

# The Hungarian conditional: Non-deictic counterfactuality<sup>1</sup>

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## 1. Introduction

**Main claim:** Counterfactuals in Hungarian include past tense semantics (even when they do not include past tense morphology).

This proposal. . .

- . . . ties in with previous accounts of how counterfactuality works in other languages (Iatridou 2000; Hall 2001; Ippolito 2006).
- . . . explains why Hungarian conditionals are non-deictic in the same way that the Hungarian past tense is.
- . . . contributes to a feature-geometric Distributed Morphology account of the Hungarian tense and mood paradigm as a whole.

## 2. Theoretical context: Counterfactuals, tense, and exclusion

In many languages, counterfactuals are expressed using past tense morphology; various authors have proposed analyses in which counterfactuality and past tense are also linked semantically:

- Iatridou (2000): Counterfactuality and past tense are both based on an exclusion function  $\text{Excl}(x)$ , where  $x$  ranges over times or worlds.
- Hall (2001, 2005): Counterfactual situations are alternative continuations from prior times.
- Ippolito (2006): Counterfactuals are alternative continuations of “historically accessible” worlds—i.e., worlds which were possible at some interval ending at the reference time.

Nevins (2002) identifies two types of counterfactuals:

- Exclusion morphology (EM) counterfactuals are semantically based on Iatridou’s  $\text{Excl}(x)$ , and their counterfactuality is cancellable.

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1. We are especially grateful to Michael Szamosi for his patient, insightful, and occasionally incredulous help with the Hungarian data.

- (1) a. COUNTERFACTUAL:  
*If the patient had eaten poisonous mushrooms, he would be exhibiting symptoms.*
- b. COUNTERFACTUAL IMPLICATURE CANCELLED:  
*If the patient had eaten poisonous mushrooms, he would be exhibiting precisely the symptoms he is showing now. Therefore, he probably ate poisonous mushrooms.*

- Non-EM counterfactuals presuppose falsehood, and are not cancellable.

- Mandarin (Nevins 2002; Su 2008): No inflection for tense; counterfactuality of *yaobushi* conditionals is not cancellable.

- (2) MANDARIN (Su 2008: 6):

*Yaobushi ta mei you fengzhen, tade pifu shang hui you bao.*  
 YAOBUSHI (s)he not have measles her/his skin surface will have bump

‘If (s)he had the measles, (s)he would have bumps on her/his skin.’  
 (COUNTERFACTUAL)

# *Qishi, yinwei tade pifu xianzai you zhei-yang de bao, ta hoaxing you*  
 actually since her/his skin now have those-kind DE bump (s)he appear have  
*fengzhen.*  
 measles

‘Actually since (s)he does have that kind of bumps on her/his skin now, (s)he appears to have the measles.’ (INFELICITOUS ATTEMPT TO CANCEL COUNTERFACTUALITY)

- Tagalog, Slovenian, Hebrew, Turkish (Nevins 2002): Counterfactuality marked by special complementizers is not connected to tense, and is not cancellable.

### 3. Tense and counterfactuals in Hungarian

#### 3.1 The conditional mood

Hungarian counterfactuals are expressed by the conditional form of the verb, which is not morphologically related to the past tense in any obvious way.

- In a counterfactual, both the antecedent and the consequent are in the conditional (3).
- The present conditional (3a) is morphologically synthetic.
- The past conditional (3b) consists of a verb in the past indicative with an invariant auxiliary *volna*, the third-person singular conditional form of ‘be.’

(3) HUNGARIAN (Bartos 2006: 233):

- a. *Ha esne az eső, hazaindulnánk.*  
 if fall.cond.3sg the rain home.start.cond.1pl  
 ‘If it were raining, we would head home.’
- b. *Ha esett volna az eső, hazaindultunk volna.*  
 if fall.past.3sg VOL.cond.3sg the rain home.start.past.1pl VOL.cond.3sg  
 ‘If it had been raining, we would have headed home.’

Question: Are Hungarian counterfactuals like those in English, or are they like the non-tense-based counterfactuals of Mandarin, Tagalog, Slovenian, etc.?

### 3.2 Relative tense

Tense in Hungarian is relative, rather than deictic—i.e., the time reference of an embedded clause is calculated with respect to the time reference of the clause containing it, rather than with respect to the moment of speech:

(4) HUNGARIAN (Bartos 2006: 244):

- a. *Péter azt mondta, hogy Mari alszik.*  
 Peter it.acc say.past.3sg that Marie sleep.pres.3sg  
 ‘Peter said that Marie was asleep.’
- b. *Péter azt mondta, hogy Mari aludt.*  
 Peter it.acc say.past.3sg that Marie sleep.past.3sg  
 ‘Peter said that Marie had been asleep.’

## 4. Accounting for the facts

### 4.1 Bartos’s analysis

Bartos (2006) claims, in effect, that Hungarian has no tense at all:

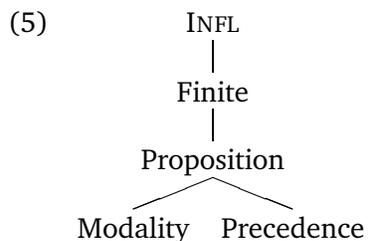
- Since past ‘tense’ is relative rather than absolute, it is actually perfective aspect. É. Kiss (2004, 2005) notes that the Hungarian past tense marker was historically a perfective aspect marker. Eszes (2004) analyzes it as such synchronically.
- The conditional mood denotes  $\text{Excl}(w)$  (Iatridou’s exclusion function applied to worlds), which excludes the utterance world, but which has no connection to the past tense.
- Nothing in Hungarian grammatically encodes  $\text{Excl}(t)$  (the exclusion function operating on times).

## 4.2 Our analysis

- Past tense morphology realizes the past tense feature Precedence.
- The conditional mood spells out Precedence and Modality.
- What the Hungarian tense/mood system lacks is the feature Deixis, and this accounts for the non-deictic semantics of both the past tense and the conditional mood.

### 4.2.1 Tense and mood features and their organization in Hungarian

The tense and mood features used by Hungarian are shown in (5). The features are based on Cowper and Hall (1999), Cowper (1999, 2005), and Hall (2001); their geometric organization in (5) is adapted from those works to account for the Hungarian facts.



What each feature contributes:

**Finite** is a purely syntactic feature corresponding to the ability to agree with, and assign nominative Case to, a subject.

**Proposition** marks a clause as denoting a proposition (something that can be evaluated as true or false), as opposed to a bare state or event. All propositional clauses in Hungarian are finite.

**Modality** indicates that the proposition denoted by a clause represents a possible or necessary continuation of the realis situation, rather than a part of the realis situation.

**Precedence** indicates that the time reference of a clause precedes its temporal anchor.

**Deixis**, which is not used in Hungarian, identifies the temporal anchor of a clause as the moment of speech.

### 4.2.2 Tense, not aspect

**Tense:** the temporal location of a clause with respect to some temporal anchor

**Aspect:** the internal temporal properties of a clause (event or state, accomplishment or achievement or activity, etc.)

For us, relative tense is distinguished from deictic tense by the presence or absence of the feature Deixis in Infl. Relative tense, like deictic tense, is independent of aspect, in that it appears in both stative and eventive clauses, with both perfective and imperfective events, and with verb phrases of all aspectual types.

## (6) STATIVE

- a. *Judit szereti a gombapaprikást.*  
 Judith like.pres.3sg.def the mushroom.paprikas.acc  
 ‘Judith likes mushroom paprikas.’
- b. *Nagyapapa szerette a csirkelevest.*  
 Grandfather like.pst.3sg.def the chicken.soup.acc  
 ‘Grandfather liked chicken soup.’

## (7) IMPERFECTIVE EVENT

- a. *Panni olvassa a könyvet.*  
 Annie read.pres.3sg.def the book.acc  
 ‘Annie is reading the book.’
- b. *Panni olvasta a könyvet.*  
 Annie read.pst.3sg.def the book.acc  
 ‘Annie was reading the book.’

## (8) PERFECTIVE EVENT

- a. *Géza megjavítja a rádiót.*  
 Géza pv.repair.pres.3sg.def the radio.acc  
 ‘Géza repairs the radio.’
- b. *Géza megjavította a rádiót.*  
 Géza pv.repair.pst.3sg.def the radio.acc  
 ‘Géza repaired the radio.’

## (9) ACHIEVEMENT

- a. *A vonat háromkor érkezik.*  
 the train 3.time arrive.pres.3sg  
 ‘The train is arriving at 3 o’clock.’
- b. *A vonat háromkor érkezett.*  
 the train 3.time arrive.pst.3sg  
 ‘The train arrived at 3 o’clock.’

## (10) ACCOMPLISHMENT

- a. *Dávid javítja a falat.*  
 David repair.pres.3sg.def the wall.acc  
 ‘Dave is repairing the wall.’

- b. *Dávid javította a falat.*  
 David repair.pst.3sg.def the wall.acc  
 'Dave was repairing the wall.'

## (11) ACTIVITY

- a. *Misi dolgozik.*  
 Michael work.pres.3sg  
 'Michael is working.'
- b. *Misi dolgozott.*  
 Michael work.pst.3sg  
 'Michael was working.'

- Hungarian past tense is tense, not aspect. It encodes the feature Precedence, just as the English past tense does.
- The English past tense form also spells out the feature Deixis.
  - The temporal anchor of the clause is thus necessarily the utterance time.
- Deixis is not part of the Hungarian tense system.
  - The clause is anchored by the clause containing it, if there is one, or by the utterance time if no other temporal anchor is available.

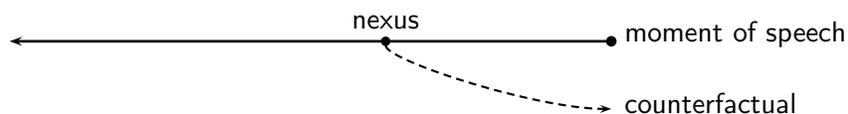
## 4.2.3 Conditional spells out Precedence and Modality

French and Spanish conditional verb forms spell out the features Precedence and Modality (Cowper 2005).

They are morphologically transparent, consisting of the stem used in the future form (Modality) and the endings of the imperfective past (Precedence).

Semantically, counterfactual clauses are alternative continuations (Modality) of earlier (Precedent) situations (Hall 2001).

## (12)



We propose that the Hungarian conditional also spells out the Precedence and Modality, with the same semantics as the French and Spanish conditionals.

The fact that it is morphologically opaque is a morphological accident: Since there is a single vocabulary item, *-na* that spells out both Precedence and Modality, that item will win out over any vocabulary items that spell out only one of those features (Halle and Marantz 1993).

## 5. Consequences

### 5.1 Hungarian counterfactuals are cancellable

If the Hungarian conditional mood contains past tense semantics, then we expect it to behave like other tense-based counterfactuals, rather than like the counterfactual complementizers of Mandarin, Tagalog, Slovenian, etc.

This prediction is borne out by examples such as (13):

(13) a. COUNTERFACTUAL:

*Ha a beteg mérges gombát evett volna,*  
if the patient poisonous mushroom.acc eat.pst.3sg.indef VOL.cond.3sg  
*mutatná tüneteit.*  
show.pres.cond.3sg.def symptom.pl.acc.3sgposs

‘If the patient had eaten poisonous mushrooms, (s)he would be exhibiting the symptoms of it.’

b. COUNTERFACTUAL IMPLICATURE CANCELLED:

*Ha a beteg mérges gombát evett volna, ugyanolyan*  
if the patient poisonous mushroom.acc eat.pst.3sg.indef VOL.cond.3sg selfsame  
*tüneteket mutatna, mint amiket mutat.*  
symptom.pl.acc show.pres.cond.3sg.indef as which.pl.acc show.pres.3sg.indef

‘If the patient had eaten poisonous mushrooms, (s)he would exhibit the same symptoms as (what) (s)he is exhibiting.’

*Tehát mérges gombát evett.*  
therefore poisonous mushroom.acc eat.pst.3sg.indef

‘Therefore (s)he ate poisonous mushrooms.’

### 5.2 Hungarian counterfactuals are non-deictic

If Hungarian lacks the feature Deixis, then we predict that the conditional mood will be relative in the same sense in which the past tense is relative:

- An embedded past tense clause in Hungarian is precedent with respect to the time reference of the clause that contains it (not necessarily the moment of speech).

- An embedded conditional clause in Hungarian is counterfactual relative to the situation described by the clause that contains it (not necessarily the realis situation).

It should thus be possible to use the conditional mood to talk about situations that are false with respect to a set of affairs described in a higher clause, even if they are true in the real world—as in the example in (14):

- (14) Context: János is a chemist who is in the early stages of Alzheimer’s disease. He expects that he will eventually forget the formula for nitrous oxide. When that happens. . .

*Azt fogja gondolni, hogy ha tudná a képletét, akkor a  
it.acc hold.pres.3sg think.inf that if know.cond.def.3sg the formula.its.acc then the  
saját konyhájában gyárthatná.  
own kitchen.his.in manufacture.can.cond.3sg*

‘He will think that if he knew the formula for it, he would be able to make it in his kitchen.’

Under Bartos’s analysis, in which the conditional mood denotes an exclusion function  $\text{Excl}(w)$  that excludes the real world, the conditional morphology on *tudná* in (14) is unexpected, because the clause describes a situation that is true in the real world at the moment of speech.

According to Nevins (2002), the counterfactuality introduced by any  $\text{Excl}(x)$  function is always a cancellable implicature, so the possibility of using the conditional in (14) does not necessarily falsify Bartos’s claim that the conditional denotes  $\text{Excl}(w)$ . However, Bartos’s analysis offers no explanation for why the conditional is obligatory in (14), or indeed why it is used at all.

In a context such as (13), where the implicature of counterfactuality is not only cancellable, but is in fact cancelled, the conditional mood is optional:

- (15) *Ha a beteg mérges gombát evett, ugyanolyan tüneteket  
if the patient poisonous mushroom.acc eat.pst.3sg.indef selfsame symptom.pl.acc  
kell hogy mutasson mint amiket mutat.  
should.3sg. that show.sbj.3sg.indef as what.pl.acc show.pres.3sg.indef*  
‘If the patient ate poisonous mushrooms, then (s)he should exhibit the same symptoms (s)he is exhibiting.’ (cf. von Fintel 1998: 37)

In (14), however, the counterfactuality is not cancelled; it is simply relative to a situation that has not yet been realized.

Even in English, counterfactual conditional clauses are less clearly deictic than indicative clauses. The English translation of (14) also uses Precedence to mark counterfactuality on *knew*, even though the proposition denoted by *he knew the formula for it* is not counterfactual with respect to the real world at the moment of speech. (See Cowper (1996) for a discussion of the use of past tense morphology in similar cases.)

The difference between Hungarian relative counterfactuals and English deictic counterfactuals can be seen in examples such as (16):

- (16) Context: Suppose that Augusta, the elder sister of King George III, said in 1759, the year before the death of their grandfather King George II, “If I were a man, then I would become king when my grandfather dies.” A present-day Hungarian speaker could report that speech event using indirect discourse as follows:

*Augusztá azt mondta, hogy ha férfi { lenne, lett volna }, ő*  
 Augusta it.acc say.past.3sg that if man { be.cond.3sg, be.past.3sg VOL.cond } (s)he  
 { lenne, \*lett volna } a király mikor nagyapja meghal.  
 { be.cond.3sg, \*be.past.3sg VOL.cond } the king when grandfather perf.die.pres.3sg

‘Augusta said that if she had been a man, she would have become king when her grandfather died.’

(LIT.: ‘Augusta said that if she {were, had been} a man, she would become king when her grandfather dies.’)

The difference between the English and Hungarian versions of (16) exactly parallels the difference in (4), repeated here as (17):

- (17) a. *Péter azt mondta, hogy Mari alszik.*  
 Peter it.acc say.past.3sg that Marie sleep.pres.3sg  
 ‘Peter said that Marie was asleep.’  
 b. *Péter azt mondta, hogy Mari aludt.*  
 Peter it.acc say.past.3sg that Marie sleep.past.3sg  
 ‘Peter said that Marie had been asleep.’

In Hungarian, both for conditionals and for ordinary indicatives, each embedded clause is temporally anchored by the clause it is embedded in, while in English, the embedded clauses are temporally deictic; i.e., temporally anchored by the utterance time.

Thus, both indicatives and conditionals in Hungarian are relative, not deictic.

### 5.3 Paradigm gap explained

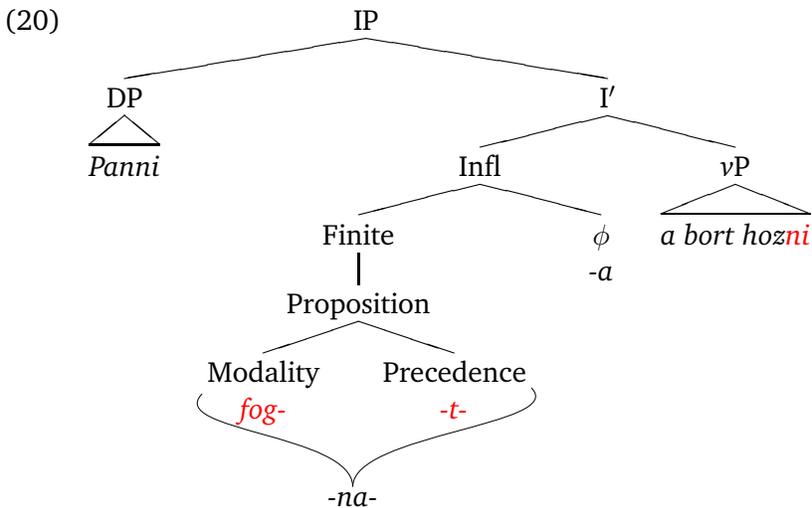
Hungarian future marking:

The verb *fogni* is either an auxiliary forming the future, or a main verb meaning ‘hold’.

- (18) a. *Panni fogja a bort hozni.*  
 Annie FOG.pres.3sg.def the wine.acc bring.inf  
 ‘Annie will bring the wine.’  
 b. *Panni fogja a bort.*  
 Annie hold.pres.3sg.def the wine.acc  
 ‘Annie is holding the wine.’

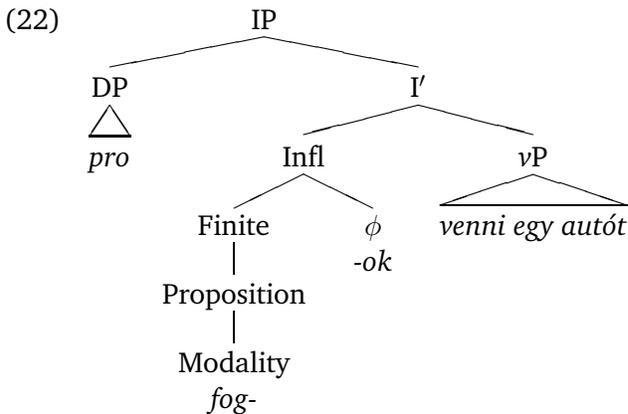
With past tense marking, it can only be a main verb.

- (19) a. \* *Panni fogta a bort hozni.*  
 Annie FOG.pst.3sg.def the wine.acc bring.inf  
 ‘Annie would bring the wine.’ (intended meaning, blocked by conditional form)
- b. *Panni hozná a bort.*  
 Annie bring.cond.3sg.def the wine.acc  
 ‘Annie would bring the wine.’
- c. *Panni fogta a bort.*  
 Annie hold.past.3sg.def the wine.acc  
 ‘Annie was holding the wine.’



The impossibility of inflecting futurate *fogni* for past tense results from morphological blocking, not semantic incompatibility. It is possible for *fogni* to receive a future-under-past interpretation when it is embedded in (and thus temporally anchored by) a past-tense clause, as in (21):

- (21) *Nem tudtam, hogy hat hónap múlva fogok venni egy autót.*  
 not know.pst.1sg.def that six months later FOG.pres.1sg.indef buy.inf a car.acc  
 ‘I didn’t know that in six months I was going to buy a car.’  
 (LIT.: ‘I didn’t know that in six months I am going to buy a car.’)



## 6. Conclusion

Although the conditional in Hungarian does not contain the past tense morphologically, as it does in French and Spanish, we have seen that it does contain the semantics of past tense, and that it thus unsurprisingly patterns with other languages of the “EM” type in Nevins’s typology.

The superficial differences between Hungarian and French or Spanish follow automatically from two things:

1. Hungarian makes no use of the inflectional feature of Deixis, while the other two languages use it.
2. Hungarian has a single vocabulary item which spells out both Modality and Precedence, while the other two languages lack such a morpheme and thus use the same vocabulary items as are found in the past tense and the future.

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