Object agreement in Hungarian

Person features, syntax and morphology

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1 March 2015

Object agreement with personal pronouns

(1) a.

Én	*lát-ok*	*valaki-t.*
I	see-1SG.SBJ	someone-ACC

‘I see someone.’

b.

Én	*lát-om*	*ő-t.*
I	see-1SG.OBJ	s/he-ACC

‘I see her/him.’

(2) a. 1 → 2: **direct**

Én	*lát-lak*	*téged.*
I	see-1SG>2	you.SG.ACC

‘I see you (sg.).’

b. 3 → 2: **inverse**

Ő	*lát*	*téged.*
s/he	see-3SG.SBJ	you.SG.ACC

‘S/he sees you (sg.).’

Main claims

Person features

Person features can **grammaticalise** referential or semantic properties. In Hungarian, they grammaticalise referentiality.

Syntax

Syntax is sensitive to person features: *v* in Hungarian only **agrees with direct objects with person features**.

Morphology

All personal pronouns trigger agreement in Hungarian, but it is only visible in **direct** configurations: “downwards” on 1 > 2 > 3

Differential object agreement in Hungarian

(3) a. *Lát-ok egy nyelvész-t.*
see-1SG.SBJ a linguist-ACC
'I see a linguist.'

b. *Lát-om a nyelvész-t.*
see-1SG.OBJ a linguist-ACC
'I see the linguist.'

- What triggers agreement? **Definiteness**?
  - possessive DOs are not always definite, but trigger agreement
  - *melyik* 'which', *mindegyik* 'each' do — *minden* 'every' does not
  - personal pronouns: ***engem*** 'I.ACC', ***téged*** 'you.SG.ACC'?

Coppock (2013) and Bartos (1999)

- Coppock suggests that some lexical items are specified as [DEF] (roughly *presuppositional* and *anaphoric*)
  - Works for *melyik* ‘which’, *mindegyik* ‘each’ vs. *minden* ‘every’
  - 1st/2nd person do not agree, because they are indexical
- Bartos argues that **syntax** plays a crucial role: all and only DPs trigger object agreement
  - 1st/2nd person not DPs?

Object agreement and person: two types of analysis

- **Only third person** triggers agreement
  - Bartos (1999), Coppock and Wechsler (2012), Coppock (2013), Rocquet (2013): *-lAk* is special, lack of agreement with 1st/2nd is regular
- **Any person** can agree
  - den Dikken (2006), É. Kiss (2013), Bárány (2015): *-lAk* is regular, lack of agreement with 1st/2nd is special
- I adopt the second approach: **all personal pronouns** agree
  - There are arguments for this!

1: Several types of personal pronouns agree

- anaphoric: *ő-t* 'her/him-ACC'

(4) *Lát-om ő-t.*
see-1SG.OBJ s/he-ACC
'I see her/him.'

- indexical: *ön-t* 'you (formal)', *téged* 'you.SG.ACC'

(5) *Lát-om ön-t.*
see-1SG.OBJ you.-ACC
'I see you (sg.).' (formal)

- reflexives: *magam-at* 'myself'

2: Object-drop vs. ellipsis

- Connection between object-drop and object agreement

(6) a. *Lát-ok.*
see-1SG.SBJ
'I see.'

b. *Lát-ok valaki-t.*
see-1SG.SBJ someone-ACC
'I see someone.'

c. *Lát-om (ő-t).*
see-**1SG.OBJ** s/he-ACC
'I see her/him.'

d. *Lát-lak (téged).*
see-**1SG>2** you.SG.ACC
'I see you (sg.).'

2: Object-drop vs. ellipsis (cont'd)

- Dropped objects can control a depictive secondary predicate

(7) a. *(Én$_i$) lát-ok részegen$_i$.*
I see-1SG.SBJ drunk
'I see drunk.'

b. *(Én$_i$) lát-ok valaki-t$_j$ részegen$_{i/j}$.*
I see-1SG.SBJ someone-ACC drunk
'I see someone drunk.'

c. *(Én$_i$) Lát-om (**ő-t**$_j$) részegen$_{i/\mathbf{j}}$.*
I see-1SG.OBJ s/he-ACC drunk
'I see her/him drunk.'

d. *(Én$_i$) lát-lak (**téged**$_j$) részegen$_{i/\mathbf{j}}$.*
I see-1SG>2 you.SG.ACC drunk
'I see you (sg.) drunk.'

2: Object-drop vs. ellipsis (cont'd)

(8) **Context**: *Látsz valakit? 'Do you see someone?'*
(Én$_i$) lát-ok.
I see
'I do.' (lit. 'I see.')

(9) **Context**: *Látsz valakit? 'Do you see someone?'*
(Én$_i$) lát-ok részegen$_{i/*j}$.
I see drunk
intended: 'I do (see someone) drunk.' (lit. 'I see drunk.')

- elided non-referential object cannot control secondary predicate

2: Object-drop vs. ellipsis (cont'd)

(10) a. *(Te$_i$) lát-sz (engem$_j$) részegen$_{i/\mathbf{j}}$.*

You	see-2SG.SBJ	I.ACC	drunk

‘You see (me) drunk.’

b. *(Ő$_i$) lát (engem$_j$) / (téged$_k$) részegen$_{i/\mathbf{j}/\mathbf{k}}$.*

s/he	see.3SG.SBJ	I.ACC	you.SG.ACC	drunk

‘S/he sees me drunk.’

- **Agreement is not visible**, but *lát-sz* and *lát* behave like agreeing forms
- *engem*, *téged* pattern like *ő-t* ‘s/he-ACC’
- But: *Kérsz sört? — Melegen$_i$ nem kérek ~~sört~~$_i$.* (É. Kiss, p.c.)
  - non-referential?

3: Cross-linguistic evidence

Table 1:Object agreement with personal pronouns in Hungarian

SBJ → OBJ	1	2	3
1		*lát-lak*	*lát-om*
		OBJ	**OBJ**
2	*lát-sz*		*lát-od*
	SBJ		**OBJ**
3	*lát*	*lát*	*lát-ja*
	SBJ	SBJ	**OBJ**

3: Cross-linguistic evidence (cont'd)

Table 2:Direct and inverse agreement in Mohawk (Béjar and Rezac 2009, 59)

SBJ → OBJ	1	2	3
1		*I see you* **direct**	*I see her/him* **direct**
2	*You see me* inverse		*You see her/him* **direct**
3	*S/he sees me* inverse	*S/he sees you* inverse	*S/he sees her* inverse

(11) *(h)s*-***k***-see [Mohawk]
2-**1**-*see*
'You see me.' (Béjár and Rezac 2009: 59)

Interim summary

- We know that 3rd/2nd pronouns can agree in Hungarian
- Indexicality/anaphoricity does not derive agreement split
- Only agreeing objects can be dropped and control secondary predicates?
- Cross-linguistic evidence for agreement in inverse contexts

The idea

- Person features (1st, 2nd, 3rd) are complex
- A probe can agree repeatedly, **but only if** it gains features
  - Cyclic Agree (Béjar and Rezac 2009)
- **Object agreement** when *v* is valued by two arguments: *v*[1, 2]
- **Subject agreement** when *v* is valued by a single argument: *v*[1]
- Hierarchical effect *without* a hierarchy
  - 1 > 2 > 3

Person features

- Kálmán (1985), Farkas (1990), Harley and Ritter (2002), Béjar and Rezac (2009): the features [1], [2], [3] are
  - **complex**, representing feature geometries or
  - **sets of features**:
    - [1] = { SP(eaker), PART(icipant), π }
    - [2] = { PART(icipant), π }
    - [3] = { π }
    - [ ] = { }**!**
- There are **four** persons, rather than three

Cyclic Agree

- *v* is a probe
  - it enters *Agree* relations with matching goals
  - only goals with **person features** are visible
- *v* has unvalued **sets of features**, DPs have valued sets of features

$$\begin{array}{ccc} v & & \text{DO} \\ \begin{bmatrix} \mathbf{u\{\,SP, PART, \pi\,\}} & = & \mathbf{1} \\ u\{\text{PART}, \pi\} & = & u2 \\ u\{\pi\} & = & u3 \end{bmatrix} & \overset{\text{Valuation of [1]}}{\underset{\text{Deletion of [2, 3]}}{\longleftrightarrow}} & \begin{bmatrix} \mathbf{\{\,SP, PART, \pi\,\}} & = [1] \\ & \\ & \end{bmatrix} \end{array}$$

- proper subsets are valued (and deleted) automatically
- a first person argument values *v* fully

Cyclic Agree (cont'd)

- partial valuation

$$\begin{array}{c} v \\ \begin{bmatrix} u\{\textsc{sp}, \textsc{part}, \pi\} & = u1 \\ \mathbf{u\{\,PART, \pi\,\}} & = \mathbf{2} \\ u\{\pi\} & = u3 \end{bmatrix} \end{array} \xleftrightarrow[\text{Deletion of [3]}]{\text{Valuation of [2]}} \begin{array}{c} \text{DO} \\ \begin{bmatrix} \mathbf{\{\,PART, \pi\,\}} & = [2] \end{bmatrix} \end{array}$$

- [u1] not valued, *v* can continue probing

$$\begin{array}{c} \text{SBJ} \\ \begin{bmatrix} \mathbf{\{\,SP, PART, \pi\,\}} & = [1] \end{bmatrix} \end{array} \xleftrightarrow{\text{Valuation of [1]}} \begin{array}{c} v \\ \begin{bmatrix} \mathbf{u\{\,SP, PART, \pi\,\}} & = \mathbf{1} \\ \mathbf{u\{\,PART, \pi\,\}} & = \mathbf{2} \\ u\{\pi\} & = u3 \end{bmatrix} \end{array}$$

Cyclic Agree (cont'd)

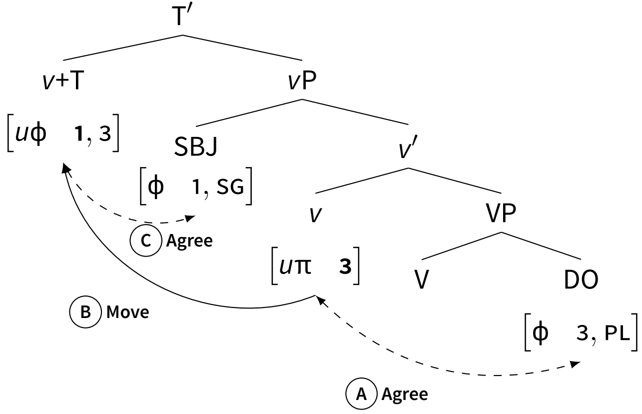
- Second cycle is only possible if the second argument's features are a proper superset of the first argument's features
- *v* agrees with the object first
- We get a **"hierarchy"**
- $[1] \supset [2] \supset [3]$

Object agreement in Hungarian

Object agreement in Hungarian surfaces when *v* is valued by **two arguments**, the subject and the object.

An example: 1→3

(12)



Interim summary

- *v* can enter several Agree relations
- only when $\Pi(\text{SBJ}) \supset \Pi(\text{DO})$
- *v* can be valued as [1, 2], [2, 3], [1, 3]
- What about [3, 3]?

What about 3→3?

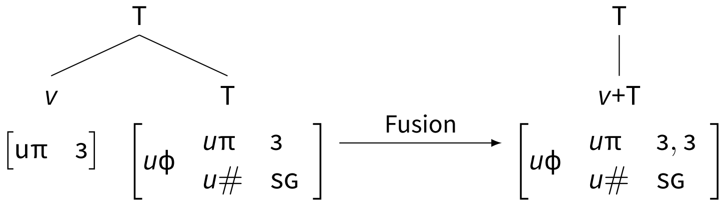
- 3→3 patterns with *direct* configurations in Hungarian
- not in other languages: in Mohawk, above, it counts as *inverse*

$$
\begin{array}{ccccccc}
T & & \text{SBJ} & & v & & \text{DO} \\
\begin{bmatrix} u\{\text{SP}, \text{PART}, \pi\} \\ u\{\text{PART}, \pi\} \\ \{\boldsymbol{\pi}\} \end{bmatrix}
& \xleftrightarrow{\text{Val.}} &
\begin{bmatrix} \\ \\ \{\boldsymbol{\pi}\} \end{bmatrix}
& \cdots\text{✗}\cdots &
\begin{bmatrix} u\{\text{SP}, \text{PART}, \pi\} \\ u\{\text{PART}, \pi\} \\ \{\boldsymbol{\pi}\} \end{bmatrix}
& \xleftrightarrow{\text{Val.}} &
\begin{bmatrix} \\ \\ \{\boldsymbol{\pi}\} \end{bmatrix}
\end{array}
$$

Fusion

- This is captured by **fusion**
- When the strongest features of T and *v* match, the two heads fuse:

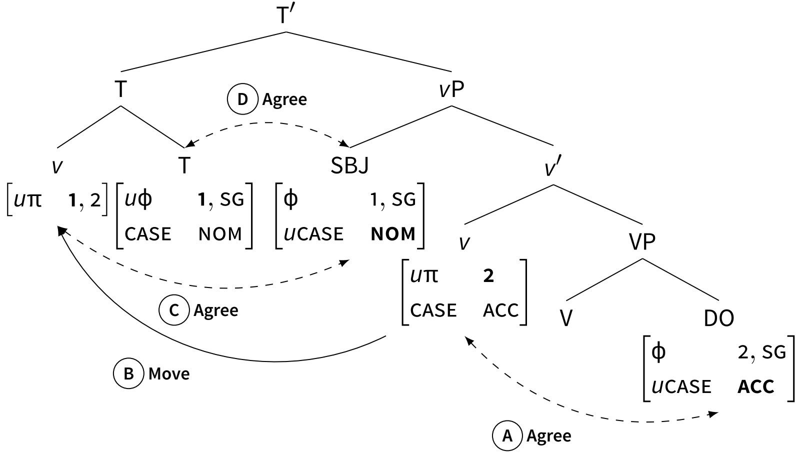
(13) Fusion of *v* and T



Direct derivation: 1→2

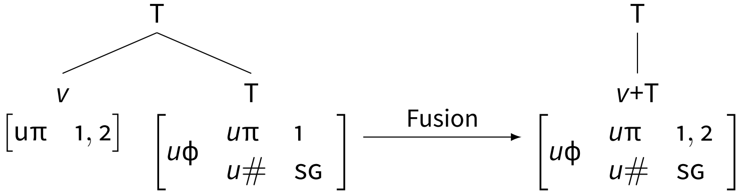
- *Én látlak téged.* 'I see you.'

(14) 1→2



Fusion

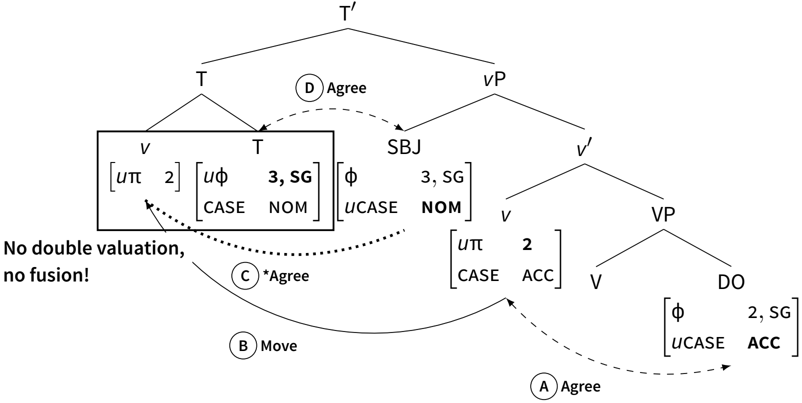
(15) Fusion of *v* and T



Inverse derivation: 3→2

- *Ő lát téged.* 'S/he sees you.'

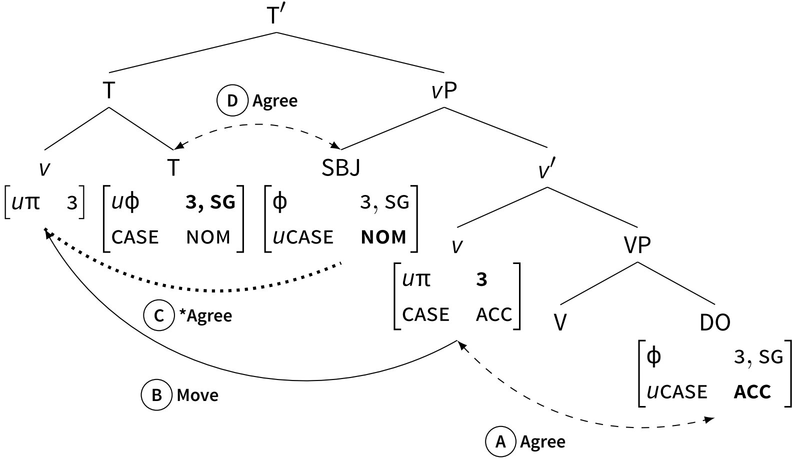
(16) 3→2



Inverse derivation and fusion: 3→3

- *Ő látja őt.* ‘S/he sees her/him.’

(17) 3→3



Fusion

(18) Fusion of *v* and T

$$\left[_{\text{T}}\ \ \underset{\begin{bmatrix} \text{u}\pi & 3 \end{bmatrix}}{v}\ \ \ \underset{\begin{bmatrix} u\phi & \begin{matrix} u\pi & 3 \\ u\# & \text{SG} \end{matrix} \end{bmatrix}}{\text{T}}\ \right] \xrightarrow{\text{Fusion}} \left[_{\text{T}}\ \ \underset{\begin{bmatrix} u\phi & \begin{matrix} u\pi & 3, 3 \\ u\# & \text{SG} \end{matrix} \end{bmatrix}}{v\text{+T}}\ \right]$$

Interim summary

- Two types of syntactic derivation:
  - **direct**: $\Pi(\text{SBJ}) \supset \Pi(\text{DO})$
  - **inverse**: $\Pi(\text{DO}) \supseteq \Pi(\text{SBJ})$
- Fusion allows "cheating": 3→3 is an *inverse* derivation, but the outcome is *direct*
- Language-specific rule for a language-specific outcome

The idea

- DM: syntax manipulates bundles/sets of features (Halle and Marantz 1993 *et seq.*)
  - spell-out matches *vocabulary items* (VIs) to feature bundles
- Features can be manipulated before spell-out: **fusion**
- **Object agreement** when *v*+T has two sets of features: *v*+T[α, β]
- **Subject agreement** otherwise
- The Hungarian verb spells out **a single ϕ-agreement suffix**
  - **only** those with a full set of ϕ-features
  - if T and *v* do not fuse, only T has a full set

Vocabulary items

- *-lAk* $\leftrightarrow$ [1, 2, SG]
- *-ja/-i/-e* $\leftrightarrow$ [3, 3, SG]
- *-jUk* $\leftrightarrow$ [1, 3, PL]
- *-játok/-itek* $\leftrightarrow$ [2, 3, PL]
- *-ják/-ik* $\leftrightarrow$ [3, 3, PL]
- What about *-Om* (1SG.OBJ), *-Od* (2SG.OBJ)?
  - wide distribution (Szabolcsi 1994)
  - *ház-am* 'my house', *lát-t-am* 'I saw-PST-1SG'
  - *ház-ad* 'your.SG house'

Vocabulary items (cont'd)

- Trommer (2005): *-Om/-Od* are **not object agreement** suffixes
  - *-Om* $\leftrightarrow$ [1, SG]
  - *-Od* $\leftrightarrow$ [2, SG]
- *-Ok* (1SG.SBJ) / *-Ol/-sz* (2SG.SBJ) are more specific (narrower distribution!)
  - *-Ok* $\leftrightarrow$ [1, SG, $+$V]
  - *-Ol/-sz* $\leftrightarrow$ [2, SG, $+$V]
- these VIs are restricted to +V contexts: no possessive suffixes
- Impoverishment derives syncretism for past tense
  - +V $\rightarrow$ Ø / [1SG, +PST]

What does this buy us?

- Szabolcsi (1994): curious overlap between possessive and verbal morphology
  - *objective* forms in the singular, *subjective* forms in the plural
  - *lát-om* ‘I see (her/him/it)’ — *ház-am* ‘my house’
  - *lát-unk* ‘we see’ — *ház-unk* ‘our house’

Overlap between possessive and verbal morphology

Overlap when the least specific VI has **a single set of person features**:

(19) /*-VI*/ $\leftrightarrow$ [α, SG/PL]

Person, syntax, and morphology

- **Person** grammaticalises referentiality in Hungarian, but
  - other properties in other languages: inverse phenomena based on animacy, topicality, etc.
  - sets of features derive hierarchical effects without hierarchies
  - referential arguments trigger agreement in Hungarian
- **Syntax** provides two types of derivations
  - direct: *v* is valued more than once
  - inverse: *v* is valued once
- **Morphology** gives rise to surface variation
  - how many suffixes are spelled out?
  - language-specific operations: 3→3 direct in Hungarian, inverse in other languages

Acknowledgements

That’s it — Thank you!

I am currently supported by OTKA Grant No. 118079, ERC_HU_15, “Az uráli nyelvek mondattanának változása aszimmetrikus kontaktushelyzetben” and much of this research has been supported by ERC Grant No. 269752 “Rethinking Comparative Syntax” (ReCoS).

Thanks to all of ReCoS, Vera Hegedűs, Orsolya Tánczos, and Katalin É. Kiss.

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