# Thoughts on the semantics and pragmatics of rising declaratives in English and of their Hungarian counterparts

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### 1 Introduction

Kálmán (2001, p. 101)<sup>1</sup> proposes that 'polar questions' can bear a specific prosody in Hungarian, which is characterized by a rise-fall melody on all phrases in the comment part of the sentence (i.e., those following the topic constituents):<sup>2</sup>

(1) ^Bekapcsolva hagytad a ^mobiltelefont a ^színházban? switched.on left.2sg the mobile.acc the theatre.in 'You left the mobile phone switched on in the theatre?' (Kálmán, 2001, p. 101, (8))

The authors<sup>4</sup> argue that as compared to ordinary "polar questions," this con-

<sup>&</sup>lt;sup>1</sup>I am greatly indebted to László Kálmán for the amount and quality of work he invested in supervising my doctoral dissertation through several years. I can only hope that the present contribution approaches his high standards. I thank an anonymous reviewer and Katalin Mády for their critical remarks and suggestions regarding a previous version of this work. The research was supported by the National Research, Development and Innovation Office – NKFIH, under project no. K 115922.

<sup>&</sup>lt;sup>2</sup>The last peak within a multiple rise-fall melody falls on the penultimate syllable of the sentence (although the typography might indicate otherwise), just as it does in ordinary rise-fall interrogatives, illustrated below.

<sup>&</sup>lt;sup>3</sup>The examples cited from Kálmán (2001) keep the original notation. In this work, '^' refers to a rise-fall contour, and '\_' to what the authors call a 'pre-tone' on unstressed definite articles and relative pronouns, which do not constitute part of the preceding character-tone. The latter phenomenon will not be discussed in what follows.

<sup>&</sup>lt;sup>4</sup>This publication was the output of a seminar taught by László Kálmán at the Theoretical Linguistics Program at ELTE Budapest. He contributed significantly to the individual chapters both in the course of the discussion and as editor of the volume. The draft of the chapter entitled *Kérdések* 'Questions' was written by Viktor Trón, and the one entitled *A topik és a kontrasztív* 

struction carries an interpretational surplus: "it is suggested that the speaker, who presumably already knows the answer, is only waiting for acknowledgement, explanation" (p. 101).<sup>5</sup> They note that this construction is usually used to encode echo questions with a "disapproving attitude."

About a different example, shown in (2), they propose that it illustrates a specific case: the aim of the question is to decide whether some state of affairs observable to the conversational participants was brought about by an event described in the question.<sup>6</sup>

(2) ^Felhívtad \_a ^takarítónőt, \_akit ^ajánlottam? (Azért van called.2sg the cleaner.acc who.acc recommended.1sg that.for be ilyen rend?) such order 'You called the cleaner I recommended? (Is that why it looks so orderly here?)' (Kálmán, 2001, p. 27, (8))

Often, the speaker uses these questions to express her surprise:

(3) A ^Lajos ^berakta \_a ^kefírgombát \_a ^mélyhűtőbe? the Lajos vm.put.3sg the kefir.grains.acc the freezer.into 'Lajos put the kefir grains into the freezer?' (Kálmán, 2001, p. 27, (9))

A further illustration of the use of the same prosodic pattern is provided in (4), which appears to be an echo-question, repeating an utterance made before:<sup>7</sup>

(4) ^Gyanútlanul ^ment ^át ⊥az ^utcán, ⊥amikor ^egyszer csak unsuspectingly went across the street.on when once only ⊥a ^fejére esett ⊥egy ^ablaktábla? the head.his.onto fell.3sg an window.pane 'He was crossing the street unsuspectingly, when suddently a window pane fell onto his head?' (Kálmán, 2001, p. 27, (10))

*topik* 'The topic and the contrastive topic' by Attila Novák and Beáta Gyuris. When I refer to "the authors" of this work, I thus mean all of the persons listed above.

<sup>&</sup>lt;sup>5</sup>"...azt sugallja, hogy a beszélő, aki már feltételezhetően tudja a választ, csak megerősítésre, magyarázatra vár. A konstrukciót általában rosszalló visszakérdezésként használjuk." (p. 101)

<sup>&</sup>lt;sup>6</sup>An analogous proposal about the use of the same prosody was previously made in Kálmán and Nádasdy (1994, p. 456).

<sup>&</sup>lt;sup>7</sup>The conjecture about the context is mine, the authors supply no information about the contexts.

Varga (2010, p. 4) also discusses forms where "each accent in the comment is retained, and the rise-fall can appear at every accented syllable, thus forming a sequence of repeated rise-falls," which express, according to his judgment, "a strongly incredulous, disbelieving yes-no question, which we ask in order to get some clarification of an unbelievable statement or experience." His example, which also contains prosodic marking, is shown in (5):

L\* H-L% L\* H -L% L\* H-L% (5) 'Meghívták a 'Melindát a 'bulira? vm.invited the Melinda.acc the party.onto 'They have invited Melinda to the party? (How come?)' (Varga, 2010, p. 4, (3b))

Both publications cited above are primarily concerned with the prosody and the felicity conditions of the construction type under consideration, and do not go into issues of formal categorization. They both refer to the relevant construction as a type of "question," but there is reason to assume that at least Kálmán (2001) considers it to be a subtype of interrogatives.<sup>8</sup>

Our ultimate aim is to formally describe the felicity conditions of the construction type illustrated above. This paper wishes to contribute to this aim by looking at formal properties of the construction, and by comparing the contexts where it can appear to contexts where the construction referred to as *rising declarative* in English, German, or French can appear. By reviewing various theoretical approaches to the interpretation of the latter sentence type we hope to identify possible strategies that could be used for the formal modeling of the felicity conditions of the Hungarian construction type under consideration at a later stage.

<sup>&</sup>lt;sup>8</sup>Regarding the prosodic form of the construction, an anonymous reviewer for the current paper makes the observation that the pitch can either stay in the same range or it can drift down with each phrase pronounced with a rise-fall. In the reviewer's opinion, the latter case seems to be characteristic of incredulous questions in general. My present suggestion is that it is not the downdrift that induces the incredulity reading. Instead, I assume that both are the result of information structural properties. Questions encoded by utterances containing multiple rise-falls tend to contain a lot of given material. (A question intended to ask for a specific piece of information in Hungarian can often take the form of a one-constituent utterance). One well-known reason for repeating given information is to call attention to the existence of some problem concerning it, e.g. the speaker's dissatisfaction. Given information tends to be pronounced with falling pitch cross-linguistically, which might explain the downdrift in this case. Although I consider these problems worthy of further attention, I will mostly disregard the issue of the downdrift in what follows.

# 2 On formal category membership

The construction type illustrated in (1)–(5) is used to make question acts, which is canonically done by means of interrogatives in human languages. In Hungarian there are two ways of formally marking polar interrogatives, i) with the -e particle, attached to the verb as a default ('-e-interrogatives'), illustrated below in (6-c), and ii) by means of a final rise-fall intonation ('/\-interrogatives'), whose peak falls on the penultimate syllable. It is possible that the multiple rise-fall tones constitute an additional marking on ordinary /\-interrogatives in order to express the emotional components of incredulity, disbelief, disapproval, the fact that the questioner asks for acknowledgement or confirmation, or the fact that the question seems to ask for a reason for a state of affairs that the interlocutors are familiar with. In what follows, we will argue against this approach, and for formally characterizing the sentence type under consideration as a declarative.

First, as noted in Gyuris (2017), the Hungarian construction under consideration is incompatible with negative polarity items, as shown in (6-a), which contains the NPI *valahol is* 'anywhere', as opposed to the types of polar interrogatives in (6-b)–(6-c), which are not incompatible with the same negative polarity item:<sup>9</sup>

- (6) a. \*^Esik ^valahol is az ^eső? falls anywhere too the rain (Gyuris, 2017, p. 6, (9))
  - b. Esik valahol is az eső/\?
    'Is it raining anywhere?'
    (Gyuris, 2017, p. 5, (7a))
  - c. Esik-e valahol is az eső? 'Is it raining anywhere?' (Gyuris, 2017, p. 5, (7b))

Second, as also shown in Gyuris (2017), the Hungarian construction with the multiple rise-fall is incompatible with the pragmatic marker *vajon* 'I wonder', which both Kenesei (1992, p. 691) and Kálmán (2001, p. 99) consider to be restricted to the interrogative sentence type, and which therefore offers itself as a diagnostic property of interrogatives. The following examples illustrate the phenomenon:

<sup>&</sup>lt;sup>9</sup>An anonymous reviewer notes that (6-a) is only ungrammatical on the non-downdrifted pronunciation of the utterance (cf. fn. 8). In the presence of the downdrift, she/he considers all NPIs compatible with an utterance bearing the multiple fall-rise prosody. Although a thorough discussion of the phenomenon has to wait for another occasion, it seems to me that the downdrifted version of (6-a) should be analysed as an echoic /\-interrogative. Naturally, the validity of this suggestion can only be proven if the different pronunciations of (6-a) are considered in the appropriate contexts.

- (7) a. Have you been in touch with Mary lately?
  - b. Not at all.
  - a.' Vajon talált-e már állást?
     vajon found-e already job.acc
     'Has she already found a job, I wonder.'
  - a." Vajon talált már állást/\?'Has she already found a job, I wonder.'
  - a."'\*^Vajon ^talált már ^állást? (Gyuris, 2017, p. 6, (10))

Third, as argued in Gyuris (2016, 2017), negative /\-interrogatives are ambiguous between the so-called 'inside' and 'outside' negation readings (referred to as IN and ON readings in what follows), which were first discussed for English in Ladd (1981). (Cf. Büring and Gunlogson 2000, van Rooij and Šafářová 2003, Romero and Han 2004, Sudo 2013 for further references.) It is shown in Gyuris (2016, 2017) that there are certain morphosyntactic features that are either only compatible with ON or only with IN readings in /\-interrogatives. If the construction type under consideration here were a /\-interrogative with an additional intonational marking, we would expect that any /\-interrogative containing a constituent that forces it to have an ON interpretation could alternatively be pronounced with the multiple /\-contour, modulo contextual restrictions. This is not the case, however. (8)–(9) show that, as opposed to ordinary negative /interrogatives, a structure pronounced with the multiple rise-fall is not compatible with an is 'also' phrase, or with lack of inversion between prefix and verb following a negative particle nem 'not', which are both considered as diagnostics of ON-readings in Gyuris (2016):

- (8) a. Nem ment el János is moziba/\?
  not went vm János also movies.into
  'Didn't John go to the movies too?'
  - b. \*^Nem ment el ^János is ^moziba?
- (9) a. Nem elment moziba/\? not vm.went movies.into 'Isn't it the case that he went to the movies?'
  - b. \*^Nem ^elment ^moziba?

Furthermore, (10-a) and (10-b) show that whereas *vala*-indefinites can have both a specific and a non-specific reading in /\-interrogatives, in multiple rise-fall constructions they can only give rise to the former interpretation, just as they do in declaratives. (The relevant observation on declaratives was made in Szabolcsi 2002, p. 220.)

- (10) a. János nem hívott fel tegnap valakit/\?

  John not called vm yesterday somebody.acc
  - i. 'Didn't John call a particular person yesterday?'
  - ii. 'Didn't John call some person yesterday?' (Gärtner and Gyuris, 2012, p. 401, (25), translations amended)
  - b. ^János ^nem hívott fel ^tegnap ^valakit?
    - i. 'John didn't call a particular person yesterday?'
    - ii. \*'John didn't call some person yesterday?'

Fourth, we can see an interesting contrast between the compatibility of /\-interrogatives and multiple rise-fall-constructions with certain speaker-oriented adverbs. (The observations were inspired by suggestions made by Abeillé et al. 2014 about adverbials in French rising declaratives.). (11-a)–(11-b) show that the adverb *esetleg* 'perhaps' in multiple rise-fall constructions is grammatical, but it is ungrammatical in ordinary /\-interrogatives:

- (11) a. Esetleg 'bekapcsolva hagyta a 'mobiltelefont a 'színházban'? perhaps switched.on left.3sg the mobile.acc the theatre.in 'He left perhaps the mobile phone switched on in the theatre'
  - b. \*Esetleg bekapcsolva hagyta a mobiltelefont a színházban/\?
  - c. Esetleg bekapcsolva hagyta a mobiltelefont a színházban.

The falling declarative counterpart of (11-a)–(11-b), shown in (11-c), is also compatible with *esetleg*, which points to the similarity of multiple rise-fall constructions and declaratives.<sup>10</sup>

As far as the adverb  $tal\acute{a}n$  'perhaps' is concerned, the situation is even more interesting: it is compatible with both structures, but it leads to a rhetorical question interpretation in the case of ordinary /\-interrogatives (which the corresponding -e-interrogatives also share):<sup>11</sup>

- (12) a. Talán 'bekapcsolva hagyta a 'mobiltelefont a 'színházban'? perhaps switched.on left.3sg the mobile.acc the theatre.in 'He left perhaps the mobile phone switched on in the theatre?'
  - b. Talán bekapcsolva hagyta a mobiltelefont a színházban/\?

<sup>&</sup>lt;sup>10</sup>An anonymous reviewer, while acknowledging the validity of the data in (11), notes that the negative counterpart of (11-b), *Esetleg nem hagyta bekapcsolva a mobiltelefont a színházban*/? is felicitous in Hungarian. Besides noting that the above structure can only give rise to an ON-reading, I have no explanation for the phenomenon at the moment.

<sup>&</sup>lt;sup>11</sup>While agreeing with the contrast in (12), an anonymous reviewer notes that the rhetorical question reading of (12-b) would be more natural with a topic, as in  $\tilde{O}$  talán bekapcsolva hagyta a mobiltelefont a színházban/? 'Did he perhaps leave his mobile phone switched on in the theatre?' and that the pronunciation of the latter seems to involve a little downdrift.

'Did he perhaps leave his mobile phone switched on in the theatre?' Intended meaning: 'He did not leave ...'

The formal differences between /-interrogatives and the multiple rise-fall-constructions reviewed above indicate that the latter do not belong to the interrogative sentence type but to the declarative one. The form type under investigation therefore will be referred to as / (*rise-fall*)-declarative in what follows.

In the next section we take a closer look at an intonationally marked declarative sentence type that in different Germanic and Romance languages is referred to as a *rising declarative*. We will contrast the felicity conditions of rising declaratives observed in the literature to those of Hungarian /\-declaratives in order to formulate some suggestions on the adequate formal modeling of the latter, and also make some observations on the validity of the theoretical proposals themselves.

# **3** Formal analyses of rising declaratives and their application to /\-declaratives in Hungarian

## **3.1** Gunlogson (2003)

Gunlogson (2003) provides a range of new observations and a formal account in terms of context update semantics on the use of declaratives (pronounced with a rising or a falling tone) and interrogatives as questions in English. For brevity's sake, we will only discuss her claims concerning rising declaratives in what follows.

The most important claims concerning the use of interrogatives and rising declaratives are the following. First, whereas the former are generally available to ask a question in an unbiased context, the latter are not, as (13) illustrates:

- (13) [at a committee hearing]
  - a. Are you a member of the Communist party?
  - b. #You are a member of the Communist party? (Gunlogson, 2003, p. 1-2, ex. (5ab))

As (14-a) shows, a /\-declarative is also unacceptable in Hungarian in the same context:

- (14) [at a committee hearing]
  - a. #Maga ^tagja volt a ^kommunista ^pártnak? you member.its was the communist party.dat

'You were a member of the communist party?'

Second, rising declaratives do not commit the speaker to the propositional content of the declarative, they are felicitous even if the speaker is skeptical about the truth of the latter:

(15) [A&B are looking at a co-worker's much-dented car]

A: His driving has gotten a lot better.

B's response:

- a. Has it? I don't see much evidence of that.
- b. It has? I don't see much evidence of that. (Gunlogson, 2003, p. 21, (44a–b))

The next example shows that a /\-declarative is also felicitous in the same context:

(16) [A&B are looking at a co-worker's much-dented car]

A: His driving has gotten a lot better.

B's response:

B: Már ^sokkal ^jobban ^vezet? Nem sok jelét látom. already much better drive.3sg not much sign.its.acc see.1sg 'His driving has gotten a lot better? I don't see much evidence of that.'

The lack of commitment by the speaker is shown in the next example, where it is not the propositional content but the presuppositions of the interlocutor's utterance that are questioned:

(17) A: The king of France is bald.

B's response:

- a. Is France a monarchy?
- b. France is a monarchy? (Gunlogson, 2003, p. 2, (7a-b))

Hungarian /\-declaratives are equally fine in the above context:

(18) A: The king of France is bald.

B's response:

a. ^Franciaország ^királyság?

France monarchy

'France is a monarchy?'

To account for these and analogous data, Gunlogson derives the meaning and

use of rising declaratives compositionally by proposing that the declarative/interrogative form and the rising/falling intonation introduce different types of context change potentials (CCP), which are then compositionally combined. According to this, whereas the declarative form signals the presence of commitment to the propositional content of the sentence, the final rise signals that this commitment is attributed to the addressee and the fall signals that it is attributed to the speaker.

The formal model of the proposal uses, in addition to the concept of the Common Ground (Stalnaker, 1978), the set of propositions representing the public beliefs or discourse commitments (DC) of the individual participants, referred to as  $DC_X$  for participant X, and the context set associated with each discourse commitment set, referred to as  $cs_X$ , which consists of the set of possible worlds compatible with the propositions in  $DC_X$ . Thus, the CCP of a declarative sentence is defined with respect to an individual  $cs_X$ , independently of the identity of X, as in (19), and the CCPs associated with rising and falling locutions as in (20)–(21), respectively, where C stands for the input and C' for the output context:

- (19)  $cs_X + S_{decl} = \{w \in cs_X : \text{ the descriptive content of } S_{decl} \text{ is true of } w\}$ (Gunlogson, 2003, p. 33, (74a-b))
- (20)  $C + \uparrow S = C'$  such that:
  - a.  $cs_{Addr}(C') = cs_{Addr}(C) + S$
  - b.  $cs_{Spkr}(C') = cs_{Spkr}(C)$ (Gunlogson, 2003, p. 33, (75))
- (21)  $C + \downarrow S = C'$  such that:
  - a.  $cs_{Spkr}(C') = cs_{Spkr}(C) + S$
  - b.  $cs_{Addr}(C') = cs_{Addr}(C)$ (Gunlogson, 2003, p. 33, (76))

Unifying the contributions of the declarative form and of the rise, the CCPs of rising declaratives look like as follows:

(22) 
$$C + \uparrow S_{decl} = C'$$
 such that:  
a.  $cs_{Spkr}(C') = cs_{Spkr}(C)$   
b.  $cs_{Addr}(C') = cs_{Addr}(C) + S_{decl}$   
(Gunlogson, 2003, p. 33, (77))

Based on the above assumptions about the contribution of the declarative form and the rising tone, Gunlogson offers the following Contextual Bias Condition on declarative questions, which proposes that rising declaratives can only be used as questions in contexts where the addressee is already publicly committed to the proposition expressed:

(23) Contextual Bias Condition An utterance of  $S_{decl}$  with descriptive content p is interpretable as a polar question in C only if  $cs_{Addr}(C) \subseteq p$ .

(Gunlogson, 2003, p. 49, (105))

Let us now consider how the above proposal accounts for the examples illustrated above. First, the theory can easily predict why *echoic* (a.k.a. reiterative) uses of rising declaratives such as (15) are felicitous, or those where presuppositions, as in (17), or entailments of the propositions that the addressee is committed to are asked about. In the case of the following example, the proposition that A talked to Helena does not appear to be an entailment of the proposition uttered by A:

(24) A: Mark and Helena are leaving for Japan this week.

B: Oh...

- a. Did you talk to Helena?
- b. You talked to Helena? (Gunlogson, 2003, p. 56, (120))

Gunlogson argues, nevertheless, that (24) can be accounted for along the same lines as the previous examples. In order to do this, given that p is the propositional content of the declarative question, and q is 'a relevant public commitment of the Addressee's that serves as the basis for the inference" (p. 58), it has to be assumed that  $q \to p$  is accommodated as a joint commitment of the participants. The next example shows that a /\-declarative is acceptable in the same situation in Hungarian:

(25) A: Mark and Helena are leaving for Japan this week.

B: Ó, ...

a. ^Beszéltél ^Helénával? talked.2sg Helena.with 'You talked to Helena?'

The second class of examples where rising declaratives are felicitous is referred to as *verification* questions by the author, shown in (27) below. The context of the latter is contrasted to the minimally different context in (26), where rising declaratives are not felicitous:

- (26) Robin is sitting in a windowless computer room with no information about current weather conditions when another person enters. Robin says to the newcomer:
  - a. Is it raining?

- b. #It's raining?
- c. #It's raining. (Gunlogson, 2003, p. 60, (126))
- (27) Robin is sitting, as before, in a windowless computer room when another person enters. The newcomer is wearing a wet raincoat and boots. Robin says:
  - a. Is it raining?
  - b. It's raining?
  - c. (I see that/So) It's raining.(Gunlogson, 2003, p. 61, (128))

The Hungarian counterparts of (26)–(27), illustrated in (28)–(29), respectively, show that the acceptability patterns are the same:

- (28) Robin is sitting in a windowless computer room with no information about current weather conditions when another person enters. Robin says to the newcomer:
  - a. #^Esik az ^eső? falls the rain 'It's raining?'
- (29) Robin is sitting, as before, in a windowless computer room when another person enters. The newcomer is wearing a wet raincoat and boots. Robin says:
  - a. ^Esik az ^eső? falls the rain 'It's raining?'

Gunlogson accounts for the felicity of (27-b) by saying that it satisfies the Contextual Bias Condition. There is public evidence that the proposition expressed by the declarative is true, which is thus accessible to the addressee. However, the addressee does not base his commitment on this evidence but on some other information he possesses due to his position, which he came by before the evidence became available for the speaker. The role of the public evidence "from the point of the Addressee is that it enables the Addressee to recognize that the Speaker is being intentionally uninformative", that is, that the speaker knows that the addressee knows that the proposition under discussion is true (p. 62). The absence of publicly available evidence for the propositional content of the declarative is then said to be the reason for the infelicity of (26-b). Gunlogson argues that even if Robin had access to information about the current weather conditions, unbeknownst to the newcomer, and "has good reason to be biased herself, together with the as-

sumption that the Addressee is knowledgeable and may be presumed to have the same bias, is not sufficient by itself to improve" (26-b) (p. 82). The author thus emphasizes the role of the publicly available evidence, as opposed to information privately available for the speaker, in the licensing of rising declaratives.

Interestingly, Gunlogson also adds the following remark to the discussion: "I want to deny that reiterative questions generally, and rising intonation specifically, are inherently associated with 'surprise' or 'incredulity', as is sometimes casually assumed" (p. 82). I think the two views could be reconciled, however, by saying that the expression of surprise or incredulity is not part of the conventional meaning of the rising declarative, but if the speaker considers the addressee to be committed to the propositional content and still asks a question to find out whether it is the case there seems to be reason to think that she does it because she finds the commitment unexpected in view her private knowledge and wants to check it explicitly. I believe that this reasoning could also apply to /\-declaratives in Hungarian, which have been claimed to convey surprise or incredulity.

There is one major problem with Gunlogson's theory, noted by Šafářová (2007, p. 305): if rising declaratives commit the addressee to the truth of the proposition in question there seems to be no reason why they still need to be responded to by the addressee.

Let us now consider the possibility of adopting the theory for Hungarian /\declaratives. Note that (29) would also be felicitous in a context where the speaker does not address the question to the person entering, because she only sees him from a long distance, but to a person staying nearby, who has the same publicly available evidence at his disposal. This fact indicates to me that it does not play a role in the felicity conditions of /\-declaratives in Hungarian whether the addressee is more knowledgeable than the speaker, only the presence of evidence counts. This observation, however, does not contradict the Contextual Bias Condition, as long as one assumes that an interlocutor must be committed to publicly available evidence.

Gunlogson argues that the following example, the translation of the corpus example of Beun (2000) from Dutch, is felicitous with a rising declarative:

- (30) A: Schiphol Information
  - B: Hello, this is G.M. I have to go to Helsinki, from Amsterdam. Can you tell me which flights leave next Sunday?
  - A: Just a moment.
  - A: Yes, there are several flights. One leaves at 9.10, one at 11.10, and one at 17.30.
  - B: The flight takes about three hours? (Gunlogson, 2003, p. 58, (123))

Gunlogson claims that in spite of the fact that the Contextual Bias Condition is not fulfilled in the context of (30) (since the proposition expressed is not logically entailed by the public commitments of the addressee), the felicity of the last utterance of B can be accounted for by assuming that the rising declarative is accommodated as a question, "by making the necessary contextual adjustment to meet the Contextual Bias Condition-" Since "[t]here is no particular commitment of the Addressee's from which the content of the declarative is taken to follow," the author relies on "a kind of blanket accommodation available for any declarative content presented by B that pertains to A's acknowledged area of expertise, i.e., airport information." According to her, the accommodation relies i) on A being "mutually understood to be possessed of facts about some particular domain" (i. e., airport operations), and ii) on the fact that "B has reason to believe that some proposition p is a fact and that A knows it by virtue of" i) (i.e., "B believes p to be a fact about airport operations"). "Therefore, when B presents p to A declaratively, it can be taken to follow from mutual assumptions that A already knows, or is in a position to confirm, p—thereby providing the contextual adjustment necessary to satisfy the Contextual Bias Condition" (p. 59).

Independently of whether this account correctly captures the facts of English, the Hungarian counterpart of (30) with a /\-declarative turns out to be infelicitous:

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(31) [Same context as in (30)]
B: #^Három ^órás az ^út?
three hourly the way
'The flight takes three hours?'
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Implications of the contrast between the range of uses available for the two constructions in the two languages will be discussed below. In the next section we look at Poschmann (2008), which raises several points of criticism against the above proposal.

#### 3.2 **Poschmann (2008)**

Poschmann (2008) disagrees with Gunlogson (2003), who assumes that declaratives used as questions uniformly involve a commitment shift from speaker to addressee. Poschmann emphasizes that the two classes of declarative questions that Gunlogson accounts for in a uniform fashion, namely, echo questions, illustrated in (15) above, and verification questions, referred to by Poschmann as *confirmative questions*, illustrated in (27-b), should be given different treatments.

Poschmann argues that whereas "utterers of echo questions can easily dissociate themselves from the content of their utterance, utterers of confirmative questions obviously cannot." (p. 252). The contrast can be illustrated with (32)

vs. (33):

- (32) Echo question:
  - A: Don't worry. The manager has of course been informed.
  - B: The manager has of course been informed? I wouldn't expect that. (Poschmann 2008, p. 252, (9))
- (33) Confirmative question:

At Tim's graduation. Tim's standing next to Sophie, a woman in her sixties.

Jack to Sophie: You're Tim's mother? (\*I don't believe so.) (Poschmann 2008, p. 257, (19), context description slightly amended)

As the following examples show, judgments are similar concerning the Hungarian counterparts of the examples above:

- (34) A: Ne aggódj. Az igazgatót már természetesen not worry.subj.2sg the director.acc already naturally tájékoztatták. informed.3pl
  - 'Don't worry. The manager has of course been informed.'
  - B: Az ^igazgatót ^már ^természetesen ^tájékoztatták? Nem the director.acc already naturally informed.3pl not hiszem. believe.1sg
    - 'The manager has of course been informed? I don't believe it.'
- (35) At Timi's graduation. Timi's standing next to Sophie, a woman in her sixties.

Jack to Sophie:

a. ^Ön a ^Timi ^édesanyja? (\*Nem hiszem el.) you the Timi mother.her not believe.1sg vm 'You're Timi's mother? (\*I don't believe so.)'

Poschmann proposes that "[i]n contrast to echo questions, confirmative questions seem to convey speaker commitment even though they certainly do not express the speaker's full beliefs, they at least convey her assumptions" (p. 252). This observation is supported by the fact that confirmative questions seem to be possible with both rising and falling intonation cross-linguistically (Dutch, English), whereas the intonation of echo questions is obligatorily rising. Further contrasts have to do with the interpretation of the particle *wohl* in German. Poschmann observes, in addition, that echo-questions and echo-assertions do not necessarily attribute commitment to the addressee, they can attribute it to a third

person as well, and thus suggests that the commitment shift they involve is not connected to questionhood but to their being meta-representations. Furthermore, echo questions occur with all possible sentence types.

Given the contrasts listed above, Poschmann (2008) argues that echo questions and confirmative questions constitute two different types of speech acts: the former involve commitment shift, and the latter speaker commitment. The speaker's commitment "depends on the addressee's acknowledgement: the speaker's commitment is suspended as soon as the addressee denies the content." (p. 257).

After showing that a classical implicature-based theory (or one based on indirect speech acts) cannot explain the data in (33) (since the proposition that Sophie is Tim's mother is not uninformative for the Common Ground), Poschmann proposes an account that follows Zeevat (1996) and Nilsenová (2000) in assuming "that the speaker's utterance does not bring an update (of the Common Ground) with the proposition p expressed by the utterance but rather with the proposition  $B_{Spkr}(p)$  – the speaker believes that p. In order for the proposition to become part of the Common Ground (that means a commitment of both, speaker and hearer), the hearer has to acknowledge it, with the update  $B_H(p)$ " (Nilsenová 2000, p. 34).

Poschmann argues that whereas context conditions are usually sufficient to trigger this acknowledgement, it is the rising intonation that explicitly realizes the call on the addressee. She assumes, furthermore, that "this request for acknowledgement, expressed by rising intonation, is not restricted to confirmative questions but is also characteristic for a wide range of other speech acts" she refers to as "tentative speech acts" (p. 258). She proposes that "rising intonation in speech acts involving speaker-commitment can be used to ask explicitly whether the addressee acknowledges the speech act performed by the speaker" (p. 258). Thus, rising intonation lends speech acts with speaker commitment a specific tentative reading, since it triggers a supplementary question about the acknowledgement (Ack) of the speech act performed (F(p)). This strategy boils down to treating confirmative questions not as questions but as complex speech acts consisting of an assertion and a question, represented formally as follows:

In Poschmann's opinion, the acknowledgement of an illocutionary act involves two steps: (i) the addressee acknowledges his understanding of the speech act, and (ii) the addressee accepts or refuses the content of the speech act. Although rising intonation can be used for asking for both kinds of acknowledgement, the content disambiguates as to which of them is relevant in the situation. In the case of confirmative questions like (33) above, where the addressee, not the speaker, is the source of information about the truth of the propositional content of the

utterance, acknowledgement of type ii) plays a role. As far as "informative rising declaratives," such as the one illustrated in (37) are concerned, acknowledgement of type i) plays a role, given that the speaker is an authority as far as her place of origin is concerned.<sup>12</sup>

(37) Informative rising declarative:

Radio station DJ: Good morning, Susan. Where are you calling from? Caller: I'm from Skokie?

(Poschmann, 2008, p. 259, (23))

Note that the Hungarian version of (37), containing a /-declarative, is infelicitous, however:

(38) Radio station DJ: Good morning, Susan. Where are you calling from?

The fact that /\-declaratives cannot be used felicitously in the context of (38) suggests that acknowledgement type i) does not play a role in the interpretation of /\-declaratives in Hungarian. Interestingly, there is another form in this language that can be used to make a speech act analogous to that in (37): this is a declarative pronounced with a final rising tone, illustrated in (39):

(39) Caller: Karcag mellől telefonálok/. 'I'm calling from the area of Karcag?'

The discussion of the felicity conditions of these 'Hungarian rising declaratives will, however, be left for a further occasion.

Regarding the assertion part of the speech act encoded by confirmative questions (cf. (36)), Poschmann argues that the speaker commitment required for an assertion to be felicitous can either be based on contextual evidence, or on the private assumptions of the speaker. The need for the latter is argued for by the author on the basis of (26): here the context does not justify that the speaker should have an assumption about the truth of the propositional content (i.e., the weather conditions), but if there is a hint that there was a source for a private assumption, e. g. from the internet, the example sounds much less problematic.

Poschmann argues for the superiority of her framework to that of Gunlogson's by showing that (30) above, where only the speaker's private assumptions

<sup>&</sup>lt;sup>12</sup>The example originates from Hirschberg and Ward (1995), and is also mentioned in Gunlogson (2003), under the name *informative rising declarative*, offering new information, but is left without specific consideration there.

support the truth of the propositional content of the rising declarative, and which Gunlogson's (2003) Contextual Bias Condition cannot explain in a straigtforward manner, can be accounted for automatically in her theory.

(36) above represents rising declaratives as encoding a speech act consisting of an assertion and a question, which looks very similar to what Reese and Asher (2006) assume about nuclear tag questions. The question therefore arises what the predictions of the present approach are about the interpretational difference between rising declaratives and tag questions, which do exist, since they cannot be replaced for each other freely in any context.

Rising declaratives that are said to involve an acknowledgement of the content of the speech act in Poschmann's framework, exemplified by (13), (15), (17), (24), (27-b) above, are referred to as *inquisitive* rising declaratives by Jeong (2017), and those involving an acknowledgement of the form, as in (37), as *assertive* (or informative) rising declaratives. Jeong argues that the two classes should be associated with different felicity conditions in English. The fact that the latter examples cannot be encoded by /\-declaratives in Hungarian is an indication that this suggestion might be on the right track. There are, however, cases where the parallel is not perfect. For example, Poschmann's confirmative question in (40) has no counterpart in Hungarian that is expressed with a /\-declarative, similarly to (30):

- (40) A: The queen will arrive in five minutes.
  - B: O.K. The manager has of course been informed? \*I wouldn't expect that.

(Poschmann 2008, p. 252, (10))

- (41) A: The queen will arrive in five minutes.
  - B: O.K. #Az ^igazgatót ^már ^természetesen ^tájékoztatták? 'O.K. The manager has of course been informed?'

The above data suggest that the felicity conditions of inquisitive rising declaratives in English do not correspond to those of /\-declaratives in Hungarian. In the next section we turn to the proposal by Gunlogson (2008), which was put forward partly as a reaction to Poschmann's criticism, and incorporates some new insights.

#### 3.3 **Gunlogson (2008)**

Gunlogson (2008) revises the author's previous proposal, partly in order to be able to account for the data that Poschmann (2008) found to be incompatible with it. In order to explain the felicity of these and other relevant examples, Gunlogson proposes that declaratives used as questions are acceptable in a context where

they independently satisfy i) felicity conditions that are associated with the use of declaratives, and ii) conditions on the context that make the questioning interpretation possible, which is facilitated by the rising tone.

In the new framework, both rising and falling declaratives are said to encode the speaker's commitment, which, however, does not have to rely on contextual evidence, but can also be based on private information. The felicity conditions of initiating (that is, non-echo) uses of declarative questions rely on the concept of sourcehood:

- (42) An agent  $\alpha$  is a source for a proposition  $\varphi$  in a discourse d iff:
  - a.  $\alpha$  is committed to  $\varphi$ ; and
  - b. according to the discourse context,  $\alpha$ 's commitment to  $\varphi$  in d does not depend on another agent's testimony that  $\varphi$  in d. (Gunlogson, 2008, p. 113, (27))

Assuming that all commitments have sources (referred to as the *Source Principle*, p. 117), the initiating uses of declarative questions are claimed to satisfy the *Rule of Initial Commitment*, defined as follows:

(43) Rule of Initial Commitment

A speaker making a discourse commitment to  $\varphi$  in a context neutral with respect to  $\varphi$  is expected to be a source for  $\varphi$ . (Gunlogson, 2008, p. 118, (39))

Based on these notions, Gunlogson accounts for the infelicity of the declarative questions in (26), repeated in (44):

- (44) Robin is sitting in a windowless computer room with no information about current weather conditions when another person enters. Robin says to the newcomer:
  - a. Is it raining?
  - b. #It's raining?
  - c. #It's raining.

According to the proposal, using a declarative involves commitment by the speaker, which makes the speaker to be the expected source of the commitment, but, as Gunlogson puts it, "according to what is known about Robin's resources in the discourse situation, she is not a plausible source." As a result, "Robin's intention in uttering the declarative is unrecognizable, resulting in infelicity" (p. 119).

The situation in (27), repeated in (45), differs from the latter in that "it gives Robin a visible basis for her commitment," and it makes it "conceivable in the con-

text that Robin could reach the conclusion that it's raining without the newcomer telling her" (p. 119):

- (45) Robin is sitting, as before, in a windowless computer room when another person enters. The newcomer is wearing a wet raincoat and boots. Robin says:
  - a. Is it raining?
  - b. It's raining?
  - c. (I see that/So) It's raining.

Although the felicity of the rising declarative in (45), as opposed to (44), seems to depend on the availability of evidence in the context, Gunlogson argues that "there is no general requirement that the speaker's evidence be available in the discourse context. Rather, what is generally required for felicity of a declarative is just that the discourse context allow the inference that the speaker has some basis for her choice" (p. 120). This strategy explains why the contexts described in (33), repeated as (46), and in (30), repeated as (47), are compatible with the use of declaratives:

(46) Confirmative question:

At Tim's graduation. Tim's standing next to a woman in her sixties. Jack to Sophie: You're Tim's mother? (\*I don't believe so.)

- (47) A: Schiphol Information
  - B: Hello, this is G.M. I have to go to Helsinki, from Amsterdam. Can you tell me which flights leave next Sunday?
  - A: Just a moment.
  - A: Yes, there are several flights. One leaves at 9.10, one at 11.10, and one at 17.30.
  - B: The flight takes about three hours?

Given the assumptions above, Gunlogson considers (46)–(47) to be the norm, rather than the exception.

The /\-declarative counterpart of (47) in Hungarian, shown in (31) above was claimed to be infelicitous. This judgment can be accounted for by assuming that /\-declaratives require that the context contains evidence that supports the truth of the propositional content p, which generally does not hold in contexts where assertive rising declaratives in English are felicitous. The felicity of the Hungarian counterpart of (46), shown in (35), can be explained in the same lines: there is evidence supporting the truth of the relevant proposition, having to do with the fact that mothers usually go to graduations of their children and show a certain resemblance to them.

Gunlogson's constraint according to which the speaker, who commits as source, must have adequate evidence (otherwise infelicity arises) explains only why the declarative form is felicitous in English, but not why the form can give rise to a questioning interpretation, since the expression of speaker commitment "is not a move inherently suited to questioning" (p. 132). The author argues that the interpretation of the speaker's commitment as questioning depends on "the extent it is understood as contingent on the addressee's ratification of the content" (p. 132). Although rising intonation facilitates the interpretation of the utterance as contingent, context also has to contribute to "making evident the superiority of the addressee over the speaker as a source" (p. 132).

In Gunlogson's opinion, contingency of commitment is "not a strictly categorical matter", and claims that "[t]he expectation is rather that a commitment-expressing utterance will have a 'questioning' flavor to the extent it is judged contingent on the addressee's ratification" (p. 127).

A contingent commitment, a subtype of contingent discourse moves, is defined by the author as follows:

- (48) A discourse move  $\mu$  committing an agent  $\alpha$  to  $\varphi$  is contingent upon ratification by an agent  $\beta$ ,  $\alpha \neq \beta$ , if:
  - a.  $\beta$  is implicitly authoritative with respect to  $\varphi$  at the time of  $\mu$ .
  - b. It is inferable in the discourse context that  $\alpha$ 's commitment to  $\varphi$  will be withdrawn unless the discourse move immediately succeeding  $\mu$  has the effect of committing  $\beta$  to  $\varphi$  as a source. (Gunlogson, 2008, p. 128, (46))

Based on the above notion, the author proposes the following "essential condition for interpreting a speaker's expression of commitment as questioning":

(49) Contingent Commitment Criterion

An utterance of a declarative with content  $\varphi$  is questioning to the extent that the speaker's commitment is understood as contingent on the addressee's ratification of  $\varphi$ .

(Gunlogson, 2008, p. 129, (48))

The Contingent Commitment Criterion accounts for the felicity of (50), since the "contingency of [Max's] commitment upon Laura's authority is inferable in the discourse context" (p. 129):

- (50) [Laura has just entered the room, where Max sees her for the first time that day.] Max:
  - a. Did you get a haircut?
  - b. You got a haircut?

- c. You got a haircut. (Gunlogson 2008, p. 104, (8))
- (51) shows that the /-declarative counterpart of (50) is also felicitous in the same situation:
- (51) [Laura has just entered the room, where Max sees her for the first time that day.] Max:
  - a. ^Levágattad a ^hajad? vm.have.cut.1sg the hair.your 'You got a haircut?'

The role of the rising intonation is then seen by the author as marking the utterance as contingent, "on some discourse condition whose identity is determined in context" (p. 29).

Based on the assumptions discussed above, Gunlogson accounts for the infelicity of (52-b) as follows:

- (52) [to coworker eating a piece of fruit]
  - a. Is that a persimmon?
  - b. #That's a persimmon?
  - c. #That's a persimmon. (Gunlogson 2008, p. 102, (3))

She claims that it appears reasonable to assume that "the speaker has some private basis for thinking the fruit might be a persimmon" (p. 131), thus the condition according to which commitments made with the help of declaratives must have sources (i. e., the Source Principle) is not violated. However, the Contingent Commitment Condition does seem to be violated, since she believes that there is no indication in the context that the addressee is acquainted with the name of the fruit he consumes. People are generally aware of the name of the food they eat but this follows from a generalization about people and not from properties of the context. The infelicity of (52-b) also follows as a result of comparing it to (52-c): the fact that the latter cannot be interpreted as an informative statement suggests that the addressee is only implicitly authoritative. The cause of the infelicity of (52-c) is that there isn't "enough of a differential between the states of speaker and addressee, evident in the context of utterance," (p. 131) which would support viewing the speaker's commitment as contingent on the addressee's in the case of (52-b).

As (53) illustrates, Hungarian /\-declaratives are equally infelicitous in the above situation:

- (53) [to coworker eating a piece of fruit]
  - a. #^Ezt hívják ^datolyaszilvának?this.acc called persimmon.dat#'This is called persimmon?'

I believe, however, that (53) can be accounted for on the basis of the assumption that the felicity of utterances made with /\-declaratives depends on the availability of *compelling contextual evidence* for the propositional content p. We follow Büring and Gunlogson (2000) in assuming that contextual eviendence for p is compelling "if, considered in isolation, it would allow the participants to assume p (i.e. the evidence could reasonably be considered to justify the inference that p)" (p. 7). Although it might follow from the common ground or from the properties of the situation that people in general or the addressee in particular knows the name of the food he is eating, it does not follow from either what the name of the fruit is in the particular case, which is the decisive criterion for the felicity of the /\-declarative.

Since Gunlogson does not look at tag questions, either, the question also arises here whether her framework could adequately discriminate between the felicity conditions of tag questions and those of rising declaratives. The next section turns to the proposals by Malamud and Stephenson (2015).

# 3.4 Malamud and Stephenson (2015)

Malamud and Stephenson (2015)'s approach to the interpretation of rising declaratives in English is based on two assumptions, which seem to be inspired by the proposals of Gunlogson (2003, 2008) and Poschmann (2008), and thus the account seems to be a unification of the preceding two ones. First, the use of rising declaratives is argued to introduce projected commitments, which remind one of Gunlogson's contingent commitments, and second, they seem to involve a *metalinguistic issue*. This reminds one of Poschmann (2008)'s account, according to which the rising tone in rising declaratives can be taken to mark a question about whether the relevant speech act has been successful. Malamud and Stephenson represent the interpretation of rising declaratives in Farkas and Bruce (2010)'s framework, whose main features can be characterised as follows.

Farkas and Bruce (2010) make use of a (possibly empty) set  $DC_X$  for each participant X, consisting of the propositions that "X has publicly committed to during the conversation up to the relevant time, and which are not shared by all the other participants." (p. 85), a set CG of propositions shared as joint discourse

<sup>&</sup>lt;sup>13</sup>Cf. Gyuris (2017) for further discussion of the role of compelling contextual evidence in the licensing of polar interrogatives available for making question acts in Hungarian.

commitments by all participants, a stack of sentential form/meaning pairs called *Table*, and a set *PS* ("projected set") of "projected" or "privileged" future common grounds. "The *Table* records what is 'at issue' in the conversation. When the Table is not empty, the immediate goal of the conversation is to empty it, that is, to settle the issue at hand. [...] A conversation is in a stable state when its Table is empty" (p. 87).

The above system is enriched by Malamud and Stephenson in two respects. First, they add *projected commitments*, "things that interlocutors are expected to become committed to in the normal course of conversation" (p. 299), which thus "represent the expected next stage of the conversation" (p. 288). A projected commitment of the speaker or hearer will turn into an actual commitment if the hearer confirms it. A projected commitment of the hearer will remain an actual commitment but will not enter the CG without further commitment from the speaker. The authors emphasize the specificity of projected speaker commitments, "given that the speaker is always in full control of her own commitment set" (p. 288). They argue that "if the speaker chooses to make a projected commitment, rather than a present one, the hearer(s) can infer that the speaker has some reason to delay making a commitment that she would otherwise be wiling to make. In the absence of any other obvious pragmatic reason, the hearer(s) will typically infer that the speaker has reason to think p, but has some uncertainty about it. Essentially, then, projected speaker commitments give rise to an implicature of tentativeness" (p. 288).

Importantly, the system including projected commitments for each participant differs from Gunlogson's contingent commitments in that Malamud and Stephenson also include projected hearer commitment, which lack a counterpart in Gunlogson (2008).

Second, they add the option of introducing a metalinguistic issue, and propose that the rising tone signals the existence of such a metalinguistic issue. The authors argue that when a rising declarative is uttered, both its propositional content p and then a (possibly singleton) set of propositions  $MLI_p$  is added to the Table.  $MLI_p$  is a "contextually determined set of propositions, any of which would resolve the contextually determined metalinguistic issue concerning p" (p. 296). A move that simultaneously involves a commitment and a metalinguistic issue indicates to the hearer that the commitment is a projected one, pending the resolution of the metalinguistic issue. "Any aspect of the utterance's content and form can be the subject of an MLI, as long as the speaker can give the hearer enough clues about its nature (though there are examples of misunderstandings regarding the nature of the MLI in naturally occurring data)" (p. 296). The effect of the rise is thus viewed as a way of "seeking approval to make an assertion that p",

<sup>&</sup>lt;sup>14</sup>This feature of the proposal was inspired by Ginzburg (1996, 2012).

thus, rises "are predicted to be possible whenever the speaker isn't sure if a plain assertion is appropriate" (p. 296).

The metalinguistic issue signalled by the rise could be of any kind that would count as a Clarification Request by the hearer or speaker of a plain assertion (Ginzburg, 2012). In what follows, we illustrate the procedure with some examples given by the authors, also showing the corresponding Hungarian examples encoded by /\-declaratives. In (53)–(56) the metalinguistic issue concerns an inference by the speaker based on the interlocutor's utterance:

**'Blushing/Innuendo' Context:** A and B are gossiping. A doesn't know anything about B's neighbor. B says, blushing, 'You've GOT to see this picture of my new neighbor!'

#### Without looking, A replies:

A: He's attractive?

(Malamud and Stephenson, 2015, p. 279, (2c))

- (55) A: 'Jól néz 'ki? well look vm 'He looks good?'
- (56) **'Single' Context:** A and B are gossiping. A doesn't know anything about B's neighbor. B says, blushing, 'You've GOT to meet my new neighbor!' A replies:

A: He's single?

(Malamud and Stephenson, 2015, p. 280, (5c))

(57) A: ^Nőtlen a ^szomszédod? single the neighbour.your 'Your neighbour is single?'

In (54) and (56), A infers that the neighbor is attractive or single, respectively, only indirectly; the metalinguistic issue concerns whether the speaker's inference regarding the hearer's blushing is correct. (55) and (57) show that the corresponding Hungarian examples containing /\-declaratives are felicitous in the respective situations. This is expected if there is compelling contextual evidence for the the propositional content of the /\-declarative, assuming that the evidence includes the fact that the interlocutor made the utterance *You've GOT to* . . . .

Next, (58) illustrates a case where A is unsure about whether her opinion is called for; thus the metalinguistic issue is whether p addresses the issue on the Table. An analogous example without a taste predicate in (59) exemplifies a different kind of tentativeness, where the speaker is unsure about the speech act itself (i.e., whether the interlocutor is the right person to introduce himself to, that is, whether he is at the right place for his appointment):

(58) **'Unsure of move'** Context: B hasn't met A's neighbor, and asks, 'What do you think of your new neighbor?' A isn't sure if B wants to know about neighborliness or suitability for dating. A replies:

A: He's attractive?

(Malamud and Stephenson, 2015, p. 280, (4c))

(59) **'My name'** (to a receptionist) Hi, my name is Mark Liberman?<sup>15</sup> (Malamud and Stephenson, 2015, p. 281, (7))

The Hungarian /\-declarative counterparts of the rising declaratives above, shown in (55) above and (60), however, would be infelicitous in the same situations:

- (60) To a receptionist:
  - a. #^Engem ^Mark ^Libermannak ^hívnak?

    I.acc Mark Liberman.dat call.3sg
     'My name is Mark Liberman?'

The next example containing a vague scalar predicate illustrates a case where "discourse commitments pertain to the appropriate standards of application rather than to objective facts" (p. 281).

(61) **'Borderline paint'** Context: A and B are sorting paint cans in a store into a 'red' bin and an 'orange' bin. B points to orangishred paint and says, 'What color would you say this is?' A replies:

A: It's red?

(Malamud and Stephenson, 2015, p. 281, (8c))

The relevant metalinguistic issue in connection with the above example is whether the standard of redness implicit in p is acceptable, given that A is not confident about her judgment. The corresponding Hungarian example, in (61) below, however, would be infelicitous in the same situation:

(62) #Ez ^piros ^színű? this red coloured 'It's red?'

The next one is an analogous example, but without a vague scalar predicate:

(63) Context: A teacher (B) is quizzing a student (A) on state capitals. The teacher says: 'What's the capital of New York?' The student isn't sure of the answer, but thinks it might be Albany. The student says:

<sup>&</sup>lt;sup>15</sup>Original source: Pierrehumbert and Hirschberg (1990, p. 290).

It's Albany? (Malamud and Stephenson 2015, p. 282, (9c))

A Hungarian /\-declarative is again infelicitous in the same situation:

- (64) Context: A teacher (B) is quizzing a student (A) on state capitals. The teacher says: 'What's the capital of New York?' The student isn't sure of the answer, but thinks it might be Albany. The student says:
  - a. #^New York állam ^fővárosa ^Albany?
     New York state capital.its Albany
     'The capital of New York state is Albany?'

The infelicity of the Hungarian examples containing /\-declaratives, shown in (58), (61), and (63), which are all supposed to be uttered as answers to wh-questions, and that of (59), which is uttered out of the blue, is expected on the basis of the fact that there is no compelling evidence for propositional content of these declaratives.

Regarding rising declaratives that appear in utterances that echo a previous move, such as (16) above, the authors propose that the rise "serves to keep the issue open for the moment (rather than adding it to the Common Ground)," and thus "achieves its purpose of keeping in contact with the addressee" (p. 298). Whenever the rising declarative serves to double check a presupposition, as in (17) above, it indicates the speaker's doubt regarding the truth of the presupposed proposition, thus the rise "may serve to prevent this information from ever reaching the Common Ground" (p. 298).

The next section looks at the proposal by Farkas and Roelofsen concerning the interpretation of rising declaratives.

#### 3.5 Farkas and Roelofsen (2017)

Farkas and Roelofsen (2017) refer to the proposition that corresponds to the surface form of rising declaratives in English (as opposed to its negation) as the *highlighted alternative*, and propose that "both rising declaratives and tag interrogatives signal that the speaker has access to some evidence for the highlighted alternative" (p. 255). In order to account for the compatibility of these two form types with particular contexts, as opposed to others, the authors suggest that the formal representation of discourse contexts proposed by Farkas and Bruce (2010), reviewed in the previous section, should be complemented, for every participant x, with a list referred to as *evidence*(x), which contains the possibilities "for which x has signaled to have some evidence" (p. 255), and also their "credence level," that is, "the degree to which she believes the alternative itself to be more likely

than its complement" (p. 20). They suggest that "rising declaratives signal that the speaker's credence in the highlighted alternative  $\alpha$  is at most low" (p. 256), where low credence means that the speaker only considers  $\alpha$  to be somewhat more likely than its negation,  $\neg \alpha$ .

I am not convinced that this approach can adequately explain all felicitous occurrences of rising declaratives, however. Consider the example in (65) and the /\-declarative that would felicitously appear in the Hungarian counterpart of the latter, shown in (66):

(65) Student: The answer to this problem is 5 because the square root of 9 is 2 and 2+3 is 5.

Teacher: The square root of 9 is 2? (Malamud and Stephenson 2015, p. 269, (55))

(66) A 'kilenc 'gyöke 'kettő? the nine square.root.its two 'The square root of nine is two?'

I agree with the authors in that (65) "cannot be accounted for in approaches where rising declaratives are taken to signal a 'contingent' or a 'conditional' commitment, as in Gunlogson (2008) and Malamud and Stephenson (2015). A contingent or conditional commitment means that the speaker is "ready to commit to the highlighted alternative provided that her interlocutor commits to this alternative first" (p. 270), but in the case of (65), there is no sign that the teacher would commit under any circumstances to the claim.

The authors' own explanation sounds as follows. In the case of (65), "the available evidence for the highlighted alternative is the student's prior commitment to it. In this context, the teacher is assumed to be authoritative, that is, she is assumed to know whether the highlighted alternative is true or not. By her use of a rising declarative, she signals to the student that her credence in the highlighted alternative is at most low. Since she is assumed to be authoritative, this can only mean that her credence is zero, and that she is effectively rejecting the student's prior commitment and urging him to reconsider" (p. 269).

There are several points I do not understand about the account. First, if the teacher is knowledgeable, why does she have to consider the pupil's utterance as evidence at all? Second, since the authors do not formulate sufficient conditions on the use of rising declaratives, the question arises why the teacher chooses the rising declarative form to formulate her question at all, and why is not an ordinary positive polar interrogative form preferred in all circumstances, which would unambigously convey zero credence, and which would also be felicitous.

The example shown in (66) also involves an authority asking a question. Its Hungarian counterpart, equally felicitous in the context, is shown in (67):

- (67) Context: Mother sees child putting on cleats:

  Mother: What? You are going to play soccer? No way! You are staying home and doing your homework.

  (Farkas and Roelofsen 2017, p. 276, (68))
- (68) ^Indulsz ^focizni?
  leave.2sg play.soccer.inf
  'You are going to play soccer?'

Although Farkas and Roelofsen claim (p. 40) that a polar interrogative would also be appropriate in the context of (67), I do not think I agree with them, especially if the context is meant to include the mother's last two sentences in (67). Again, the Hungarian example can easily be accounted for on the assumption that the use of the rising declarative is justified by the fact that the evidence available in the context supports the truth of the propositional context of the /\-declarative, independently of whether it is likely to be true, given other factors in the context (e.g. the parent's authority).

In the previous examples, Hungarian /\-declaratives were shown to be felicitous in the same situations as English inquisitive rising declaratives are. Given the problems pointed out in connection with Farkas and Roelofsen's approach, however, I do not believe that the account could be used to successfully model the felicity conditions of /\-declaratives in Hungarian. The next section summarizes the results of the paper.

#### 4 Conclusions

This paper had two major aims. On the one hand, we investigated the formal properties of the construction type in Hungarian we referred to as the /\-declarative. On the other hand, we looked at existing formal approaches to the fecility conditions of rising declaratives in English, a construction type with an apparently similar distribution, in order to identify the felicity conditions of /\-declaratives in Hungarian and consider possibilities for their formal modelling. In the course of this, we pointed out some aspects of the analyses that we considered problematic, but also managed to identify some distributional differences between rising declaratives in English and /\-declaratives in Hungarian. According to these, /\-declaratives involve a speaker commitment, which must be based on publicly available evidence (plus general assumptions about the conversation such as cooperativity), and not on private information available to the speaker only. Furthermore, the speaker's commitment should not be considered projected or contingent on subsequent commitment by the addressee, the felicitous use of the construction does not necessarily involve an addressee commitment, or an acknow-

ledgement of a speech act made, and their use does not involve a metalinguistic issue. We have suggested that inquisitive /\-declaratives appearing in contexts with compelling contextual evidence for the truth of the propositional content can be assimilated to echoic uses of the same construction, since a previous utterance by the interlocutor does contribute to evidence in the context. These results will be put to use in the future in the course of proposing a formal modeling of the felicity conditions of /\-declaratives.

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