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ADVERBS AND THEIR INTEGRATION INTO THE STRUCTURE OF ENGLISH AND BULGARIAN CLAUSES

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This paper aims to contribute to the formation of a unitary theory that describes the positions of adverbs in sentences. It analyses high and low adverbs in Bulgarian and English, using Cinque's idea that adverbs are the specifiers of functional heads and form a universal hierarchy. The fundamental idea behind this approach is that verbs move around adverbs. Adapting Ledgeway and Lombardi's proposal of a clause-medial functional projection, YP, I have proposed that Bulgarian finite lexical verbs can target a head within the lower adverb space and move to the head of the functional projection YP, but they cannot target positions within the higher adverb space. In contrast, the positions of English finite lexical verbs are very limited. The paper also suggests that English and Bulgarian auxiliaries originate in two different places, with Bulgarian past auxiliaries offering a second Merge site – YP. The analysed examples demonstrate that active past participles in English cannot raise freely within the lower adverb class but could raise from VP to YP and optionally continue to raise higher. However, Bulgarian past participles behave differently depending on whether they are used with a present auxiliary or a past auxiliary.

Key words: high adverbs, low adverbs, verb movement, functional head, specifier

1. Introduction

The syntactic features of adverbs have been well documented in the comprehensive grammar books of English (Jacobson 1964, Quirk *et al.* 1985 and many others), and their placement in the sentence has been widely studied (Ballert 1977, Ernst 1984, Alexiadou 1997, Cinque 1999, and others). And yet, the way Ray Jackendoff begins his chapter on adverbs in his monograph 'Semantic Interpretation in Generative Grammar' still feels relevant: 'the adverb is perhaps the least studied and most maligned part of speech, . . . maltreated beyond the call of duty' (1972: 47). Up to this day,

there still has not been found a unitary theory that could describe the various positions of adverbs available in sentences thoroughly. Scholars such as Jacobson (1964), Dobbie (1965), Quirk et al. (1985), and more recently, Huddleston and Pullum (2002) analysed the puzzling functions of adverbs, trying to define them and describe how they are used in the sentence – a task that is quite difficult because as Halling notices, 'Adverb is often used as a generic term for leftover items that do not appear to belong elsewhere' (2018: 7). Adverbs undoubtedly have an intrinsic perplexity. Semantically, they have an undefined number of subtypes. Syntactically, they can be predicatelevel adverbs describing how an action is performed and sentence-level adverbs showing the speaker's stance towards the proposition. Nevertheless, all those adverbs have one thing in common – they are regarded as modifiers. It is widely accepted that the primary function of adverbs is to modify verbs or verb phrases. Schachter and Shopen define adverbs as 'modifiers of everything except for nouns' (2007: 20). A significant part of the syntacticians dealing with adverbs build their research on the assumption that, even though within distinct domains, adverbs and adjectives are both modifiers. Therefore, in Generative Syntax, adverbs have been widely regarded as adjuncts.¹

While the traditional look on adverbs classifies them as adjuncts, other suggestions have emerged as well. In his monograph 'Adverbs and Functional Heads', Cinque suggests that there exists a universal inventory of adverbs in each language (1999), which has an intrinsically fixed order. However, languages differ in that they may choose their way or ways of encoding functional content into specific morphological forms (adverbs, inflections, etc.). Rather than as adjuncts, Cinque looks at adverbs as the specifiers of different functional heads. He suggests that 'adverbs should not be seen as accessory appendices to clause structure (as the traditional notion of "adjuncts" would suggest), but rather as an integral part of it, despite their general optionality' (Cinque 2004: 693). He believes that different classes of AdvPs 'enter into a transparent Spec/head relation with the different functional heads of the clause', following a strict hierarchy (1999: vi). The cartographic theory takes syntax as central in explaining the functions and categories of adverbs and proposes that each adverb is individually licensed by a dedicated functional head. Cinque also proposes that it is verbs that move within the deep structure and raise to a given head, which takes a particular adverb as its specifier.

¹ See, among others, Jackendoff (1972), Ernst (1984), and Shaer (1998).

The aim of this research is to examine adverbs and verb movement with finite lexical verbs, auxiliary verbs, and active past participles in English and Bulgarian, using Cinque's proposals as a cornerstone. The paper is organised as follows. Section 1 clarifies the motivation for the work presented, discusses some of the names that form the research topic's background, and introduces the reader to Cinque's theory of high and low adverbs. Section 2 elaborates on Cinque's ideas, providing a theoretical basis for his proposal in connection with how adverbs integrate into the structure of the English and Bulgarian clauses. The section's fundamental idea is that verbs move around adverbs in a given structure. For that reason, the section is divided into three parts: Adverbs and Finite Lexical Verbs, Adverbs and Auxiliaries, and Adverbs and Active Past Participles. Section 3 closes with implications and an indication of some additional issues. An undertaking of this kind will require delimitations, and this paper will not deal with the movement of past passive participles, negation, and interrogative sentences. For the illustrative purpose of this research, examples taken from the British National Corpus and the Bulgarian National Corpus will be used throughout the different sections.

1.1. Cinque's (1999) Theory of High and Low Adverbs

Ignored at first, nowadays, adverbs are the main focus of the research of numerous scholars because, as Dobbie explains, 'among the many problems posed by Modern English word order, for both the native speaker and the foreign learner, one of the most difficult is the placement of adverbs' (1965: 205). Generative Syntax relies highly on the functional-head theory, which differentiates between lexical and functional heads. While Negation and Tense are the two globally accepted functional heads, other suggestions have appeared throughout the years, especially such connected to the extended verbal projection. Guglielmo Cinque's cartographic approach is aimed precisely at these functional heads, analysing them in both clause and internal phrase structures. In his 'Adverbs and Functional Heads' from 1999, he views adverbs as specifiers of distinct functional heads and claims that verbs raise from VP into the heads of these phrases. An important distinction made by Cinque is the one between low and high adverb space. Comparing examples from several typologically different languages, Cinque suggests an adverb hierarchy, placing some adverbs in the Lower (pre-VP) AdvPs category and others in the Higher (Sentence) AdvPs category. Observing the raising abilities of active past participles, Cinque defines the lower adverb space as 'delimited on the left by the leftmost position that an (active) past participle can come to occupy and on the right by a complement (or the subject) of the past participle' (1999: 4). On the other hand, higher adverbs are mainly speaker-oriented. After comparing sentences containing two or more adverbs, Cinque suggests the following hierarchy (taken from Cinque (1999: 106)):

1) [frankly Mood_{speech act} [fortunately Mood_{evaluative} [allegedly Mood_{evidential} [probably Mod_{epistemic} [once T(Past) [then T(Future)] [perhaps Mood_{irrealis} [necessarily Mod_{necessity} [possibly Mod_{possibility}] [usually Asphabitual [again Asprepetitive(I) [often Aspfrequentative(I) [*intentionally* Mod_{volitional} [*quickly* Asp_{celerative(1)} [*already* T(Anterior) [no longer Aspterminative [still Aspcontinuative [always Aspperfect(?)] Asp_{proximative} [briefly *iust* Asp_{retrospective} soon Asp_{durative} [characteristically(?) Asp_{generic/progressive} [almost Asp_{prospective} [completely Asp_{SgCompletive(I)} [tutto Asp_{PLCompletive} [well Voice [fast/early Asp_{celerative(II)} [again Asp_{repetitive(II)} [often Asp_{frequentative(II)}] [completely Asp_{SgCompletive(II)}

2. Adverbs and Verb Movement in Bulgarian and English

Even though, in theory, the whole adverb hierarchy can be realised in one sentence, due to syntactic length and limitations of memory, we use only several adverbs in one sentence explicitly. This hierarchy proves to be observed in positional terms concerning the verb or other adverbs in various languages, including English and Bulgarian, as we will see in this next section. The theoretical approach adopted in the generative literature that V starts out in VP, i.e., below all adverbs, and then raises to one of the functional projections in the clause will be the backbone of this work. This section will back up Cinque's claim that verbs in different languages have different obligatory and optional raising options within lower and higher adverb space (1999: 45). It will also try to test empirically to what extent Cinque's proposals can handle the differences between English and Bulgarian word order regarding finite lexical verbs, auxiliaries, and active past participles² in affirmative sentences.

² Languages such as Bulgarian have distinct participles for active and passive uses. For the Bulgarian examples included in this work, I will be using only Past Active Aorist Participles and Past Active Imperfect Participles ending in -л /l/, -ла /la/, -ло /lo/, -ли /li/.

2.1. Adverbs and Finite Lexical Verbs

Linguists have observed throughout the years that finite lexical verbs in English cannot be placed to the left of an adverb. In generative terms, this restriction has been explained as due to the absence of overt V movement to the left of the adverb, giving rise to ungrammaticality of sentences such as (2):³

- 2) a) *I eat *always* in the morning.
 - b) *She woke up *perhaps*.

However, when it comes to the adverbs *well* and *early*, English can actually form grammatical sentences with these adverbs positioned to the right of the verb:

- 3) a) I ate well today.
 - b) She woke up *early*.

So, the question arises as to why this is the case. Cinque's division between low and high adverbs and his theory of verb movement to the heads of clausal functional projections that contain the adverbs as their specifiers give a relatively sophisticated account of the 'behaviour' of the English language. Finite lexical verbs can be seen in a variety of positions because they do not have a fixed site and may occupy different positions (Cinque 1999: 49–51). English finite lexical verbs start in the VP below all adverbs, high and low, and then raise although to a limited number of positions: either to the left of *early* or to the left of *well*, hence the grammaticality of (3). What is interesting about English is that the finite lexical verb cannot raise any higher and has to stay on the left of the adverb well. This is why we cannot have sentences such as (2). In (2a), the verb has raised above *always*, but according to Cinque's adverb hierarchy, while both always and well are low adverbs, *always* is located above *well* in the adverb hierarchy in (1). Since we already noted that the finite lexical verb in English must remain to the left of well, it cannot have risen to the left of already, hence the ungrammaticality of (2a). The same analysis can be applied to (2b) with the difference that *perhaps* is a high adverb. Nevertheless, since English finite lexical verbs obligatorily remain to the left of the lowest portion of adverbs, in particular to the left of well, (2b) is expectedly ungrammatical. This is the reason why in English, high and low adverbs, with the exception of well and early (and the other adverbs which are part of the Voice and Aspcelerative(II)

³ The sentence is grammatical if the adverb is focused, cf.(i):

⁽i) I eat *always* in the morning and *never* in the evening.

In this paper, we will not consider sentences involving adverb focalization.

groups), are always observed to the left of finite lexical verbs, as illustrated by the examples in (4):

- 4) a) But he *never* kept his word.
 - b) She *almost* expected him to salute.
 - c) Nowadays, she probably never even gave him a second thought.

Bulgarian mimics English in that the finite lexical verb in Bulgarian cannot raise to the right of *early* or between *fast* and *early*. However, as I claim in Mateva (2023), in contrast to English finite verb movement, Bulgarian finite lexical verbs do not obligatorily stop to the left of the low VP-adverb *well*:

5) а) Никога не пропускаше деня за среща и идваше винаги по едно и също време.

Nikoga ne propuskashe denya za sreshta i idvashe vinagi po edno i sashto vreme.

*He never missed the appointment date and came *always* at the same time.⁴

b) Но ти каза *вече* това.

No ti kaza veche tova.

* But you said *already* that.

Examples such as (5), taken from the Bulgarian National Corpus, show that the Bulgarian lexical verb can optionally continue to raise higher, all the way up to the phrase whose specifier is the highest adverb in the low adverb space, namely *Beye* (*already*). The question is why this should be the case?

In their paper 'Verb Movement, Adverbs and Clitic Positions in Romance', Ledgeway and Lombardi notice that 'Cinque's so-called "higher sentence adverbs" are invariably excluded from interpolation structures' and that 'adverbs found in interpolation structures belong exclusively to the lower portion of the clause, a class of adverbs termed by Cinque "lower pre-VP adverbs" since they occupy a syntactic space delimited to the left by presuppositional adverbial negators (cf. Italian *mica* 'not') and to the right by arguments of the VP' (2005: 81). Based on this and other relevant findings, Ledgeway and Lombardi propose the existence of a clause-medial functional projection, YP, which is 'sandwiched between the higher adverb space (HAS) and the lower adverb space (LAS)' (*ibid.* 2005: 83). Following this proposal, we could claim that the Bulgarian lexical verb raises optionally up to YP, as illustrated in (5). Nevertheless, a careful look at the

⁴ The examples are personally translated in accordance with the Bulgarian word order.

frequency results from the Bulgarian National Corpus shows that the word order in (5) is not the typical word order in Bulgarian. More frequent results show up with the word order shown in (6), where the verb is to the right of the adverb⁵:

- 6) а) В края на краищата, винаги идваше утрото.
 - V kraya na kraishtata, *vinagi* idvashe utroto. *After all, *always* came the morning.
 - b) Както вече каза, имаше толкова много други неща...
 - Kakto veche kaza, imashe tolkova mnogo drugi neshta...
 - *As already (he) said, there were so many other things...

The examples in (5), which illustrate the point of view that the lexical verb in Bulgarian optionally raises from the head of the Voice phrase to other higher heads until it reaches *already T(Anterior)*, were harder to find, and the frequency ratings suggest that it is actually the examples in (6) that reflect the canonical word order, while those in (5) correspond to more specific cases, whose correctness is somewhat stylistically marked. Nonetheless, I will regard them as grammatical, given that they are taken from the Bulgarian National Corpus.

Therefore, it can be concluded that Bulgarian finite lexical verbs can target a head within the lower adverb space or move to the head of the functional projection YP. If they do the latter, they obligatorily remain there and cannot target positions within the higher adverb space. On the other hand, in English, high and low adverbs, with the exception of adverbs which are part of the Voice and Asp_{celerative(II)} groups, are always observed to the left of finite lexical verbs.

2.2. Adverbs and Auxiliaries

Examples containing a compound tense in English show that auxiliaries (and modals) typically appear to the left of all adverbs:

- 7) a) You have *probably* noticed how much I look like them.
 - b) In fact, he **has** *completely* failed to take into account this very important development.
 - c) She and Charlie had *always* remained very close friends.

⁵ For example: 975 examples of the combination *VERB in Aorist* + *ckopo (soon)* and 5 231 of the combination *ckopo (soon)*+ *VERB in Aorist*; 2 578 examples of the combination *VERB in Aorist* + *BUHACU (always)* and 7 232 of the combination *BUHACU (always)* + *VERB in Aorist*; 11 454 examples of the combination *VERB in Aorist* + *BUHACU (always)* + *VERB in Aorist*; 11 454 examples of the combination *VERB in Aorist* + *BUHACU (always)* + *VERB in Aorist*; 11 454 examples of the combination *VERB in Aorist* + *BUHACU (always)* + *VERB in Aorist*; 11 454 examples of the combination *VERB in Aorist* + *BUHACU (always)* + *VERB in Aorist*; 11 454 examples of the combination *VERB in Aorist* + *BUHACU (always)* + *VERB in Aorist*; 11 454 examples of the combination *VERB in Aorist* + *BUHACU (always)* + *VERB in Aorist*; 11 454 examples of the combination *VERB in Aorist* + *BUHACU (always)* + *VERB in Aorist*; 11 454 examples of the combination *VERB in Aorist* + *BUHACU (always)* + *VERB in Aorist*; 11 454 examples of the combination *VERB in Aorist* + *BUHACU (always)* + *VERB in Aorist*; 11 454 examples of the combination *VERB in Aorist* + *BUHACU (always)* + *VERB in Aorist*.

But where exactly do they originate? To answer this question, let us start by observing how finite perfect auxiliary verbs behave within the lower adverb space when we have sentences with complex verbs. Going through data from the British National Corpus, we see that perfect auxiliary verbs in English are always to the left of those adverbs and cannot separate two low adverbs, as (8d) shows:

- 8) a) We must ensure that hospitals **have** *well* thought out discharge plans for every individual.
 - b) The steam **had** *almost completely* cleared now.
 - c) This is because an egg that **has** *already almost* reached the womb could still be implanted after the operation.
 - d) * I already have almost finished my homework.

The examples in (8) allow us to speculate that perfect finite auxiliary verbs in English originate in a position above the low adverbs, which we previously labelled as YP, following Ledgeway and Lombardi (2005). However, as Baker notices, there are two special cases where some auxiliaries and modals can follow adverbs: "The first is that in which the finite auxiliary is emphasised, the second that in which the constituent following the auxiliary has been deleted" (Baker 1971: 171).

- 9) a) He loves her now, and he *always* HAS loved her.
 - b) You may continue lying, but I no longer WILL.

What is interesting is that sentences such as (9) are only possible with adverbs that are higher than *almost* in the hierarchy. This was observed by Cinque, who says that 'along the hierarchy of adverbs seen here, certain modals and auxiliaries can remain as low as the position to the immediate right of *almost* (or higher), but not any lower' (shown in (6), (7), (8), (9) from Cinque 1999: 132, repeated here as (10) (11) (12) (13):

- 10) He said he would destroy ita. *? ... and he completely will/has.b. *? ... and he will/has completely.
- 11) He said he would do his homework somehow by tonighta. * ... and he well will/has.b. * ... and he will/has well.
- 12) He said he would wake up by himselfa. * . . . and he early will/ has.b. * ... and he will/has early.

13) He said he would finish his homework by tonighta. * ... and he fast has/will.b. * ... and he has/will fast.

The examples allow Cinque to believe that these auxiliaries could be generated to the immediate right of *almost* (or higher). Whether this is a plausible solution or auxiliaries in English are indeed generated in YP is a question that will need further research. Nonetheless, for the purposes of this paper, we will accept the theory that YP separates lower and higher adverbs, and auxiliaries in English originate there.

The examples in (14a) and (14b) show that Bulgarian can mimic traditional English word order with respect to complex verbs when there is a past auxiliary form in the sentence but does not do so when there is a present auxiliary form⁶ as we can see in (14c) and in (14d):

14) a) След което беше вече изчезнал. Sled koeto beshe veche izcheznal. After which (he) had already disappeared.
b) В коридорите сражението беше вече почти завършило. V koridorite srazhenieto beshe veche pochti zavarshilo. In the corridors, the battle had already almost finished.
c) * Аз съм вече направил своя избор. Az sam veche napravil svoya izbor. I have already made my choice.
d) *Той е добре написал книгата. Toj e dobre napisal knigata. *He has well written the book.

A plausible explanation is that in (14a) and (14b), the Bulgarian past auxiliary originates in YP located between the higher and the lower adverb space and is followed by the AdvPs and the active participle, which is still in VP (just like in the English structure). However, the same analysis cannot be applied to (14c) and (14d) as the present auxiliary cannot be placed in front of low adverbs such as *seve (already)* and *doope (well)*. Despite the correctness of (14a) and (14b), what is a rather more preferred word order is exemplified in (15), where the adverbs are placed in front of the present and the past auxiliaries. This structure is impossible in English under an analysis of the auxiliaries in English as originating in YP.

⁶ This is due to the difference in the distribution of BE auxiliaries in Bulgarian. For more information on this topic, see Krapova (1999).

a) Не, благодаря, вече съм ял. Ne, blagodarya, veche sam yal.
*No, thanks, already (I) have eaten.
b) Изглежда, npocmo съм припаднала. Izglezhda, prosto sam pripadnala.
*It seems that just (I) have passed out.
c) Почти бяха забравили. Pochti byaha zabravili.
*Almost (they) had forgotten.

What the contrasts in (15) show is that finite auxiliary verbs in Bulgarian originate lower than YP and, therefore, lower than they do in English. A logical assumption is that both past and present auxiliaries in Bulgarian originate below the lowest '*completely* Asp_{SgCompletive(process}' to the left of VP. However, past auxiliaries allow for a second internal merge option – YP, thus forming sentences such as (14a) and (14b). On the other hand, present auxiliaries in Bulgarian obligatorily merge below the lowest '*completely* Asp_{SgCompletive(process})' to the left of VP and do not allow for a second internal merge option.

Adopting the theory that finite auxiliary verbs in English originate in YP, we can claim that they can optionally continue to raise higher within the high adverb space, allowing for sentences such as (16):

16) a) He **had** *honestly* believed he could take the place of everything she had ever known.

b) ... the physiologist carried on an operation in his sleep which *probably* **had** *often* occurred to his fancy when at his work...

c) Grove House had once been a convent with a chapel.

In contrast, Bulgarian auxiliary verbs do not raise within the higher adverb space. As we observed, they originate to the left of VP, with past auxiliary verbs optionally being merged in YP. However, word order like the one observed in (16) is not possible in Bulgarian sentences:

a) *Аз бях вероятно ходил там. Az byah veroyatno hodil tam. I had probably been there.
b) * Той е нарочно ходил там. Toj e narochno hodil tam. He has deliberately been there. The ungrammaticality of (17) can be taken to be proof that finite auxiliary verbs in Bulgarian do not raise higher than YP on their own and do not move freely within the higher adverb space, as the examples in (18), taken from the Bulgarian National Corpus show:

a) През нощта сънувах всевъзможни глупости, повечето от които, като се събудих, за щастие бях вече забравил.
Prez noshtta sanuvah vsevazmozhni gluposti, povecheto ot koito, kato se sabudih, za shtastie byah veche zabravil.
During the night (I) dreamt about all kinds of foolish things, most of which, when I woke up, fortunately (I) had already forgotten.

b) Явно беше вече доста понапреднал с чашите.

Yavno beshe veche dosta ponaprednal s chashite.

Apparently (he) had already drunk one glass too many.

с) Той потвърди един факт, който явно винаги беше знаел със сигурност.

Toj potvardi edin fakt, koyto yavno vinagi beshe znael sas sigurnost.

He confirmed a fact, which (he) *apparently always* had known for sure.

In (18a) and (18b), the past auxiliary is in YP, and the higher adverbs are on its left, while the lower ones remain on its right. In (18c), the auxiliary is to the left of VP, below the lowest 'completely $Asp_{SgCompletive(process)}$ ', where it originates in a separate AUX projection, while the high adverb *neho* (*apparently*) and the low adverb *nehazu* (*always*) are to its left, in the order we would expect them to due to their hierarchy – *apparently* coming first, followed by *always*.

In conclusion, I suggest that finite auxiliary verbs in English originate in a position between high and low adverb spaces, which we labelled YP, following Ledgeway and Lombardi (2005). In contrast, Bulgarian auxiliaries originate immediately to the left of VP, but past auxiliaries offer a second merging site – YP, mimicking, to some extent, English word order. In addition, English auxiliaries can optionally raise higher within the higher adverb space, whereas Bulgarian auxiliaries cannot.

2.3. Adverbs and Active Past Participles

Interesting observations can be made regarding the participle movement in both languages. If, as speculated in the previous section, English auxiliaries originate in YP (and optionally raise higher within the higher adverb space) and active past participles originate in VP, the examples in (19) give us the standard English word order:

a) Failure, he had often said to himself, was not a part of his life.
b) The previous section has briefly examined three theoretical perspectives in sociology.

However, sentences such as (20) show us that English past participles could optionally move out of VP to the head of a given projection hosting AdvP in its specifier:

a) Since then he and Eddie have met *again*.
b) John still looked strained but Angela had recovered *quickly* and was radiant.

Interestingly, the examples above contain adverbs from the higher adverb class. When going through the British National Corpus and searching for relevant examples, the only ones that I found show that past participles cannot move freely within the lower adverb space. The examples in (20), together with the ungrammatical sentences in (21), allow us to conclude that if they raise, the first landing site of active past participles is YP. Therefore, active past participles in English can raise from VP to YP, which is located between the low and high adverbs, and optionally continue to raise higher but cannot move freely within lower adverbs.

21) a) * She had fallen asleep *almost*.b) * The girls had cooked *already*.

Bulgarian active past participles also act interestingly. In the previous section, we claimed that present auxiliaries originate immediately to the left of VP. This claim accounts for the word order in (22) below:

22) a) Виждаш ли, слънцето *почти* е залязло. Vizhdash li, slantseto pochti e zalyazlo. You see, the sun *almost* has set.
b) Те *винаги* са имали прекрасни системи за превод. Te *vinagi* sa imali prekrasni sistemi za prevod. They *always* have had wonderful systems for translation.

Since the Bulgarian present auxiliary form merges to the left of VP and cannot be merged into YP (unlike past auxiliaries in Bulgarian), Bulgarian present auxiliaries must always be to the right of the lower adverbs, hence the ungrammaticality of (23):

23) a) * Той е *тъкмо* пристигнал. Тој е *takmo* pristignal. Не has *just* arrived.
b) * Тя е *винаги* казвала, че го обича. Туа е *vinagi* kazvala, che go obicha. She has *always* said that she loves him.

The reason for this is that the present auxiliary verb is a clitic and 'needs', for prosodic reasons, to stay close to the participle.⁷ However, examples such as (24) show that when the active past participle accompanies the present auxiliary, the sentence can be grammatical:⁸

24) a) Рано беше още, както съм казал вече. Rano beshe oshte, kakto sam kazal veche. It was still early, as (I) have said already.
b) Единият става детектив, какъвто е искал винаги да бъде. Ediniyat stava detektiv, kakavto e iskal vinagi da bade. One of them becomes a detective, as (he) has wanted always to be.

We can speculate that in (24), the participle has moved from VP to the merge point of the present auxiliary (immediately to the left of VP) and together, as a clitic, they can optionally move to a head within the lower adverb space. Using the examples above, we can conclude that this is possible because the active participle moves together with the present auxiliary. Otherwise, we saw that the present auxiliary remains in its base position and does not raise any higher. Due to length limitations, this article will not look deeper into the clitic status of the auxiliary.

In terms of participle movement with past auxiliaries within the lower adverb space, we can expect the two most common word orders in Bulgarian to be: one where the past auxiliary is immediately to the left of VP, with the past participle remaining in VP – (25), and one where the past auxiliary is internally merged in YP, with the active past participle once again in VP – (26):

25) a) Почти бях изгубил надежда. Pochti byah izgubil nadezda. Almost (I) had lost hope.
b) Вече бяха достигнали първите дървета. Veche byaha dostignali parvite darveta. Already (they) had reached the first trees.

⁷ See Steven and King's *A Handbook of Slavic Clitics* (2000) for more information.

⁸ We are ignoring negative sentences for the time being, as they most probably need a different approach, and we are focusing only on affirmative sentences.

26) a) Бях *почти* смачкал инстинкта си за самосъхранение.
 Byah *pochti* smachkal instinkta si za zamosahranenie.

(I) had *almost* crushed my instinct for self-preservation.

b) Всеки от министрите си беше вече намерил своето оправдание.

Vseki ot ministrite si **beshe** *veche* **nameril** svoeto opravdanie. Each of the ministers **had** *already* **found** their excuse.

However, active past participles can also raise out of VP. The word order in (27) allows us to speculate that there is a special position to the immediate left of the lowest adverbs which they obligatorily raise to:

27) а) Но тъй като **бях каза**л *вече*, че ще мога сам, трябваше да стисна зъби и да продължа.

No taj kato **byah kazal** *veche*, che shte moga sam, tryabvashe da stisna zabi i da prodalzha.

But since (I) **had said** *already* that (I) could (do it) myself, I had to bite the bullet and to continue.

b) Маркварт разпозна този поглед, тъй като го беше виждал често.

Markvart razpozna tozi pogled, taj kato go **beshe vizdal** *chesto*. Markvart recognised this look as (he) it **had seen** *often*.

Since, as we already noted in the previous section, Bulgarian auxiliaries do not raise to the higher adverb space, and the highest position they can reach is YP, Bulgarian present and past participles can never be found to the left of YP. Therefore, high adverbs in Bulgarian are always to the right of YP and to the right of the auxiliary and the participle:

28) а) Вероятно беше научил за готварските хитрости с портокаловия сос.

Veroyatno **beshe nauchil** za gotvarskite hitrosti s portokaloviya sos.

(He) *Probably* had learned about the cooking tricks with the orange sauce.

b) *Явно* **беше разбрала**, че да убие човек не е толкова лесно. *Yavno* **beshe razbrala**, che da ubie chovek ne e tolkova lesno.

(She) Apparently had realised that to kill a person is not that easy.

To sum up, in this section, I have theorised that active past participles in English cannot raise freely within the lower adverb class. They can, however, raise from VP to YP and optionally continue to raise higher. In contrast, Bulgarian participles behave differently depending on whether they are used with a present or a past auxiliary. Active past participles move out of VP to the merge point of the present auxiliary (immediately to the left of VP), and together, they form a clitic. Then, they can optionally move to a head within the lower adverb space. When used with a past auxiliary, active past participles can also raise out of VP, but they obligatorily raise to a special position to the immediate left of the lowest adverbs. Since Bulgarian auxiliaries do not move within the higher adverb space, the highest point Bulgarian active past participles can reach is to the right of YP.

3. Implications and Conclusions

Throughout the years, names such as Ernst (1984), Alexiadou (1997), and Cinque (1999) have left their marks on the theory of adverbs, and yet still, to this day, the topic of adverbs is one of the most arduous ones in generative syntax. The current paper relies heavily on Cinque's ground-breaking 'Adverbs and Functional Heads a Cross-Linguistic Perspective', where he proposes that adverbs should be considered as specifiers of distinct maximal projections (1999). Using Cinque's work as the foundation of this paper, I have briefly explored and analysed the differences between English and Bulgarian in terms of adverb position in the sentence, focusing on the behaviour of high and low adverbs.

The first part of Section 2 deals with finite lexical verbs and illustrates and theorises on where English and Bulgarian finite lexical verbs start and where they raise to. To prove my point, I have adopted Ledgeway and Lombardi's proposal that there exists a clause-medial functional projection, YP, located between the higher and the lower adverb spaces. I have concluded that Bulgarian finite lexical verbs can target a head within the lower adverb space and move to the head of the functional projection YP. If they raise to the head of YP, they remain there and cannot target positions within the higher adverb space. On the other hand, English finite lexical verbs raise either to the left of *early* or to the left of *well* but not any higher, which makes their positions within the adverb hierarchy very limited compared to Bulgarian word order.

The second part of Section 2 focuses on auxiliaries. I have proposed that auxiliaries in English and Bulgarian originate in different positions, with the English ones originating in YP and the Bulgarian ones originating immediately to the left of VP. However, past auxiliaries in Bulgarian offer a second Merge site – YP. This part of the section has also put forward the

idea that while English auxiliaries can optionally raise higher within the higher adverb space, Bulgarian auxiliaries cannot.

The third part of Section 2 deals with the movement of active past participles and shows that the two languages have many differences concerning this part of the syntax. I have tried to prove that active past participles in English cannot raise freely within the lower adverb class but could raise from VP to YP and optionally continue to raise higher. The situation with Bulgarian participles has proved to be even more difficult as I have discovered that they behave differently when they are used with a present auxiliary and with a past auxiliary. (29) below summarises the origin sites of all the verbal forms discussed in this paper:

(29)

[frankly Mood_{speech act} [fortunately Mood_{evaluative} [allegedly Moodevidential [probably Modepistemic [once T(Past) [then T(Future) [perhaps Mood_{irrealis} [necessarily Mod_{necessity} [possibly Mod_{possibility}] [usually Asp_{habitual} [again Asp_{repetitive(I)} [often Asp_{frequentative(I)} [intentionally Mod_{volitional} [quickly Asp_{celerative(1)} [YP ENG Auxiliaries/BG Past Auxiliaries² [already T(Anterior) [no longer Asp_{terminative} [still Asp_{continuative} [always AsP_{perfect(?)} [just Asp_{retrospective} [briefly Asp_{durative} Asp_{proximative} [characteristically(?) soon Asp_{generic/progressive} [almost Asp_{prospective} [completely Asp_{SgCompletive(I)} [tutto Asp_{PLCompletive} [well Voice [fast/early Asp_{celerative(II)} [again Asp_{repetitive(II)} [often Asp_{frequentative(II)} [completely Asp_{SgCompletive(II)}]BG Auxiliaries [VP BG Finite Lexical Verbs/ ENG Finite Lexical Verbs/ ENG Active Past Participles/ BG Active Past Participles

As all the above pages have demonstrated, adverb movement is indeed a complex topic. This paper sheds at least some light on the differences between English and Bulgarian verb movement in relation to the positions occupied by adverbs. All in all, I believe this work succeeded in providing valid arguments and supporting them with solid evidence. The current paper also sparked some new and exciting questions – as I believe every scholarly work should. The findings of this work will hopefully be of interest and help to students, teachers, and scholars alike. Nevertheless, for the topic to be given full justice, further research that would include a broader range of examples, an experimental study, and an analysis of negative sentences, among others, must be conducted.

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