

MODAL ADVERBS IN HUNGARIAN (THE CASE OF *TALÁN* ‘PERHAPS’)*

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Abstract: This paper discusses epistemic modal adverbs in Hungarian from a functional perspective. It argues that epistemic modal adverbs indicate several operations that are closely interconnected: on the one hand, they indicate the fact that the speaker presents the event represented in the sentence as a possibility rather than as a fact (thereby opening the dimension of epistemic modality for its interpretation); on the other hand, they signal that the evaluation of likelihood comes from the speaker, that the specification of the degree of probability of the given event is based on the speaker’s inference (setting the domain of evidentiality into motion). Both of these functions can be interpreted as part of the operation of subjectification, identifying the speaker as the subject of consciousness. The author assumes that Hungarian exhibits a modalized system of representing evidence; she takes epistemic modality and evidentiality to be partially overlapping domains.

The paper gives an overview of inferential-epistemic modal adverbs in Hungarian. In a corpus-based analysis of the lexeme *talán* ‘perhaps’, it discusses its inferential-epistemic functions, as well as the paths of leaving the modal domain.

Keywords: modal adverbs, subjective epistemic modality, inferential evidentiality, subjectification

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1. Introduction

Most Hungarian modal adverbs function as markers of epistemic modality and evidentiality (e.g., *feltehetőleg* ‘presumably’, *valószínűleg* ‘probably’). In the case of modal adverbs, indicating epistemic modality and evidentiality (including indirect, inferential evidence) are interrelated functions. The literature offers several different approaches to the relationship of these two categories. Therefore, in section 2, I begin by discussing the categories of epistemic modality and inferential evidentiality, as well as the problem of their relationship. I also introduce the conceptual framework to be adopted later in the description of the functions of *talán* ‘perhaps’.

Another, smaller group of Hungarian modal adverbs belong to other semantic categories such as bouletic modality (e.g., *remélhetőleg* ‘hopefully’), affective-evaluative attitude (e.g., *szerencsére* ‘fortunately’), or limitation (e.g., *elméletileg* ‘theoretically (speaking)’). In the present paper, however, I will focus on modal adverbs used in epistemic and evidential functions, and give an overview of them in section 3.

The second part of the paper is a corpus-based investigation, from a functional perspective, of the modal adverb *talán* ‘perhaps’ with the aim of characterizing the way its inferential-epistemic meaning is organized (section 4). In analyzing *talán*, I will concentrate on borderline cases in order to delimit the modal domain concerned. The various functions will be represented in a way that allows compatibility with a typologically relevant semantic map¹ of the modality in question, covering both its synchronic and diachronic aspects as well as the relations between modal and postmodal meanings (section 4.3.2).

Our choice of *talán* is motivated by the fact that, from among similar expressions of other languages (e.g., English, German, Tzotzil), it is those meaning ‘perhaps’ or ‘probably’, central and prototypical as they are within their group, that have received the most attention in the literature (cf. Doherty 1988; Haviland 1989; Nuyts 2001, 55).

2. Operations related to the functions of modal adverbs

In some utterances, the speaker represents what are taken to be facts by intersubjective consensus. Hence, ‘facts’ are not something objectively

¹ Cf. Bybee et al. (1994) and van der Auwera–Plungian (1998).

given but rather pieces of the interlocutors' shared knowledge being constructed within the discourse. Whatever is taken to be a fact by both participants is unmarked, according to the principles of effective information flow (cf. Grice 1975). An assertive speech act is typically and routinely manifested in a declarative sentence (cf. Croft 1994), and that sentence type serves as a schema for utterances concerning events that can be intersubjectively regarded as facts. In other words, presenting facts is the default function of the syntactic type of declarative sentences.

Whenever the speaker does not present a fact, this has to be marked in conformity with the partner's expectations (cf. Givón 1982, 24);² if she fails to do so, she must anticipate that the speech partner will challenge the validity of her statement. At the most basic level, the relationship between epistemic modality and evidentiality is based on both being defined against the backdrop of presenting a fact; both being regarded as more subjective and more marked than the default case (as in (1)):

- (1) A pénzügyi piacon csökken a feszültség.
the financial market-on lessens the tension
'The tension of financial markets is lessening.'
- (2) A pénzügyi piacon **szemlátomást** csökken a feszültség.
'The tension of financial markets is **perceptibly** lessening.'
- (3) A pénzügyi piacon **állítólag** csökken a feszültség.
'The tension of financial markets is **allegedly** lessening.'
- (4) A pénzügyi piacon **bizonyosan** csökken a feszültség.
'The tension of financial markets is **certainly** lessening.'
- (5) A pénzügyi piacon **talán** csökken a feszültség.
'The tension of financial markets is **perhaps** lessening.'

The operation of evidentiality involves an indication, by linguistic means, of the source of information or the type of evidence (this is made explicit by *szemlátomást* 'perceptibly' in (2) and by *állítólag* 'allegedly' in (3)). In the case of *szemlátomást*, the operation can be interpreted as attaching evidence to the event represented, supporting its factuality (Anderson

² At least if we assume that the aim is effective flow of information. Obviously, it is not obligatory to comply with these expectations; but whenever the speaker does not, this leads to implicatures, i.e., further processes of enrichment of meaning. This will be ignored in the present paper.

1986, 274); that is, the operation is one of verification. However, a similar interpretation of *állítólag* would be inappropriate, and the same holds true for the type of evidence called ‘inferential’ (cf. section 2.2). Making the type/source of evidence linguistically explicit shows that the speaker is aware of expressing less than an obvious fact; i.e., something that can be doubted or questioned and therefore is in need of confirmation (that, however, is not always possible). Evidentiality will be discussed more in detail in section 2.2.

The operation of epistemic modality indicates linguistically that the event represented is not a fact but a possibility. More precisely, the relevant modal adverbs specify the degree of likelihood, in the speaker’s opinion, of the given event. Compare (4) and (5) above where the former presents the event as more likely than in the case of the latter, thus their modal force (cf. section 3) is different. This operation will be discussed in section 2.1.

The sentences in (1)–(5) represent events that are understood or mentally processed by the speaker. The difference is that in (1) the speaker construes the event as a fact, making it accessible to her partner as such, whereas in the other cases she makes the event accessible on the basis of independent sources (cf. (3)), experience (cf. (2)), or her own assumption (cf. (4), (5)), i.e., as seen from a non-neutral vantage point (cf. Sanders–Spooren 1997; Tolcsvai Nagy 2001).

In the above examples, it is the modal adverb that makes the perspective subjective (Sanders–Spooren 1997; Langacker 2006, 18) by indicating that the situation represented in the sentence is construed from the perspective of a subject (the subject of consciousness),³ on the basis of her observations, inferences, or beliefs. Thus, the modal adverb shifts the relationship “from the objective axis to the subjective axis” (Langacker 1990, 17), that is, it performs the operation of subjectification.

One of the manifestations of subjectification is where the speaker represents the profiled event as possible from her own point of view, on the basis of her own processes of inference or beliefs, thereby opening the dimension of epistemic modality for its interpretation (cf. section 2.1).

³ The subject of consciousness is “the subject [...] to whom the responsibility for the information is attributed; with other words, the subject is responsible for the propositional content of the utterance and possibly also for its form” (Sanders–Spooren 1997, 87).

Another manifestation is where she makes the event accessible from a source that can be associated with a subject. A subclass of the latter is speaker-based inferential evidentiality (section 2.2), and another one is perspectivization, i.e., linking the source to a subject other than the speaker (cf. Sanders–Spooren 1997). In what follows, we will look at these operations one by one.

2.1. Subjectification and epistemic modality

In epistemic modality, the profiled entity or situation is interpreted against the background of the speaker’s knowledge. The speaker functions as a reference point for establishing mental contact with an epistemically grounded profiled component (the target structure). This process is modelled by Langacker (2006, 22) as a kind of mental extrapolation of objectively construed relations⁴ (both historically, in its emergence, and in its present operation).

The epistemic modal adverbs in (4) and (5) (*bizonyosan, talán*) illustrate the operation of subjectification, marking possibility in terms of the speaker’s beliefs, thus indicating that the speaker takes responsibility for the validity of the piece of information at hand (Sanders–Spooren 1997, 91).⁵

Modal adverbs as indicators of subjectification and epistemic modality “are the devices by which speakers take responsibility for success in communication and seek to meet hearers’ attempts to integrate new information” (Traugott 1995, 45 [partly citing Blakemore]; cf. Haviland 1989, 40; Givón 1982).

⁴ Although formalist approaches based on the concept of possible worlds (cf. Kratzer 1991; Kiefer 1988; 2000; 2005) may also model modality as extrapolation, this is usually done in terms of a function relation, defining the set of possible worlds with a set of statements assumed independently of the current discourse space. From a functional point of view, however, when we say that epistemic modality projects the event to possible worlds according to the speaker’s knowledge, the ground is provided by the knowledge, results of processes of inference, etc. of the speaker/conceptualiser, and that conceptual domain is dynamically organized during the discourse, it is not previously given.

⁵ “Subjectivity is expressed when the current speaker displays an attitude towards the predicated information [...] the speaker adds his degree of certainty” (*idem.*).

2.2. Evidentiality

Evidentiality (just like modality) is a semantic category. Its exponents specify the source and type of the speaker's knowledge or evidence;⁶ in a broader sense,⁷ evidentiality expresses the attitude of the speaker to what she is saying, her commitment to the truth of her statement⁸ (Bybee 1985, 184–5; Palmer 1986, 20–1, 51, 66ff; van der Auwera–Plungian 1998, 85; Kiefer 2000, 328–31).

Two main types of evidence are usually distinguished: direct evidence whose source is the speaker's experience (visual, auditory, or other sensory experience) and indirect evidence that is either reported or inferential evidence, the latter further subdivided into 'results' based on some experience or observation, and 'reasoning' based on a speculative mental construct (Palmer 1986, 84–5, 95; Willett 1988, 57; Kiefer 2000, 329).

In Hungarian, evidentiality is an "optional linguistic category", rather than an obligatory grammatical system (Aikhenvald 2004; Cornillie 2009). Just like in Germanic languages (cf. Saeed 1997, 131; Aikhenvald 2004), it is typically lexical items (along with some bound morphemes) that indicate evidentiality. The main distinction is based on the directness hierarchy (cf. Givón 1982, 44) and is implemented as a contrast between direct evidence that is reliable (hence, in general, incontestable) and indirect evidence that is less reliable (hence, in general, questionable). As shown in Kugler (2002; 2003), the latter type has a larger number of lexicalized exponents in Hungarian.

Within the 'indirect' branch of the main contrast, a secondary distinction in Hungarian is that between reported/quotative (e.g., *állítólag* 'allegedly') and inferential evidence (e.g., *feltehetőleg* 'presumably'): the important feature is indirectness (hence, lesser strength of evidence) in both. It is in general true of indirect inferential evidence that it is not capable of supporting factuality (cf. section 2). This is clearly the case with reasoning, but can be seen to hold for the 'result' type as well. Inferential

⁶ "Evidentials may be generally defined as markers that indicate something about the source of the information in the proposition" (Bybee 1985, 184).

⁷ The broader interpretation is problematic, though: some authors claim that speaker commitment belongs to the realm of epistemic modality, rather than evidentiality (cf., e.g., Cornillie 2009).

⁸ "[T]he speaker may indicate the strength of his commitment to what he is saying, not in terms of possibility and necessity but in terms of what kind of evidence he has" (Palmer 1986, 20).

markers generally acquire an additional epistemic modal value—motivated by the close ties between indirect knowledge and a lesser degree of speaker responsibility and commitment—, which leads to the emergence of a modalized system of representing evidence (Plungian 2001, 354, 356).

2.3. Epistemic modality and evidentiality

The literature offers at least four different views on the relation between these two categories:

- a. epistemic modality is quite separate from evidentiality (Willett 1988; Kiefer 2000; Nuyts 2001);
- b. evidentiality is a subdivision of epistemic modality (Palmer 1986; also Givón 1982);
- c. epistemic possibility is a subdivision of evidentiality (Biber–Finegan 1989; Biber et al. 1999, section 5.7);
- d. epistemic modality (necessity) and inferential evidentiality are overlapping categories (van der Auwera–Plungian 1998; Kiefer 2005).

In Hungarian, epistemic modal adverbs (e.g., *bizonyosan* ‘positively’, *feltehetőleg* ‘presumably’, *talán* ‘perhaps’, *valószínűleg* ‘probably’) are found in the boundary area of the two categories:⁹ they indicate inferential evidence and highlight the speaker’s processes of inference. The evaluation of likelihood is not some kind of estimation that can be detached from processes of inference; hence, the term *estimation* is far from appropriate for defining the primary, inferential-epistemic function of modal adverbs. In his recent monograph on modality, Kiefer (2005, 77) comes to a similar conclusion. The contact between the two categories cannot be put down to the fact that “the epistemic meaning is a secondary, implied meaning” (Cornillie 2009, 49), as this meaning has been conventionalized for the expressions just mentioned.

⁹ Approaches that keep the two categories distinct (Nuyts 2001; Cornillie 2009) claim that the above reasoning is a case of “categorical confusion”. In Cornillie’s view, “rather than representing a concrete overlap domain, epistemic and evidential expressions may more accurately be described as having similar sub-dimensions [reliability of knowledge (evidentiality) and speaker commitment (epistemic modality), respectively] that meet at some point” (*op.cit.*, 51). Thus, this approach denies full overlap of the categories but accepts that they are in contact with one another.

In what follows, the group of modal adverbs exemplified in sentences (4) and (5) above (*bizonyosan* ‘certainly’, *talán* ‘perhaps’) will therefore be located in the overlap area between epistemic modality and inferential evidentiality and will be referred to (following Kiefer 2005) as ‘inferential-epistemic’ modal adverbs.

3. Inferential-epistemic modal adverbs in Hungarian and modal force

Some Hungarian inferential-epistemic modal adverbs (plus some marking non-inferential evidence) are listed in Table 1 (based on Kugler 2003, 55).

Table 1

Category	Examples
inferential evidentiality and epistemic modality	<i>bizonygyal</i> ‘certainly’, <i>bizonyosan</i> ‘positively’, <i>biztosan</i> ‘surely’, <i>egyértelműen</i> ‘definitely’, <i>feltétlenül</i> ‘absolutely’, <i>kétségbevonhatatlanul</i> ‘undoubtedly’, <i>kétségkívül</i> ‘no doubt’, <i>kétségtelenül</i> ‘doubtlessly’, <i>mindenképpen</i> ‘at any rate’, <i>nyilván</i> ‘clearly’, <i>nyilvánvalóan</i> ‘obviously’, <i>okvetlenül</i> ‘by all means’, <i>természetesen</i> ‘naturally’, <i>vitathatatlanul</i> ‘indisputably’; <i>alighanem</i> ‘most probably’, <i>bizonyára</i> ‘in all likelihood’, <i>előreláthatólag</i> ‘as far as can be foreseen’, <i>valószínűleg</i> ‘probably’; <i>esetleg</i> ‘possibly’, <i>feltehetőleg</i> ‘presumably’, <i>sejthetően</i> ‘conceivably’, <i>talán</i> ‘perhaps’, <i>vélhetően/vélhetőleg</i> ‘supposedly’; <i>aligha</i> ‘scarcely’
non-inferential evidentiality	<i>állítólag</i> ‘allegedly’, <i>láthatólag</i> ‘apparently’, <i>látszólag</i> ‘seemingly’, <i>szemlátomást</i> ‘perceptibly’; <i>közismerten</i> ‘as is well-known’, <i>köztudomásúan</i> ‘as a matter of common knowledge’, <i>köztudottan</i> ‘to everyone’s knowledge’, <i>tudtommal</i> ‘as far as I know’, <i>tudvalevően</i> ‘as is known’

One of the dimensions of the meaning of a modal adverb is its modal force. This is a scale consisting of several grades that are, however, assessed in relation to each other and cannot be characterized by some absolute value. In Kratzer’s view, the following degrees can be discerned in an order of decreasing modal force (1991, 644–5): (a) necessity (‘it is not possible that not *p*’), e.g., *feltétlenül* ‘absolutely’, *nyilvánvalóan* ‘obviously’, *vitathatatlanul* ‘indisputably’; (b) weak necessity (‘it is more probable that *p* than not *p*’), e.g., *alighanem* ‘most probably’, *bizonyára*

‘in all likelihood’, *valószínűleg* ‘probably’; (c) possibility (‘it is not necessary that not *p*’), e.g., *esetleg* ‘possibly’; (d) “medium probability” (‘*p* is at least as possible as not *p*’), e.g., *feltehetőleg* ‘presumably’, *talán* ‘perhaps’, *vélhetően/vélhetőleg* ‘supposedly’; (e) low probability (‘weak necessity of not *p*’), e.g., *aligha* ‘scarcely’. This attempt by Kratzer to define modal force on a logical basis will only be used here as a point of departure. In particular, we will refrain from employing the dichotomy of necessary vs. possible: “the degree of certainty cannot be measured in an objective manner”¹⁰ (Kiefer 2005, 77); rather, we can speak of various degrees of likelihood. In addition, in discussing epistemic modality, we use ‘probability’ as a synonym of ‘possibility’ (rather than as a distinct degree of modal force).

Earlier questionnaire studies (Kugler 2003, 50) support the hypothesis that although inferential-epistemic modal adverbs identify pieces of information as having various degrees of likelihood, modal force does not represent a scale of discrete points.

Inferential-epistemic modal adverbs typically occur in declarative sentences both in their epistemic and evidential functions. The reason is that they require that the speaker make a piece of information available to the listener (similarly to cases of presenting a fact); what makes their use peculiar is that the speaker as the subject of consciousness does not consider the profiled event to be a fact and therefore chooses to indicate the degree of possibility and speaker commitment attached to the statement (cf. section 2). This observation will come in handy in the separation of the non-modal functions of the modal adverb *talán* ‘perhaps’.

4. The case of *talán*

4.1. Corpus of the study

This study is based on a spoken language corpus of 76101 words (tokens)¹¹ and the written language corpus of the Hungarian National Cor-

¹⁰ This means ‘in an exact/formalisable manner’ here.

¹¹ Volumes 6 and 7 (spontaneous conversation, lecture) of the Spoken Language Database of the Department of Hungarian Linguistics of Eötvös Loránd University, Budapest (not yet available via internet).

pus (HNC).¹² The frequency of *talán* in the corpora is shown in Table 2. Frequency is given in token/1000 words.

Table 2

Corpus	Spoken language	Written language	
Subcorpus	conversation	0.638	
	lecture	1.668	
	press	0.244	
	scholarly/scientific	0.234	
		official	0.289
		personal	0.444
Average frequency	1.117	0.316	

The conspicuously high frequency value in spoken language is due to the fact that one of the subjects used the modal adverb *talán* a lot more frequently¹³ than expected,¹⁴ partly in an inferential-epistemic, and partly in a pragmatic function.

4.2. Inferential-epistemic *talán*

As expected, the inferential-epistemic use of *talán* accounts for most data in both corpora (cf. (6a)). It is typically the case in these occurrences that the evaluation ‘possible’ is based on inference, and the speaker’s epistemic attitude is marked by means of subjectification. Accordingly, they can be paraphrased by *lehet/lehetséges, hogy* ‘it is possible that’¹⁵ (cf. 6b)) (Kiefer 2005, 125), and—with some semantic limitations—they can be replaced by other modal adverbs of a similar modal force (e.g., *feltehetőleg* ‘presumably’, *valószínűleg* ‘probably’) (cf. (6c)).

¹² *Magyar Nemzeti Szövegtár*; the database of the Research Institute for Linguistics of the Hungarian Academy of Sciences (<http://corpus.nytud.hu/mnsz/>).

¹³ 46 occurrences of *talán* (out of the total 85) came from this speaker.

¹⁴ For instance, in our investigation of *esetleg* ‘possibly’ (a modal adverb whose use is rather similar to that of *talán*) conducted on the same corpus, we found a frequency of 0.223 in spoken language and 0.2 in written language, that is, no such discrepancy was found between spoken and written texts.

¹⁵ However, that solution represents another type of epistemic modality: *lehetséges* ‘possible’ as a higher predicate would ‘overwrite’, in the Langackerian framework, the grounding of the subordinate clause without performing any epistemic grounding itself (Pelyvás 1998) and, in my view, conceptualization foregrounds possibility here (or at least, the relation of possibility is onstage).

- (6) (a) [Pál apostol] **talán** rövidlátó lehetett.
 Paul apostle perhaps short-sighted be-may-past-3sg
 ‘[The Apostle Paul] may perhaps have been short-sighted.’
- (b) Lehetséges [az], hogy rövidlátó volt.
 possible it that short-sighted be-past-3sg
 ‘It is possible that he was short-sighted.’
- (c) Valószínűleg/feltehetőleg rövidlátó volt.
 probably presumably short-sighted be-past-3sg
 ‘He was probably/presumably short-sighted.’

In both corpora, examples of *talán* have been found with a bouletic meaning on top of their inferential-epistemic value. In such cases, the linguistic context makes it clear that the speaker considers the foregrounded event not only possible but also desirable or favourable in the reference world, cf. (7a). In the absence of sufficient contextual support, this additional meaning component can be indicated by the modal adverb *remélhetőleg* ‘hopefully’ (cf. (7b)), but a paraphrase corresponding to the epistemic function is also possible, see (7c).

- (7) (a) [Tornából hányasa van?]
 gymnastics-from what.mark-poss is
 Hát kettes, biztos. Hármast megadja neki **talán**.
 well D sure C-acc give-3sg 3sg-dat perhaps
 ‘[What mark does he have in gymnastics?] Well, D, for sure. They’ll give him/her C, perhaps.’
- (b) (A) hármast megadja neki remélhetőleg.
 the C-acc give-3sg 3sg-dat hopefully
 ‘They’ll give him C, hopefully.’
- (c) Lehetséges az, hogy a hármast megadja neki.
 possible it that the C-acc give-3sg 3sg-dat
 ‘It is possible that they give him C.’

The proportions of the above two functions within the whole set of data in the two corpora are shown in Table 3.

Within the epistemic function, the following uses can be distinguished:

Table 3

Function	Spoken	Written
(inferential-)epistemic modality	62.4%	80%
bouletic-epistemic modality	11.8%	16%

(a) Alternatives. Here the modal adverb plays a role in marking alternatives, usually expressing that both of the alternatives are possible to the same degree, thus attesting “medium probability” (see section 3):

- (8) ... (**talán** engesztelésül, **talán** amúgy is járó juttatásként)
 perhaps compensation-as perhaps otherwise too due allotment-as
 szintén kapott egy ilyen csodakenut.
 also got-3sg a like.this fancy canoe-acc
 ‘(maybe as a compensation, maybe as an allotment due to him anyway), he also got one of these fancy canoes.’

(b) Possibility as an *ad hoc* suggestion. This function can only be recognized when the actual co(n)text is known. For instance, in (9), the speaker first admits that she does not know the reason, only to suggest one of the possible reasons in the next sentence. The basis for that suggestion is an interpretative relation to her earlier emotional state. Hence, this use of *talán* also hinges on processes of inference.

- (9) Már ekkor vonzódtam hozzájuk — nem is tudom, miért.
 already then be.attracted-past-1sg to.them not even know-1sg why
Talán, mert valahogy már a nevükből valami
 perhaps because somehow already the names-poss3pl-from some
 költői varázs áradt. Vagy inkább népmesei?
 poetic magic flow-past-3sg or rather folktale-adj
 ‘At that point, I liked them already—I can’t tell why. Maybe because even their names conveyed some poetic enchantment. Or rather one from a folktale?’

(c) Diminishing commitment. Used in conjunction with markers of speaker commitment (e.g., *valóban* ‘in fact’ in (10)) or non-epistemic necessity (e.g., *kell* ‘is needed’ in (11)), *talán* does not serve to mark medium or higher degree of possibility but rather to weaken the commitment or necessity expressed by those other markers.

- (10) Ezúttal **talán valóban** a költemény keletkezése
 this.time perhaps in.fact the poem creation-poss-3sg
 körülményeinek ismerete segíthetne...
 circumstances-poss-3sg-dat knowledge-poss-3sg help-may-cond-3sg
 ‘This time it might in fact be familiarity with the circumstances in which the
 poem was created that could help...’
- (11) ... s most **talán kell** is ennyi eltérés,
 and now perhaps be.needed too this.much difference
 hogy valóban egymást lássuk.
 that really each.other-acc see-imp-1pl
 ‘... and this time maybe this difference is really needed so that we see each other
 indeed.’

(d) Making the proposition uncertain, expressing cautiousness, carefulness, or modesty. Given that, by using *talán*, the speaker indicates that the event is not a fact but a mere possibility (a hypothesis based on reasoning), she can only state it with doubts or can expect the listener to take it with doubts (Givón 1982, 24).

This function can be easily discerned in utterances like (12) where (i) the speaker brings in evidence to support her statement; but (ii) uncertainty is also marked propositionally (as part of the construed reality: *valószínűnek látszik* ‘it seems probable’) and by using subjective modality (*lehetett* ‘might have been’)—hence, *talán* is not the sole marker of epistemic modality, and it is “liberated” by the stacking of diverse modal expressions to (also) express a non-modal attitude, cautiousness.

- (12) Valószínűnek látszik az, hogy a [...] betegség **talán**
 probable-dat seem-3sg it that the illness perhaps
 malária lehetett, de hát persze én hogy merem mondani,
 malaria be-may-past-3sg but well of.course I how dare-1sg say-inf
 hogy valószínű, azért merem mondani, mert az irodalom
 that probably therefore dare-1sg say-inf because the literature
 legnagyobb része így foglal állást [...]
 largest part-poss so take-3sg stand-acc
 ‘It seems probable that the [...] illness might have been malaria, but of course
 how dare I say probable, I dare say it because most of the literature says so [...].’

(e) Estimation. When the modal adverb does not pertain to the possibility of a whole event but only to a foregrounded part thereof, the

above factor of uncertainty is reinforced. If, in such cases, *talán* comes to indicate some quantitative evaluation, the important component will be estimation rather than likelihood (cf. (13)); this has given rise to the role of *talán* as a particle of estimation¹⁶ (*talán* can be used to convey imprecision, cf. hedges)¹⁷ (see (14a)).

- (13) Egy éve **talán**, a régi szerkesztőségemben telefonon kerestek.
 a year.ago perhaps the old editorial.office-poss.1sg-in phone-by look.for-past-3pl
 ‘A year or so ago, I was called on the telephone in my old editorial office.’

- (14) (a) Nem sok embert mozgat. **Talán** harminc ember
 not many person-acc move-caus-3sg perhaps thirty person
 vesz részt benne.
 take-3sg part-acc in-3sg
 ‘It doesn’t concern many people. Around thirty people participate in it.’
 (b) Lehetséges, hogy harminc ember vesz részt benne.
 possible that thirty person take-3sg part-acc in-3sg
 ‘It is possible that the number of people participating in it is thirty.’

Example (14a) begins to illustrate one of the paths of *talán* leaving the modal domain: although the paraphrase test does work (cf. (14b)), we can observe a slight dislocation of function. *Talán* indicates uncertainty with respect to the quantity of the profiled entity, while the event, the whole situation, remains valid; it is not part of the domain of ‘possibility’.

(f) Quotative evidence (and perspectivization). In terms of types of evidence, *talán* typically signals inferential evidence (more specifically, reasoning as a mental construct). However, there are also examples of quotative evidence being invoked, albeit exclusively in the spoken corpus.

- (15) [...] tényleg a prédikációkból, az iratokból az derült ki,
 really the sermons-from the records-from it turn-past-3sg out
 hogy a világ végét, a Messiás második, vagy **talán** első
 that the world end-poss-acc the Messiah second or perhaps first
 eljövetelét a nagyon közeli időre várják...
 coming-poss-acc the very near time-for wait.3pl
 ‘[...] the sermons and the records suggested they expected the end of the world,
 the return or perhaps the first coming of Messiah to be very close in time...’

¹⁶ German *Rangierpartikel*, *Gradpartikel* (Ungefähr-Gruppe, Helbig 1988, 31, 46).

¹⁷ Biber et al. (1999, 557).

(g) Pragmatic function. In epistemic modality, the relationship between the speaker (as background and also the subject of consciousness) and the situation being construed is a modal relation whose significance lies in the cooperation between the interlocutors (cf. Givón 1982). However, this may be compounded by reference to another, interpersonal relationship, i.e., that between speaker and listener. In such cases, the modal adverb will acquire a pragmatic function. Whenever this second function can only be accessed on a contextual basis, the construction itself failing to provide clues for disambiguating the relevant functions, this role appears not to have been conventionalized yet.

- (16) Ahogy beszélek, **talán** úgy tűnik, megvetem
 as speak-1sg perhaps so seem-3sg despise-1sg
 az olyan embereket, akik a családnak élnek.
 the such people-acc who-pl the family-dat live-3pl
 ‘The way I’m talking, it might seem that I despise people living for their families.’¹⁸

In (16), *talán* satisfies all criteria that we tend to attribute to epistemic modal adverbs; but the modal clause additionally refers to the listener’s cognitive processes, structuring the shared knowledge of the interlocutors, hence *talán* comes to have a role in polite communication, too.

Another pragmatic function of this modal adverb concerns contextual implication, but only in declarative sentences:¹⁹

- (17) [...] **talán** mégiscsak tartósabban be kellene rendezkedni
 perhaps after.all more.permanently in be.needed-cond settle-inf
 ebből a szempontból is erre a világra.
 this-from the viewpoint-from too this-to the world-to
 ‘[...] after all we might still have to settle down more permanently in this world, in this respect, too.’

¹⁸ The rest of the utterance makes clear that the speaker does not despise those people.

¹⁹ Sentence types (declarative etc.) are not used in this paper as a formal syntactic criterion. “The linguistic form of sentences encodes several different aspects of speaker–addressee interaction”; the characteristics of major sentence types “can provide insight into the conceptual distinctions made by speakers on the nature of the utterances they produce” (Croft 1994, 462, 475). Hence, the occurrence of the modal adverb *talán* in diverse syntactic environments has a functional background and explanation.

In (17), the speaker reacts to other people's inferred or explicit statement 'the profiled content is not true; one does not have to settle in more permanently' and implies its negation ('one does have to settle in permanently'). The modal functions of *talán* are fulfilled,²⁰ that is, subjectification does occur, the epistemic attitude is interpretable, and the conventional implicature works even if the modal adverb is omitted; however, *talán* also plays a role in expressing the speaker's expectation that her opinion may be challenged by the listener (that is, in marking another, non-modal relation).

4.3. Non-modal *talán*

The pragmatic functions of *talán* have emerged on the basis of its modal meaning. In the relevant utterances, the expression of uncertainty may be a tool for indicating indirectness, and thereby this originally modal marker may assume a role in face-saving (cf. Goffman 1959) and politeness strategies (e.g., in indicating the speaker's willingness to adapt to the listener), cf. (18a).

- (18) (a) Nézzük **talán** először ezt a bizonyos törekvést,
 look-imp-1pl perhaps first this-acc the certain ambition-acc
 amelynél megállapítom, hogy...
 which-at establish-1sg that
 'Let us first perhaps take a look at this ambition, for which I point out that...'
- (b) *Lehetséges az, hogy nézzük először ezt a bizonyos törekvést!
 'It is possible that let us first take a look at this ambition.'
- (c) *Nézzük **feltehetőleg/valószínűleg** először ezt a bizonyos törekvést!
 'Let us presumably/probably take a look at this ambition.'

In examples like this, the function of the modal adverb is **not** to identify the speaker as the subject of consciousness, or to indicate that she assumes responsibility for the evaluation of the given piece of information, specifying it as possible. Such evaluation does not occur (cf. (18b)), and *talán* cannot be replaced by another epistemic modal adverb (cf. (18c)).

²⁰ The above tests do work: the adverb can be replaced (with semantic limitations) by another epistemic modal adverb, and rephrasing the sentence to begin *lehetséges, hogy...* 'it is possible that...' is also feasible.

In (18a), it is part of the politeness strategy of the speaker that she uses a first person plural verb form in her lecture, indicating as a gesture that she regards the listener as a partner in meaning-making, as an active participant in their shared mental activity. The meaning component ‘possibility’ is inactive here as far as the evaluation of the event is concerned; nevertheless, it is still there in an interpersonal function (by linking possibility to the shared activity which is expected to involve the listener, too).

Sentences involving the modal adverb *talán* in a pragmatic function are usually not statements but represent some other speech act type; accordingly, their syntactic type is non-declarative in most cases.

4.3.1. An overview of non-modal functions

4.3.1.1. Indicating indirectness and weakening the illocutionary force in requests, suggestions, or proposals. One type of requests, suggestions, or proposals is implemented in indirect speech acts (‘conventionally indirect speech act’, cf. Levinson 1983, 263ff).

An interrogative sentence (+ the *-NA* hortative/cohortative mood marker) is a conventionalized expression of polite and cautious requests (not only in Hungarian, cf. Dressler 1995; Szili 2004, 107);²¹ *talán* serves as an additional tool in this strategy.

- (19) (a) Ezt **talán** bővebben elmondanád.[?]²²
 this-acc perhaps more.in.detail tell-cond-2sg
 ‘You might want to tell this more in detail.’
- (b) *Ezt **valószínűleg/feltehetőleg** bővebben elmondanád?
 ‘Would you probably/presumably tell this more in detail?’

The basic function of *talán* is the indication of possibility such that this epistemic evaluation is attributed to the speaker as the subject of consciousness. The meaning component ‘possibility’ may remain perceptible even when this operation is no longer performed.²³ That is why, in testing

²¹ Szili also orders the solutions shown in the examples along a scale of directness in implementations of the speech act ‘request’ (*op.cit.*, 108).

²² In the conversation, the speaker asks the listener to tell something more in detail by this sentence. In another context, the same sentence could be taken ironically.

²³ What is portrayed as possible in such cases is the action expected of the listener (possibility is “transferred” from the speaker to the partner’s action) whereby the force of the request is cushioned and the risk of losing face is minimized.

the epistemic function, I checked the feasibility of replacing *talán* by other epistemic modal adverbs (see section 4.2), in addition to formulating the paraphrase *Lehetséges, hogy...* ‘It is possible that...’ (Kiefer 2005, 126). In (19a), *talán* cannot be freely replaced by epistemic modal adverbs (cf. 19b)).

Another, more direct strategy can be detected in sentences whose verb is in the imperative (or rather, functionally speaking, in the hortative, desiderative, or obligative). In these, the role of *talán* is the diminishing of illocutionary force, the expression of politeness or tact²⁴ in making the partner perform an action (cf. Tact Maxim, Leech 1983):

- (20) **Talán** beszéljen majd a takarítónővel...
 perhaps talk-imp-2sg in.future the cleaning.lady-with
 ‘Maybe you could talk to the cleaning lady some time...’

The role of *talán* is the curbing or cautious weakening of the force of the imperative. In an imperative sentence, this function is exclusively served by *talán*; its omission may lead to the interpretation of the sentence as a downright command. It is not a Hungarian peculiarity either that an epistemic modal adverb should have this function: Haviland (1989, 40) observed the same role in the use of the Tzotzil modal adverb *nan* ‘perhaps’.

It can be stated in general that whereas modal adverbs expressing the highest degree of possibility tend to leave the modal domain in the direction of strengthening the illocutionary force, those located in the middle of the strength continuum (cf. section 3) and expressing lesser probability (and higher uncertainty) like *talán* or *esetleg* typically leave that domain in the direction of weakening.²⁵

The new pragmatic function goes hand in hand with a different syntactic environment (different from that of the basic inferential-epistemic function, that is). While inferential-epistemic *talán* typically occurs in declarative sentences (cf. section 3), the above pragmatic functions occur in other sentence types (used in special functions); in certain types of request and suggestion, they signal atypical illocutionary values, that is, indirect speech acts.

²⁴ In Goffman’s social-psychological model, this corresponds to reducing the risk of losing face.

²⁵ However, these modal adverbs may (less typically) become tools of strengthening, too, if their pragmatic function is implicit evaluation by irony.

The ratio of occurrence of instances of the types exemplified above is 21.2% in the spoken corpus and 9% in the written data.²⁶

4.3.1.2. Signalling contextual implication in interrogative sentences.

- (21) Mi **talán** háztulajdonosok vagyunk?
 we perhaps house.owners be-1pl
 ‘Are we the owners of the house?’

The example in (21) will be interpreted by the listener as suggesting that the speaker implies the opposite of the situation specified in the sentence (‘we are not owners of the house’)²⁷ (Kiefer 1988, 120). Thus, the interrogative sentence is not used for requesting information: clearly, the speaker knows that he is not the owner of the house.²⁸ The implicature is triggered by the interrogative sentence, not by *talán*; but the latter makes it unambiguous by excluding the information eliciting function. It makes clear for the listener that the speaker expects a negative answer (if any): thus, in the grammaticalization (or pragmaticalization) process of *talán*, we can observe the conventionalization of the implicature (Ladányi 1998, 411). On the one hand, *talán* refers to the relationship between the assumptions of speaker and hearer; on the other hand, via its ‘possibility’ component, it invalidates the ‘true’ value of the proposition, thereby contributing to the marking of implicature. In this role, *talán* invariably occurs in interrogatives.

Similarly, the speaker can use an interrogative sentence to indicate her surprise, astonishment or disappointment about the apparent truth (or possible truth) of the profiled content (‘you have no money’).

²⁶ The large discrepancy may be explained by the fact that the spoken corpus involves texts that require a speech partner and involve synchronicity of text production and comprehension, whereas most written texts do not; at most, data from stage plays or asynchronous (virtually synchronic) texts of web forums are similar to spoken data in this respect.

²⁷ On the basis of the actual co-text, asking for information or opinion (the inquiring function) can be excluded.

²⁸ The marking of subjectification by an epistemic modal adverb is incompatible with the same profiled relation being given an interrogative form at the same time since the speaker is not supposed to ask a question about her own epistemic attitude; nor is she expected to ask about the validity or details of a predicate grounded by the value “neither true nor false”.

- (22) Mi az, **talán** nincs pénzed?
 what it perhaps is.not money-poss-2sg
 ‘What, you don’t have any money?’

The emotional attitude concerned is primarily marked by the interrogative sentence type and prosodic features. By invoking an element of uncertainty, *talán* decreases the illocutionary force (reproach etc.) if the sentence is construed to mean that the speaker expects not-*p* despite signs suggesting *p* (that is, she expects that the listener does/should have some money). Since the speaker may be in possession of evidence that not-*p* is a fact (that is, she may know that the listener does have some money), *talán*—by decreasing the validity of *p*—may imply not-*p*, i.e., the speaker’s expectation that her partner should deny *p* (e.g., *De, van* ‘Oh yes, I do’).

4.3.2. Leaving the modal domain

As we have seen, several paths of leaving the modal domain can be discerned in our corpora. All of them rely on two components of the inferential-epistemic modal adverb: possibility and low level of commitment or (epistemic) uncertainty, with an indirect, less reliable type of evidence in the background. One of these paths concerns the reduction of the scope of the modal adverb; this is the grammaticalization path “modal adverb → particle of estimation” (cf. 4.2(e) and (14a)). Two others involve assuming some pragmatic role, in conjunction with an atypical syntactic environment, mood and sentence type (imperative, interrogative), cf. section 4.3.1 above.

4.4. Word order

If a modal adverb occurs in a neutral sentence, we find straight word order: the adverb does not trigger the inversion of preverb and verb. Indicating a certain degree of possibility and/or commitment does not interfere with the basic validity of the proto-statement (cf. Imrényi 2009); rather, it shows that that validity is maintained even with modal adverbs expressing a low degree of likelihood.²⁹ This is also demonstrated by the behaviour of modal adverbs in short answers to yes-no questions (cf. Imrényi 2009):

²⁹ Except for *aligha* ‘scarcely’.

- (23) Megoldotta a feladatot?
 prev-solve-past-3sg the task-acc
 ‘Has she solved the task?’
- (24) (a) **Talán.** ‘Perhaps.’
 (b) Igen, **talán.** ‘Yes, perhaps.’
 (c) *Nem, **talán.** ‘No, perhaps.’

The answer in (24a) contains an implicit ‘yes’ (made less certain by the modal adverb); (24b) is an explicit version of the same answer. However, (24a) is incompatible with a negative interpretation (cf. (24c)). Since the modal adverb does not locate the profiled event between ‘yes’ and ‘no’ but indicates the degree of its likelihood (cf. Kiefer 2005, 76–7), the modalized sentence can be interpreted as upholding the proto-statement *Megoldotta* ‘He/she has solved it’ while showing a higher degree of specificity in the domain of speaker evaluation.

In its inferential-epistemic function, *talán* is not in a semantic relationship with the verb (unlike, e.g., manner adverbials) but with the statement (elaborated to a certain degree); this explains its relative positional freedom (higher than that of a manner adverbial), i.e., the fact that it is not always adjacent to the verb.

The modal adverb may occur clause initially, clause internally, and clause finally, too. The typical case is when it is clause internal.³⁰ In the two corpora, the proportions of occurrence in these positions are as follows:

Table 4

	Clause-initial position	Clause-internal position	Clause-final position
Spoken	40%	51.8%	8.2%
Written	26%	74.0%	—

Thus, while clause-internal position is the most frequent in both corpora, spoken language data involve significantly more clause-initial occurrences than written data do, and postposing is only found in the spoken corpus. As opposed to German and Dutch (cf. Nuyts 2001, 94), Hungarian

³⁰ The sentence-internal position seems to be the default placement in Nuyts’ English, German, and Dutch data, too (Nuyts 2001, 94).

exhibits a rather large percentage in initial position, especially in the spoken language. This is only partially explained by the observation that simpler constituents tend to precede more complex ones (*ibid.*, 95); as a more pertinent reason, we might add that modal function, as a speaker-based relation, is more salient than factors directly contributing to the profiled information. The interplay of word order and function requires further research.

5. Summary

In the first part of the paper, I argued that Hungarian has a modalized system of representing evidence, as shown by its system of modal adverbs. In this system, lexical items acquire additional epistemic modal value based on the routine association between indirect evidence and less reliable support, as well as, consequently, less speaker responsibility and a lesser degree of commitment. The most typical Hungarian modal adverbs signal inferential evidence and possibility at the same time, where the latter involves the speaker as a subject of consciousness and as a reference point in evaluating the event (the target structure) as possible. Hence, I referred to these expressions by the term *inferential-epistemic modal adverbs*.

The second part of the paper presented the results of a corpus-based functional investigation of the lexeme *talán* ‘perhaps’. The basic function of *talán* is to indicate inference-based possibility, with this epistemic evaluation attributed to the speaker as the subject of consciousness. In testing the epistemic function of the adverb, I checked its replaceability with inferential-epistemic modal adverbs of a comparable strength (*feltehetőleg* ‘presumably’, *valószínűleg* ‘probably’), as well as the feasibility of a paraphrase beginning with *lehetséges, hogy* ‘it is possible that...’.

Moving away from the modal domain in its process of grammaticalization, *talán* may retain its meaning component ‘possibility’ while acquiring novel roles accompanied by a change in its syntactic environment and absorbing new, pragmatic functions.

Among the pragmatic functions derived from epistemic possibility and a factor of uncertainty in evaluation, we find indication of indirectness whereby the modal adverb can be interpreted as part of the speaker’s politeness strategy, weakening the illocutionary force of a command, proposal, or request, and signalling the presence of some contextual implication.

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