This paper investigates focus projection in Bulgarian English from an empirical perspective. The term Bulgarian English is used to refer to a variety of English spoken by English teachers who were born and have lived in Sofia, and have Bulgarian as their mother tongue and English as a foreign language. The introductory section views focus projection as a natural phenomenon in language. The literature overview pays attention to major studies dealing with focus projection in English. The next section presents an experiment which has two main tasks: first, to test whether focus projection exists in Bulgarian English, and second, if projection is found, to study its behaviour. The concluding section analyses the results of the experiment in comparison with British English.

Keywords: focus, projection, comparison, Bulgarian English

1. Introduction

Projection can be seen as a natural phenomenon in language. It finds expression at different linguistic levels and contributes to a more economical use of the resources of a given linguistic system. For example, in English at the level of morphology, the finite verb phrase requires that only the first verb be conjugated and the rest of the verbs be in a non-finite form, i.e. either the infinitive or the participle. Thus, the first verb “projects”, as it were, the categories person, number, tense, mood, and voice to the rest of the verbs within the same phrase. This means that these categories mark the entire verb phrase despite the fact that only the first verb indicates morphologically the categories in question.

At the level of intonation, in subject-verb-object utterances, a pitch accent on the object may suffice to intonationally mark both the object and the verb as new information in the utterance. As regards Bulgarian English, one can ask whether a pitch accent on the object is capable of projecting focus to the preceding transitive verb. In other words, the question boils down to the following: is it possible for different focus
types in Bulgarian English to have the same intonation pattern as is the case with British English?

2. Literature overview

Focus projection in English has been studied both theoretically and empirically. The most prominent theoretical models have been proposed by Gussenhoven (Gussenhoven 1983a) and Selkirk (Selkirk 1995). Gussenhoven (Gussenhoven 1983a) claims that there is a rule according to which a pitch accent on the object is sufficient to render the whole verb phrase in focus. That is, a pitch accent on the object projects focus to the preceding transitive verb.

Selkirk (Selkirk 1995) establishes the relation between accent and focus through F-marking. F-marked constituents receive an accent but they are not necessarily in focus. The following rule accounts for focus projection: if the head of a phrase or a constituent within the head is F-marked, then the whole phrase is F-marked. Thus, focus is seen as a constituent which is F-marked but not dominated by other F-marked constituents. Focus projects from the head of the phrase to the rest of the phrase: the head of the phrase is not dominated by other constituents of the phrase. Selkirk (Selkirk 1995) also claims that all accents are equally capable of projecting focus.

Empirically, it could be claimed that focus projection really exists in English. The empirical studies by Gussenhoven (Gussenhoven 1983b), Birch and Clifton (Birch and Clifton), Welby (Welby 2003), and Bishop (Bishop 2011, 2012, 2017) prove that focus projection is not a mere theoretical construct but a real phenomenon in English. Gussenhoven (Gussenhoven 1983b) shows that focus projection occurs from the object to the transitive verb. This serves as empirical evidence in favour of his theoretical assumptions (Gussenhoven 1983a).

Focus projection in Bulgarian English and in Bulgarian has not been studied exclusively. As regards Bulgarian, focus projection has been mentioned only in connection with the investigation of other intonational phenomena. For example, focus projection is mentioned in relation to the intonation contours associated with different types of focus in Bulgarian: Andreeva et al. (Andreeva et al. 2001), Andreeva (Andreeva 2007, 2009). The very fact that focus projection is mentioned in these studies means that the above quoted scholars assume
that focus projection exists in Bulgarian. No such assumptions, however, can be derived with respect to Bulgarian English. Thus, both Bulgarian English and Bulgarian are in need of further investigation regarding focus projection.

3. Experiment

3.1. Stimuli

Since focus projection has not been studied in Bulgarian English and in Bulgarian, an experiment that has been conducted concerning English can be used as a basis, which would allow for a comparison of the results of the two experiments. Thus, the stimuli for the experiment are the mini dialogues used by Gussenhoven (Gussenhoven 1983b). Three types of utterances are used: a combination of a predicate and an argument (Structure A), a predicate and an argument devoid of specific meaning (e.g. *everything, nothing*), or a predicate and an adverbial (Structure B), and an argument in final position (Structure C). Structure C is used to determine the maximum retrievability demonstrated by the participants.

Each structure consists of 16 utterances constituting 8 lexically identical pairs. There is a question to each utterance so that in each lexically identical pair in Structures A and B one of the questions constructs a broad focus context whereas the other – a narrow focus one. As to Structure C, one of the questions constructs such a context that the argument in final position is accented; this is not valid for the other question. Also, the utterances in Structures A and B are grouped based on a further criterion: the number of intervening syllables between the potentially accentable syllables. Both structures consist of four groups, each group in turn consisting of four utterances. The utterances in each group contain an equal number of intervening syllables. The four groups have 0, 1, 2, and 3 intervening syllables respectively.

A brief illustration of the above mentioned criteria is in order. The utterance *We create business* is accompanied by two questions: *What is your contribution to society?* and *What is it you’re creating?*. Obviously, the first question requires broad focus, whereas the second leads to narrow focus in the answer. Each question is combined separately with the answer, hence two mini dialogues or one lexically identical pair of utterances. This example belongs to Structure A, and the number of
intervening syllables between the potential accents – that is, the second syllable of *create* and the first one of *business* – is zero.

3.2. Recordings

Six female participants, all of them university English teachers having Bulgarian as their mother tongue, were recorded. The participants were grouped into three pairs. In each pair, one of the subjects read the questions and the other – the answers; after that, they changed their roles. Prior to the recording, the 48 mini dialogues – 3 structures each consisting of 16 mini dialogues or 8 lexically identical pairs – were randomised in 6 different versions so that each participant read the questions and the answers in a different order. This was done to avoid order effects. The participants were instructed to read the dialogues as naturally as possible and were not informed about the purpose of the experiment.

Forty-eight questions and forty-eight answers were chosen from the recordings. Each question was combined separately with the two lexically identical answers. Of course, one of the answers was the answer to the question; the other was an answer to a question requiring a different type of focus. When randomising the dialogues, an attempt was made to avoid clusters of utterances belonging to the same structure, clusters of utterances with the same number of intervening syllables, and one and the same participant reading two or more consecutive answers. Also, in no mini dialogue were the question and the answer taken from one and the same pair of participants; but the lexically identical answers on the one hand and the accompanying questions on the other hand in each pair were taken from one and the same participant. That is, the participant reading the answers is different from the participant reading the questions in a pair of mini dialogues.

If a pair of lexically identical utterances appears in a particular order when combined with the broad focus question, then the pair appears in the same order as an answer to the narrow focus question. The other pair of lexically identical answers belonging to the same structure and having the same number of intervening syllables appears in the reverse order with respect to focus type. For example, the lexically identical utterances *We create business* appear in the order broad-narrow focus both with *What is your contribution to society?* and *What is it you’re creating?*. The other lexically identical pair with the
same number of intervening syllables in the same structure – *We repair radios* – appears in the order narrow-broad focus both with *What is the nature of your business?* and *What is it you repair?*.

3.3. Presentation of the tape

A tape was prepared based on the criteria described in the previous subsection. The tape was presented to 28 English Philology students, 19 women and 9 men aged between 20 and 43. All of the students are Bulgarians having Bulgarian as their mother tongue. The experiment was conducted in a sound treated room. The subjects were equipped with headphones and were instructed not to pause the recording until the end. The questions from the dialogues figured on the answer sheets. The task was to write “1” or “2” next to each question based the subjects’ judgement as regards the correct answer. “1” is used to indicate that the first question-answer combination is correct; “2” means that the second combination is correct. The students listened to the tape once. The duration of the tape was about 15 minutes.

4. Results

The results show that the different structures are characterised by similar degrees of retrievability. *Retrivability* refers to the percentage of correct combinations per structure marked by the participants. Each structure consists of 16 pairs of dialogues with lexically identical answers, i.e. 16 pairs of dialogues multiplied by 28 participants is 448 pairs of dialogues per structure. Then, 448 correctly marked combinations equals 100% retrievability.

Since the experiment presented in this paper follows closely one of Gussenhoven’s (Gussenhoven 1983b) experiments, the results are comparable. The retrievability in Structure A in Bulgarian English is about 55%. Gussenhoven arrives at a similar result. As for Structure B, the retrievability in Bulgarian English is about 50%, and in English in Gussenhoven’s study it is about 70%. Structure C in Bulgarian English has about 55%, whereas Gussenhoven registers about 83%.

On the basis of the results, two important claims deserve attention. First, the results from the two experiments are hardly similar; and second, focus projection exists in Bulgarian English. The results for Structure A are very similar in both experiments, which serves as a
basis for the claim in favour of focus projection both in Bulgarian English and in English. The results for Structures B and C, however, are markedly different in the two experiments. The degree of retrievability for Structure B in English serves as a good reason for Gussenhoven to argue that this structure is devoid of focus projection. As far as Bulgarian English is concerned, the retrievability for Structure B allows for focus projection. This raises questions concerning the reasons for projection in this structure bearing in mind the results for English. Structure C is supposed to define the maximum retrievability – it performs this function in Gussenhoven’s experiment but fails to do so with reference to Bulgarian English. This also raises questions and necessitates further research.

5. Conclusion

It may be claimed quite safely based on the results that focus projection exists in Bulgarian English. This is confirmed by the retrievability in Structure A: the participants achieve about 55% retrievability, which means that they are unable to differentiate intonationally between broad and narrow focus in almost half of the dialogues belonging to this structure. Thus, two different focus types – broad focus and narrow focus – appear to have the same intonational form in more than half of the cases.

Structure B offers intriguing results in the sense that it has a lower degree of retrievability than Structure A. At first glance, it is tempting to argue in favour of focus projection in Structure B. Yet, one could challenge the close syntactic relatedness between predicates on the one hand and lexically empty arguments and adverbials on the other hand. Also, it could be tested whether the retrievability in Structures A and B is dependent upon the distance between the potential accents. It is expected that this distance does not play a role in Structure A due to the close syntactic relatedness between the predicate and the argument, which contributes to the realisation of focus projection. If, however, the distance turns out irrelevant in Structure B, then this structure is probably, too, characterised by projection. It should also be borne in mind that the speakers could have used narrower pitch range compared to the pitch range they use when speaking Bulgarian. This necessarily makes it more difficult for the subjects to identify the focus type.
Further, the degree of stress of the prenuclear accents in Structures A and B could be judged. Such an experiment is also expected to contribute to the understanding of focus projection in Bulgarian English. It goes without saying that Structure C deserves special attention. It failed to define the maximum retrievability possible, which raises questions of language contact and invites phonological and phonetic analysis of the utterances belonging to this structure, which deserves a separate study.

**BIBLIOGRAPHY**


