

HEDGING AND BOOSTING STRATEGIES IN LINGUISTICS AND GEOGRAPHY – A CASE STUDY OF STUDENT PERCEPTION

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Abstract: This paper examines the use of hedging and boosting strategies in written academic discourse, specifically in scientific/research monographs in Linguistics and Geography. In particular, hedging and boosting strategies in academia are analysed within the corpora of monographs written in the two abovementioned disciplines in English and in Serbian, in order to investigate the possible differences in the interactional discipline-specific practices. Moreover, the paper explores student perceptions of the hedging and boosting used in the written scientific discourse in both Linguistics and Geography.

This pilot study, conducted at the University of Novi Sad, focuses on the student reception of the hedging and boosting used in the scientific monograph corpora in the field of Linguistics and Geography in English and Serbian. Our findings show that focusing on hedging and boosting strategies in academic discourse in the English and in the Serbian corpora helps students achieve a better understanding of the discourse.

We propose that exposing students to various samples of scientific writing and guiding them through the examination of the discipline-specific usage of hedges and boosters could benefit both students and language instructors. Students would better understand the intentions and implications of the authors' scientific discourses if they were given a comparison of the English and Serbian discipline-specific hedging and boosting strategies. If language instructors were to focus students' attention on the language-specific features used in scientific discourse, it would improve students' understanding of scientific inquiry and scientific methodologies.

Guiding students through the rules of hedging and boosting would most likely enable them to better locate hedging and boosting within the existing body of literature, to reflect upon the credibility of scientific findings, and to integrate such strategies into their future academic and professional writing.

Keywords: scientific monograph, hedges, boosters, LSP instruction

Introduction

In the academic written discourse, authors utilize different strategies to indicate their standpoints and specify their attitude to the referential material they are presenting to the readers. Hedging and boosting, as techniques operating within such metastrategies, contribute to these ends as they provide cues to indicate doubt or reservation, or to underline assertion. This paper investigates hedging and boosting strategies applied in scientific monographs in two fields; one from the natural science (Geography) and one from the humanities (Linguistics), in two languages – English and Serbian. On the one hand, the paper investigates the presence of possible differences in the usage of hedging and boosting between the English and Serbian written academic discourse, and on the other examines the perception of the native speakers of Serbian, participating students of the University of Novi Sad, regarding these strategies.

After a presentation of the relevant theoretical background, the paper considers the results of research related to students' interpretation of hedging and boosting in the above-mentioned fields, analysing whether the awareness of these strategies facilitates the students' comprehension of the structure of scientific texts and correspondingly helps them to prepare their own scientific papers and presentations.

Theoretical Background

Some current trends in ESP instruction emphasise that reading is an interactive process of bottom-up, top-down, and metacognitive skills (Dubin and Bycina 195-215). This approach is considered particularly applicable when observed in the context of reading for specific or academic purposes. Regarding students' needs, such an approach would seem suitable to processes in which students decode meaning, understand the text, and handle new information from the text. Alongside this interactive process between the reader and the textual content itself, there is also another important interaction occurring at the same time: the interactive dialogue between the reader and the author. This dialogue may be defined as metadiscourse and according to Vande Kopple (1997, 2) such interaction helps writers express their personalities, as well as their evaluations of and attitudes toward ideational material. It also establishes what role and manner of delivery they are seeking to embrace in the communication situation, and indicates their intentions regarding how they would like readers to respond to the ideational material; relatedly, it is also defined as "the discourse that people use not to expand referential material, but to help their readers connect, organise, interpret, evaluate and develop attitudes towards that material" (Vande Kopple 2002, 2-3).

Readers should inherently benefit from the occurrence of metadiscourse in a written text. One of the benefits is that, according to Crismore (1989), the

“explanatory and persuasive role of metadiscourse creates solidarity between reader and author.” Moreover, the interpersonal nature of metadiscourse adds spoken discourse features to written discourse and makes it more reader-friendly. Correspondingly, certain organisational and structural functions of metadiscourse assist readers in enhancing information management, which in turn makes the information clearer to them. Crismore (1989) further highlights the potential promotion of critical thinking on the part of the readers since their own opinions are thus compared to the author’s opinion. If the readers are able to follow precisely what the author’s is expressing throughout the text it can boost their metacognitive control.

In the context of this paper, the focus on discourse markers is placed on certain subcategories, i.e., the hedging and boosting strategies that authors utilize to interact with the readers. During the process of decoding meaning from the text, successful readers implement not only bottom-up skills, but also top-down skills, which help them activate relevant background knowledge and easily identify textual clues, thus improving their understanding of new information, whilst employing metacognitive strategies to attain a more comprehensive understanding of the text.

For this reason, hedges and boosters, as discourse strategies, are regarded in this paper as operating at the peak of assertiveness, because in written academic discourse the authors are inherently motivated to gain acceptance of their work by striking a balance between cautiousness and persuasion. Moreover, an academic author strives to be recognised as “an appropriate disciplinary persona of modesty and assertiveness” (Hyland 180). Yet problems may arise in the exact placement of hedging and boosting instances since both hedges and boosters are considered “polypragmatic” (Hyland 347) interactional discourse strategies, i.e., their functions vary depending on the text surrounding them, as well as on the communicative purpose they are used for.

In addition, hedges and boosters are also described as epistemic modalities, more precisely as a form of academic knowledge communication (Martin-Martin 138). Academic authors employ hedges and boosters to communicate their academic knowledge, either by presenting a claim or contradicting former theories or beliefs, in a way that will ensure community acceptance of their academic contributions and exclude the potential risk of being interpreted as impolite and creating what Brown and Levinson call Face Threatening Acts (FTAs), i.e., acts that threaten the public self-image (Brown and Levinson 66).¹

¹ The estimation of the seriousness of a FTA is calculated considering a formula of Brown and Levinson, with three independent variables that have an effect on the choice, type, and intended effect of politeness strategies: the social distance (D) of the speaker and hearer (a symmetric relation), the relative power (P) between them (an asymmetric relation), and the absolute ranking (R) of impositions in the particular culture.

Hedges and boosters are considered as key interpersonal devices and used particularly by the writers of research articles to negotiate and establish their credibility, modify the truth-value of the knowledge conveyed, and communicate different degrees of commitment to opinions and claims when they engage in a dialogue with the reader (Salager-Meyer 1994, Hyland 2005). Moreover, in academic discourse hedges and boosters may convey a cautious approach either to the presented information or to research results and in doing so may function as a tool in attempting to gain acceptance for the presented work (Hyland 2000). Sometimes, hedging and boosting strategies are used intentionally in academic discourse to convey positive or negative politeness.

Boosters also help authors to close down alternative opinions and to show a high degree of certainty (Hyland 2005: 52). Their role is as well perceived in enhancing the illocutionary force of speech acts (Holmes 1984). Boosters may be observed as devices not intrinsically related to politeness and their contribution to the expression of solidarity depends on their contextual interpretation (Holmes 77). The importance of both hedging and boosting strategies is noticeable in the following instances: a) the reader expects the text to be explicitly signalled by hedges and boosters; b) the reader understands the intended meaning from the text in an effortless manner (Hyland 181). Both hedges and boosters as communicative strategies contribute to the interactive nature of the text, despite students potentially thinking that direct conversation is the only interactive skill. Their key communicative role is to convey reliability while strategically contributing to the strength of the commitment or detachment of a certain proposition to achieve interpersonal goals intended by the author. The assisting role of hedges and boosters has been seen to manifest in better text comprehension by both native and non-native students. The authors' stance towards the information included in the text and the negotiation of the authors' stance on, along with their level of engagement with, the given text is also more fully conveyed by the assisting role of hedges and boosters. Moreover, hedges and boosters contribute to the necessary finding out of whether the texts intended for a particular group of students/readers have the potential to serve their intended purpose and aid in text comprehension.

There is no precise definition of hedges and boosters because they are found in an indefinite number of surface forms. For this contrastive research, we adapted the typology (i.e., linguistic realization) of hedges and boosters identified in previous scholarly research (Hyland 2005; Salager-Meyer 1994; Vassileva 2001). The adapted typology of hedges and boosters is presented in Tables 1 and 2 with several examples listed.

Boosters	Modal verbs	<i>must, will, have to, ...</i>
	Lexical verbs	<i>assure, confirm, indicate...</i>
	Nouns	<i>certainty, confidence, evidence, fact...</i>
	Adjectives	<i>absolute, certain, clear...</i>
	Adverbs	<i>absolutely, accurately, entirely, indisputably...</i>

Table 1. Boosters in the English language

Boosters	Modal verbs	<i>morati, ne može</i>
	Lexical verbs	<i>potvrditi, uveriti, pokazati, ukazati...</i>
	Nouns	<i>dokaz, činjenica, uverenost, sigurnost...</i>
	Adjectives	<i>apsolutan, siguran, jasan...</i>
	Adverbs	<i>apsolutno, definitivno, fundamentalno...</i>

Table 2. Boosters in the Serbian language

Research Methodology

The paper explores the usage of hedging and boosting strategies in academia, analysed within the corpora of four scientific/research monographs. The monographs were selected from the scientific disciplines of Geography and Linguistics as part of the reading lists for relevant majors at the University of Novi Sad. Two of the monographs selected for this small-scale study were written in English and two in Serbian. The research aimed to investigate possible differences in interactional discipline-specific practices. The paper also explores the student perception of hedging and boosting as used in the written scientific discourse in Geography and Linguistics. Notably, only a few researchers were found to have previously investigated hedges and boosters from a pedagogical point of view, though not were found to have done so specifically in the context of scientific/research monographs.

Research Results indicate that there is a vast repertoire of hedging and boosting strategies employed in the prescribed context to present different commitment and detachment orientations. In the surveyed texts, certain differences were found in the overall distribution of hedging and boosting instances, which could be explained by different rhetorical and educational traditions.

No.	Scientific discipline	Hedges	Boosters
1	Linguistics	1485	674
2	Geography	1189	478
	Total	2674	1152

Table 3. Distribution of Hedges and Boosters in the English Corpus

Frequency of Hedges and Boosters in the English Corpus

Table 3 illustrates that hedging devices outnumbered boosting devices in the scientific monographs in the two selected disciplines in the English corpus. This section further explores the instances of hedges and boosters by category in the selected disciplines. Regarding the frequency of different hedging and boosting devices in the English language corpus, the results are presented here. With respect to verbal hedges, 3 different modal verbs and 2 lexical verbs were identified, amounting to 63.31% of the total amount of hedges. *Can, may, should, claim* and *seem* were the top five in terms of frequency. The relative incidence of hedges of this type was higher in the linguistic corpus. Regarding adverbs, 6 different terms were detected as hedges, representing 18.65% of the total amount of hedges. The items most commonly employed were *generally* and *typically*, which were the top two in both geography and linguistics. Concerning adjectives, 5 different adjectives were detected as hedges, representing 11.64% of the total amount of hedges. Most frequent among these detected items were *major* and *large*, with linguistics accounting for over 60% of such usages. As for nouns, only 3 different hedging nouns were employed in the English corpus, only 6.40% of the total amount of hedges. The most commonly used items were *idea* and *evaluation* and these were the top two such terms both in linguistics and geography.

Regarding verbal boosters, which accounted for 40.90% of the total amount of boosting strategy occurrences, the most frequently employed items were modal verbs such as *cannot, must, have to* and lexical verbs such as *show, assure, establish* were the top six in terms of frequency in the English corpus. As for adverbs, 3 different adverbs were employed as boosters, accounting for 11.67% of the total amount of boosters. Most frequent among the adverbs were *essentially, totally, inevitably, precisely, and fully*, with the last two being the most commonly employed in the Geography corpus. Concerning adjectives, 7 different adjectives were detected, representing 19.10% of the total amount of boosters. Among the most frequent were *absolute, obvious, certain, clear, and total*, with the last three as the most employed in both Linguistics and Geography. With respect to nouns used as boosters, only 5 nouns were found in the English corpus, though they account for a surprising percentage of 28.29% of the total boosters used. The most frequently employed items were *certainty, evidence, and fact*, with the last two as the most frequently employed in both Linguistics and Geography.

No.	Scientific discipline	Hedges	Boosters
1	Linguistics	574	229
2	Geography	404	321
	Total	978	550

Table 4. Distribution of Hedges and Boosters in the Serbian Corpus

Frequency of Hedges and Boosters in the Serbian Corpus

Table 4 shows the distribution of hedges and boosters detected in the Serbian language corpus in the two selected disciplines. Regarding verbal hedging devices, 4 different modal verbs and 7 lexical verbs were identified, accounting for 42.98% of the total amount of hedges. *Moći, znati, pretpostavljati,* and *razmatrati* were the top four in terms of frequency. The relative incidence of hedges of this type was higher in the Linguistics corpus. As for adverbs, 6 different terms were detected as hedges, corresponding to 29.70% of the total amount of hedges. The most commonly employed adverbs were *delimično, retko, uobičajeno, uglavnom,* and *moguće*, with the last two as the most frequently used in both Geography and Linguistics. Concerning adjectives, 6 different adjectives were detected as hedges, representing 22.98% of the total amount of hedges. Most frequent among the detected items were *čest* and *primaran*, with *čest* accounting for 60% of occurrences in geography yet less than 5% in linguistics. Concerning nouns, only 5 different hedging nouns were employed in the Serbian corpus, or only 4.34% of the total hedges, with nouns as hedging devices used significantly less in Linguistics. The most commonly used items were *predlog ideja,* and *mišljenje*, the last two as the most frequently employed in both Linguistics and Geography.

The findings in regard to verbal boosters are described in the following passage. Modal verbs and lexical verbs together accounted for 51.16% of the total amount of boosting strategies detected. The most frequently employed items were modal verbs, with *trebati* and *morati* as the most frequency applied in Geography, and lexical verbs, with *smatrati* and *ukazati* as the most frequency applied in Geography. *Ukazati* was also the most commonly employed boosting verb in Linguistics. Regarding adverbs, 8 different adverbs were employed as boosters, representing 37.14% of the total amount of boosters. Most frequent among the adverbs were *jasno, nesumnjivo, potpuno,* and *neophodno*, with the last three being the most prominently used in Geography. With regard to adjectives, 6 different adjectives were detected, accounting for only 4.05% of the total amount of boosters. Among the most frequent were *očigledan, apsolutan,* and *definitivan*, with the last two the most commonly applied in Geography. With respect to nouns used as boosters, only 4 nouns were found in the Serbian corpus, corresponding to only 7.66% of the total amount of boosters. The most frequently employed items were *dokaz* and *činjenica*, both in Linguistics and Geography.

To summarize, the distribution of all linguistic categories employed as hedges and boosters in scientific monographs in English and Serbian languages has shown that verbs were dominant in both hedging and boosting strategies, though a significantly smaller number of incidences were detected in the Serbian corpus. In addition, the Linguistics corpus accounted for more than half

of the total amount of hedges and boosters, while the Geography corpus accounted for nearly half of the total amount of hedges but less than 40% of the total amount of boosters. Regarding the English corpus in particular, almost 60% of the total boosters and slightly over 55% of the total hedges were found in the Linguistic corpus. The Geography corpus included just under 45% of the total amount of hedging devices and slightly over 40% of the total amount of boosting devices. Regarding the Serbian corpus in particular, more than half of the total hedges and slightly over 30% of the total boosters were found in the Linguistics corpus. The Geography corpus included less than 40% of the total amount of hedging devices but almost 60% of the total amount of boosting devices. In conclusion, the use of boosting devices is much more prevalent percentage-wise in the Serbian Geography corpus vs. the Linguistic corpus than in English.

Students' reception experiment

After the small-scale exploration of the selected scientific monographs regarding the occurrence of hedges and boosters in the two disciplines and two languages, a pre-experiment involving students was conducted in order to test students' reception of the hedging and boosting strategies employed in the academic discourse of the two scientific disciplines featured – Linguistics and Geography, in the English language. Two distinct groups of students (Linguistics and Geography majors) were administered a set of 5 sentences for each group. The sentences were selected from the English language corpus in the students' relevant scientific discipline with illustrative examples of hedging and boosting strategies. The students were asked about their vocabulary recognition of the underlined sentence parts and to elicit translation equivalents in the Serbian language. This was done deliberately to determine the learners' awareness about the possible parallel hedging and boosting strategies applied in English and Serbian. The students were not given definitive instructions regarding hedges and boosters, but were encouraged to express the closest translation equivalents in the academic discourse of the Serbian language in their respective disciplines. This pre-experiment was intended to serve as a springboard for more refined experimental research in the future.

1. Contrary to frequent observations or implicit assumptions, the Slavic aspectual systems are idiosyncratic in many respects and cannot be taken as the paradigm.
2. The sixth and largest part called the 'Language file,' attempts to present structural and social information on a large number of languages in a consistent format so that students can gain a very brief overview.
3. This motivates the fact that it can be modified with another iterative adverbial like 'three times', for example.
4. The telic interpretation does not here depend on what is explicitly coded in the linguistic expressions, but on what the interpreter knows about the larger scenes evoked by the linguistic material.
5. Tenny (1989:12) also observes that undetermined plural noun phrases must be considered a separate phenomenon for the purpose of the AIH.

Figure 1. Illustrative sentences from the Linguistics Corpus

1. The problem is that group dynamics may create a very strong commitment to a set of objectives that a model suggests has wider and negative implications.
2. As is commonly the case with GIS and remote sensing, "ground truth" for accuracy and interpretation still needs to be established through fieldwork.
3. Switzerland and other places had the hottest summer in 250 years, which was of course taken to prove global warming and confirm predictions of future trends.
4. It has been widely used to account for, and predict, an amazingly wide variety of flows: job migration, telephone traffic, airline passenger movements, mail delivery, commodity shipping, and the spread of information, among many others.
5. An emphasis on procedural evaluation assumes that better participatory processes lead to better environmental (and other) outcomes, yet there can, by definition, be no guarantee that this is the case.

Figure 2. Illustrative sentences from the Geography Corpus

The same two groups of students were surveyed in the central part of the student perception experiment. This experiment aimed at testing the perceptions of non-native undergraduate students regarding texts from academic discourse settings in their relevant major disciplines. There were two different pairs of academic texts offered to the students. One pair from Linguistics and the other from Geography. Each pair consisted of two selected texts which were labelled Text A without H&B and Text B with H&B, representing a shorter version from which the hedging and boosting markers were removed and a longer version with the original academic hedging and boosting markers preserved, respectively. The main goal of the experiment was to examine the sensitivity of the students as readers of academic texts in their selected discipline and also to assess their preferences in terms of opting for either a shorter variant, presumably which would be easier to read (with a lower word-count and without H&B) and a longer variant, which would presumably take more initial effort to grasp (more words, with H&B). The hypothesis behind this experiment was that

the readers' preference would be the longer variant of the text, with preserved hedging and boosting strategies, since it would likely be more efficient in the end in producing a positive cognitive effect on text comprehension. It might be expected that those students who had been more exposed to the relevant scientific field would use top-down techniques to activate their background knowledge and comprehend the text, while those students with less established sensitivity to language structure and style would rely more on bottom-up techniques, such as hedging and boosting markers, to look for clues so as to comprehend the text. In terms of top-down, bottom-up, and metacognitive skills, given that both variants of the text have cognitive potential effects that are comparable, the key question was which text would help the reader perceive those effects with the least effort in terms of time and mental exertion?

Text A Otuda nemogućnost tipološke klasifikacije jezika. A jezici su u tom smislu prelazni, čak „mešani“ no čisti slučajevi, arbitrarno identifikovani, imenovani, kategorizovani, i klasifikovani (iako se lingvistička tipologija smatrala strogom naukom, njene sistematizacije jesu arbitrarne po prirodi predmeta koji im podležu). Lingvisti, povodom rasprava o kriterijumima za identifikovanje jezičkih entiteta, metaforično konstatuju da je jezik u osnovi „dijalekat koji uživa podršku kopnenih trupa i mornarice“. Ako se nekome ovo tumačenje učini preterivanjem, previđa li „simboličko-identitetske funkcije jezika“. Ovde pomenuti mehanizam, dakle, ne impresionira naučnošću, i ne deluje nimalo lingvistički, već je ekstralingvistički (a pri tom čak i politički) - no tako, funkcionise istorija sveta i njegovih jezičkih te subjezičkih entiteta.

Text B Otuda i česta nemogućnost stroge (tipološke) klasifikacije jezika. A jezici su u tom smislu češće prelazni, čak „mešani“ no čisti slučajevi, veoma arbitrarno identifikovani, imenovani, kategorizovani, i klasifikovani (iako se lingvistička tipologija redovno smatrala srazmerno strogom naukom, njene sistematizacije jesu arbitrarne već po prirodi predmeta koji im podležu). Neki lingvisti, povodom rasprava o kriterijumima za identifikovanje zasebnih jezičkih entiteta, čak metaforično konstatuju da je jezik u osnovi „dijalekat koji uživa podršku kopnenih trupa i mornarice“. Ako se nekome ovo tumačenje namah učini preterivanjem, valjalo bi da se upita ne previđa li možda važnost „simboličko-identitetske funkcije jezika“. S našom temom u vezi, ovde pomenuti mehanizam, dakle, ne impresionira naučnošću, i ne deluje nimalo lingvistički, već je potpuno ekstralingvistički (a počesće je pri tom čak i dominantno politički) - no tako, u ovom pogledu barem, funkcionise poznata nam istorija sveta i njegovih jezičkih te subjezičkih entiteta.

Figure 1. Academic text - Linguistics (Text A without H&B and Text B with H&B) from the Serbian Corpus

Text A Politika Svetske trgovinske organizacije utiče na ljudsko zdravlje. Neslaganja postoje da li ugovori Svetske trgovinske organizacije obezbeđuju da se zdravlje ljudi zaštiti od slobodne trgovine ili ne. S jedne strane, globalno tržište olakšava ekonomski razvoj i ekonomsku sigurnost, što se odražava na zdravlje ljudi. Uz to, iako neke nacije, ili čak pojedinci, postaju bogatiji, siromaštvo je smanjeno i to se odražava na zdravlje siromašnih naroda (Svetska banka, 2012). Zastupnici suprotnog mišljenja postavljaju pitanje kakve će posledice po zdravlje ljudi imati isključenje nacija ili pojedinaca iz globalnog tržišta. Ovo isključenje iz dinamike ekonomske globalizacije je u zemljama u razvoju. Ako zanemarimo slučajeve ekonomskog rasta osamdesetih godina prošlog veka, u istočnoj Aziji, prihod po glavi stanovnika se smanjio u 70 zemalja u ovom istom periodu, a to su podaci i sa aspekta zdravstvenog stanja populacije u ovim zemljama.

Text B Takođe i politika Svetske trgovinske organizacije značajno utiče na ljudsko zdravlje. Neslaganja postoje oko činjenice da li ugovori Svetske trgovinske organizacije obezbeđuju dovoljno mogućnosti da se zdravlje ljudi zaštiti od različitih posledica slobodne trgovine ili ne. S jedne strane, globalno tržište olakšava ekonomski razvoj i ekonomsku sigurnost, što se, opet, pozitivno odražava na zdravlje ljudi. Uz to, iako neke nacije, ili čak pojedinci, zaista postaju bogatiji, apsolutno siromaštvo je smanjeno i to se pozitivno odražava na zdravlje siromašnih naroda (Svetska banka, 2012). Zastupnici suprotnog mišljenja postavljaju pitanje kakve će posledice po zdravlje ljudi imati isključenje nacija ili pojedinaca iz globalnog tržišta. Oni tvrde da je ovo isključenje iz rastuće dinamike ekonomske globalizacije značajno u zemljama u razvoju. Ako zanemarimo par spektakularnih slučajeva ekonomskog rasta osamdesetih godina prošlog veka, naročito u istočnoj Aziji, prihod po glavi stanovnika se smanjio u gotovo 70 zemalja u ovom istom periodu, a to su zabrinjavajući podaci i sa aspekta zdravstvenog stanja populacije u ovim zemljama.

Figure 2. Academic text - Geography (Text A without H&B and Text B with H&B) from the Serbian Corpus

The academic text from the Serbian corpus in Linguistics and its adaptation in Figure 1 was an extract from Milorad Radovanović's "Uvod u fazi lingvistiku" (Radovanović 28), an element from the reading list for students of English Language and Literature at the Faculty of Philosophy, the University of Novi Sad. The extract from the Serbian corpus in Geography and its adaptation in Figure 2 were taken from Imre Nađ's "Medicinska geografija" (Nađ, Dujmović, Plavša and Lukić 91), an element from the reading list for students of Geography at the Faculty of Science, the University of Novi Sad. The two texts were presented in contrast, with the first, representing the shorter version, as Text A (hedging and boosting devices removed), and the second, representing the original version, as Text B (hedging and boosting devices restored). These texts were followed by a set of 4 multiple choice questions, which students were to answer after reading the texts.

The first group of respondents consisted of 34 first-year students, mainly native speakers of Serbian from English Language and Literature Department at the Faculty of Philosophy, while the second group was comprised of 24 second-year students from Department of Geography, Tourism, and Hotel Management at the Faculty of Sciences. Students of both groups were aged 19-22. The groups of students were selected due to their exposure to relevant academic discourse for at least one semester prior to being engaged in the experiment.

The experiment was conducted in the form of an online questionnaire for the students which consisted of two sets of tasks. The first set was the same for both groups and consisted of general questions about the participants (age, affiliation, mother tongue, other foreign languages spoken). The second set involved the comparison of the two versions of the academic texts (text A without hedges and boosters and text B with hedges and boosters), represented by paragraphs of approximately 200 words, from the Serbian corpus. In this set, the first group received texts from Linguistics and the second group the texts from Geography, corresponding to their respective majors at the faculties, as indicated above. The second set of the questionnaire also included 4 questions whose primary focus was ascertaining which text would be the preference of an early academic reader. The answers of both groups will be discussed here in more detail.

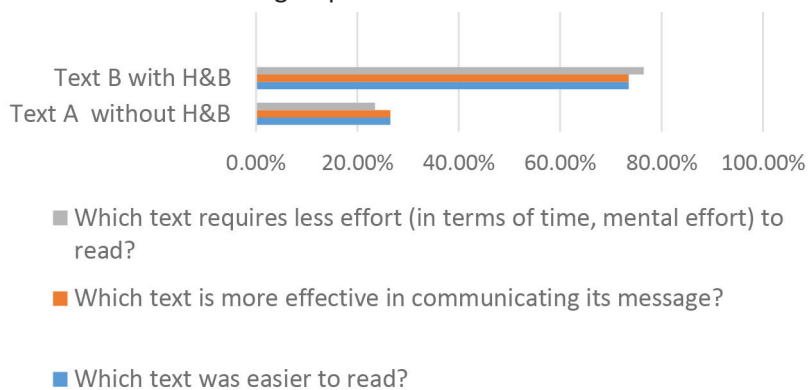


Figure 3. Results for the Linguistics Corpus

Figure 3 illustrates the students' responses to the Linguistics Corpus. Respondents' reactions seemed to agree with the researchers' hypothesis that the longer text would be the preference of the students. The majority of students (76.5%) considered Text B with hedges and boosters as the text which requires less effort in terms of time and mental effort to read. Regarding the same variant of the text, the majority of the respondents (73.5%) also expressed the opinion that it is also more effective in communicating the message. As for the ease of reading, the respondents selected text B with hedges and boosters at an identical percentage (73.5%). This was expected from readers having the perspective of a native speaker.

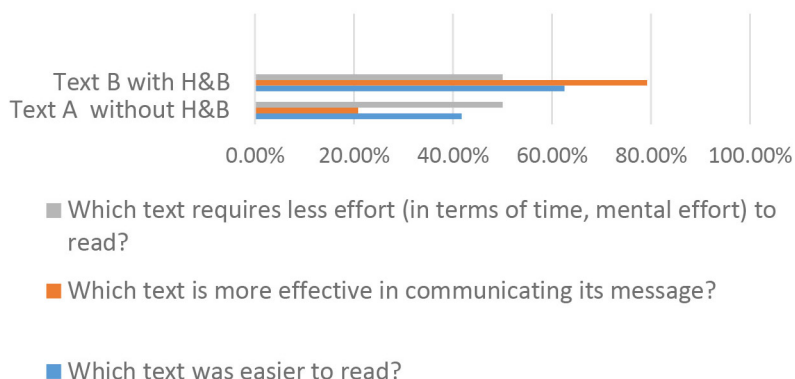


Figure 4. Results for the Geography Corpus

Figure 4 reveals a slightly different situation regarding the perception of the second group of students towards the two employed text from the academic discourse of Geography. Namely, responding to the first question as to which text which required less effort in terms of time and mental effort, the students of the group were evenly divided in their opinion, with one half opting for Text A without H&B and the other half for Text B with H&B. Concerning the effectiveness of the text in communicating the message, the respondents showed striking unanimity in favouring Text B - a total of 79.2% of the respondents stated that Text B is more effective in communicating its message. Finally, regarding the ease of reading of the texts, the respondents clearly indicated being in favour of Text B (62.5%) compared to text A (41.7%), though less so than in regard to the second question. The final question in the questionnaire was a multiple-choice question to which the students were allowed to respond by ticking more than one offered answer.

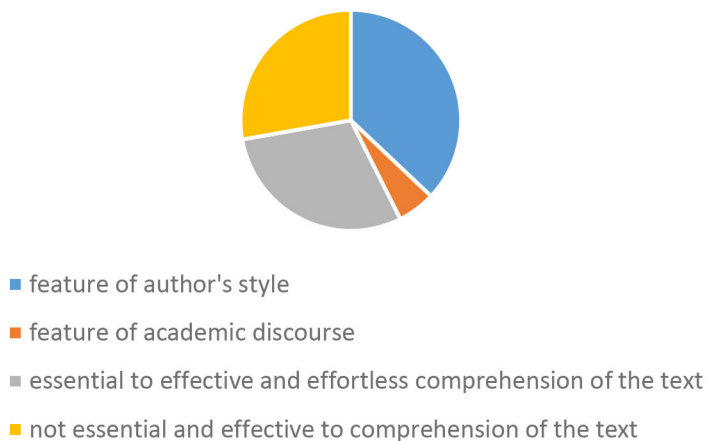


Figure 5. Multiple choice question for the Linguistics Corpus

Figure 5, in brief, summarises the students' responses to the final question. The students were allowed to tick more than one answer. Out of the total, 37% respondents indicated considering the underlined words in Text B as a feature of the author's style. One-third of the students from this group responded that the underlined words were essential to effective and effortless comprehension of the text. Slightly less than one third (28%) of the respondents reported that the underlined items were not essential and effective to the comprehension of the text. It is striking that only 6% of the students indicated thinking that the hedges and boosters as underlined items were features of academic discourse.

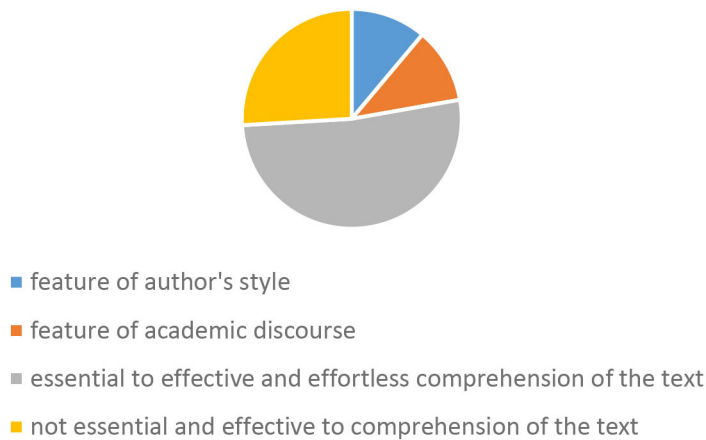


Figure 6. Multiple choice question for the Geography Corpus

Figure 6 illustrates the students' responses regarding the underlined features in Text B (with hedges and boosters). More than half of the respondents (52%) indicated considering the underlined items were essential to effective and effortless comprehension of the text. Slightly less than one third (26%) of the respondents reported having the opposite opinion regarding the effectiveness of hedges and boosters. Only 11% of the respondents reported having the opinion that the underlined words were the features of the author's style and academic discourse, respectively. Overall, this experiment revealed an impressive appreciation on the part of the students, as readers, for the effectiveness of hedges and boosters for text comprehension.

Pedagogical implications

Although limited in both the number and scope, the above findings seem to suggest that hedging and boosting devices play an impactful role in text comprehension. This study was conducted in the context of classroom research to gain more insight into the relationship between hedging and boosting strategies and the comprehension of academic texts among two groups of Serbian univer-

sity students, among which one group consisted of students majoring in English Language and Literature from the Faculty of Philosophy, and the other was comprised of students majoring in Geography from the Faculty of Sciences. Namely, a better understanding of this aspect of the reading process would be particularly useful in the EAP/ESP instructional setting, which emphasises hedging and boosting strategies as important for reading scientific monographs in English. Therefore, the question arises as to whether the presence of hedges and boosters in university-level academic texts leads to improved comprehension. The underpinning statement might be that academic texts containing more hedges and boosters are easier to comprehend than those with fewer or none. The research for this study was conducted in two different forms and approaches: a small-scale exploratory experiment to investigate the role of metadiscourse by comparing mean scores on a brief comprehension test administered after reading corresponding extracts of a complete version (more metadiscourse) vs. an abridgement (less metadiscourse) of the same text; and 2) a comparison of readers' responses to a questionnaire administered after the reading comprehension test to determine student perceptions of both the level of the difficulty and effectiveness of the two text treatments, as well as the students' degree of awareness of metadiscourse.

While these two interpersonal strategies, as forms of authorial participation in communicating the message to the readers, are central aspects of the rhetorical character of any academic writing, they were once considered less important to the purpose of conveying propositional information (Dee-Lucas & Larkin, 1986). Novice learners in a scientific domain may be heavily dependent on signalling contained in a scientific text, whereas students with a sufficient background in the domain would likely be less influenced by the same signalling. In university settings, the acquisition of discipline-specific knowledge is often a priority for both faculties and students. This brings us to the point that there is a considerable danger for students to fail in processing these interpersonal features adequately and thereby to fail to ascertain and process their crucial contribution to the very meaning of the text. Previous studies have suggested that texts for novice academic audiences would have the effect of enhancing learning if they combined "the knowledge of subject-based content schema in conjunction with rhetorical devices in signalling the important text content," so that the students would become most effective in understanding the critical text content (Dee-Lucas & Larkin, 1988: 478).

In brief, the application of the results may be useful in facilitating EAP/ESP instruction at the university level regarding reading and writing comprehension. In this context, language instructors are expected to provide learners with guiding principles regarding the use of hedging and boosting strategies in academic discourse in specific disciplines. Students should be encouraged to understand

and use English in academic communication as well as to improve their writing skills after a period of instructions focusing on hedging and boosting strategies. It is also pertinent that the students are able to grasp differences and similarities in the use of hedging and boosting strategies in both English and their native languages, where relevant.

Conclusion

This small-scale study supports the idea that EAP/ESP instruction indeed serves to raise students' awareness of the pragmatic strategies involving the use of hedging and boosting as linguistic devices and that this further assists students in the development of their pragmalinguistic competence² beyond speech act, thereby also better preparing them to properly communicate within the academic environment. Relatedly, students may also acquire specific pragmalinguistic knowledge spontaneously if they have corresponding form-function mapping between their mother tongue and a relevant foreign language, and of the forms that can be used in foreign language academic contexts, with corresponding effects.

This study has provided additional insight into the academic discourse features under consideration. If one assumes, as we do, that explicit knowledge about language can help learners to improve their reading skills, there follows the need for EAP/ESP courses to incorporate accounts of hedging and boosting strategies as adequately as possible. This paper provides some suggestions of how, in view of recent theoretical studies, hedges and boosters could be presented in a more comprehensive way. Furthermore, it also emphasizes the need to illustrate to the students of scientific disciplines the particular targeted features of hedges and boosters and how they function in the discourse of the relevant scientific discipline the students are seeking to become proficient in. To conclude, guiding students through the functions of hedging and boosting strategies can enable them to locate occurrences of hedging and boosting within the existing body of literature, to more fully reflect on and comprehend the credibility of scientific findings, and to integrate such strategies into their future academic and professional writing.

The trends perceived in this study suggest that there is a growing need for more comprehensive research into the formal effects of EAP/ESP instructional intervention on the acquisition, processing, and employment of hedging and boosting devices at the tertiary level both in academic reading and writing, as

² Leech (1983) proposed a subdivision of pragmatics into a pragmalinguistic and sociopragmatic component. *Pragmalinguistics* refers to the resources for conveying communicative acts and relational or interpersonal meanings. Such resources include pragmatic strategies like directness and indirectness, routines, and a large range of linguistic forms which can intensify or soften communicative acts.

well as into whether such training can be transferred to other segments of language learning in academia. However, whether measurable effects of such instruction could be achieved might also be highly dependent upon the students' level of linguistic competency in the relevant languages employed in their studies.

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STRATEGIJE OGRAĐIVANJA I ISTICANJA U LINGVISTICI I GEOGRAFIJI – STUDIJA SLUČAJA O PERCEPCIJI STUDENATA

Rad se bavi istraživanjem strategija ograđivanja i isticanja u pisanom akademskom diskursu, preciznije u diskursu naučnih monografija iz naučnih oblasti lingvistika i geografija. Naime, strategije ograđivanja i isticanja u akademskom diskursu analizirane su u korpusu naučnih monografija iz pomenutih disciplina na engleskom i srpskom jeziku kako bi se otkrile potencijalne razlike kao i specifičnosti u upotrebi ovih strategija u lingvistici i geografiji. Rad se takođe bavi i percepcijom studenata o upotrebi strategija ograđivanja i isticanja u pisanom naučnom diskursu iz naučnih oblasti lingvistika i geografija.

Ova pilot studija provedena je na Univerzitetu u Novom Sadu i usmerena je na ispitivanje recepcije strategija ograđivanja i isticanja upotrebljenih u korpusu naučnih monografija na engleskom i srpskom jeziku kod studenata anglistike i geografije. Rezultati istraživanja pokazali su da predstavljanje ovih strategija studentima u okviru akademskog diskursa na engleskom i srpskom jeziku doprinosi njihovom boljem razumevanju diskursa.

Takođe, smatramo da je potrebno studentima predstaviti različite tipove naučnih i istraživačkih tekstova te ih upoznati sa specifičnostima upotrebe strategija ograđivanja i isticanja u pojedinim naučnim disciplinama što će svakako koristiti i nastavnicima stranog jezika u daljem radu. Studenti će bolje razumeti namere autora u naučnom diskursu ukoliko se napravi uporedni prikaz strategija ograđivanja i isticanja u engleskom i srpskom jeziku u naučnim disciplinama koje proučavaju. Nastavnici stranog jezika ukazuju studentima na specifičnosti engleskog i srpskog naučnog diskursa te im na taj način olakšavaju razumevanje naučnih istraživanja i naučne metodologije.

Možemo zaključiti da upoznavanje studenata sa pravilima ograđivanja i isticanja doprinosi lakšem uočavanju strategija ograđivanja i isticanja u raspoloživoj naučnoj literaturi, što svakako odražava kredibilitet naučnih rezultata te doprinosi lakšem integrisanju ovih strategija u budućem akademskom i profesionalnom radu.

ključne reči: naučne monografije, ograđivanje, isticanje, nastava stranog jezika struke