https://doi.org/10.36007/3310.2019.105-117

# TWO KINDS OF EPISTEMIC MODALITY IN THE CONTEXTS OF BUSINESS ENGLISH AND HUNGARIAN

#### Katalin KISS<sup>1</sup>

#### **ABSTRACT**

The paper provides an overview of the ways to express different types of meanings related to epistemic modality, having to do with concepts such as possibility, probability, impossibility in English and Hungarian. All of these concepts cover the subjective or objective attitude or statement of the speaker, who presents their evaluation/judgement or belief of the knowledge upon which the proposition is based. Modal verbs such as English *can* or *may* express modal meanings, which are referred to as "epistemic" having to do with probability, logical possibility, hypothetical meaning, beliefs and predictability. In this paper we claim that within the category of epistemic modality two types must be distinguished in English: subjective possibility and objective possibility which are expressed by modals, modal lexical verbs with adverbs and some other means in English. Hungarian uses modals combined with the possibility suffix to express plain possibility and evidential probability within the single category of epistemic modality. In Hungarian, the two meanings correlate with two different sentence structures. The aim of the present paper is to show how specific devices, context, structural means in Hungarian (main stress, focus position of the constituents) may help to distinguish two types of epistemic modality.

#### **KEYWORDS**

possibility, probability, epistemic modality, subjective possibility, objective possibility, inferential probability

#### 1. INTRODUCTION

The aim of the paper is to show differences of expressing epistemic modality in business English and Hungarian. Epistemic modality refers to the use of modality which is based on the speaker's evaluation and judgment in relation to the degree of confidence of the knowledge on the proposition (Lyons [12: 823]). While this general definition seems to be quite transparent, there are a number of problematic issues in this area, such as the distinction between epistemic possibility and evidentiality within the category of epistemic modality (cf. Cornillie [2], Portner [15: 167–172]). The literature on modality in both English and cross-linguistically seems to be divided as to the necessity to distinguish between the two types of epistemic modality. However, in some languages, the distinction between evidentiality and plain epistemic modality in many cases is quite clear-cut. Hungarian, for instance, has grammatical evidentials – structural means which provide the source of information without offering epistemic judgement (Kiefer [9]). Thus, Hungarian distinguishes two types of epistemic modality using

<sup>&</sup>lt;sup>1</sup> Dr. Kiss Katalin, PhD, senior lecturer, Budapest Business School, College of International Management and Business, Department of International Business English kiss.katalin@unibge.hu

the notions of 'epistemic possibility' and 'inferential (evidential) possibility' to cover the above phenomena in English (Kiefer [9]: 6). In this paper we want to argue that within the concept of epistemic modality it seems plausible to tell the notions of objective (epistemic possibility) and subjective modality (evidential modality) apart in English, similarly to Hungarian, since one and the same modal verb may express a number of meanings leading to sentences containing modals to be multiply ambiguous.<sup>2</sup> We will attempt to show that it is the context and other means which can help delimit the two categories of epistemic modality. Both languages have different means to express epistemic modality. While English in the majority of cases uses the modals such as may, might, can, could, should and ought along with modal adverbs, lexical verbs and clauses containing adjectives to convey the meanings of possibility and probability (Biber at al. [1: 492]), in Hungarian epistemic possibility is normally expressed by the verbal suffix -hat/-het or by the verb lehet (the contamination of the verb lesz 'become' and the possibility suffix -het) (Kiefer [9: 2]). Both the forms containing modal verbs in English and the suffixed verbal forms with -hat/-het may produce ambiguous readings. For instance, a simple sentence used in a business context containing a modal verb can such as A parent company can change its ownership status by purchasing more shares can be interpreted as relating the possibility and ability sense. The fulfilment of the action seems to depend on a mixture of external factors and inherent properties of the subject (Leech & Coates [11]). Hence the sentence may get the following readings: it is possible for the parent company to change its ownership status since it has capacity of doing so or the company is able to change the status due to external factors. As Leech and Coates [11] state, ability also implies possibility, which means that if someone has the ability to do something, then it is possible. Likewise, the Hungarian translation of the above English sentence Az anyavállalat több részvény megvásárlásával megváltoztathatja a tulajdonosi státuszát may also get different readings in Hungarian: an epistemic (possibility) reading, but it may also mean that the company is allowed to change its status (deontic reading) or that the circumstances on the market (external circumstances) are such that the parent company is able to change its status (circumstantial reading). Without knowing the broader context in which a modal sentence is uttered it is impossible to know what exactly the sentence means.

In the following sections we will first shed some light on the notions of modality, epistemic possibility and probability and then discuss several devices that may help disambiguate interpretation of the sentences containing epistemic modal verbs. The findings may also prove useful in teaching English and Hungarian for Specific Purposes.

# 2. THE NOTION OF MODALITY IN ENGLISH. THE CASE OF EPISTEMIC MODALITY

Modality is to be understood as a semantic category. It is the speaker's opinion or judgement on the content and speech function of the clause (Halliday [5: 88]). Modal auxiliaries express a wide range of meanings, having to do with concepts such as ability, permission, possibility, necessity, and obligation. Modal verbs can basically express two different kinds of modal meanings, which are referred to as "epistemic" and "deontic" modality. While deontic modality refers to expressions of obligation, it is an event modality, epistemic modality is a special type of propositional modality which deals with the possibility, probability or impossibility of a certain proposition.

<sup>&</sup>lt;sup>2</sup> The issue of epistemic modality has traditionally been discussed in terms of the distinction between subjective and objective modality, i.e., subjective and objective possibility, the terminology was introduced in Lyons [12]. In this paper we will adopt Lyons's terms for the discussion of the category of epistemic modality in English.

In the *Longman Grammar of Spoken and Written English* (Biber at al. [1: 485-486]) modal verbs are grouped into three major categories according to their meaning: intrinsic and extrinsic modal verbs. Intrinsic modality refers to actions and events that humans (or other agents) directly control – meanings relating to permission, obligation, or volition (or intention). Extrinsic modality refers to the logical status of events or states, usually relating to assessments of likelihood: possibility, necessity, or prediction.

In the literature on epistemic modality, one very often encounters the suggestion that there is a distinction between a 'subjective' and 'objective' evaluations of the likelihood of a state of affairs, thus the terms objective and subjective possibility were distinguished.<sup>3</sup> Subjective possibility seems to be the easiest to define: a proposition A is subjectively possible just in case it could be true, for all you know. A is consistent with your knowledge. In other words, you are not certain that A is false. The following sentences all express subjective possibility:

- (1) a. (I don't know if the company is going to dismiss four hundred employees) It is possible it will.
  - b. It is possible that Hungarian government has additional sources to increase allowances for young married couples.
  - c. It is possible that a higher amount of dividends was distributed among shareholders this year.
  - d. It is possible that the functional structure was deliberately retained by the company.

These thoughts might also be expressed using the modal words *could*, *may* and *might*, as follows:

- (2) a. The company *may/might* dismiss four hundred employees.
  - b. Hungarian government *could* have additional sources to increase allowances for young married couples.
  - c. A higher amount of dividends *might have been distributed* among shareholders this year.
  - d. The functional structure *could have been deliberately* retained by the company.

It appears that subjective possibility depends on what one knows (and especially what one is ignorant of) so it can be also called epistemic (i.e. knowledge) possibility. Another kind of possibility that does not seem to depend on knowledge or ignorance is known as objective possibility, that remains even after we know everything. Objective possibility is a matter of consistency with certain objective facts, rather than with our knowledge. Consider, for examples, the following statement:

(3) It is possible to withdraw up to HUF 150.000 from a domestic ATM monthly free of charge.

<sup>&</sup>lt;sup>3</sup>Various authors provided different terms for the two types of epistemic modality, for instance, Nuyts [13] distinguished "representational" (objective) and "interpersonal" (subjective) modality examining modals in terms of layered clause structure.

In this case one would not say "I guess it is possible for all I know", but rather "It *really* is possible". The claim in the statement is consistent with the actual legislation pertaining to the activities and services of the Hungarian banks. Consider, however, another example below:

(4) It is possible that Tesla shares will plummet because of the defective autopilot feature/Tesla shares *may* plummet.

The statement appears to contain two levels of possibility, the first (outer) possibility seems to be subjective, and the second (inner) one objective. On the subjective reading, it is consistent with our knowledge that Tesla's shares may plummet due to defective spare part.

Probably the clearest formulation for the distinction between subjective and objective possibility is due to Lyons [12]. Lyons argues that epistemic *may* in an example like (5) can have two interpretations:

#### (5) Alfred may be unmarried (Lyons [12: 797])

Given that Alfred belongs to a community of ninety people, the interpretation of may in (5) depends on the speaker's knowledge about the presence of unmarried people in that community. One interpretation is objective: if the speaker knows that there are unmarried people in the group to which Alfred belongs, s/he also "knows, and does not merely think or believe, that there is a possibility (in this case a quantifiable possibility) of Alfred's being unmarried" (Lyons [12: 798]). That is objective possibility presents the fact that a certain state- of- affairs is possible based on what we know about the world. The other interpretation of the statement is subjective: if the speaker does not know anything about the presence of unmarried people in this group, s/he "may be understood as subjectively qualifying his commitment to the possibility of Alfred's being unmarried in terms of his own uncertainty" (Lyons [12: 797]), i.e. a certain state of affairs is very likely to occur in view of what we know or believe about the world. The speaker may have good reasons to believe that a certain state- of- affairs holds rather than another one. Thus, Lyons [12] argues, the possibility expressed by may can either be attributed to the uncertainty of the speaker, as in the subjective interpretation, or it can be logically inherent in the situation described in the utterance, as in the objective interpretation. Still without a broader context it is impossible to grasp which epistemic meaning prevails in the sentence.

Following Lyons [12], various authors like Halliday [4], Foley and Van Valin [3], and Hengeveld [6] tried to posit a distinction between two types of epistemic modality. Although these proposals are driven by different theoretical concerns, the actual definition of the distinction boils down to whether or not the modal in question involves the speaker in the utterance.

The following examples provided by Portner [15: 122] might make it easier to disambiguate Lyons's intuition:

- (6) a. Alfred has smoked for 30 years, so I worry about him. He may well get lung cancer.
  - b. Alfred has smoked for 30years, and the statistics tells the scary tale. He may well get lung cancer.

(6a) has a subjective use, while (6b) is objective. In the former, *he may well get lung cancer* seems to mean "the possibility of his getting lung cancer is one to worry about", while in the latter it has the meaning more like "the probability of his getting lung cancer is relatively high". Lyons's account of the distinction can also be interpreted in terms of the notion of evi-

dentiality, especially for epistemic modality: in the case of subjective modality, the speaker "alone knows the evidence and draws a conclusion from it", whereas in the case of objective modality "s/he indicate[s] that the evidence is known to (or accessible by) a larger group of people who share the conclusion based on it" (Nuyts [13: 31]).

There are also certain criteria which Lyons [12: 797-801] used to distinguish between subjective and objective modality. His account of the distinction is formulated in terms of Hare's analysis of utterances into three basic functional components: the tropic, the neustic, and the phrastic. The tropic is defined as "that part of the sentence which correlates with the kind of speech act that the sentence is characteristically used to perform" and glossed as the I-say-so component of the utterance (Lyons [12: 749]). The neustic is defined as "that part of the sentence which expresses the speaker's commitment to the factuality, desirability, etc., of the propositional content conveyed by the phrastic" (Lyons [12: 750]) and glossed as the it-is-so and so-be-it component of the utterance. The phrastic, finally, corresponds to the propositional content of the utterance. These three functional components form the basis of Lyons's analysis of subjective and objective modality. Subjective epistemic modality involves a qualification of the tropic component of the utterance, through which the speaker "express[es] reservations about giving an unqualified, or categorical, 'I-say-so' to the factuality of the proposition embedded in his utterance" (Lyons [12: 799]). Objective epistemic modality, on the other hand, involves a qualification of its neustic component: the speaker does give an unqualified *I-say-so* to his utterance, but introduces a modal qualification in the *it-is-so* component.

To sum up the discussion above, we can conclude that the major distinction between the categories of epistemic subjectivity (subjective possibility) and objectivity (objective possibility) essentially corresponds to the distinction between "speaker-related" and "content-related function".

In what follows we are going to examine the behaviour of modals and we will try to support observations on the existence of the two types of epistemic modality based on the examples from business English context.

Let us consider the following example:

(7) The company may distribute dividends to reduce taxable burden.

The statement may have both subjective and objective readings. On the objective reading, the speaker marks the proposition as only possibly being true. The speaker based on his knowledge of the world, i.e., given economic situation and financial standing of companies in general, does not exclude the possibility of the company distributing dividends. On the other hand, we can assume that the speaker, someone working for the company being aware of the financial situation in-house, may believe or have good grounds to assume that the probability of the company distributing dividends is high, i.e., the speaker may be subjectively qualifying his commitment to the possibility of the company distributing dividends. The sentence may also mean that the circumstances are such that the company is able to distribute dividends (circumstantial reading). The question arises how to explain the various meanings of the same modal in the sentence. In the following section we will look at some criteria proposed in the literature that can help delineate subjectivity and objectivity.

# 3. SOME CRITERIA FOR DELINEATION OF SUBJECTIVE AND OBJECTIVE MODALITY

There are a number of approaches to distinguish subjective and objective interpretation of modals. One such approach is to associate subjectivity and objectivity with specific adverbs. English has a considerable number of adverbs that can be used to express the speaker's attitude toward a state -of- affairs. Different grammar books (cf. Huddleston & Pullum [8: 767], Quirk et al. [16: 620–621]) list the following items which express epistemic meanings: admittedly, allegedly, apparently, arguably, assuredly, avowedly, certainly, clearly, conceivably, decidedly, definitely, doubtless, evidently, incontestably, incontrovertibly, indeed, indisputably, indubitably, ineluctably, inescapably, likely, maybe, manifestly, necessarily, no doubt, obviously, of course, patently, perhaps, plainly, possibly, presumably, probably, purportedly, reportedly, reputedly, seemingly, supposedly, surely, truly, unarguably, unavoidably, undeniably, undoubtedly, unquestionably.

Epistemic adverbs are often subdivided according to the degree of certainty they express (e.g., Huddleston & Pullum [8: 768]), which, however, reveals very little about their specific meanings. Epistemic adverbs can be epistemic in the narrow sense of the word, i.e., they express certainty which comes from the speaker's own judgment of the reliability of truth, e.g., certainly, indeed, surely; furthermore, they can be evidential adverbs, which refer to certainty coming from available evidence, e.g., clearly, obviously; and these can be expectation adverbs as well, which relate the speaker's expectations to the state of affairs, e.g., of course, naturally. Adverbs such as conceivably, probably, possibly, presumably, supposedly, perhaps, maybe rely on the author's judgement of the situation, so they can be classified as evidential. Conceivably, probably, possibly, presumably, supposedly, perhaps, maybe rely on the author's judgement of the situation, so they can be classified as evidential. Conceivably, probably, possibly, presumably, supposedly, perhaps, maybe rely on the author's judgement of the situation, so they can be classified as epistemic adverbs (Simon-Vandenbergen & Aijmer [17: 84]).

Let us see how adverbs or clauses with adjectives may influence the meaning of a statement.

- (8) a. (*Probably/it is probable that*) the company will pay higher salaries.
  - b. (Perhaps/possibly, it is possible that) the company will pay higher salaries.

(8a) and (b) are clauses in which the modality is not overtly coded in the form of a simple modal but in other realizations such as modal adverbs or adjuncts. The use of adverbs in (8) helps to interpret the above utterances in the following way: in (8a) the speaker relies on his own judgement and does not exclude the probability of the company paying higher salaries, so the sentence seems to contain subjective attitude of the speaker. Someone saying (8a) may base his statement on the idea that the company is doing well, it is financially sound and can use this belief to assert (8a), that is, the sentence containing epistemic adverbs such as *probably/it is probable* can be analysed as the one representing subjective modality. Whereas (8b) implies a mere possibility, the speaker may have in mind only reasons having to do with the financial situation of the company, its stability on the market, he bases the likelihood of the company paying higher salaries on the knowledge he may have received from external sources, for instance, media coverage. Perkins [14: 100-105] regards expressions like those in (8b) as "explicitly objective adjectival modal expressions", whereas those in (a) are "explicitly subjective".

Though modal adverbs can serve as a tool to distinguish subjective and objective modality, in many cases they are said to represent a low level of subjectivity because of their association with the content.

Perhaps one of the most convincing criteria to distinguish the two subcategories of epistemic modality is the use of the first person (or sometimes 3rd person singular) modal lexical verbs such as *believe*, *think*, *suppose*, *know* which are often considered to be highly subjective because of their relation with the speaker (cf., e.g., Perkins [14]; Hengeveld [7]). These verbs can be understood as markers of epistemic modality. Perkins [14: 101,103] points out that if the speaker "wishes to make the modality of his utterance explicitly subjective, he may use a modal lexical verb with a first person subject, although he is obliged here to specify further the nature of the subjective epistemic state". Consider the following sentences:

- (9) a. I [think/believe/reckon] that the company will dismiss several employees in the near future.
  - b. He thinks he might be given a generous compensation package.
  - c. We *suppose* multiskilled employees may generally use their talents fully without close supervision.
  - d. The company figures *suggest* that they might start restructurization soon.

As the sentences show, the cases of epistemic subjective modality are associated with either first person or 3rd person singular pronoun combined with some modal lexical verb. The speaker appears to be more explicit in both (9a) and (9b) and there is a closer relation of the speaker to the content. The speaker makes a conclusion based on his own knowledge of company performance whether it is good or bad. While (9c) and (9d) are the cases of logical conclusion drawn by the speaker or a group of people based on their observations. The two latter examples are the cases of epistemic objective modality.

Another criterion formulated by Nuyts [13: 79] is the following: subjective modality is bound to the moment of speaking, whereas objective modality is not. Events which are a part of objective modality normally do not depend on the actions of an intentionally acting agent. Timeless events, if modalized, can only have an epistemic objective reading expressing possibility or the likelihood of a situation. Consider the following sentences:

- (10) a. Heavier taxes may reduce the incentive to work.
  - b. Defective products may ruin reputation of any company.
  - c. Tough competition may cause job insecurity.
  - d. Tax returns can be filed electronically.

The events described in (10) are not controlled by an agent, nor are they due to certain circumstances or bound by time. They are just compatible with what we know about the world. Hence, they are the cases of objective modality.

There are also other criteria mentioned in the literature to distinguish the two types of possibility, such as objective modality can be questioned, but subjective modality cannot; or, objective modality can occur in a conditional sentence, whereas subjective modality cannot. But since there is a strong disagreement in the literature on these criteria, they will be left out of the present discussion.

The following section will deal with the two kinds of epistemic modality in Hungarian.

# 4. EPISTEMIC MODALITY AND THE INFERENTIAL USE OF MODALS IN HUNGARIAN

On its epistemic reading the modal verbal forms in Hungarian can be paraphrased as 'in view of what I know it is possible that V'. Consider the following examples:

- (11) a. A cég fizethet osztalékot, hogy csökkentse az adó terhét.
  - 'The company may be paying dividends to reduce taxable burden'
  - b. Péter lehet az irodában.
    - 'Peter can be in the office'

(11a) asserts that on the basis of what the speaker knows it is not excluded that the company is paying dividends to reduce their tax burden. Similarly, (11b) asserts that it is not excluded that Peter is in the office, but other possibilities are not excluded either. The possibility put forward by the speaker can easily be negated by a third person with a different knowledge background. Consider:

- (12) a. *A cég nem fizethet osztalékot, mert tudom, hogy veszteséges volt.*'The company cannot be paying dividends because I know it has made losses'
  - b. Péter nem lehet az irodában, mert éppen most tárgyalt a bankban a beruházóval.

'Peter cannot be in the office because he was just negotiating with an investor

in the bank'

As the sentences show, Hungarian has a fixed order of constituents in (11a) and (11b): Subject – Modal - Complement. Furthermore, it is important to note that in both cases in (11) the modal verb form is contrastively stressed. Since the modal suffix is not an independent constituent it can only be stressed by stressing the modal verb form containing this suffix. In Hungarian grammar the position immediately preceding the verb is often referred to as Focus Position (=FP). If a nominal complement is moved into this position it gets contrastively stressed (Kiefer [9: 4]). Consider:

- (13) a. A cég **osztalékot** fizethet, hogy csökkentse az adó terhét.
  - 'It is dividends that the company may be paying to reduce taxable burden'
  - b. Péter az **irodában** lehet.
    - 'It is in the office where Peter can be'

Contrastive stress which falls on a nominal complement is indicated by bold letters in the sentences above. In the cases in (11) the modal does not admit other possibilities. The financial benefit that the company may be paying or the place where Peter can be represents the only possibility. How can the difference between (11a) – (11b) and (13a) – (13b) be explained? As Kiefer [9: 4] states, contrastive focus laid on the nominal constituent has the property of 'exhaustive listing'. According to this property, the focused constituent denotes the set of entities for which the predicate holds. Thus, the dividend is the only financial asset that the company will pay to reduce its taxable burden and the office is the only place where Peter can be. In other words, (13a) and (13b) express probability rather than just possibility. In the followings we will examine some criteria to distinguish epistemic possibility and probability in Hungarian.

#### 4.1 Negation

Sentences such as (11a) and (11b) can be easily negated, as was shown above. On the other hand, this is not the case with (13a) and (13b), which admit external negation only.

- (14) a. Nem igaz, hogy a cég osztalékot fizethet.
  - 'It is not true that the company may be paying dividends'
  - b. Nem igaz, hogy Péter az irodában lehet.
    - 'It is not true that Peter may be in the office'

By using internal negation we question the validity of the original hypothesis and we put forward our own hypothesis.

(15) a. *A cég nem osztalékot, hanem jutalmat fizethet*. 'The company may be paying bonuses rather than dividends'

The speaker in (15) may have good grounds to believe that the financial benefit the company is paying is bonus and not the dividend. These reasons are based on the speaker's belief and serve as an evidence. In other words, the abovementioned probability can be equated with evidential(inferential) meaning. The speaker has evidence for (15) but not for (13). The situation is different if the focussed constituent lies outside of the scope of the negation and the negative particle precedes the modal verb, as in (16):

(16) A cég osztalékot nem fizethet. 'The company may not be paying dividends'

The sentence in (16) negates plain epistemic possibility: it says that it is out of the question that the company is paying dividends, (16) does not negate probability, it negates the state-of-affairs which might give rise to the inferential meaning 'The company is very likely to pay dividends'. Negation may combine with modality in English as well. The occurrence of *not* with a modal verb may negate the modal verb itself or the content of the following proposition (Kreidler [10: 244]). Consider the following examples:

- (17) a. Peter may not be in his office now.
  - b. Peter might not be in his office now.
  - c. Peter must not be in his office now.
  - d. Peter can't be in his office now.

(17a) and (17d) show different things. The former expresses the possibility of Peter not being in his office, and the latter talks about the impossibility of Peter being in his office. *Not* in (17a) applies to the proposition, hence it negates objective possibility, while in (17d), *not* applies to the modal verb *can*, negativity is non-propositional, meaning of the sentence is something like 'I am sure Peter is not in his office since I met him elsewhere'. This is the case of subjective possibility. Sentence (17b) is similar to (17b). They only differ in their strength. The possibility in (17b) is less forceful as compared to that in (17a). And (17c) shows high probability that Peter is not in his office.

Another way to distinguish plain possibility and inferential probability is to subject modal sentences to interrogation.

#### 4.2 Interrogation

(18a) is the interrogative form of (11): the speaker wants to know if the given state-of-affairs is a possible. On the other hand, by asking (18b) the speaker would be questioning his interlocutor's inference, which does not seem to be possible:

- (18) a. A cég fizethet osztalékot?
  - 'Can the company be paying dividends?'
  - b. \*A cég osztalékot fizethet?
    - 'May the company be paying dividends?'

#### 4.3 The premise of a conclusion

A similar difference can be observed if we want to use the possibility as a premise in a conditional. In (19a) the premise expresses plain epistemic possibility and conditional is a grammatical sentence. In contrast, if the premise conveys an inferential meaning, the conditional becomes ungrammatical. In other words, an inferential cannot be the premise of a conclusion. Compare (19a) and (19b).

- (19) a. Ha a cég **fizethet** osztalékot, akkor biztosan csökkenti majd az adó terhét.
  - 'If the company can be playing dividends, it is certain to reduce its taxable burden'
  - b.\**Ha a cég osztalékot fizethet, akkor majd csökkenti az adó terhét.*'If the company may be paying dividends, it will reduce its taxable burden'

#### 4.4 Embedding under the verb know

Epistemic possibility is certainly something which can be known. This is objective possibility in English. Inferential probability, or subjective possibility in English, has to do with the speaker's assumptions and beliefs. This difference manifests itself by allowing a sentence expressing epistemic possibility to embed under the verb *know*, which is excluded in the case of inferential possibility. Compare (20a) and (20b).

- (20) a. *Péter tudja, hogy a a cég fizethet osztalékot, hogy csökkentse az adó terhét.* 'Peter knows that the company can be paying dividends to reduce taxable burden'
  - b. \*Péter tudja, hogy a cég osztalékot fizethet, hogy csökkentse az adó terhét. 'Peter knows that the company may be paying dividends to reduce taxable burden'

Since any proposition can be negated and questioned, and any proposition can be the premise of a conclusion and can be known, Kiefer [9: 6] claims that inferential possibility is not propositional.

On the basis of the above discussion we may thus conclude that two types of epistemic modality must be distinguished in Hungarian: epistemic possibility, which is propositional, and inferential possibility, which advances the speaker's hypothesis about a state-of-affairs, and which is not propositional. In Hungarian, as it was shown, epistemic possibility and inferential possibility can be kept apart structurally. In the case of epistemic possibility main stress is carried by the modal form containing the possibility suffix, on the other hand, in the case of inferential possibility a complement of the verb is contrastively stressed. This complement must precede the verb, i.e. it must occupy the focus position of the sentence.

# 5. THE RELATIONSHIP OF MODAL PARTICLES, ADVERBIALS AND EPISTEMIC MODALITY IN HUNGARIAN

Hungarian has a considerable number of particles, some of them express the speaker's attitudes toward a state-of-affairs (e.g. sajnos 'unfortunately'), some others may have a logical function, often in addition to a pragmatic function (e.g. csak 'only') and again others carry a modal meaning. In the majority of cases the modal meaning is epistemic and inferential (Kiefer [9: 9]). The set of modal particles include the particles aligha 'hardly', alighanem 'most likely, presumably', állítólag 'supposedly', bizonnyal 'certainly, surely', esetleg 'perhaps, possibly', kétségkívül 'undoubtedly', nyilván 'evidently', talán 'perhaps' and tényleg 'really'; the adverbials biztosan 'surely, certainly', feltehetően 'presumably, supposedly', kétségtelenül 'undoubtedly', nyilvánvalóan 'evidently, obviously', természetesen 'naturally', valószínűleg 'probably', vitathatatlanul 'unquestionably' belong to the set of modal adverbials, which are derived from adjectives. Modal particles and modal adverbials are used in sentences of inferential epistemic possibility. Without any exception all modal particles and modal adverbials are non-propositional. Consider:

- (21) a. *A cég most nyilván osztalékot fizet, hogy csökkentse az adó terhét.* 'Evidently, the company is presently paying dividends to reduce taxable burden'
  - b. A cég most nyilván nem osztalékot fizet, hogy csökkentse az adó terhét. 'Evidently, the company is presently not paying dividends to reduce taxable burden'
  - c. A cég most nyilván nem fizet osztalékot, hogy csökkentse az adó terhét. 'Evidently, the company is presently not paying dividends to reduce taxable burden'

As shown by (21b, c) the modal particle lies outside of the scope of negation. This also holds true for modal adverbials. Compare:

a. A cég most valószínűleg osztalékot fizet.
'The company is probably paying dividends at present'
b. A cég most valószínűleg nem osztalékot fizet.
'The company is probably not paying dividends at present'

Both the modal particle *nyilván* 'evidently' in (21b) and the modal adverb *valószínűleg* 'probably' in (22b) lie outside of the scope of negation and they occupy focus position preceding the verb (the predicate) which is required by the cases of inferential possibility. From the analysed examples we may conclude that modal adverbials can express evidential possibility. Though the examples above are quite convincing, as Kiefer [9: 10] claims, the meanings of the modal particles and adverbials in Hungarian are vague. Only a detailed analysis of each individual modal can reveal their typical uses.

#### 6. CONCLUSION

The aim of the paper was to provide an overview of the ways to express epistemic modality in English and Hungarian. As we have seen, English distinguishes two types of epistemic modality – subjective and objective modality, also referred to as subjective and objective possibility. We have demonstrated that the use of specific adverbs, first and 3rd person modal lexical verbs and the context itself all serve as convincing criteria to differentiate subjective and objective epistemic modality in English. We have also shown that in terms of the context the major distinction between the categories of subjective possibility and objective possibility is due to the distinction between "speaker-related" and "content-related function" in English. Hungarian makes a clear distinction between epistemic possibility and inferential possibility (probability) which are expressed by verbs, by a verbal suffix, by adverbials and particles. We have shown that the differentiation between the two types of modality in Hungarian is more systematic than in English which is due to the fact that word order in Hungarian is relatively free and the focussed constituent normally occupies the position immediately preceding the verb.

#### **REFERENCES**

- [1] BIBER, Douglas, Stig Johansson, Geoffrey Leech, Susan Conrad, Edward Finegan. Longman Grammar of spoken and written English. Harlow: Pearson Education Limited. 1999/2007
- [2] CORNILLIE, B. Evidentiality and epistemic modality. On the close relationship between two different categories. *Functions of Language* 16.1, 44-62. 2009
- [3] FOLEY, William and Robert Van Valin. *Functional syntax and universal grammar*. Cambridge: Cambridge University Press.1984
- [4] HALLIDAY, M.A.K. Functional diversity in language as seen from a consideration of modality and mood in English. *Foundations of Language* 6: 322-361.1970
- [5] HALLIDAY, M.A.K. An introduction to Functional Grammar. London: Arnold. 1994 (2nd

ed).

- [6] HENGEVELD, Kees. Clause structure and modality in Functional Grammar. In: Johan van der Auwera and Louis Goossens, eds., *Ins and outs of the predication*, 53-66. Dordrecht: Foris. 1987
- [7] HENGEVELD, Kees. Illocution, mood and modality in a functional grammar of Spanish. *Journal of Semantics* 6: 227-269.1988
- [8] HUDDLESTON, Rodney, Geoffrey K. Pullum, et al. *The Cambridge grammar of the English language*. Cambridge: Cambridge University Press.2002
- [9] KIEFER, Ferenc. Two kinds of epistemic modality in Hungarian. In Guentchéva, Z (ed) *Epistemic Modalities and Evidentiality in Cross-Linguistic Perspective*. Berlin: De Gruyter-Mouton (Empirical Approaches to Language Typology 59), 430 p. 2018
- [10] KREIDLER, C.W. Introducing English Semantics. London: Routledge.1998
- [11] LEECH, Geoffrey & Jennifer Coates. Semantic Indeterminacy and the Modals. *Studies in English Linguistics* In: Sidney Greenbaum, Geoffrey Leech & Jan Svartvik, eds., 79–90. London: Longman.1980
- [12] LYONS John, Semantics. Volume 2. Cambridge: Cambridge University Press.1977
- [13] NUYTS, Jan. Epistemic Modality, Language, and Conceptualization: A Cognitive-pragmatic Perspective. John Benjamins Publishing, 428 p. 2000
- [14] PERKINS, Michael. Modal expressions in English. London: Pinter. 1983

- [15] PORTNER, Paul. *Modality*. Oxford surveys in Semantics and Pragmatics. Oxford: Oxford
  - University Press, pp. 288. 2009
- [16] QUIRK, Randolph, Sidney Greenbaum, Geoffrey Leech, & Jan Svartvik. *A Comprehensive Grammar of the English Language*. London: Longman. 1985
- [17] SIMON-VANDENBERGEN, Anne-Marie & Karin Aijmer. *The semantic field of modal certainty: A corpus-based study of English adverbs*. Berlin & New York: Mouton de Gruyter. 2007