”. С обзиром на то да у зборнику налазимо радове који се баве трима српским дијалектима који су у употреби на Косову и Метохији, можемо рећи да је тако обухваћен читав терен. Овим зборником обухваћене су и различите области лингвистике. Најпре, пажња је била усмерена на историју језика (рад Александра Ломе и Жељка Степановића). Предмет проучавања биле су и лингвистичке области које су најподложније променама под страним утицајима: лексикологија и лексикографија (нпр. рад Рајне Драгићевић)

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и ономастика (рад Раде Стијовић и Мирјане Гочанин). Најзад, зборник садржи и научне чланке који су усмерени и на остале гране науке о језику (као нпр. рад Радивоја Младеновића, који се бави морфолошким, фонетским и прозодијским особинама призренско-јужноморавског дијалекта). То нам казује да зборник посматран као целина обухвата и географски и лингвистички различите делове ове области, чиме се тежи свеобухватности у приказу опште дијалекатске слике поменутог поднебља.

Композиција зборника је изузетно добро организована, чиме се доприноси његовој прегледности. Након „Предговора” (стр. 9–18) уредника Радивоја Младеновића и „Закључака са конференције” (стр. 19–21) подељених у четрнаест тачака, следи четрнаест научних чланака (стр. 23–326), затим „Прилог библиографији о српским народним говорима Косова и Метохије” (стр. 327–331) Радивоја М. Младеновића и Бранкице Ђ. Марковић, списак скраћеница (стр. 333–337) подељен у два потпоглавља („Часописи” и „Зборници радова”), те „Библиографија” (стр. 339–387), у којој су најпре аутори класификовани по азбучном реду презимена, па испод презимена и имена сваког од њих следе њихови радови распоређени по хронолошком редоследу (од најраније објављеног). У зборнику можемо наћи и осам различитих дијалекатских карата (стр. 389–398). На самом крају налазе се „Индекс кључних речи” (стр. 399–400) распоређених по азбучном реду и „Индекс аутора” (стр. 401–405) у ком се аутори класификују опет по азбучном реду презимена.

У „Предговору” су дати подаци о научној конференцији, наведени су њени учесници, а изложен је и њен основни циљ, а то је стварање основа за будућа проучавања српских народних говора Косова и Метохије. Направљен је и осврт на досадашња истраживања ових говора, а онда је у кратким цртама представљен сваки рад појединачно. На самом крају уредник Радивоје Младеновић указује на прилоге, те упућује на „Индекс кључних речи” и „Индекс аутора”. У „Закључцима са конференције” дају се препоруке за будућа истраживања, а сумира се и оно до сада постигнуто.

За први научни рад („Косово и Метохија у оквиру српског дијалекатског простора” Слободана Н. Реметића (23–32. стр.)) можемо рећи да је најопштији, те да као такав представља неку врсту „увода” у остале радове. Овај рад нам доноси бројне податке о српским говорима на Косову и Метохији: о њиховом „мозаику”, миграцијама изазваним политичким или економским разлозима које су условиле ширење ових говора ка североистоку, те утицају турског, албанског и македонског језика. Аутор посебно истиче да је од изузетног значаја да ови народни говори буду достојно испитани, сматрајући то неписаним аманетом.

Други чланак („Прилог историји српских говора на подручју Косова и Метохије” Александра Б. Ломе и Жељка Д. Степановића (33–58. стр.)) односи се на историјску дијалектологију, јер се у њему разматра



„Рударски законик деспота Стефана Лазаревића”, који представља сведочанство о новобрдском говору из 15. века, а у коме се могу пронаћи бројне дијалекатске црте које одликују данашњи призренско-јужноморавски дијалекат. Анализирана су оба преписа, и старији ћирилични и млађи латинични. Оно што аутори у овим преписима истражују јесу две важне црте: екавски развој вокала *ћ* и прелаз *-л у -а*. Закључено је да латинични препис боље чува *јаш* него ћирилични, док је појава прелаз *-л у -а* обилато посведочена у оба преписа, уз напомену да има и примера са очуваним *-л*, док у латиничном препису има и примера преласка *-л у -о*, што се објашњава језичким осећањем преписивача. Промена *-л у -а* је, закључују аутори, централни аргумент да језик „Рударског законика деспота Стефана Лазаревића” репрезентује новобрдски говор са почетка 15. века, јер је одлика и савременог призренско-јужноморавског дијалекта. На крају рада аутори најављују истраживање и других дијалекатских црта овог споменика.

Затим имамо три рада која се баве по једним дијалектом заступљеним на подручју Косова и Метохије: „Дијалекатски мозаик косовскометохијских призренско-јужноморавских говора” Радивоја М. Младеновића (59–106. стр.), „Косовско-ресавски говори Косова и Метохије унутар косовско-ресавске дијалекатске области” Софије Р. Милорадовић (107–125. стр.) и „Зетско-сјенички говори Косова и Метохије унутар зетско-сјеничке дијалекатске области” Бојане М. Вељовић Поповић (127–141. стр.). Радивоје Младеновић се у свом чланку бави призренско-јужноморавским говорима за које наводи да заузимају највећу територију Косова и Метохије. У раду он описује њихов прозодијски систем, вокализам, консонантизам и морфолошки систем. Истиче да највећи део призренско-јужноморавских говора припада парадигматском акценту са варијацијама, да вокалски систем ове области садржи пет вокала (*а, е, и, о, у*), али и полугласник реда */а/*, те да је у малом делу говора забележен и лабијализовани вокал */и/*, да се разлике унутар говора на нивоу консонантског система тичу судбине африката, палаталних сонаната */љ, њ/*, судбине група */ли, ле/* и судбине */л/* на крају слога, а анализира и низ морфолошких особина. Посебне пасусе посвећује досадашњој истражености и правцима будућих истраживања, што у свом раду чини и Софија Милорадовић. Наиме, ауторка помиње бројне закључке дате у текстовима синтетичког и прегледног типа, најпре Павла Ивића и Слободана Реметића, а онда и Станислава Станковића, Милете Букумирића, Голуба Јашовића и других, те издваја да је у тим проучавањима пажња махом била усмерена на фонолошке, морфолошке и лексичке особине ових говора, а да су најмање проучаване синтакса и творба речи, што, заједно са целовитим дијалектолошким описима околине Косовске Митровице, околине Подујева и насеља тзв. северне зоне косовских говора, чека будуће истраживаче. Осим досадашњих дијалектолошких истраживања, Софија Милорадовић помиње и истраживања говора косовско-ресавског дијалекта на плану лингвистичке

географије, с обзиром на то да је један пункт овог подручја испитан за *Евројски лингвистички ајлас*, односно двадесет и два пункта за *Српски дијалектолошки ајлас*. У последњем делу научног рада, ауторка издваја приоритетне теме за будућа истраживања. Према томе, најважнији проблеми које је неопходно у будућим истраживањима решити тичу се: (1) прозодијског нивоа, конкретно утврђивања заступљености неоакута, (2) анализирања промена у говорима насталих несловенским утицајем, и (3) описивања анализације настале под утицајем суседних призренско-јужноморавских говора. Најзад, Бојана Вељовић Поповић у свом раду описује говоре зетско-сјеничког дијалекта на Косову и Метохији, поредећи их са њима суседним говорима Тутина, Сјенице и Новог Пазара. Грађу анализира на различитим нивоима: на плану прозодије, вокализма и консонантизма. Кад је реч о акцентуацији присутној на овом терену, показано је да се стање углавном слаже са оним у тутинско-новопазарско-сјеничком ареалу, али да разлику представља то што су послеакцентатске дужине углавном елиминисане, што је у примерима са рефлексима дугог јата акценат на првом слогу, а не на другом, и што се могу наћи примери са предакцентатским дужинама, којих нема у говорима Тутина, Сјенице и Новог Пазара. У вези са вокалским системом највећа пажња посвећена је замени вокала *jaɨ*, с обзиром на то да је ово подручје на ком су се сударила два говорна типа: екавски, који је стари, и ијекавски, донесен миграцијама. У раду се износе и особине осталих вокала, а посебно се истиче и судбина полугласника у говору Ибарског Колашина, где је вокализован, тј. замењен вокалом *a*. У делу посвећеном консонантизму ауторка наводи да су се бројне особине (неразликовање парова африката, умекшавање *л* у *љ* у групама испред предњих вокала и сл.) развиле под утицајем албанског језика.

Након радова у којима се махом износе истражене особине говора, а онда дају и препоруке за будућа научна истраживања, следи рад чија је главна тема ово друго. Реч је о чланку „О истраживању народних говора данас – о могућностима текстоллингвистичких дијалектолошких истраживања” Радоја Д. Симића и Јелене Р. Јовановић Симић (143–157. стр.). Аутори полазе од два дијалекатска текста, од којих је један снимљен крајем седме деценије двадесетог века у левачким селима, а други је сниман двадесетак година касније на Гори код Призрена. Иако су ови говори територијално и структурно удаљени, аутори овог чланка примећују одређене заједничке црте. Реч је пре свега о сличностима у начину излагања и композицији, те указују и на бројне специфичности у оквиру фолклорних облика, који су у мањој или већој мери у духу народног стваралаштва. Овакав рад је од нарочитог значаја што позива научнике на истраживања из области синтаксе и надсинтаксичке структуре, те показује да је и поред свих досадашњих проучавања одређен број научних питања остао отворен, да су поједине гране лингвистике недовољно описане. Међутим, можемо приметити да предлози изнети у овом раду могу бити корисни и проучаваоцима неких других народ-

них говора (научно питање и научна методологија били би исти, само би анализа била заснована на другој грађи).

Научни чланци „Српски језик и његови дијалекти на Косову и Метохији данас: стање и перспективе” Митре М. Рељић (159–179. стр.) и „О српској дијалекатској баштини Косова и Метохије и друштвенополитичким оквирима њеног истраживања” Првослава Т. Радића (181–210. стр.) посебно указују на друштвенополитичку ситуацију на Косову и Метохији и на њен утицај на народне говоре. Митра М. Рељић се бави актуелним стањем и расправља о тренутном положају Срба у бројним селима и општинама на Косову и Метохији, истичући негативан утицај демографије, економског и социјалног статуса српског народа и изостанка институционалне подршке на српске дијалекте. Простор Косова и Метохије је, како се у раду наводи, специфичан по томе што се на њему преплићу диглосија и билингвизам. Ауторка закључује да је управо то, заједно са навикама прикривања језичког идентитета, допринело лингвистичкој несигурности говорника српских дијалеката. Са друге стране Првослав Т. Радић анализира народне говоре посматрајући их кроз историју. У свом раду полази од статуса српских дијалеката на простору Косова и Метохије још од деветнаестог века и времена рада Вука Стефановића Караџића. Преглед двоековног истраживања српских народних говора на Косову и Метохији затим прати у различитим периодима: (1) од Берлинског конгреса до Великог рата, где нарочито истиче допринос Јована Живановића, Спиридона Гопчевића, Бранислава Нушића, Александра Белића и Глише Елезовића, (2) у времену Краљевине Југославије, када и даље значајне доприносе проучавању ових говора дају Белић и Елезовић, али и Миливој Павловић, док (3) за време Југославије након Другог светског рата издваја доприносе М. Стевановића, Д. Барјактаревића, М. Божовића, С. Реметића, Р. Младеновића, М. Букумирића и других. Осим лингвистичких проблема предмет ова два научна чланка је и очување националног идентитета и културне баштине на поменутом простору, чиме се примарно лингвистичка тематика зборника проширује.

У раду Рајне М. Драгићевић „Речници косовско-метохијских говора” (211–228. стр.) приказани су неки од најрепрезентативнијих објављених речника и збирки речи ових говора. Предмет њеног интересовања најпре су речници: *Речник косовско-метохијског дијалекта* Глише Елезовића, *Речник говора северне Метохије* Милете Букумирића, а онда и збирке речи Милете Букумирића, Голуба Јашовића, Маринка Божовића и Снежане Башчаревић. Након пасуса посвећених лексикографским описима „пастирске лексике и назива из домаће радиности” (стр. 218–219), „ратарске лексике и назива за мере” (стр. 219–221) и „назива за кућу и њене делове” (стр. 221–223) дати су и савети за даља лексиколошко-лексикографска истраживања говора овог подручја. Лексикологијом српских говора Косова и Метохије баве се и радови који следе: „О проучавању лексичког система српских говора Косова и Метохије

(на примеру српског призренског говора)" Тађе З. Милосављевић (229–249. стр.), „Називи хлеба у српским говорима Косова и Метохије у етнографском контексту” Љубинка Р. Раденковића (251–265. стр.) и „Проучавање дијалекатске лексике и терминологије на простору Косова и Метохије на Филозофском факултету Универзитета у Приштини” Голуба М. Јашовића (267–289. стр.). За сва три рада можемо рећи да имају и лингвокултуролошки значај, јер доносе податке о традиционалној култури поменуте говорне заједнице. Тања Милосављевић се у свом раду бави реконструисањем дијалекатске језичке слике света на основу лексике српског призренског говора, сагледане у контексту антропоцентричне парадигме, док Љубинко Раденковић бира лексему *хлеб*, животну намирницу која има велики удео у различитим обредима из животног циклуса човека, и анализира њена значења наведена у појединим речницима (Елезовићевом, Чемерицићевом и Букумирићевом), али притом доноси и бројне податке о обредима и обичајима везаним за различите врсте овог производа (*џшенични/кукурузни хлеб, кисејац, ђоџача, кравај, колач*). Најзад, чланак Голуба Јашовића се разликује од свих осталих чланака, јер у њему сазнајемо у којој мери је лексика ових говора истраживана на једној високошколској установи. Јашовић полази од *Речника косовско-метоховског дијалекта* Глигорија Елезовића, а онда наводи и бројне друге доприносе проучавању лексике овог подручја, да би у другом делу свог научног рада проговорио о проучавању дијалекатске лексике на Филозофском факултету Универзитета у Приштини. Помиње различите монографије, збирке лексема, научне радове, дипломске и завршне мастер радове и сл. који су објављивани у издању поменуте установе. Јашовић издваја и бројне ауторе најзначајнијих објављених научних дела из ове области: Милету Букумирића, Маринка Божовића, Милицу Мимовић и друге. И овај рад се завршава позивом на будућа истраживања, како би се испунио важан циљ, а то је да се што више грађе сачува од заборава.

Још једна област којој је посвећен посебан рад јесте ономастика. Осврт на досадашња ономастичка истраживања и указивање на будуће задатке проучавалаца пружа рад „Савремена ономастичка истраживања Косова и Метохије” Раде Р. Стијовић и Мирјане С. Гочанин (291–309. стр.). И у овом раду имамо излазак из чисто лингвистичких токова, пошто су неповољне политичке прилике допринеле да се не напише ономастика у оним крајевима где је апсолутно доминантно било албанско становништво. Ауторке наводе студије које пружају бројне значајне ономастичке податке (*Косово. Ојис земље и народа* (књ, I и II) Бранислава Нушића, *Ибарски Колашин* Милисаву Лутовца, *Горња Морава и Изморник* Атанасија Урошевића итд.), а дају и осврт на организована ономастичка истраживања, која почињу у осмој деценији двадесетог века. Осим теренских истраживања радило се и на објављивању прикупљене антропонимијске и топонимијске грађе, која је у највећој мери објављивана у *Ономастолошким њрилозима*. Спровођење ономастичких

истраживања, како је назначено и у „Закључцима” веома је важно јер се спроводи све већи утицај албанског језика на српску топонимију, па је било неопходно што пре сачувати грађу. Иако је прикупљена грађа довољно богата, потребно ју је и даље прикупљати, али и додатно анализирати, што Р. Стијовић и М. Гочанин констатују у свом закључку.

Последњи рад „Етнолингвистичка истраживања српских говора Косова и Метохије” Биљане Љ. Сикимић (311–326. стр.) доноси преглед прикупљања лингвистичке грађе на овом терену у 21. веку, али позива и на будуће активности које би подразумевале изградњу базе података, што би омогућило да се грађа брзо и лако претражује по различитим параметрима, а отворене су и могућности за израду различитих врста корпуса. Овај рад је од посебног значаја и због тога што доноси предлоге засноване на технолошким унапређењима, која су код нас у различитим областима проучавања лингвистике још увек недовољно развијена.

Посматрајући различите сегменте књиге, можемо закључити да научни зборник *Резултати досадашњих и правци будућих истраживања српских народних говора Косова и Метохије* представља веома значајан допринос српској дијалектологији, односно да служи као важан извор информација проучаваоцима народних говора. У сваком од четрнаест научних чланака тема дефинисана у њиховим насловима обрађивана је прецизно и јасно, уз присутну објективност аутора. Осим што се у чланцима излажу резултати досадашњих истраживања српских народних говора Косова и Метохије, дати су и неки правци њихових будућих проучавања, док прегледност композиције заједно са свим добро искоришћеним методама и бројним научно релевантним сазнањима додатно доприносе изузетној вредности овог научног дела.

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## **О АСТРОНОМСКОЈ ТЕРМИНОЛОГИЈИ У КЊИЖЕВНИМ ЈЕЗИЦИМА СРБА ХVІІІ И ХІХ ВЕКА**

(Исидора Г. Бјелаковић, *Терминологија у књижевним језицима Срба ХVІІІ и ХІХ века (астрономија)*, Нови Сад, Матица српска, 2022, 378 стр.)

У оквиру Одељења за књижевност и језик Матице српске објављена је монографија Исидоре Г. Бјелаковић *Терминологија у књижевним језицима Срба ХVІІІ и ХІХ века (астрономија)*. Иако основу студије чини докторска дисертација *Географска терминологија код Срба у ХVІІІ и ХІХ веку*, одбрањена 2012. године на Филозофском факултету у Новом Саду, ово истраживање је спроведено на знатно ширем корпусу, уз потпуну измену модела лексикографске обраде. У складу са тим, у ову публикацију инкорпорирани су и новије анализе посведочене грађе.

О успешности овог научног подухвата сведочи чињеница да је монографија *Терминологија у књижевним језицима Срба ХVІІІ и ХІХ века (астрономија)* награђена престижном наградом „Павле и Милка Ивић” за 2022. годину, коју додељује Славистичко друштво Србије.

Предмет истраживања монографије изречен је већ у наслову, а у даљем тексту на увид стручној јавности износи се опсежна анализа ове појаве. Монографија је тематски подељена на целине и поглавља, те тако након уводне речи и теоријско-методолошких разматрања, ауторка представља своје истраживање и анализу предстандардног лексикона, тематски ограниченог на терминологију из области астрономије, регистровану у делима научног карактера и изданицима, писаним код Срба на руском књижевном, славеносрпском, доситејевском и српском језику у периоду од 1783. до 1867. године. Своје истраживање ауторка ће заокружити резимеом на енглеском језику, док нам прилози у виду табеларних приказа на крају књиге пружају могућност сагледавања термина који одговарају стању у савременом српском терминолошком систему и њихових еквивалената који се нису усталили.

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Корпус за анализу чинило је 28 дела научног и научно-популарног карактера, као и уџбеника посвећених астрономији. Дефинишући појмове *штермин* и *штерминологија*, ауторка у фокус свог истраживања поставља питање времена стабилизације основног слоја астрономске терминологије у српском књижевном језику. У вези са наведеним, поставља се и питање структуре посведоченог регистра, његовог порекла, утицаја термилолошких система из других језика, те (дис)континуитета у његовој генези од најстаријих споменика до данас. Свим наведеним доменима ауторка посвећује одговарајуће поглавље у свом истраживању.

Анализа наведеног корпуса спроведена је како би се системски прикупила термилолошка грађа и саставио речник на основу стања затеченог у уџбеницима и делима научног карактера из поменутог периода, чиме би се омогућио бољи увид у развој астрономског термилолошког система у предстандардном периоду развоја српског књижевног језика. Лексикографска обрада (речничка макро и микроструктура) чини посебан сегмент ове публикације.

Прва целина „Теоријско-методолошки оквир истраживања” (9–20) обухвата дефинисање општих појмова: термилологије и астрономије, као и развој астрономије као научне дисциплине, при чему ауторка посебну пажњу посвећује успостављању астрономије као науке код Срба. Подаци су приказани хронолошки, почев од средњег века па све до друге половине XIX и почетка XX века. У ту сврху, ауторка се позива на сазнања других аутора, која су релевантна за њено истраживање, чиме додатно поткрепљује и аргументује своја запажања. У овој целини дефинисани су предмет, задаци и циљеви истраживања, којих се ауторка придржава током читавог рада, истичући да је грађа најпре системски прикупљена и лексикографски обрађена, а потом анализирана с обзиром на порекло и структуру. Анализа је спроведена удруживањем савремених лексиколошких приступа са методама дијахронијских истраживања. На тај начин, ауторка је забележен термилолошки регистар упоредила како са стањем у старословенском језику и средњовековној писмености тако и са ситуацијом у савременој термилологији не би ли утврдила у којој мери се може говорити о континуитету у датим термилолошким регистрима.

У другој целини „Анализа” (21–149), ауторка најпре излаже структуру термилолошког система (прво поглавље ове целине: *Структура штермилолошкој ретистра*), наводећи основне принципе настанка и формирања термина: *позајмљивање*, *штермилололизацију лексема ойшшеї лексичкој фонда* и *креирање штермина шворбом*, *калкирањем* и *семаншичким йосућивањем*. Међутим, како славенизми и хибриди (славеносрбизми) имају посебан статус у погледу порекла и структуре, те не могу бити укључени ни у једну од наведених група, о њима се не може говорити као о позајмљеницама, али ни као о лексемама домаћег порекла. Ауторка их зато посматра као посебне категорије, те с обзиром на



порекло и иновативни поступак који се налази у основи моделирања посведочених термина, грађа је подељена на четири целине:

(1) *Термини страних јорекла:*

а. интернационализми

б. германизми

в. турцизми

г. латинизми

д. грецизми

ђ. италијанизми

е. хунгаризми

(2) *Славенизми,*

(3) *Славеносрбизми,*

(4) *Термини домаће јорекла.*

Излажући сваку од наведених група појединачно датим редоследом и поткрепљујући је одговарајућим примерима, чије је порекло утврђено на основу података датих у одабраним речницима, а поред којих је наведен и податак о времену најстарије потврде на основу навода у RJA ZU и у речнику Н. Јанковића, ауторка закључује да најбројнију групу међу посведоченим термилошким регистром чине термини домаћег порекла, а да су међу позајмљеницама најбројнији интернационализми, док се број осталих посведочених термина страног порекла може сматрати занемарљивим.

Посебна пажња у овом делу монографије посвећена је једночланим и вишечланим термилошким јединицама (42–43). Под вишечланим термилошким јединицама или *фразним штерминима*, ауторка подразумева термилошке јединице које се формално реализују као синтагме, а семантички и функционално – као самосталне речи. Са друге стране, посведочени моноксемски термини подразумевају и неизведенице и изведенице, а међу изведеницама могуће је препознати оне добијене суфиксацијом, слагањем, сложено-суфиксалном творбом, а ређе изведенице настале чистом префиксалном и префиксално-суфиксалном творбом. Када су у питању вишечлани термини, ауторка бележи и оне моделе који одступају од стања у српском термилошком стандарду. Примери који иду у прилог овој тврдњи показују одступања која се огледају у три синтаксичке карактеристике, типичне за књижевне језике Срба у XVIII и XIX веку: постпозиција атрибута, антепозиција генитива и различити типови опкорачења. Надаље, ауторка се сасвим оправдано надовезује на извесна морфосинтаксичка обележја регистрованих термина, која не одговарају стању у стандардном српском језику: *род инштернационалних штермина, шроширење основе, једначење јенишива и акузајшива, дајшив, инштрументал, локајшив множине* (44–47).

Поредећи грађу забележену у старословенском језику и у српским средњовековним списима од XIII до XVIII века са термилошким системом регистрованим у датом истраживању, ауторка у другом

поглављу, које носи наслов *(Дис)континуишећ терминолошкој сисџема у љериоду IX/X–XIX века*, поставља питање да ли и у којој мери постоји континуитет у развоју терминологског сисџема из области астрономије од првих писаних докумената (X–XI век), тј. од првих писаних превода међу Србима до времена када астрономија код Срба почиње да се конституише као научна дисциплина. Сходно томе, како би се стекао што бољи увид у сличности и разлике међу регистрованим терминима, ауторка је забележену грађу поделила на неколико терминологских скупина, при чему је свака од њих дата у виду табеларног приказа, који читаоцу обезбеђује прегледност и могућност јаснијег уочавања поменутих сличности и разлика. На основу спроведене анализе, ауторка закључује да су у периоду од X/XI до XIX века функционисала два терминологска сисџема, у великој мери различита, а омеђена XVII веком, док је број заједничких термина релативно мали. Са друге стране, у циљу утврђивања мере у којој посведочени астрономски регистар из XVIII и XIX века одговара стању у савременој номенклатури, ова два сисџема су упоређена, а ауторка бележи свега 146 терминологских јединица које у потпуности одговарају стању у савременом терминологском регистру српског језика (треће поглавље *Однос љрема савременој љерминологији*). И на овом месту уочавамо систематичност у погледу представљања грађе, која је подељена на неколико терминологских скупина и дата у виду табеларних приказа.

Четврто поглавље у оквиру ове целине, *Процеси у формирању астрономске љерминологије у српским књижевним језицима језицима XVIII и XIX века*, посвећено је специфичним поступцима у формирању астрономске терминологије, а на основу којих ауторка ексцерпирану грађу дели на две веће целине:

1. Термини који одговарају савременом терминологском сисџему српског језика

2. Термини који се нису инкорпорирали у терминологски сисџем стандардног српског језика или су претрпели семантичку измену.

Поред забележених примера, у заградама се наводе године, хронолошки поређане према времену јављања у анализираној грађи: на овај начин, ауторка пружа могућност регистровања учесталости понављања датих термина током XVIII и почетком XIX века. Насупрот томе, за многе појмове којима оперише савремена астрономија, у анализираној грађи, наводи ауторка, не постоје термини. Они своју генезу, закључује она, везују за каснији временски период – крај XIX века и за XX век.

Посебно поглавље, *Лексичка спојивост љермина /Месец/ и /Сунце/, односи се на анализу лексичке спојивости лексема /Сунце/ и /Месец/ како би се уочиле сличности и разлике у односу на савремену стандарднојезичку ситуацију, а самим тим, и указало на развој лексичке спојивости анализираних термина. Наиме, забележено стање дато је у виду речника и упоређено је са стањем у савременим уџбеницима на српском језику. Поред тога, утврђено је и у којој мери лексичка се-*

мантика термина /Месец/ и /Сунце/ утиче на природу структурне везе у коју лексема ступају. На овом месту ауторка, заправо, говори о колокацијама, тј. о способности неке лексичке јединице да ступи у чврст, конвенционалан синтагматски однос са другим лексемама, пре чему тај однос у највећој мери зависи од лексичке семантике речи у позицији колоката. Проучавање оваквих веза има за резултат приказ стања у уџбеницима из XIX века: будући да аутори анализираних текстова настоје да на што сликовитији и пријемчивији начин објасне одређене природне феномене и процесе, ови уџбеници писани су више научно-популарним него научно-уџбеничким стилем.

У последњем поглављу унутар ове целине, *О семантици термиолошкој речника*, извесна пажња посвећена је степену семантичког варирања унутар посведоченог термиолошког регистра. Ауторка нам скреће пажњу на то да је ово варирање прилично ограничено, готово занемарљиво, што одговара резултатима ранијих истраживања. Наиме, ретке семантичке трансформације заснивају се углавном на синегдохи (нпр. мена - 'Месечева мена') и метонимији (нпр. зреник - 'хоризонт, привидна граница неба и земље'). Када је реч о метафори, ауторка закључује да семантичко варирање, којем је у основи метафора, није уочено у анализираној термиолошкој грађи.

Уколико узмемо у обзир да је ова монографија писана у корелацији са историјом језика, лексикографијом и лексикологијом, као значајном се намеће и чињеница ослањања ауторке и на историјску семантику као дисциплину која нам, између осталог, сведочи о историји народâ, па и човечанства: она је основно полазиште за реконструкцију иницијалног човековог поимања и концептуализације света, а самим тим и живота и прилика у далекој прошлости. Оваква кореспонденција поменутих научних дисциплина представља иницијалну тачку за осврт на добро познату везу између изворне семантике лексема из области астрономије и фундаменталног космогонијског концепта човека.

Трећу целину „Речник” (151–349) чини речник са својом макро и микроструктуром. С обзиром на околност да је жеља ауторке била да посведочени термиолошки регистар буде приступачан ширем пољу академске заједнице, па и сваком заинтересованом појединцу – одреднице су у овом речнику транскрибоване и узбучене према алфабетском редоследу стандардног српског језика. Будући да је лексикографска обрада у овој монографији подразумевала примену својеврсних комбинација различитих методолошких решења, речник би припадао хибридном термиолошко-историјском типу, са енциклопедијским елементима. Када је реч о микроструктури речника, ауторка врло концизно објашњава процес успостављања одредница, као и саму структуру речничког чланка. Свака одредница унутар речника означена је болдом, а након ње наводе се граматичке информације, регистрована форма у оригиналу, дефиниција (у италику), потврда са ширим контекстом у којем је пример забележен, синоними и изрази са датим терми-

ном који немају статус посебне термилошке јединице (под ознаком Изр.). Захваљујући овако осмишљеној концепцији, ауторка нам је дала увид у време појављивања, развој, смену, адаптационе процесе и стабилизацију одређеног броја термина из области астрономије.

Монографија *Терминологија у књижевним језицима Срба XVIII и XIX века (астрономија)* написана је изузетно јасно, прецизним и концизним језиком и без непотребних и оптерећујућих дигресија. Примери и грађа којима је илустрован анализиран термилошки систем одабрани су пажљиво, зналачки, тако да на убедљив и аргументован начин поткрепљују и потврђују закључке до којих је ауторка дошла. Сами закључци изложени су јасно и недвосмислено, у складу са природом и опсегом извршеног испитивања и доступним језичким чињеницама.

Сматрамо да је ауторка одговорила на постављене задатке и успешно реализовала своје истраживачке циљеве, те да ће представљена књига бити од изузетне користи и значаја у првом реду оним проучаваоцима чија су научна интересовања усмерена на домен лексикологије, лексикографије и историје језика. Овом књигом Исидора Г. Бјелаковић даје изузетан допринос изучавању термилошког система српскога језика, излазећи из временског оквира постављеног у наслову монографије поређењем са стањем датог система у старословенском језику, средњовековној писмености и са ситуацијом у савременој терминологији. На тај начин нам је омогућено сагледавање једног ширег система, система чија грађа може представљати основно полазиште за свако будуће изучавање астрономског термилошког регистра.

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