

EPISTEMIC MODALITY OF CLAUSES AND SENTENCES WITH ENGLISH AND BULGARIAN ALTERNATIVE INTERROGATIVE STRUCTURES

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The article focuses on the qualitative and quantitative findings from a comparative corpus-based research into the epistemic modality of clauses and sentences with English and Bulgarian alternative interrogative structures. The study has shown that in both languages the clauses and sentences are either genuine inquiries expecting the addressee to provide the right answer or self-addressed questions signaling the speaker's lack of knowledge, unhelpful memory, wondering and uncertainty, assumption, or concern and worry.

Key words: alternative interrogative structure, genuine inquiry, self-addressed question, lack of knowledge, unhelpful memory, wondering

I. Corpora used in the research

This article focuses on the qualitative and quantitative findings from a comparative corpus-based research into the epistemic modality of clauses and sentences with English and Bulgarian alternative interrogative structures (E&BAISs)¹. The study has been based on authentic examples of alternative interrogative structures (AISs) excerpted from eight corpora of written and spoken English and Bulgarian.

- English Fiction Corpus (EFC, 90 508 word forms) compiled by V. Spasova for the purposes of her PhD thesis.
- English Corpus of Fiction Monologue (ECFM, 50 370 word forms) compiled by V. Spasova for the purposes of her PhD thesis.

¹ Clauses with English AIS were discussed in a separate article (cf. Spasova 2015). The analysis suggested below, however, is a revision of the one offered previously. Moreover, in this article both English and Bulgarian clauses with AISs are analyzed.

- Charlotte Face-to-Face Corpus of Spoken English (CFCSE, 90 630 word forms). It is part of a larger corpus of spoken English, the Charlotte Narrative and Conversation Collection (CNCC, 198 295 word forms), included in the Open American National Corpus (OANC).
- Switchboard Telephone Corpus of Spoken English (STCSE, 50 476 word forms). It is part of a larger corpus of spoken English, the LDC Switchboard corpus (3 019 477 word forms), included in the Open American National Corpus (OANC).
- Bulgarian Fiction Corpus (BFC, 90 326 word forms) compiled by V. Spasova for the purposes of her PhD thesis.
- Bulgarian Corpus of Fiction Monologue (BCFM, 50 508 word forms) collected by Tzvetomira Venkova (Faculty of Classical and Modern Philology at Sofia University “St. Kliment Ohridski”).
- Corpus of Spoken Bulgarian *Aleksova* (CSB–A, 89 959 word forms) collected by Krasimira Aleksova (Faculty of Slavic Studies at Sofia University “St. Kliment Ohridski”).
- Corpus of Spoken Bulgarian *Nikolova–Venkova* (CSB–NV, 50 000 word forms) collected by Tsvetanka Nikolova and Tzvetomira Venkova.

II. Epistemic modality

In view of the forthcoming discussion, it is necessary to outline the essence of the kind of modality referred to as epistemic in linguistic literature.

In central cases epistemic modality implicates the level of knowledge that the speaker has of the event described in the proposition. In view of the speaker’s knowledge, the event can be factual or non-factual, and generally past or present, while the proposition can be true or false. In other words, “epistemic modality is concerned with the truth status [of a proposition] in the light of what the speaker knows” (Huddleston 1984: 167) and with “the speaker’s attitude to the factuality of past or present time situations” (Huddleston & Pullum 2002: 178).

As “epistemic modality is oriented towards the speaker” (Huddleston 1984: 167), it is defined primarily as “subjective” (*ibid.* 1984: 167) or as “a matter of subjective attitude on the part of the speaker (or others)”, i.e. other “persons referred to in the sentence” (Huddleston & Pullum 2002: 173).

Subjective epistemic modality has two poles, *viz.* one that indicates the speaker’s certainty, confidence and complete knowledge, the other

their uncertainty, doubt and lack of knowledge of the factuality of the event expressed in the proposition (Nitsolova 1984: 162–3).

III. Groups of clauses and sentences with E&BAISs

Corpora observations allow us to establish two groups of clauses and sentences with E&BAISs, *viz.* clauses and sentences used as

- genuine (usually alternative) inquiries
- direct or indirect self-addressed questions

IV. Genuine inquiries

By definition a genuine inquiry is “a question to which the speaker does not know the answer” and wants to obtain it from the addressee (Huddleston & Pullum 2002: 866). In this article “the expression *the answer* is understood to mean ‘the right answer’” and “usually the right answer is the one that is true” (*ibid.* 2002: 866). Hence genuine inquiries stand at the pole of epistemic modality that conveys the speaker’s lack of knowledge as to which answer is the right one, i.e. the one that is true.

The prototypical genuine inquiry carries two implicatures:

- a) *X* does not know something
- b) *X* requests *Y* to supply the missing information,

where *X* is the speaker and *Y* the addressee.

1. Statistics

Data indicate that 137 English alternative interrogative structures (EAISs), i.e. 53.5 % out of the total of 256 AISs found in the four corpora, constitute or make part of clauses and sentences used as genuine inquiries. There are 9 in EFC, 2 in ECFM, 93 in CFCSE, and 33 in STCSE.

The Bulgarian alternative interrogative structures (BAISs) are 60, i.e. 24.8 % out of the total of 242 AISs testified in the four corpora. There are 9 in BFC, 37 in CSB–A, and 14 in CSB–NV.

As statistics show, EAISs are 2.3 times as numerous as BAISs.

Not surprisingly, the majority of the English inquiries and almost all Bulgarian ones are alternative. There are 88 EAISs in alternative inquiries – 4 in EFC, 1 in ECFM, 53 in CFCSE, and 30 in STCSE. The BAISs are 56 – 9 in BFC, 34 in CSB–A, and 13 in CSB–NV.

Corpora data also show that EAISs often occur in clauses and sentences used as genuine polar inquiries. These EAISs are 43 – 5 in EFC,

1 in ECFM, 34 in CFCSE, and 3 in STCSE. BAISs, however, are hardly ever found in polar inquiries – there are only 3 occurrences.

Finally, 6 EAISs (in CFCSE) and 1 BAIS (in CSB–A) make part of clauses and sentences used as genuine open inquiries.

2. Subgroups of genuine inquiries

Corpora evidence suggests that unlike others, some genuine inquiries with AISs carry “affective meaning” (Leech 1981: 15), i.e. they not only request the addressee to supply the right answer but also reflect “the personal feelings of the speaker, including his attitude to the listener, or his attitude to something he is talking about” (*ibid.* 1981: 15). This in mind, we can divide the inquiries into two subgroups:

- Genuine inquiries that are emotionally neutral
- Genuine inquiries that carry affective meaning

In all examples below the constituents of the AIS are in round brackets, while the AIS is in square brackets and is marked with single underlining. The coordination markers are in bold type. The abbreviated name of the corpus from which the example is taken follows the example and is enclosed in round brackets.

2.1. Genuine inquiries that are emotionally neutral

Most inquiries in the English and Bulgarian corpora do not convey any personal feelings or attitudes on the part of the speaker towards the addressee or the topic of conversation. The speaker only asks the addressee to provide the right answer.

In fact, the EAISs in these inquiries are 133, i.e. 97.1 % of all EAISs found in genuine inquiries. There are 7 in EFC, 1 in ECFM, 93 in CFCSE, and 32 in STCSE.

The BAISs are 45, i.e. 75 % of all BAISs found in genuine inquiries. There are 4 in BFC, 31 in CSB–A, and 10 in CSB–NV.

A large number of the English inquiries and all Bulgarian ones are alternative. They carry two implicatures:

- a) X does not know if A or B is true
- b) X requests Y to choose A or B and thus to confirm its truth value, where X is the speaker, Y is the addressee, and A and B are the alternatives (denoted by the constituents of the AIS) that can serve as an answer.

In ex. (1), (2), and (3) the addressee chooses the first alternative as the right answer. In ex. (4) they confirm the truth value of the second alternative.

(1) A: *Right, uh, is yours a, is it a, [(a slab foundation) (or pier and beam)]?*

B: *It's slab. (STCSE)*

(2) A: *[(Was that told to you) (or did you read that)]?*

B: *Um, that was told to me and I saw that genie coming out of the bottle in the picture in the book was not about a kind and loving genie. (CFCSE)*

(3) B: *A [(поставихте ли такива радиатори), (или още не сте ги слагали – сега започвате)]?*

A: *A, сложихме ги радиаторите, сега боядисваме и чистиме. (CSB–A)*

V: *A [(postavihte li takiva radiatori), (ili oshte ne ste gi slagali – sega zapochvate)]?*

A: *A, slozihme gi radiatorite, sega boyadisvame i chistime. (CSB–A)*

B: *'But have you put such radiators on the walls or you haven't put them yet – you are about to?'*²

A: *'Well, we have put the radiators, now we are doing the painting and the cleaning.'*

(4) A: *A бебето станало [(без да го иска) (или нарочно)]?*

B: *He, ne, тя не се е пазила въобще, нарочно. (CSB–NV)*

A: *A bebeto stanalo [(bez da go iska) (ili narochno)]?*

B: *Ne, ne, тя не се е pazila vaobshte, narochno. (CSB–NV)*

A: *'And the baby was conceived against her will or intentionally?'*

B: *'No, no, she didn't take any precautions at all, intentionally.'*

2.2. Genuine inquiries that carry affective meaning

In my corpora only 4 EAISs occur in genuine inquiries that carry affective meaning. This makes only 2.9 % of all EAISs found in genuine inquiries. By contrast, the BAISs are 15, i.e. 25 % of all BAISs found in genuine inquiries. There are 5 in BFC, 6 in CSB–A, and 4 in CSB–NV.

The inquiries usually reveal the speaker's negative attitude (anger, disapproval, reproach, accusation, etc.) towards the addressee's behavior (or the behavior of the person the speaker is talking about). In their turn, the addressee's responses show the intended or unintended "perlocutionary

² Single inverted commas indicate meaningful translation of the Bulgarian examples into English. Translation is mine.

effects”, i.e. “effects on the feelings, attitudes, and subsequent behavior of the hearers” (Searle & Vanderveken 1985: 11) resulting from the utterance of the inquiries.

The inquiry in ex. (5) accuses the addressee of having mocked at the speaker. The intended perlocutionary effect is that the addressee should assume responsibility for a state of affairs that is bad for the speaker. The addressee, however, rejects the accusation, thus refusing to take responsibility.

(5) С: *Кой, а, [(Любо и Дидка) (или ти и татко ти)] ми се смеят?*

Д: *Аз не съм била.* (CSB–A)

S: *Кож, а, [(Lyubo i Didka) (ili ti i tatko ti)] mi se smeyat?*

D: *Az ne sam bila.* (CSB–A)

S: ‘*Who, speak up, are Lyubo and Didka or you and your dad laughing at me?*’

D: ‘*It wasn’t me.*’

V. Self-addressed questions

Some questions with E&BAISs entail “the presupposition that the speaker doubts as to whether their question can receive a true answer at the moment of speaking, for the speaker himself (or herself) is unable to answer the question and presupposes that an addressee cannot provide an adequate answer either”³ (Nitsolova 1984: 168). These are questions that the speaker asks to themselves (*ibid.* 1984: 168) and for this reason they are termed “ratiocinative” or “self-addressed” questions (Quirk *et al.* 1985: 826) in English, and „автовъпроси“ (Nitsolova 1984: 168) in Bulgarian. They often suggest that the speaker is wondering out loud. Hence self-addressed questions stand at the pole of epistemic modality that communicates the speaker’s doubt and uncertainty.

1. Statistics

Corpora data show that 97 EAISs, i.e. 37.9 % out of the total of 256 AISs found in the four corpora, constitute or make part of clauses and sentences used as direct or indirect self-addressed questions. There are 25 in EFC, 10 in ECFM, 30 in CFCSE, and 32 in STCSE.

³ Translation of quotations from books by Bulgarian authors is mine.

The BAISs are 173, i.e. 71.5 % out of the total of 242 AISs testified in the four corpora. There are 48 in BFC, 26 in BCFM, 61 in CSB–A, and 38 in CSB–NV.

This comes to say that BAISs are 1.8 times as numerous as EAISs.

2. Subgroups of self-addressed questions

According to the meaning conveyed, self-addressed questions can be divided into five subgroups, *viz.* self-addressed questions that convey the speaker's

- lack of knowledge
- unhelpful memory
- wondering, uncertainty, doubt and hesitation
- assumption
- concern and worry

2.1. Speaker's lack of knowledge

These questions indicate that at the time of the utterance the speaker lacks knowledge to assess the veracity of the stated alternatives. They carry two implicatures:

a) *X* does not know if *A* or *B* is true

b) *X* does not request information from *Y*, where *X* is the speaker, *Y* is the addressee, and *A* and *B* are the two alternatives expressed by the constituents of the AIS.

Lack of knowledge results from the fact that the speaker has no general information (i.e. information about the usual state of affairs), or personal observation or experience about the event described in the proposition (i.e. the speaker was not a witness to or a participant in the event).

Lack of knowledge is marked by lexical and grammatical (syntactic and/or morphological) means. The AIS often represents a coordination of two closed interrogative subordinate clauses or of one closed and one open interrogative subordinate clause. Bearing in mind that “the interrogative [clause] types are characteristically used to express questions to which the speaker doesn't know the answer” (Huddleston & Pullum 2002: 174), we can regard them as syntactic markers of the pole of epistemic modality that indicates the speaker's uncertainty, doubt and lack of knowledge. In Bulgarian, the speaker's lack of knowledge may also be signaled morphologically by means of the verb paradigm for conclusive mood.

The most common lexical markers are the verbs of mental cognition *know* and *знам* used in their negative forms in the main clause containing the AIS (ex. 6), or in the preceding (ex. 7) or following clause. In the latter two cases the expressions *I don't know* and *не знам* usually have the status of parentheticals.

(6) *Both of the ones I met have been really funny guys. I don't know if that's, uh, [(if that's true about all Puerto Ricans) (or not)]. ...* (STCSE)

(7) *Тоя се върте един час и не мой да заспи. Не знам, [(там на обед спи ли), (кво е ...)]* (CSB–NV)

Toya se varte edin chas i ne moj da zaspi. Ne znam, [(tam na obed spi li), (kvo e ...)] (CSB–NV)

'He turned over in bed for an hour but he couldn't get to sleep. Does he sleep at noon or what is it, I don't know.'

Lack of knowledge is often double-signaled in Bulgarian as there are both lexical and grammatical markers in the same clause or sentence. In ex. (8) the negated verb *знам* is preceded by an AIS whose constituents are a closed and an open interrogative subordinate clause containing the conclusive aorist forms *са били* and *е било*.

(8) *Имало два тролея, [(зад тролея ли са били), (как е било)] не знам, и пострада.* (CSB–A)

Imalo dva troleya, [(zad troleya li sa bili), (kak e bilo)] ne znam, i postrada. (CSB–A)

'There were two trolleybuses, were they behind the trolleybus or how was it, I don't know, but he got injured.'

2.2. Speaker's unhelpful memory

These questions indicate that at the time of the utterance the speaker's memory does not serve them well and for this reason they cannot assess the truth value of the alternatives mentioned. Such questions carry two implicatures:

- a) *X* knows but does not remember if *A* or *B* is true
- b) *X* does not request information from *Y*.

Unhelpful memory means that the speaker does not or cannot remember clearly a fact about a past or present event in general or a fact about an event from their own past in particular which they have personally observed or experienced. For instance, most of the English examples come from stories retold by interviewees who were witnesses to or participants in the events described and therefore had direct evidence of

them. Yet, for some reason, at the time of the interview they do not remember some of the facts related to the events.

The unhelpful memory is marked lexically and/or grammatically.

The most typical lexical indicators are the verbs of mental cognition *remember*, *know* (meaning *remember*) and *знам* (meaning *помня*) always used in their negative forms in the main clause containing the AIS.

(9) *But I do remember that we stood and watched him go by and waved at him. I don't remember [(whether he waved back) (or not)] so I did get to see President Roosevelt himself and in person ...* (CFCSE)

(10) *Ами за рус човек става. Такова небесносиньо. Аз не знам детето му [(тъмно ли беше), (светло ли беше), (черно ли беше)].* (CSB–A)

Ами за рус човек става. Такова небесносиньо. Аз не знам детето ми [(tamno li беше), (svetlo li беше), (cherno li беше)]. (CSB–A)

‘Well, the color is suitable for a blond person. Sky-blue. I don’t know if his child was dark-haired or if he was fair-haired or if he was black-haired.’

In my opinion, in ex. (10) *не знам* (*I don’t know*) is to be understood as *не помня* (*I don’t remember*) since it becomes clear from the context that the speaker knows the child in question but has forgotten the color of his hair. The unhelpful memory is further signaled morphologically by means of the imperfect tense form *беше* (*was*) which is a component of each constituent of the AIS. “This is the so-called imperfect for reminding („имперфект за припомняне“) used only in interrogative utterances to show that the speaker is asking about something they knew in the past but have forgotten at the moment of speaking.” (Nitsolova 2008: 285)

2.3. Speaker’s wondering, uncertainty, doubt and hesitation

These questions show that at the time of the utterance the speaker is wondering which alternative is true. They carry two implicatures:

- a) *X* is wondering / is unsure whether *A* or *B* is true
- b) *X* does not request information from *Y*.

In both English and Bulgarian corpora, wondering and uncertainty are usually signaled by lexical markers. In English, such indicators are the verbs *wonder*, *doubt*, *think* (used as an ideographic synonym for *wonder*), *know* (used in its negative form), the modal expression *I’m not sure*, etc.

(11) *Right, they had to go through wondering for three days [(whether or not) (I was going to live)].* (CFCSE)

(12) *Um, and then when I got in junior high, we started riding city buses to school. I'm not sure [(how that worked) (or how the route worked)], I just remember doing it.* (CFCSE)

Among the lexical markers in Bulgarian are the verb *викам* (*cu*) (used as an ideographic synonym for *чудя се*), the abstract noun *колебание* (*hesitation*), the impersonal construction *не беше ясно* (*it wasn't clear*).

(13) *Вървя и си мисля. Викам сега гримът ми [(разцапан ли е), (или не е разцапан)].* (CSB–NV)

Varvya i si mislya. Vikam sega grimat mi [(raztsapan li e), (ili ne e raztsapan)]. (CSB–NV)

'I'm walking and I'm thinking. I'm thinking now is my make-up smudged or isn't it smudged.'

(14) *Цяла нощ Камела се мятеше в леглото, разкъсана от колебания [(дали да отиде на уречената среща), (или не)].* (BCFM)

Tsyala nosht Kamela se myatashe v legloto, razkasana ot kolebaniya [(dali da otide na urechenata sreshta), (ili ne)]. (BCFM)

'All night Camela turned over in bed devoured by hesitations whether to keep the appointment or not.'

2.4. Speaker's assumption

These questions indicate that the speaker has limited information so that they can only make an assumption about the factual status of the event and the degree of probability that the proposition will be true (Nitsolova 1984: 164). They carry two implicatures:

- a) *X* does not know but assumes that *A* or *B* is true
- b) *X* does not request information from *Y*.

Assumption is marked lexically in both English and Bulgarian examples. The most typical indicators are the modal adverbs *maybe*, *probably*, *може би* (*maybe*), *сигурно* (meaning *вероятно*). As adverbs like *може би* and *вероятно* “denote probability of around 50 %” that the proposition will be true (Nitsolova 1984: 165), we can conclude that the examples in this subgroup express assumption with a degree of probability of around 50 % that the proposition containing the AIS will be true, hence assumption with the same degree of probability that one of the suggested alternatives will be true.

(15) *But this tree, it's been years, probably about [(six years) (or five years)], so I don't remember the exact width or anything, but this tree was so large ...* (CFCSE)

(16) *Викам боже, свекър ми беше още жив, викам този пък дър-так какво ли се й сетил, защо ми й затиснал, запушил мазето с тоя камъшит. [(Сигурно за да не влизат кучета ли), (какво)]. (CSB–NV)*

Vikam bozhe, svekar mi beshe oshte zhiv, vikam tozi pak dartak kakvo li se e setil, zashto mi e zatisnal, zapushil mazeto s toya kamashit. [(Sigurno za da ne vlizat kucheta li), (kakvo)]. (CSB–NV)

‘I’m thinking, oh dear, my father-in-law was still alive, I’m thinking, what has come into the mind of this old man, why has he covered, blocked the basement with this cane mat. Probably so that dogs can’t go in or what.’

The reason why the speaker makes an assumption about the number of years passed in ex. (15) is that their memory does not serve them well as suggested by the verb *remember* used in its negative form in the clause following that with the AIS.

2.5. Speaker’s concern and worry

These questions show that at the time of the utterance the speaker is concerned with the truth status of the proposition containing the AIS, hence with the truth status of the stated alternatives. They carry two implicatures:

- a) *X* is concerned whether *A* or *B* is true
- b) *X* does not request information from *Y*.

(17) B: *But I’m, I’m disturbed by a country that attempts to be functionally bilingual at the official level.*

A: *Oh, I see.*

B: *Um, I’m, I’m concerned about [(whether or not) (that causes fractiousness)], I guess. (STCSE)*

VI. Conclusions

The comparative qualitative and quantitative corpus-based research into the epistemic modality of clauses and sentences with E&BAISs results in the following conclusions:

1. In both English and Bulgarian corpora, the clauses and sentences are either genuine inquiries expecting the addressee to provide the right answer or direct or indirect self-addressed questions signaling the speaker’s lack of knowledge, unhelpful memory, wondering, uncertainty and hesitation, assumption, or concern and worry.

2. Clauses and sentences with EAISSs used as genuine (most often alternative) inquiries are 1.4 times as many as those used as self-addressed questions.
3. By contrast, clauses and sentences with BAISs used as self-addressed questions are 2.9 times as many as those used as genuine inquiries.
4. Whereas almost all genuine inquiries with AISs found in the English corpora are emotionally neutral, a quarter of those testified in the Bulgarian corpora carry affective meaning.

REFERENCES

- Aleksova:** Алексова, Кр. *Корпус от разговорен български език.* [Aleksova, Kr. Korpus ot razgovoren balgarski ezik.] <<http://folk.uio.no/kjetilrh/bulg/Aleksova/>> (April, 2012).
- Huddleston 1984:** Huddleston, R. *Introduction to the Grammar of English.* Cambridge: Cambridge University Press, 1984.
- Huddleston, Pullum 2002:** Huddleston, R., Pullum, G. K. *The Cambridge Grammar of the English Language.* Cambridge: Cambridge University Press, 2002.
- Leech 1981:** Leech, G. *Semantics. The Study of Meaning.* Second edition – revised and updated. Harmondsworth: Penguin Books Ltd, 1981.
- Nikolova, Venkova:** Николова, Цв., Венкова, Цв. *Корпус от разговорен български език.* [Nikolova, Tsv., Venkova, Tzv. Korpus ot razgovoren balgarski ezik.] <<http://folk.uio.no/kjetilrh/bulg/Nikolova/>> (April, 2012).
- Nitsolova 2008:** Ницолова, Р. *Българска граматика. Морфология.* [Nitsolova, R. Balgarska gramatika. Morfologiya.] София: УИ „Св. Климент Охридски“, 2008.
- Nitsolova 1984:** Ницолова, Р. *Прагматичен аспект на изречението в българския книжовен език.* [Nitsolova, R. Pragmatichen aspekt na izrechenieto v balgarskiya knizhoven ezik.] София: ДИ „Народна просвета“, 1984.
- Open American National Corpus:** <<http://www.anc.org/data/oanc>> (December, 2012).
- Quirk et al. 1985:** Quirk, R., Greenbaum, S., Leech, G., Svartvik, J. *A Comprehensive Grammar of the English Language.* Harlow: Longman Group Limited, 1985.
- Searle, Vanderveken 1985:** Searle, J. R., Vanderveken, D. *Foundations of Illocutionary Logic.* Cambridge: Cambridge University Press, 1985.

Spasova 2015: Spasova, V. Some Meanings of English Clauses with Alternative Interrogative Structures. // Научна конференция с международно участие *Хоризонти в развитието на човешките ресурси и знанието*, 12–14 юни 2015 г., Бургас. Габрово: ЕКС-ПРЕС ООД, 2015, Т. II, 110 – 115.