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HEDGES AND BOOSTERS IN ARABIC AND SERBIAN RESEARCH ARTICLES: THE ROLE OF PARTICLES, ADVERBS, ADJECTIVES, CLAUSES, AND PREPOSITIONAL PHRASES

The aim of the present study is to show the similarities and differences between Arabic and Serbian research papers in terms of particles, adverbs, adjectives, clauses, and prepositional phrases functioning as hedges and boosters. The results showed a lower frequency of hedges in these categories in the Serbian part of the corpus, except in the chemistry and pedagogy subcorpora. As for boosters, their usage is significant in the Arabic texts, unlike in the Serbian texts, suggesting a cultural difference. The studied categories are compared, with examples drawn from the corpus.

Keywords: metadiscourse, hedges, boosters, Arabic, Serbian, academic discourse

1. INTRODUCTION

The scientific style is a “strictly academic mode of presentation” and its most important characteristics are: accuracy in conveying information, a distinctly informative nature, persuasiveness of evidence, absence of an active agent, semantic clarity and unambiguity, and a minimal presence of expressive elements, evaluative elements, etc. (Mitrofanova, 1979: 69). According to Katalinić-Udovčić (1979: 78), the main features of the scientific style are abstract generalization, logical structure, objective neutrality, and precision. Scientific expression is “logical, abstract, objective, precise, normative, hermetic, monologic, characterized by the use of terminology and a strict selection of vocabulary”. (Tošović, 2002, as cited in Klikovac, 2008, 187). The substyles of the scientific style are strictly scientific (academic), scientific-textbook, and scientific-popular (Tošović, 2002: 330).

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One of the most studied features of academic discourse is metadiscourse. Metadiscourse is “the cover term for the self-reflective expressions used to negotiate interactional meanings in a text, assisting the writer (or speaker) to express a viewpoint and engage with readers as members of a particular community” (Hyland, 2005: 37). Metadiscourse is based on three key principles: 1) it is different from the propositional part of the text; 2) it refers to the features of the text related to the interaction between the writer and the reader; 3) it refers exclusively to internal parts of the discourse (Hyland, 2005: 38). Crismore et al. (1993: 40) use the term “metadiscourse” to refer to “the linguistic material in texts, whether spoken or written, that does not add anything to the propositional content but that is intended to help the listener or reader organize, interpret, and evaluate the information given”.

1.1 Classifications of Metadiscourse Markers

The first classification of metadiscourse markers was proposed by Vande Kopple (1985), who divides metadiscourse into two main categories: textual and interpersonal. Textual metadiscourse represents “communication about communication in that they can help us show how we link and relate individual propositions so that they form a cohesive and coherent text and how individual elements of those propositions make sense in conjunction with the other elements of the text in a particular situation” (Vande Kopple, 1985: 87). The other type of metadiscourse, interpersonal metadiscourse, is “communication about communication in that they can help us express our personalities and our reactions to the propositional content of our texts and characterize the interaction we would like to have with our readers about that content” (Vande Kopple, 1985: 86–87). According to Vande Kopple’s classification (1985: 83–87), textual metadiscourse markers include text connectives (*next, however, nevertheless*), the code glosses (*x means y*), illocution markers (*to sum up, for example*), and narrators (*according to James, the principal reported that*). The other kind of metadiscourse, interpersonal, is divided into three groups: validity markers (*perhaps, may, undoubtedly*), attitude markers (*surprisingly*), and commentary (*most of you will oppose the idea that*). The second significant classification of metadiscourse was made by Crismore et al. (1993: 47–54). In textual metadiscourse they include textual markers (logical connectives, sequencers, reminders, and topicalizers) and interpretive markers (code glosses, illocution markers, and announcements). Interpersonal metadiscourse include hedges, certainty markers, attributors, attitude markers, and commentary.

The most significant classification of metadiscourse is Hyland’s (2005: 49) interpersonal model of metadiscourse. “It is based on a functional approach which regards metadiscourse as the ways writers refer to the text, the writer or the reader” (Hyland, 2005: 48). The interpersonal model divides metadiscourse into interactive and interactional. Interactive metadiscourse markers guide the reader through the text, and its categories are transitional markers, which connect the relationships between

ideas expressed in clauses (*in addition; but; thus; and*), frame markers, which refer to discourse acts, sequences or stages (*finally; to conclude*), endophoric markers, which refer to other parts of the text (*noted above; see Fig*), evidential, which refer to sources outside the text (*according to X; Z states*), and code glosses, which are used to provide examples and additional explanations (*namely; e.g.; such as; in other words*). Interactional metadiscourse is also divided into five categories: hedges, through which authors express doubt about the propositional content (*might; perhaps; possible; about*), boosters through which authors emphasize certainty in the proposition (*in fact; definitely; it is clear that*), attitude markers, which express writer's attitude to proposition (*unfortunately; I agree; surprisingly*), self mentions, which writers use to refer to themselves (*I; we; my; me; our*), and engagement markers, through which the author builds a relationship with the readers (*consider; note; you can see that*).

Research on metadiscourse in the Arabic language mainly focuses on academic discourse and is often contrastive (Јазовић, 2025: 60), most often comparing it with metadiscourse in the English language (Almakrob, 2023; Alotaibi, 2015; Alotaibi, 2016; Andrusenko, 2015; El-Dakhs, 2020; Sultan, 2011; Zaki, 2022). Almakrob (2023) examines interactional metadiscourse in the introductions of academic papers in Arabic. The results of the study showed that boosters are used more frequently than hedges, leading the author to conclude that Arabic authors prefer to present their content as facts rather than as opinions (Almakrob 2023: 1598). In a study of paired abstracts in Arabic and English, Alotaibi (2015: 1) found that interactive metadiscourse markers are used more frequently than interactional ones, but the preferred categories differ: abstracts in Arabic employ more transitionial markers, while those in English use more frame markers and code glosses. English abstracts also relied more on interactional metadiscourse, except in the category of self-mention markers (Alotaibi 2015: 1). In another study, Alotaibi (2016) examines metadiscourse markers in the introduction and conclusion sections in Arabic and English research articles. The results showed that the text-oriented metadiscourse was more used in both corpora and it was “more prominent in introductions compared to conclusions” (Alotaibi, 2016: 182). He also found that English research articles employ more metadiscourse markers than Arabic ones (Alotaibi, 2016: 182). Zaki (2022) conducted a corpus-based study of abstracts of academic papers in Arabic, examining both groups of metadiscourse markers. The results showed that within the category of interactive metadiscourse, transitional markers and frame markers are used most frequently, while in interactional metadiscourse, boosters and self-mention markers are the most commonly employed (Zaki 2022: 113).

As for research on metadiscourse in the Serbian language, it is abundant and often involves contrastive studies (Јазовић, 2025: 60), particularly with English (e.g., Blagojević, 2008; Ђorđević, 2017; Ђorđević & Vesić Pavlović, 2020; Mirović & Bogdanović, 2016; Vučićević & Rakić, 2020; Јазовић, 2024; Јазовић, 2025).

In their study of markers in abstracts from the field of agricultural engineering, Đorđević and Vesić Pavlović (2020: 303) conclude that authors in this field rely more on interactive than on interactional metadiscourse, and that the use of hedges and boosters is almost equal in the corpus. Blagojević's (2008) study examines the use of metadiscourse markers in academic papers written in Serbian, in English as a native language, as well as in English-language papers authored by writers from Serbian-speaking areas. The research showed that when writing in English, authors from Serbian-speaking backgrounds tend to exhibit rhetorical transfer, i.e., they display a low level of rhetorical adaptation (Blagojević 2008: 231). Vučićević and Rakić's (2020: 269) research applies the taxonomy proposed by Blagojević (2008) and examines textual metadiscourse in book reviews written in English and Serbian. The study showed that more markers are used in reviews written in Serbian than in those written in English. Furthermore, logical textual connectors prevail over other textual connectives, discourse act markers, and markers of the author's reference to the discourse (Vučićević & Rakić, 2020: 269). Mirović and Bogdanović (2016) compare the use of metadiscourse in papers written in Serbian and English by the same authors, with the papers covering the same or similar topics. They conclude that both interactive and interactional metadiscourse markers are used more frequently in papers written in English. They also note that the authors successfully adapt their writing and transition from one writing culture to another (Mirović & Bogdanović, 2016: 395). Lazović (Лазовић, 2024: 116) points out that the use of interactive metadiscourse markers is more important for achieving textual coherence and cohesion in Arabic abstracts, as they employ significantly more transitional, frame, and endophoric markers than Serbian abstracts, while Serbian abstracts make greater use of evidential markers and code glosses. In another study, Lazović (Лазовић, 2025: 57) found that Arabic authors employ more interactional metadiscourse markers than Serbian authors, with the exception of attitude markers.

The present study is a contrastive analysis of hedges and boosters in academic papers in Arabic and Serbian, more specifically, the use of particles, adverbs, adjectives, clauses, and prepositional phrases functioning as hedges and boosters. We decided to include these categories because their equivalents in these languages often belong to different categories. For example, the equivalent of Serbian particle *naravno* (eng. *of course*) in Arabic is an adverb (*bi al-ṭabʿ*¹). Also, adjectives in Arabic are often found in constructions with the preposition *min* (e.g. *min al-wāḍiḥ* – *it is clear*), and their equivalent in Serbian are clauses with adverbs or particles. Moreover, the Serbian particle *nesumnjivo* (eng. *undoubtedly*) has equivalents both in Arabic and Serbian clauses (ar. *lā šakk^a*, sr. *nema sumnje*) and prepositional phrases (ar. *dūna šakk*, sr. *bez sumnje*). The aim of this research is to show the similarities and differences between Arabic and Serbian hedges and boosters in these categories, at both quantitative and qualitative levels.

¹ I used ZDMG transcription of Arabic words in this paper.

I put forward a hypothesis – boosters will be more prevalent in the Arabic part of the corpus than in the Serbian one. This hypothesis stems from one of the main disciplines of Arabic rhetoric – *word order* (ar. *‘ilm al-ma‘ānī*), according to whose theory “the constituent units of a proposition can be rearranged in order to achieve specific pragmatic effects and various communicative functions”, and among the linguistic devices that a speaker can use in an altered word order are *particles of affirmation* (ar. *’adawāt al-tawkīd*), among which are *qad* and *’inna* (eng. *indeed*). According to previous studies (Alotaibi, 2015: 6; Zaki, 2022: 125) these particles are noticeably present in the realizations of boosters in academic papers in Arabic, therefore, the hypothesis of boosters being more frequent in Arabic academic discourse in these categories is justified.

2. CORPUS AND METHODOLOGY

The research corpus will consist of 48 academic papers in Arabic and Serbian. It will be divided into an Arabic and a Serbian section, with each section comprising six subcorpora of academic papers excerpted from academic journals in various scientific fields, so as to cover both the hard and soft sciences (Hyland, 1998: 448). Each subcorpus will, therefore, contain 4 papers. The sciences represented by the subcorpora are 1) chemistry, 2) civil engineering, 3) medicine, 4) pedagogy, 5) applied linguistics, and 6) theoretical linguistics. Thus, the sciences included will be those in which different methodologies are applied, taking into account that, according to Hyland’s (1998: 448) classification, hard sciences are most often pure, while soft sciences are usually applied. In order to achieve a high level of comparability between subcorpus pairs, we will take into account overlaps in the narrower scientific discipline, the research subject, or similarities in methodology.

A pair of subcorpora in the field of chemistry includes two papers that use the chromatography method (CHar1, CHar2, CHsr1, CHsr2)², and two papers using the spectrophotometry method (CHar3, CHar4, CHsr3, CHsr4). Articles in the fields of medicine and civil engineering were selected based on a keyword search of Serbian-language papers on emarefa.com, a site specialized in searching for papers in Arabic. In the pair of subcorpora in the field of pedagogy, two papers deal with teacher competence and motivation ((PEDar1, PEDar3, PEDsr1 i PEDsr4) and student competence and motivation (PEDar2, PEDar4, PEDsr2 i PEDsr3). Two papers in the pair of subcorpora in the field of applied linguistics deal with the analysis of language errors (ALar2, ALar4, ALsr1, ALsr3) and two with language teaching methodology (ALar1, ALar3, ALsr2, ALsr4). In the pair of subcorpora in the field of theoretical linguistics, one paper deals with verb mood (TLar1 and TLsr1), one with semantics (TLar2 and TLsr2), and two with syntax (TLar3, TLar4, TLsr3, and TLsr4).

² The articles in the corpus are listed in the Sources section.

The study applied Hyland's (2005: 49) interpersonal model of metadiscourse. The corpus was annotated by marking hedges and boosters in the categories of particles, adverbs, adjectives, clauses, and prepositional phrases. A frequency analysis was conducted, followed by a contrastive analysis of the Arabic and Serbian parts of the corpus at both the quantitative and qualitative levels. The quantitative analysis involves comparing the frequencies of hedges and boosters in pairs of subcorpora. The qualitative analysis was conducted by comparing specific realizations of hedges and boosters in terms of their categorical status. The study does not include approximate hedges (e.g., *around*), as some of them function as prepositions, and in Arabic, the verb *yaqrabu* can be considered an approximate hedge. Also, abstracts are not included in the quantitative analysis.

3. RESULTS AND DISCUSSION

	Chemistry	Civil engineering	Medicine	Pedagogy	Applied linguistics	Theoretical linguistics
Arabic	0,28	0,76	2,735	0,78	1,48	2,15
Serbian	1,12	0,49	0,23	1,025	0,495	0,25

Table 1: Frequency of hedges in the Arabic and Serbian sections of the corpus

Table 1 shows the normalized frequency of hedges realized as particles, adverbs, and adjectives in the corpus. The frequency of these markers in the Serbian part of the corpus is lower compared to the Arabic part, except in the chemistry and pedagogy subcorpora. Only the Arabic subcorpora of medicine and theoretical linguistics can be said to have more frequent use of hedges from these categories. I will now provide examples from each category of hedges in the corpus.

Modal particles are more varied in the Arabic section of the corpus than in the Serbian section. In the Arabic section, there are *la'alla* (examples 1 and 2), *qad* + imperfective (examples 3 and 4), and *rubbamā* (examples 5 and 6), all of which mean *perhaps*.

- (1) *la'lla* al-muštağilīna fī al-'amaliyya al-ta'līmiyya yudrikūna al-'iğāba dūna ḡuhd 'aw tafkīr 'amīq (...)
(*Perhaps* those involved in the educational process understand the answer without much effort or deep thought (...)(ALar2, p. 295))
- (2) wa *la'alla* qawl ibn ḡinnī 'aqrab 'ilā al-ḥaqīqa, ḥaytu yaqūlu (...)
(*Perhaps* what Ibn Jinni says is closest to the truth, as he says (...)(TLar1, p. 96))
- (3) liḍā fa qad 'aqarrat al-kaṭīr min al-mu'tamarāt al-'ilmiyya wa al-mawāṭīq al-duwaliyya maḡmū'a min al-qawā'id wa al-muḥaddadāt al-latī *qad* taštariku fihā al-mabānī al-taqlīdiyya ma'a al-mabānī al-tārīḥiyya wa al-'aṭariyya bi waḡh 'āmm, wa 'ahammuhā (...)

(For this reason, many scientific conferences and international charters have adopted a set of rules and guidelines that *may* be common to traditional buildings and historical or archaeological structures in general, the most important of which are (...)(CEar1, p. 858))

- (4) wa *qad* yuwāḡihu al-mu'allim muškilāt mutanawwi'a ḥawla dāfi'iyyat al-ṭalaba dāḡila ġurfat al-šaff, fa hunāka ṭalaba yahtammūna bi šakl 'asāsiyy bi taḡannub ḡibrat al-fašal 'aktar min ihtimāmihi min bi 'amaliyyat al-ta'allum, wa ṭalaba ya'taqidūna bi 'anna 'ayy šay' ya'malūnahu yu'addī 'ilā al-naḡāḡ (...)

(*Maybe* the teacher encounters various problems related to student motivation in the classroom. There are students who essentially care more about avoiding the experience of failure than about the learning process itself, as well as students who believe that whatever they do leads to success (...)(PEDar1, p. 391))

- (5) kamā 'inna sabab siyādat wa baqā' ġins al-makūrāt al-mi'awiyya fī bī'at al-mustašfā hiya muqāwamatuhu al-ṭabī'iyya li al-'adīd min al-muḡāddāt al-ḡayawiyya al-mustaḡdama wa *rubbamā* al-sabab al-'aktar 'aḡammīyat^{an} huwa qudratuhu 'alā iktisāb al-muqāwama li kull al-muḡāddāt al-ḡayawiyya al-mutawaffira ḡāliyy^{an} 'immā 'an ṭarīq al-ṭafra 'aw 'an ṭarīq intiḡāl al-blāzmīdāt 'aw al-'anāšir al-wirāṭiyya al-qāfiza (Centikaya et al., 2000).

(Another reason for the dominance and persistence of the genus *Enterococcus* in the hospital environment is its natural resistance to many commonly used antibiotics, and *perhaps* the most important reason is its ability to acquire resistance to all currently available antibiotics, either through mutations or the transfer of plasmids or transposable genetic elements (Cetinkaya et al., 2000). (MEDar3, p. 44))

- (6) wa *rubbamā* ya'ūdu irtifā' mustawā al-dāfi'iyya al-'akādīmiyya al-dātiyya ladā ṭalaba al-ṭaḡaššus al-'ilmiyy 'ilā ṭabī'at al-ṭaḡaššus al-'ilmiyy wa ġiddiyat al-ṭalaba fī mu'addalāt 'āliya (...)

(A high level of intrinsic academic motivation among students in science and mathematics programs *maybe* can be naturally attributed to the nature of the program and the students' seriousness in achieving high grades (...)(PEDar1, p. 403))

Modal particles in the Serbian section of the corpus are *možda* (eng. *perhaps*) (examples 7 and 8) and *verovatno* (eng. *probably, likely*) (examples 9 and 10).

- (7) Уколико би се већи број испитаника других година старости укључио у нека будућа истраживања, *можда* би такви резултати могли имати другачију статистичку значајност.

(If a larger number of respondents from other age groups were included in future studies, such results will *maybe* have different statistical significance. (PEDsr4, p. 281))

- (8) Неко будуће истраживање *можда* би могло објаснити зашто је тако.
(Some future research *might* be able to explain why this is the case. (ALsr3, p. 110))
- (9) Kod kompleksa na pH 7,5 i 12 dva preklapljena pika ukazuju na postojanje dve frakcije vrlo bliskih molarnih masa, *verovatno* nastalih delimičnom hidrolizom dekstrana pod uticajem reakcionih uslova sinteze.
(In the complexes at pH 7.5 and 12, two overlapping peaks indicate the presence of two fractions with very similar molar masses, *likely* resulting from partial hydrolysis of dextran under the influence of the reaction conditions during synthesis. (CHsr2, p. 420))
- (10) Већи узорак испитаника *вероватно* би утицао и на значајност регресионе функције.
(A larger sample of respondents would *likely* also affect the significance of the regression function. (PEDsr4, p. 281))

As for adverbial hedges, we divide them into three groups: truth-related, epistemic, and indefinite, following Đorđević (2017: 114). There were no epistemic adverbial hedges in the Arabic section of the corpus, but there were indefinite: *ʿilā ḥadd mā*, *naw^{an} mā* (eng. *somewhat*) (examples 11 and 12) and *nisbiyy^{an}* (eng. *relatively*) (example 13).

- (11) fa hunā ʿayḍ^{an} yumkinu istiḥdām muṣṭalahāt al-manṭiqiyyīna mimmā yuʿādilu dalāla al-taḍammun *ʿilā ḥadd mā*.
(Here, one can also use the terms of logicians, which *somewhat* correspond to the meaning of implication. (TLar1, p. 101))
- (12) (...) wa ʿašāra fi ḥādā al-ʾiṭār Scallon (2004) bi ʾanna buḥūt taqyīm al-kafāʾāt bi wāsiṭat al-mahām al-murakkaba mutawaqqifa *naw^{an} mā* (...) ((... in this context, Scallon (2004) pointed out that research on assessing competencies through complex tasks has been *somewhat* stalled (... (PEDar4³))
- (13) taqyīm al-kafāʾāt lahu tārīḥ ṭawīl *nisbiyy^{an}* zahara munḍu bidāyat al-sabʿīnāt min al-qarn al-māḍī fi al-wilāyāt al-muttaḥida al-ʾamrīkiyya bi ism al-kafāʾāt al-dunyā Minimum Competences ka radd fiʾl ʾalā al-iḥtibārāt al-muqānnana al-qāʾima ʾalā muqāranat ʾadāʾ al-ṭulāb bi ʾingāzāt zumalāʾihim (...) (The assessment of competencies has a *relatively* long history, dating back to the early 1970s in the United States, when it appeared under the name “Minimum Competences” as a response to standardized tests based on comparing students’ achievements with the results of their peers (... (PEDar4))
- On the other hand, indefinite adverbial hedges in the Serbian section of the corpus were *donekle* and *nešto* (eng. *somewhat*) (example 14 and 15).

³ The pages in PEDar4 are not numbered.

- (14) Јасно је, међутим, сасвим да је понекад тешко разграничити KV-дирестате и KT-дирестате, јер свака промена квантитета *донекле* укључује и квалитативну промену.
(It is, however, quite clear that it is sometimes difficult to distinguish between KV-direct states and KT-direct states, since any change in quantity *somewhat* involves a qualitative change as well. (TLsr2, p. 60))
- (15) Наиме, младићи су реаговали *неушито* интензивнијим емоцијама из модалитета изненађења и радости од девојака.
(Namely, the young men reacted with *somewhat* more intense emotions of surprise and joy than the young women. (PEDsr3, p. 224))

There were also truth-related adverbial hedges in the Arabic section of the corpus: *‘āmma^{an}*, *‘umūm^{an}*, *bi šakl ‘āmm*, *bi šifa ‘āmma*, *bi wağh ‘āmm* (eng. *generally*) (examples 16 and 17), and *bi šakl ‘asāsiyy* (eng. *essentially*) (example 18). In the Serbian section of the corpus there were *generalno* (eng. *generally*) (example 19), *praktično* (eng. *practically*) (example 20), *suštinski*, *u supštini* (eng. *essentially*) (example 21), and *uopšte* (*in general*). There is, therefore, a variety of ways to express “generally” in Arabic, but Serbian has a greater number of truth-related adverbial hedges.

- (16) (...) wa kāna al-ḥağğ ‘inda al-nās huwa al-qasd *‘āmma^{an}*, wa kaḍālika ‘alfāz al-šalā, al-latī intaqalat min al-du‘ā’ al-‘āmm ‘ilā al-dalāla al-ḥašša ‘alā al-šalā (...)
(...) Hajj *generally* indicated intention in people, as did expressions for prayer, which shifted from the general meaning of du‘ā’ to the specific meaning of prayer (...) (TLar2, p. 192))
- (17) nulāḥizu min al-ğadwal al-sābiq ‘anna al-nisba al-‘a’lā li ḥuṭūra ḥudūt al-muḍā‘afāt kānat fī ‘amaliyyāt al-daraq al-nākisa *bi šakl ‘āmm* hāḍihi al-nisba manṭiqiyya bi sabab wuğūd al-iltiṣāqāt wa tabaddul al-ma‘ālim al-tašrīḥiyya fī ‘amaliyyāt al-daraq al-nākis.
(From the previous table, we observe that the highest percentage of risk for complications was present in repeated thyroid surgeries. *In general*, this percentage is logical due to the presence of adhesions and altered anatomical relationships in cases of repeated thyroid surgeries. (MEDar2, p. 123))
- (18) (...) kamā ‘anna ma‘rifat hāḍihi al-‘aḥṭā’ tusā‘idu *bi šakl ‘asāsiyy* wāḍi‘ al-muḥṭawā al-ta‘līmiyy li hāḍihi al-fi‘a ‘alā al-diḡqa fī intiḡā’ al-mawḍū‘āt al-luğawiyya al-muḥimma al-latī yaḥṭāğuhā al-dāris wa ṭarīqat mu‘ālağatihā wa taqḍīmihā fī al-minhāğ li al-dāris kamā yanbağī ‘an tuḡdima.
(...) additionally, knowledge of these errors *essentially* helps the creator of educational content for this group to accurately select the important

language topics needed by the student, as well as the way they are taught and presented in the curriculum, in the manner they should be presented. (ALar2, p. 285))

- (19) *Generalno*, mala pomeranja apsorpcionih maksimuma pod uticajem susptituenata ili rastvarača karakteristična su za molekule kod kojih u osnovnom stanju nisu izraženi dipoli, a kod kojih je elektronski prelaz udružen sa intramolekulskim prenosom elektrona [12].

(*Generally*, small shifts of absorption maxima under the influence of substituents or solvents are characteristic of molecules whose ground state does not exhibit pronounced dipoles, and in which the electronic transition is associated with intramolecular electron transfer [12]. (CHsr4 p. 262))

- (20) Tada je proračun AB okvirnih konstrukcija s tradicionalnom ispunom *praktično* nemoguć.

(At that point, the calculation of AB frame structures with traditional infill becomes *practically* impossible. (CEsr1, p. 44))

- (21) У *суштини*, већа дискрепанција између развојне и опажене оријентације значи да се више прецењује сопствена интеркултурна осетљивост (Hammer, 2022).

(*Essentially*, a greater discrepancy between developmental and perceived orientation means that one's own intercultural sensitivity is overestimated (Hammer, 2022). (PEDsr1, p. 295))

In the Serbian section of the corpus, epistemic adverbial hedges are realized by the marker *potencijalno* (eng. *potentially*), as shown in example 22.

- (22) То *попјенцијално* може указивати на различито поимање личних компетенција код различитог пола или неке друге разлике у ставовима. (This *potentially* may indicate a different perception of personal competencies across genders or some other difference in attitudes. (PEDsr4, p. 280))

As for hedges adjectives, in the Arabic section of the corpus there were *muḥtamal* (eng. *probable*) and *mumkin* (eng. *possible*). They are mostly used in constructions with *min* + definite adjective (examples 23 and 24), and rarely as an attribute (example 25).

- (23) ḥayṭu *min al-muḥtamal* 'anna al-ḥaṭa' qad yuntiḡu min 'an kayfiyyat muḥṭawā al-kitāb al-madrasiyy wa ittiḥād al-mu'allim ru'ya taṣṭiḥiyya fī taqwīm tarāḡim al-ṭullāb 'inda tawqī' 'awrāq al-imtiḥān 'aw taqwīm 'aḡwibatihim al-ṣafawiyya wa qillat ihtimām al-mu'allim bi al-muḥadaṭa wa al-takallum bi al-'arabiyya fī qā'at al-dirāsa (...)

(*It is probable* that the error stems from the content of the textbook and

from the teacher taking a superficial approach when evaluating students' translations during exam marking or assessing their oral responses, as well as from the teacher's insufficient interest in conversation and speaking Arabic in the classroom (...) (ALar4, p. 28))

- (24) (...) fa *min al-mumkin* 'an takūna al-mušābaha lafziyya faqat, ġayr 'annahā ġā'at fī mawāḍi' qalīla ġalaba 'alayhā al-taṣrīf (...)

((...) *it is possible* that the analogy exists only in the form of the expression, but it occurs in rare cases where morphology predominates (...) (TLar3, p. 77))

- (25) wa fassarāt al-bāwī (2010) tafawwuq al-'ināṭ 'an al-ḍukūr bi 'iddat 'awāmil *muḥtamala* minhā: tafawwuq al-'ināṭ 'an al-ḍukūr fī al-taḥṣīl mimma zāda mustawā al-ṭīqa ladayhinna; wa bi al-tālī zādat al-dāfi 'iyya al-'akādīmiyya al-dātiyya ma'ahunna.

(Al-Bawī (2010) explained the superiority of girls over boys through several *possible* factors, including the fact that girls achieve better academic results, which increases their level of self-confidence and, consequently, their intrinsic academic motivation. (PEDar1, p. 403))

The adjectives realized as hedges in the Serbian section of the corpus are *moгуć* (eng. *possible*) and *potencijalni* (eng. *potential*). The adjective *moгуć* can be found in the modal expression *moгуće je* (example 26), as well as functioning as an attribute (example 27). The hedge *potencijalni* is realized only as an attribute (example 28).

- (26) И с треће стране, *moгуће је* да неизворни говорници у Војводини овај присвојни придев, као део топонима, у свом говору користе као индеклинабилан.

(Third, *it is possible* that non-native speakers in Vojvodina use this possessive adjective, as part of a toponym, in their speech as indeclinable. (ALsr3, p. 108))

- (27) *Moгућу* узроци нетироидне болести код болесника који се лече хемодијализом јесу: смањена периферна конверзија Т4 у Т3 због недостатка ензима 5'-дејодиназе; хронична метаболичка ацидоза (НМА) (22); повећане вредности маркера инфламације (CRP, TNF, IL-6) (23–24); малнутриција (25); (...)

(The *possible* causes of non-thyroidal illness in patients undergoing hemodialysis are: reduced peripheral conversion of T4 to T3 due to a deficiency of the enzyme 5'-deiodinase; chronic metabolic acidosis (CMA) (22); elevated levels of inflammation markers (CRP, TNF, IL-6) (23–24); malnutrition (25); (...) (MEDsr1, p. 79))

- (28) Nivo obrazovanja i korišćenje pomagala predstavljaju *potencijalne* faktore rizika za nastanak demencije.

(Level of education and the use of assistive devices represent *potential* risk factors for the development of dementia. (MEDsr4, p. 4))

It is notable that the Arabic authors do not use equivalents for *potential* and *potentially*. A noticeable difference between the Arabic and Serbian texts is in the use of hedges that indicate a greater degree of authorial certainty: in Serbian, the modal particle *verovatno* is used, whereas in Arabic, the adjective *muḥtamal* is employed. There were no clauses and prepositional phrases in the corpus that function as hedges.

	Chemistry	Civil engineering	Medicine	Pedagogy	Applied linguistics	Theoretical linguistics
Arabic	1,84	6,62	5,58	4,88	5,405	5,68
Serbian	0,12	0,30	0,57	0,26	0,43	0,44

Table 2: Frequency of boosters in the Arabic and Serbian sections of the corpus

Table 2 shows the normalized frequency of boosters realized as particles, adverbs, adjectives, clauses, and prepositional phrases in the corpus. The frequency of these markers is considerably higher in the Arabic part of the corpus than in the Serbian one and in all subcorpora. This is in line with both Almakrob (2023: 1598) and our findings (Лазовић, 2025: 62) about the greater use of boosters than hedges in Arabic-language research articles. This is due to the overuse of *qad* + perf. and *'inna* in the Arabic texts. Our hypothesis is, therefore, confirmed.

'inna and *qad* + perf. are the only modal particles that function as boosters in the Arabic section of the corpus (examples 29–32), whereas in the Serbian part they are more varied: *naravno* (eng. *of course*) (example 33), *nesumnjivo* (eng. *undoubtedly*) (example 34), *svakako* (eng. *certainly*) (example 35), and *zaista* (eng. *indeed*) (example 36), even though their frequency is much lower.

- (29) (...) 'id *'inna* mu'ẓam ḥāḍihi al-murakkabāt ḍuwāba fī al-maḥall nafsihi, li ḍālika lā yumkinu istiḥlās murakkab bi wuḡūd al-murakkab al-'āḥar bi šakl kāmīl (...)

((...) since *indeed* most of these compounds are soluble in the same solvent, it is not possible to completely isolate one compound in the presence of another (...)) (CHar1, p. 17))

- (30) *'inna* sabab i'timād ḥāḍā al-ḡins ka musabbib šā'i' li 'adwā al-mustašfayāt qad yakūnu nātiḡ 'an al-istiḥdām al-wāsi' li al-sīfālūsburīnāt wa al-laḍī qad yusā'idu 'alā intiḥāb al-baktiriyya al-muqāwima ka al-makūrāt al-mi'awiyya fī al-flūrā al-birāziyya fecal flora (Kuhn et al., 1995)

(The reason why this genus is *indeed* considered a common cause of hospital infections may be the widespread use of cephalosporins, which may contribute to the selection of resistant bacteria such as enterococci in the patient's fecal flora (Kuhn et al., 1995). (MEDar3, p. 44))

- (31) wa lammā kānat al-mabānī al-taqlīdiyya bi maṭābat al-nawā al-'ulā li malāmiḥ al-taškīl al-mi'māriyy, liḍa fa *qad* kānat ḍāt ṭabī'a ḥāṣṣa mumayyiza fī ṭirāziḥā al-mi'māriyy (...)

- (Since traditional buildings represented the original basis for shaping architectural features, they *indeed* had a special and recognizable character in their architectural style (...)) (CEar1, p. 848))
- (32) wa *qad* ṭubbiqat al-dirāsa ‘alā ‘ayyina mukawwana min 12 mu‘allim^{an} wa 90 ṭālib^{an} min al-ṣaf al-ṭānī al-‘i‘dādiyy, wa *qad* tawaṣṣalat al-dirāsa ‘ilā ‘anna al-tadrīb sāhama fī ‘iksāb al-mušārikīna ‘anmāṭ^{an} sulūkiyyat^{an} lam takun mawḡūda qabla al-bad’ fī al-barnāmiġ.
(The study was *indeed* conducted on a sample of 12 teachers and 90 second-grade primary school students. The study *indeed* showed that the training contributed to the acquisition of behavioral patterns among participants who had not been present before the start of the program. (PEDar1, pp. 391–392))
- (33) *Naravno* da je u tom smislu potrebno pronaći odgovarajuću ravnotežu da bi se izbegla fosilizacija grešaka.
(*Of course*, in this sense it is necessary to find an appropriate balance in order to avoid the fossilization of errors. (ALSr1, p. 166))
- (34) Иако се начинско значење традиционално додељује адвербијалима, *несумњиво* је да се с њим могу појавити и супстантиви, који могу бити додатно одређени специфичним начинским значењима, истим којима се одређују и глаголске лексеме.
(Although manner meaning is traditionally assigned to adverbs, it is *undeniable* that it can also appear with nouns, which can be further specified by particular manner meanings—the same ones that are used to specify verbal lexemes. (TLSr1, p. 54))
- (35) To *svakako* ostavlja traga i na kognitivno funkcionisanje, što je evidentno i u našem istraživanju.
(This *certainly* also leaves a mark on cognitive functioning, which is evident in our study as well. (MEDsr4, p. 6))
- (36) Резултати су показали да одређене социјалне и когнитивне карактеристике ученика *заусица* утичу на њихову процену моралних прича које се односе на лагање.
(The results showed that certain social and cognitive characteristics of students *indeed* influence their evaluation of moral stories related to lying. (PEDsr2, p. 374))

As for adverbial boosters, we found *bi wuḍūḥ* (eng. *clearly*) (example 37), *bi šakl ‘akṭar wuḍūḥ^{an}* (eng. *more clearly*), *fī^{an}* (eng. *indeed*), and *ṭab^{an}* (eng. *of course*) (example 38) in the Arabic part of the corpus, as well as *evidentno* (eng. *evidently*) (example 39) and *jasno* (eng. *clearly*) (example 40) in the Serbian section.

- (37) (...) ‘iḍ yataḡallā mawḍi‘ al-tadāḥul al-luġawiyy bayna al-fārisiyya wa al-‘arabiyya fī al-tarġama *bi kull wuḍūḥ* (...)

- ((...) the site of linguistic interference between Persian and Arabic is clearly manifested in the translation (...) (ALar4, p. 19))
- (38) fa al-‘alāqa al-sababiyya hiya ‘iḥdā al-‘alāqāt fī al-mağāzīn, wa tab^{can} ḥaqīqat kull minhā taḥtalifu ‘an al-‘āḥar kamā ḡā’a fī tafāṣīl al-kutub, fa nantaqilu ‘ilā taṭbīqihā fī al-‘āyāt al-karīma.
(The causality relationship is one of the relationships in the two types of metaphor, where, of course, the essence of each differs, as explained in detail in the books, and we now move on to its application in the noble verses. (TLar1, pp. 96–97))
- (39) Iz navedenog evidentno je da je učestalost različitih izazivača IUT varira u skladu sa ispitivanim lokalitetom.
(From the above, it is evident that the frequency of different UTI pathogens varies according to the site under investigation. (MEDsr3, p. 7))
- (40) Rezultati jasno pokazuju veliku razliku u periodima oscilovanja između zgrade s praznim okvirima i zgrade s tradicionalnom ispunom.
(The results clearly show a large difference in oscillation periods between the building with empty frames and the building with traditional infill. (CEsr1, p. 43))

It is noticeable that the equivalent boosters in the two languages sometimes belong to different categories. They can also be translated into different categories in English.

The adjectival boosters in the Arabic part of the corpus are diverse: *badahiyy* (eng. *self-evident*), *ma‘lūm* (eng. *known*), *ma‘rūf* (eng. *known*), *mu‘akkad* (eng. *certain*), *wāḍiḥ* (eng. *clear*). In most cases, they occur in constructions with *min* (example 41), but sometimes they appear independently (example 42).

- (41) min al-ma‘lūm ‘anna mafhūm al-luġa al-‘insāniyya niẓām ramziyy, wa naḥnu ‘indamā nadrusu luġa mā ‘innamā nadrusu (niẓām^{an}), wa ḥādā al-fahm li ḥaqīqat al-luġa yaqūdunā ‘ilā ‘anna al-‘aḥṭā’ al-luġawiyya muḥālafa li ḥādā al-niẓām wa ḥāriġa ‘an masārihi (...)
(It is known that the concept of human language is a symbolic system, and when we study a language, we are in fact studying a system. This understanding of the essence of language leads us to the conclusion that linguistic errors are deviations from that system and fall outside its framework (...) (ALar2, p. 287))
- (42) ma‘rūf fī al-‘adabiyyāt ‘anna al-simāt al-maḡūliyya li ‘unṣur al-murakkab tasqutu min ra’s al-murakkab.
(It is known in the literature that the categorical features of a complex element are inherited from the head of that complex expression. (TLar4, p. 289))

On the other hand, there was only one instance of an adjective as a booster in the Serbian part of the corpus (example 43).

- (43) *Dokazane* su male razlike u laringealnoj disfunkciji između tipova gde je dominantan symptom tremor od osoba sa dominantnim simptomom posturalne nestabilnosti.
(Small differences in laryngeal dysfunction have been *proven* between the types where tremor is the dominant symptom and those where postural instability is the dominant symptom. (MEDsr2, p. 148))

Clause boosters refer to the author's commitment to the proposition, without any doubt. There were three different clause boosters present in the Arabic section of the corpus: *lā šakk^a* (example 44), *lā rayb^a* (example 45), and *laysa min šakk*, all meaning *no doubt*. The Serbian equivalent, *nema sumnje*, wasn't present in the corpus; therefore, there were no clause boosters in the Serbian part of the corpus.

- (44) *lā šakk^a* 'anna taršīd istiḥlāk al-tāqa šāra min 'awlawayyāt al-siyāsa al-āmma li al-mamlaka al-'arabiyya al-sa'ūdiyya (...)
(There is *no doubt* that the rationalization of energy consumption has become one of the priorities of public policy in the Kingdom of Saudi Arabia (...)) (CEar2, p. 3, abstract))
- (45) wa *lā rayb^a* 'anna al-'alāqāt al-mu'ğamiyya 'ayḍ^{an} tal'abu dawr^{an} kabīr^{an} fī 'irsā' hāḍiḥi al-'alāqāt wa 'iẓhār al-ma'ānī.
(There is *no doubt* that lexical links also play a major role in establishing these relationships and in uncovering meaning. (TLar1, p. 105))

Finally, the prepositional phrases in both parts of the corpus also indicate the author's full commitment to the proposition. There were *bi lā šakk* (example 46) and *dūna šakk wa lā rayb^a*, both meaning *without a doubt*, in the Arabic part of the corpus, whereas in the Serbian part there were *bez sumnje* (eng. *without a doubt*) (example 47) and *sa sigurnošću* (eng. *with certainty*) (example 48).

- (46) (...) ḥayṭu tufḍī kull al-tawğīhāt al-luğawiyya 'ilā dalālat al-naṣṣ al-latī tu'addī – *bi lā šakk* – waẓīfatuhā fī al-maqām al-laḍī waẓẓafat fīhi min 'iḥbār 'aw 'inšā' (...)
(...) all linguistic orientations lead to the meaning of the text, which – *without a doubt* – fulfills its function in the context in which it is used, whether it is for informing or creating (...) (TLar3, p. 77))
- (47) Upotreba ekvivalentne pritisnute dijagonale, *bez sumnje*, najviše je prihvaćen i najviše izučavan pristup.

(The use of the equivalent stressed diagonal is, *without a doubt*, the most accepted and most studied approach. (CEsr1, p. 16))

- (48) Притом се појава мушког рода множине *са сигурношћу* може утврдити само код присвојних заменица, док би се многи придеви у мушком роду множине могли тумачити и као погрешна употреба одређеног придевског вида, који страни студенти окружени изворним говорницима свакодневно могу чути и заменити с неодређеним видом (као у примеру Budimpešta je veoma lepi grad (korejski)).

(At the same time, the occurrence of the masculine plural can be determined *with certainty* only for possessive pronouns, whereas many adjectives in the masculine plural could also be interpreted as incorrect use of a specific adjectival form, which foreign students, surrounded by native speakers, may hear daily and substitute with the indefinite form (as in the example Budimpešta je veoma lepi grad [Korean]). (ALsr3, p. 110))

There was only one instance of each prepositional phrase that occurred in the corpus. Therefore, it could be said that this category is not typical for expressing the author's full commitment to the proposition.

4. CONCLUSION

Particles, adverbs, adjectives, clauses, and prepositional phrases can be used to express the author's commitment to the proposition, as well as to withhold it. The importance of their role varies across the languages studied, as certain categories prevail over others. Particles are especially important in Arabic for expressing boosting. In Serbian, according to our findings, adjectives and clauses do not play a significant role in expressing boosting. Boosters are considerably more significant in Arabic academic discourse than in Serbian, as they occur much more frequently in Arabic texts. As for hedges in the studied categories, they appear much less frequently than boosters in Arabic research articles, unlike in the Serbian part of the corpus, where their frequency is similarly low to that of boosters. Both hedges and boosters in the studied categories are diverse, but they function similarly and have equivalents in different categories when translated across languages.

The present study could be expanded to include other morphosyntactic categories, e.g., verbs and nouns. The corpus for the study of metadiscourse can also include different types of academic texts, making it possible to compare Arabic and Serbian in these types, e.g., in abstracts of doctoral dissertations. Metadiscourse markers are studied in different types of discourse where persuasion is important, so future studies could examine hedges and boosters in, for example, media discourse in Arabic and Serbian.

Sources:**Chemistry**

- CHar1: Maḥfūd, Ğ. (2012). taḥdīd al-bārāsītāmūl wa al-ībūbrūfan bi istiḥdām al-krūmātūğrāfiyā al-sā'ila 'āliya al-'adā'. *mağallat ġāmi'at dimašq li al-'ulūm al-'asāsiyya*, 28(2), 15–35.
- CHar2: Zeydān, M. et al. (2022). ṭarīqa taḥlīliyya ġadīda wa taqyīmuhā li taḥdīd sīftriyāksūn al-šūdiyūm bi istiḥdām al-krūmātūğrāfiyā al-sā'ila 'āliya al-'adā' bi al-ṭawr al-'akūs. *mağallat ġāmi'at dimašq li al-'ulūm al-'asāsiyya*, 38(2), 219–239.
- CHar3: Muḥammad, 'A, Š. (2013). ṭarīqa ṭayfiyya li taqdīr 'aqqār al-izūniyāzāyd min ḥilāl takwīn murakkab 'āzūtiyy bi šaklihi al-naqiyy wa fī mustaḥḍarātihi al-šaydalāniyya. *mağallat al-kūfa li 'ulūm al-kīmiyā'*, 8, 1–10.
- CHar4: Muḥammad, Ğ. H. (2013). al-taqdīr al-ṭayfiyy li 'aqqār al-klūrūmfīnkūl fi al-mustaḥḍarāt al-šaydalāniyya bi wisāṭat tafā'ul al-izdiwāğ al-ta'aksudiyy wa bi taqniyat al-qiyās al-lawniyy. *mağallat al-kūfa li 'ulūm al-kīmiyā'*, 7, 23–34.
- CHsr1: Dobričić, V., Vladimirov, S., Čudina, O. (2014). Primena hromatografskih tehnika u optimizaciji procesa prečišćavanja amida kortijske kiseline iz hidrokortizona i etil estra L-glicina. *Arhiv za farmaciju*, 64(3), 220–229.
- CHsr2: Savić, I. i dr. (2009). Primena HP-GFC hromatografske metode za analizu oligosaharida u bioaktivnim kompleksima. *Hemijska industrija*, 63(5), 415–426.
- CHsr3: Zečević, M., Jocić, B., Ivanović, I. (2004). Primena eksperimentalnog dizajna u optimizaciji VIS spektrofotometrijske metode za određivanje feroglicin sulfata u Orferon retard tabletama. *Arhiv za farmaciju*, 54(1-2), 51–59.
- CHsr4: Matijević, B. i dr. (2016). Solvatohromizam N-aril-fenilacetamida. Zaštita materijala, 57(2), 253–264.

Civil engineering

- CEar1: Bāsīlī, 'Ī. F. M., 'abd al-Ḥamīd, T. R. (2017). ta'ṭīr istilhām wāğihāt al-mabānī al-taqlīdiyya 'alā malāmiḥ al-taškīl al-mī'māriyy al-mu'āšir. *Journal of Engineering Sciences*, 45(6), 847–862.
- CEar2: Sa'īd, S. 'A. (1999). taqšīmāt al-tāqa al-kahrabā'iyya fī al-mabānī al-sakaniyya al-sa'ūdiyya. *mağallat ġāmi'at al-malik 'abd al-'azīz: al-'ulūm al-handasiyya*, 11(2), 3–20.
- CEar3: Ḥuḍūr, L. 'A. (2020). iṭār istrāṭiğiiyy muta'addid al-ma'āyir li taḥsīn kafā'a al-tāqa al-tašğīliyya li al-'abniya al-sakaniyya fī zill 'i'ādat al-'i'mār. *mağallat ġāmi'at dimašq li al-'ulūm al-handasiyya*, 36(1), 57–72.
- CEar4: Šaraf, T. M. (2016). muqāwamat al-mutadaḥriğāt al-kurawiyya al-bāzaltiyya li al-'aḥmāl al-zilzāliyya. *mağallat ġāmi'at dimašq li al-'ulūm al-handasiyya*, 32(1), 89–101.

- CEsr1: Marinković, M., Flores, C. S., Butenweg, C. (2020). Numerička analiza armiranobetonskih okvirnih zgrada sa izolovanom zidanom ispunom. *Građevinski materijali i konstrukcije*, 63(4), 13–48.
- CEsr2: Milošević, V., Kostić, D., Milošević, J. (2020). Zavisnost sila zatezanja membranskih konstrukcija od različitih parametara pod dejstvom koncentrisane sile. *Građevinski materijali i konstrukcije*, 63(1), 29–43.
- CEsr3: Barović, D., Milajić, A., Beljaković, D. (2017). Optimalno oblikovanje i pozicioniranje energetske efikasne zgrade. *Tehnika*, 72(4), 481–489.
- CEsr4: Vukadinović, A., Radosavljević, J., Đorđević, V. (2020). Uticaj orijentacije individualnog stambenog objekta sa staklenom verandom na potrošnju energije i emisiju CO₂. *Tehnika*, 75(5), 563–570.

Medicine

- MEDar1: Ḥanān, Ṭ., Baw‘ūd, ‘A. (2020). šakl al-ikṭi‘āb wa idṭirāb ba‘ḍ al-wazā‘if al-ḡabhiyya al-tanfīḍiyya ladā al-musinnīna. *mağallat al-bāḥiṭ fī al-‘ulūm al-‘insāniyya wa al-iğtimā‘iyya*, 12(4), 407–412.
- MEDar2: ‘Alī, M., Qanḡrāwī, ‘A., Māniḡyān, T. (2015). dirāsāt al-muḍā‘afāt al-qarība li ḡirāḥa al-ḡudda al-daraqiyya. *mağallat ḡāmi‘at tišrīn li al-buḡūt wa al-dirāsāt al-‘ilmiyya silsilat al-‘ulūm al-ṣiḡḡiyya*, 37(1), 113–128.
- MEDar3: Naḡm, Ḥ, Z., ‘Īsā, M. ‘A. (2013). intišār naw‘ay ḡurṭūma al-makūrāt al-mi‘awiyya Enterococcus faecalis wa Enterococcus faecium ḍimna bī‘at al-mustašfayāt wa al-miyāḥ fī maḍīna al-mawṣil. *mağallat ‘ulūm rāfidayn*, 24(5), 38–54.
- MEDar4: Bakrī, Z. N. M. (2021). al-tašawwuhāt al-ma‘rifiyya ladā marḍā al-šalal al-ru‘āš. *mağallat kulliyyat al-‘ādāb bi qinā*, 52(1), 14–29.
- MEDsr1: Лазаревић, М. и др. (2015). Функција штитасте жлезде код болесника на хемодијализи. *Медицински часопис*, 49(3), 78–84.
- MEDsr2: Paunović, V., Petrović Lazić, M., Vuković, M. (2023). Poremećaji glasa kod osoba sa Parkinsonovom bolešću: karakteristike, procena i tretman. *Medicinski časopis*, 57(4), 147–153.
- MEDsr3: Smieško, G., Baroš Brkljača, M., Banović, P. (2022). Povećana učestalost urinarnih infekcija izazvanih rodnom Enterococcus kod pacijenata COVID-19 bolnice Kliničkog centra Vojvodine. *PONS - medicinski časopis*, 19(1), 4–8.
- MEDsr4: Živanović, S. i dr. (2023). Procjena kognitivnog statusa kod starijih osoba u zajednici. *PONS - medicinski časopis*, 20(1), 3–8.

Pedagogy

- PEDar1: al-Balūšī, Š. b. ‘Ī., al-Maḡrizi, R. S., Šabīb, ‘A. M. (2021). ta‘ṭīr al-sulūk al-dāfi‘iyy al-dāfiyy li al-mu‘allim ‘alā al-dāfi‘iyya al-‘akāḍimiyya al-dāfiyya ladā ṭalaba al-šaff al-ḡādiya ‘ašara fī saltanat ‘umān. *mağallat al-‘ulūm al-tarbawīyya wa al-naḡsiyya*, 22(1), 387–414.

- PEDar2: al-Šahrī, F. 'A., Abā ḥayl, A. 'A. (2021). al-dāfi 'iyya al-'aqliyya wa 'alāqatuhā bi 'ādāt al-'aql ladā 'ayyina min ṭālibāt al-marḥala al-ṭānawīyya bi madīnat ḡadda. *al-maḡalla al-'arabiyya li al-'ulūm wa našr al-'abḥāt maḡallat al-'ulūm al-tarbawīyya wa al-nafsiyya*, 5(22), 115–133.
- PEDar3: 'abd al-Wahāb, Ġ., Ġamīla, B. (2020). “‘aṭar ba 'ḍ al-mutaḡayyirāt 'alā takwīn al-mu'allimīna wifqa manḡaḡiyyat al-tadrīs bi al-muqāraba bi al-kafā'āt” dirāsa waṣfiyya ladā 'ayyina min mu'allimī al-ta'līm al-ibtidā'iyy. *maḡallat al-bāḡit fī al-'ulūm al-'insāniyya wa al-iḡtimā'iyya*, 12(1), 1–16.
- PEDar4: Fārūq, T. (2017). taqyīm kafā'āt al-ṭullāb: bayna al-wāqi' wa al-taḡaddiyāt. *maḡallat al-'ulūm al-nafsiyya wa al-tarbawīyya*, 5(2), 161–175.
- PEDsr1: Димитријевић, Б. и др. (2024). Интеркултурна осетљивост наставника у културно хетерогеном контексту у Србији: прихватање културних разлика или прецењивање сопствене интеркултурне осетљивости?. *Насијава и васијишање*, 73(3), 283–300.
- PEDsr2: Шимоњи, Г., Мајор, Ј. (2024). Ко лаже, а ко говори истину? Улога образовања у развоју разумевања лажи. *Насијава и васијишање*, 73(3), 363–376.
- PEDsr3: Стојановић, Б., Миловановић, Р., Ћирковић-Миладиновић, И. (2023). Емоционалне реакције адолесцената у настави. *Узданица*, 20(1), 215–228.
- PEDsr4: Брадоњић, Т. (2024). Значај интринзичке мотивације за избор будуће професије и професионални развој – ставови наставника. *Узданица*, 21(2), 267–283.

Applied linguistics

- ALar1: al-Rabābī 'a, I. Ḥ. (2019). ta'līm al-luḡa al-'arabiyya li al-nāṭiqīna bi ḡayrihā min manzūr al-madḡal al-waṣīfiyy. *Dirāsāt, al-'ulūm al-'insāniyya wa al-iḡtimā'iyya*, 46(1), 105–122.
- ALar2: al-Ġanādiba, 'A. S. (2019). al-'aḡṭā' al-kitābiyya fī al-luḡa al-'arabiyya ladā ḡayr al-mutaḡaṣṣiṣīna fī ḡāmi'at Zāyid dirāsa maydāniyya taḡlīliyya. *Dirāsāt, al-'ulūm al-'insāniyya wa al-iḡtimā'iyya*, 46(2), 283–298.
- ALar3: Banāḡī, Ḥ. (2022). binā' al-tamārīn al-luḡawīyya wa dawruhā fī ta'līmiyyat al-luḡāt (al-'arabiyya al-'amāzīḡiyya al-faransiyya wa al-'iṅḡilīziyya) dirāsa taḡlīliyya taqwīmiyya li kutub al-sana al-ṭāliṭa min al-ta'līm al-mutawassiṭ fī ḍaw' al-lisāniyyāt al-taṭbīqiyya. *maḡallat al-'ādāb wa al-luḡāt wa al-'ulūm al-'insāniyya*, 5(2), 165–187.
- ALar4: Zare, S. et al. (2018). dirāsāt 'aḡṭā' al-tarḡama ladā muta'allimī al-luḡa al-'arabiyya fī al-madāris al-'irāniyya (ṭullāb al-marḥala al-ṭāliṭa al-ṭānawīyya al-ṭāniya bi muḡāfazāt fāris namūdaḡ^{an}). *buhūt fī al-luḡa al-'arabiyya*, 10(19), 15–32.

- ALsr1: Perišić Arsić, O. (2016). Analiza grešaka u srpskom jeziku kao stranom na primeru italofona. U V. Krajišnik, N. Marinković, N. Stržak (ured.), *Srpski jezik kao strani u teoriji i praksi III* (155–168). Filološki fakultet
- ALsr2: Mićović, D. (2020). Uticaj fonda usvojenih reči na razumevanje pročitanoг stručnog teksta na engleskom jeziku — pilot istraživanje. *Analiza Filološkog fakulteta*, 32(1), 207–220.
- ALsr3: Бабић, Б. (2023). Анализа грешака у облику конгруентне речи у именичкој синтагми у српском као страном језику. *Методички виђици*, 14(2), 95–118.
- ALsr4: Пурић, Д. (2018). Вежбање у настави српског језика у функцији унапређивања усменог и писаног изражавања ученика млађег школског узраста. *Зборник радова педагошког факултета, Ужице*, 20, 163–176.

Theoretical linguistics

- TLar1: Ḥaydarī, Y., Nağafī, R. S. (2018). dirāsāt nizām al-‘alāqāt bayna al-ḥāl al-mufrada wa šāḥibihā fī al-qur’ān al-karīm. *buḥūt fī al-luğā al-‘arabiyya*, 19, 91–107.
- TLar2: Badriyya, N. ‘a. F. (2022). al-dalāla anmāṭuhā wa zawāhiruhā al-luğawiyya. *mağallat wādī al-nīl li al-dirāsāt wa al-buḥūt al-‘insāniyya wa al-iğtimā’iyya wa al-tarbawiyya*, 33, 169–200.
- TLar3: Beḥūla, B., al-‘Amāmī, S. Ş. M. (2021). al-mušābaha fī al-naḥw al-‘arabiyy. *mağallat al-‘ādāb li al-dirāsāt al-luğawiyya wa al-‘adabiyya*, 9, 62–86.
- TLar4: Ḥaḍrī, ‘A. (2020). tarkīb al-‘aṭf fī al-‘arabiyya dirāsa lisāniyya. *mağallat al-qārī’ li al-dirāsāt al-‘adabiyya wa al-naqdiyya wa al-luğawiyya*, 3(1), 266–290.
- TLsr1: Редли, Ј. (2019). Именичке синтагме с начинским значењем у српском језику. *Зборник мајице српске за филологију и лингвистику*, 62(1), 45–56.
- TLsr2: Ајдановић, Ј. (2019). Синтаксичко-семантичка анализа глагола са префиксом -наг. *Зборник Мајице српске за филологију и лингвистику*, 62(1), 57–71.
- TLsr3: Антонић, И. (2022). Синтакса и семантика предлога низ. *Слависти́ка*, 26(1), 319–338.
- TLsr4: Вићентић, Б. (2009). Синтакса именица nomina agentis у руском у поређењу са српским. *Слависти́ка*, 13, 137–149.

References:

- Almakrob, A. Y. (2023). How do Arab Writers Interact With Their Readers? An Analysis of the Use of Metadiscourse Markers. *Theory and Practice in Language Studies*, 13(6), 1591–1600.
- Alotaibi, H. (2015). Metadiscourse in Arabic and English research article abstracts. *World Journal of English Language*, 5(2), 1–8.

- Alotaibi, H. (2016). Comparison of metadiscourse markers in Arabic and English research articles in the introduction and conclusion sections. *The Linguistics Journal*, 10(1), 182–202.
- Andrusenko, A. (2015). A contrastive analysis of Spanish-Arabic metadiscourse use in persuasive academic writing. *Procedia-Social and Behavioral Sciences*, 178, 9–14.
- Blagojević, S. (2008). *Metadiskurs u akademskom diskursu*. Filozofski fakultet.
- Crismore et al. (1993). Metadiscourse in persuasive writing: A study of texts written by American and Finnish university students. *Written Communication*, 10(1), 39–71.
- El-Dakhs, D. A. S. (2020). Are Arabic and English Research Article Abstracts Different? Rhetorical Structure & Interaction in Focus. *The Asian ESP Journal*, 16(5.1), 6–32.
- Hyland, K. (1998). Persuasion and context: The pragmatics of academic metadiscourse. *Journal of Pragmatics*, 30(4), 437–455.
- Hyland, K. (2005). *Metadiscourse: Exploring Interaction in Writing*. Continuum.
- Katalinić-Udovčić, P. (1979). Naučni funkcionalni stil. *Strani jezici*, 8(1–2), 74–82.
- Klikovac, D. (2008). *Jezik i moć – Ogledi iz sociolingvistike i stilistike*. Biblioteka XX vek.
- Mirović, I. & Bogdanović, V. (2016). Use of metadiscourse in research articles written in L1 and L2 by the same authors. In S. Plane, C. Bazerman, F. Rondelli, C. Donahue, A. N. Applebee, C. Bore ... D. Russell (Eds.), *Recherches en écritures: Regards pluriels. Recherches Textuelles, No. 13* (pp. 435–456). Université de Lorraine.
- Mitrofanova, O. D. (1979). Jezik znanstveno-tehničke literature. *Strani jezici*, 8(1–2), 68–73.
- Sultan, A. (2011). A contrastive study of metadiscourse in English and Arabic linguistics research articles. *Acta Linguistica*, 5(1), 28–41.
- Tošović, B. (2002). *Funkcionalni stilovi*. Beogradska knjiga.
- Vande Kopple, W. (1985). Some exploratory discourse on metadiscourse. *College Composition and Communication*, 36, 82–93.
- Vučičević, A. L. & Rakić, A. D. (2020). Textual metadiscourse in academic book reviews in Serbian and English. *Zbornik radova Filozofskog fakulteta*, 50(3), 269–292.
- Zaki, M. (2022). The metadiscourse of Arabic academic abstracts: A corpus-based study. *Research in Corpus Linguistics*, 10(2), 113–146.
- Đorđević, D. (2017). *Ograde u naučnim radovima na engleskom i srpskom jeziku* [Unpublished doctoral dissertation]. University of Belgrade.
- Đorđević, D., & Vesić Pavlović, T. (2020). Metadiskursni markeri u kontekstu sažetaka naučnih radova iz poljoprivredne tehnike. In V. Lopičić & B. Mišić (eds.), *Jezik, književnost, kontekst* (pp. 303–317). Filozofski fakultet.

- Лазовић, Н. (2024). Интерактивни метадискурсни маркери у арапским и српским апстракнима научних радова – контрастивна анализа. У М. Ковачевић, Ј. Петковић (уред.), *Савремена проучавања језика и књижевности: Зборник радова са XV научној скупи младих филолога Србије, одржаној 1. априла 2023. године на Филолошко-уметничком факултету у Крагујевцу. Књ. 1* (113–122). Филолошко-уметнички факултет.
- Лазовић, Н. (2025). Контрастивно истраживање интеракционих метадискурсних маркера у арапским и српским апстракнима научних радова. *Лингвистика*, 86, 57–70.

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**OGRADJE I POJAČIVAČI U ARAPSKIM I SRPSKIM NAUČNIM RADOVIMA:
ULOGA ČESTICA, PRILOGA, PRIDEVA, KLAUZI I PREDLOŠKIH FRAZA**

Rezime

Cilj ovog istraživanja je da prikaže sličnosti i razlike između arapskih i srpskih naučnih radova u pogledu čestica, priloga, prideva, klauza i predloških fraza koji funkcionišu kao ograde i pojačivači. Rezultati su pokazali manju učestalost ograda u ovim kategorijama u srpskom delu korpusa, osim u potkorpusima hemije i pedagogije. Što se tiče pojačivača, njihova upotreba je značajna u arapskim tekstovima, za razliku od srpskih tekstova, što ukazuje na kulturnu razliku. Proučavane kategorije su upoređene, sa datim primerima preuzetim iz korpusa.

Ključne reči: metadiskurs, ograde, pojačivači, arapski, srpski, akademski diskurs