Hungarian scope marking: intonation, syntax, and semantics

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Overview

▸ Regular multi-clause *wh*-question vs. scope-marking construction

  • Syntax

  • Semantics

  • Intonation and Prosody–Scope Correspondence

▸ Proposal: question clauses

'Regular' multi-clause *wh*-question

(1) *István* **ki-t** *gondol,* *hogy*
István.NOM who-ACC thinks.INDEF that
János *fel-hívta?*
János.NOM VM-called.DEF
'Who does István think that János called?'

▸ question word *kit* in higher clause than the verb which selects it: *felhívta* in (1)

▸ position of question word is consistent with the extent of interrogative scope

Scope-marking construction

(2) *István*   MI-T   *gondol,*   [*hogy*

István.NOM   SM-ACC   thinks.INDEF   that

János   ***ki-t***   *fel-hívta*]*?*

János.NOM   who-ACC   VM-called.DEF

'Who does István think that János called?'

- ▸ scope marker (SM): *MI-* (form = 'what')
- ▸ associate clause: square brackets
- ▸ 'true' question word (McDaniel 1989): *ki-t* in (2)

Comparison: syntax

SM and a 'true' question word both occupy immediately preverbal focus position, as (1) or (2) show.

Direct Dependency (**DD**; Riemsdijk 1983, McDaniel 1989, inter alia):

SM = a semantically empty scope extender that is **directly** linked to a true question word, meaning that (1) and (2) have fundamentally the same syntactic and semantic structure.

Curiouser …

However, the two constructions *are* different: compare island violations.

(3) *__Ki-vel__   *vagy*   *dühös, mert*

   who-INSTR   be.PRS.2SG   angry   because

találkoz-t-ál?

meet-PST-2SG

'Who are you angry because you met?'

(Horvath 1997)

Curiouser …

However, the two constructions *are* different: compare island violations.

(4) *MI-ÉRT*   *vagy*   *dühös,* [*mert*
     SM-CAUS   be.PRS.2SG   angry   because

   ki-vel   *találkoz-t-ál*]?
   who-INSTR   meet-PST-2SG

   'Who are you angry because you met?'

                                    (Horvath 1997)

… and curiouser …

The predicate in the matrix clause must be one which subcategorises for a non-interrogative complement despite the subordinate clause containing a question phrase.

(5) *István   MI-T   kérdezett,   [hogy
      István.NOM SM-ACC asked.INDEF   that

      János   **ki-t**   fel-hívott]?
      János.NOM   who-ACC   VM-called.DEF

Intended: 'Who did István ask that János called?'

Comparison: semantics

Indirect Dependency (**ID**; Dayal 1994, 2000):

The SM is itself a 'real' question word: an existential interrogative quantifier over propositions, with the associate clause being the restriction of the SM. The only direct link is between the SM and the associate clause.

If the SM were a 'real' question word, it should be possible to provide a negative answer to it, but this is not the case (Horvath 2000).

… and curiouser …

(6) Q: *MI-T* *mondott* *János,* [*hogy*
SM-ACC said.INDEF János.NOM that
ki-vel *táncolt*]*?*
who-INSTR danced.INDEF
'With whom did János say that he had danced?'

A: *#Semmit nem mondott, hogy kivel táncolt.*
'He didn't say anything with whom he had danced.'

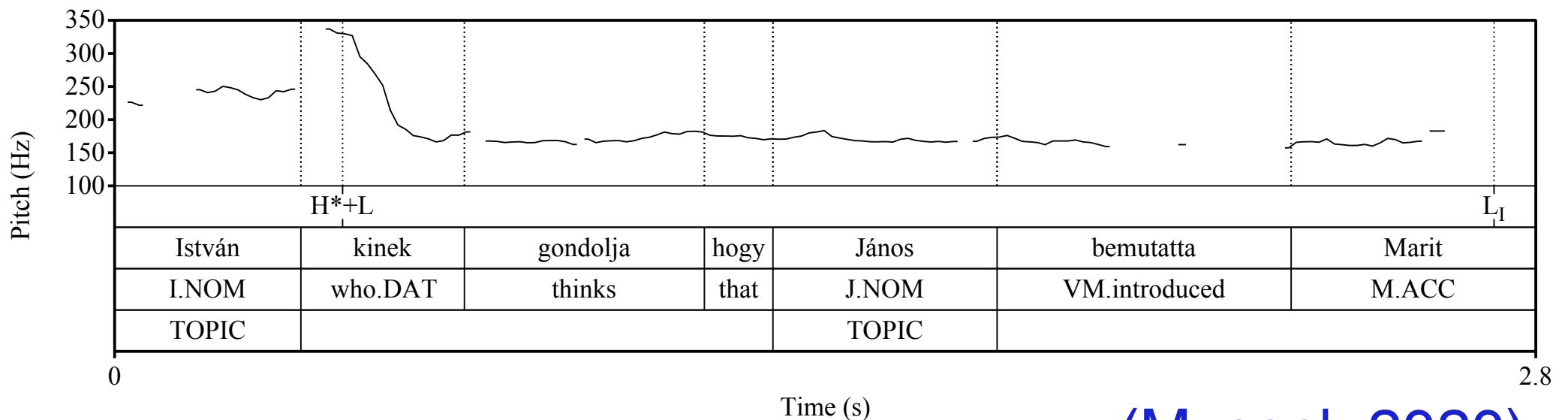(Horvath 2000)

The puzzle so far

There does not appear to be a direct syntactic and semantic relationship between the SM and a 'true' question word given the results of island constraint violation (contra **DD**).

A SM does not appear to be a 'real' question word whose restriction is the associate clause because a negative answer is not possible (contra **ID**).

What about intonation?
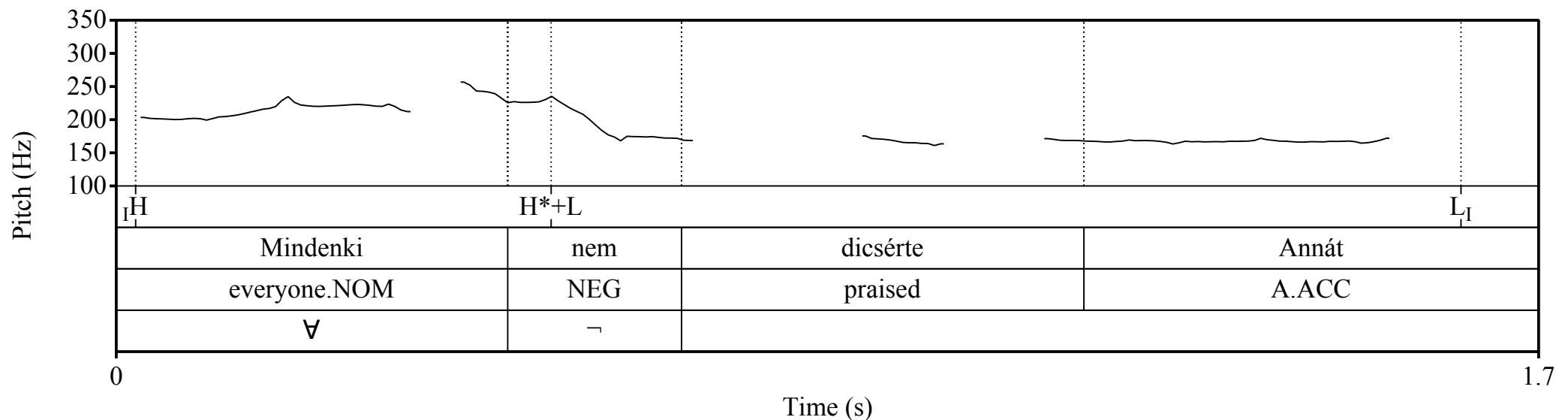
Intonation: 'Regular' multi-clause *wh*-question

Characteristics: sharp fall on question word (H*+L) followed by a low plateau ending in a right boundary tone (L) associated with the end of the intonational phrase.

István	kinek	gondolja	hogy	János	bemutatta	Marit
I.NOM	who.DAT	thinks	that	J.NOM	VM.introduced	M.ACC
TOPIC				TOPIC		

(Mycock 2020)

Intonational marking of scope

Not unique to questions: the element that takes **widest scope within the predicate** portion of the utterance bears the H*+L accent (Hunyadi 2002, Mycock 2010a, b), including any preceding material bearing a H monotone (Mycock 2010a, b).

	Mindenki	nem	dicsérte	Annát
	everyone.NOM	NEG	praised	A.ACC
	∀	¬		

Pitch (Hz): 350, 300, 250, 200, 150, 100

$_I$H ... H*+L ... L$_I$

Time (s): 0 ... 1.7

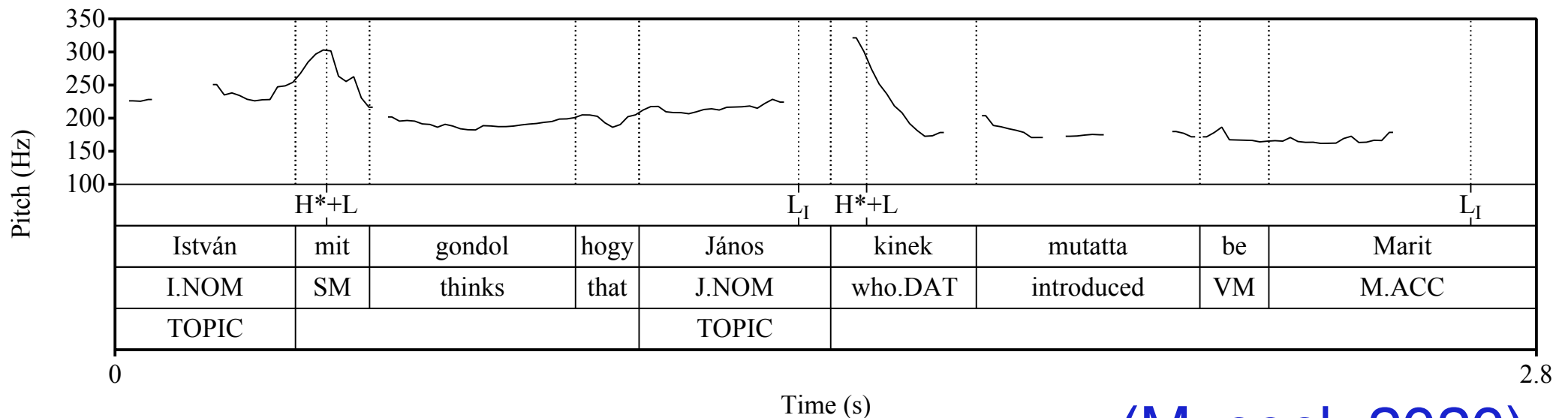# Intonation: interim summary

Prosody–Scope Correspondence

(Mycock 2010b)

When an operator *a* takes scope over any element *b*, the operator *a* is prosodically prominent (i.e. bears H*+L) and *b* is minimally associated with a right boundary tone L.

$$\text{IntP}_{\text{SCOPE}} \rightarrow \text{(H) H*+L L}$$
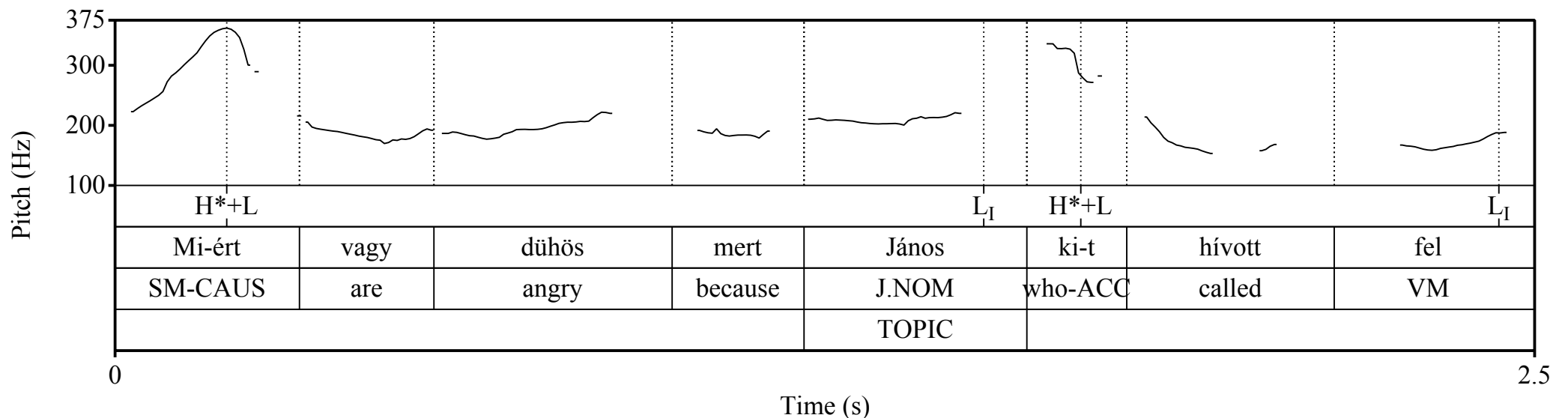
Intonation: Scope-marking construction

Characteristics: two successive IntPs (note the pitch reset before the 'true' question word) with the SM and a 'true' question word both bearing the H*+L accent, each followed by a low plateau.

H*+L					L$_I$	H*+L			L$_I$
István	mit	gondol	hogy	János	kinek	mutatta	be	Marit
I.NOM	SM	thinks	that	J.NOM	who.DAT	introduced	VM	M.ACC
TOPIC				TOPIC				

(Mycock 2020)

Intonation: Scope-marking construction

Characteristics: two successive IntPs (note the pitch reset before the 'true' question word) with the SM and a 'true' question word both bearing the H*+L accent, each followed by a low plateau.

H*+L					L_I	H*+L	L_I
Mi-ért	vagy	dühös	mert	János	ki-t	hívott	fel
SM-CAUS	are	angry	because	J.NOM	who-ACC	called	VM
				TOPIC			

Pitch (Hz)

Time (s)

Intonation: Scope-marking construction

Scope-marking construction: an Utt(erance) comprising a chain of at least two 'scope-marking' IntPs, the final of which contains a 'true' question word.

$$\text{Utt} \rightarrow \text{IntP*} \quad \text{IntP}_{SM}^{+} \quad \text{IntP}_{SCOPE}$$

$$\text{IntP}_{SCOPE} \rightarrow \left[\begin{pmatrix} \text{AP} & \text{AP*} \\ \text{H} & \end{pmatrix} \quad \text{AP} \quad \text{AP*} \right]$$
$$\text{H*+L}$$

$$\& \; [\text{AP*} \quad \text{AP}]$$
$$\text{L}$$

Intonation and Syntax

Intonation encodes a co-dependent relationship between the SM (≠ a question word) that appears in the *interrogative* matrix clause and a 'true' question word in a *non-interrogative* lower clause.

This contrasts with what we find in the syntax: the only direct relationship is between a SM and an associate clause (which includes a 'true' question phrase).

Question clause

The subordinate clause is **not an interrogative clause** (as in *Mary asked* [*who will come tomorrow*]), but rather a question expression in its own right. It is a **question clause** that takes scope over the matrix clause, with the result that the whole sentence is interrogative.

A SM serves to mark the scope of a question clause, but it is *not* an operator in its own right as it lacks relevant semantic content (which instead is supplied by the question clause).

Intonation

When IntP$_{SM}$ occurs, it helps distinguish the scope-marking construction (a single question) from

- ▸ two separate questions, one following the other (*What do you think? Who did János call?*), and
- ▸ a 'regular' multi-clause *wh*-question in which the question word *mi-* 'what' (rather than the SM) appears and takes scope over multiple clauses.

Conclusions

The only direct relationship between SM and a 'true' question word is intonational (contra DD).

A SM indicates the extent of scope, but that is its only semantic contribution: it is not a 'true' question word itself (contra ID).

In this construction, the Prosody-Scope Correspondence does not straightforwardly apply as a SM does not qualify as an operator.

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