

# Variation in the position of case markers relative to possessive agreement\*

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## 1. Introduction

The relative order of agreement markers with respect to other morphemes is notoriously unstable from a cross-linguistic point of view. Julien (2002) shows that verbal agreement doesn't have a fixed position in the extended verbal sequence.

**Aims:** to show that this is also true of agreement in the DP and PP, and give an account of the variation.

### 1. Variation across Finno-Ugric:

Sami

- (1) goadi-**sta-n**  
hut-LOC-POSS.1SG  
in my hut  
(Sammallahti, 1998a, p. 63.)

Hungarian

- (2) ház-a-i-**m-ban**  
house-POSS-PL-POSS.1SG-INESS  
in my houses

### 2. Variation internal to Hungarian:

R-expression possessor

- (3) (az én) szem-**em-ben**  
the I eye-POSS.1SG-INESS  
in my eye

pronominal possessor

- (4) én-**benn-\*(em)**  
I-INESS-POSS.1SG  
in me

**Claims:** the cross-linguistic variation stems from the variable underlying position of agreement (so it is unpredictable); while the Hungarian-internal variation is predictable if we assume that a possessive syntax underlies PPs.

**Background assumptions:** PPs have a fine-grained structure, with the universal underlying order (5); spatial case markers realize the Place or Path positions in this extended sequence (Riemsdijk and Huybregts, 2002; Asbury et al., 2007, among others).

- (5)  $P_{path} > P_{place} > P_{apart} > P > DP$  (c.f. Svenonius, 2010; Cinque, 2010a)

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## 2. Variation across Finno-Ugric

### 2.1. The empirical picture

(Pl >) Case > Poss:

Sami

- (6) goadi-**sta-n**  
hut-LOC-POSS.1SG  
in my hut  
(Sammallahti, 1998a, p. 63.)

Finnish:

- (7) a. hyv-i-**llä-si**  
good-PL-ADESS-POSS.2SG  
b. paho-i-**lla-ni**  
bad-PL-ADESS-POSS.1SG  
(Kanerva, 1987, ex. 52.)

Erzya Mordvin:

- (8) kudo-**so-n**  
house-INESS-POSS.1SG  
in my house  
(Rueter, 2010, p. 109.)

Tundra Nenets

- (9) serako-m-t° te-**m-t°**  
white-ACC-2SG reindeer-ACC-2SG  
'your white reindeer'  
(Nikolaeva, 2003, ex. 9.)

(Pl >) Poss > Case:

Hungarian:

- (10) csont-ja-i-**d-ban**  
bone-POSS-PL-POSS.2SG-INESS  
in my bones

Mansi (Vogul):

- (11) puut-an-**əm-nəl**  
pot-PL-POSS.1SG-ELAT/ABL  
from my 3+ pots  
(Keresztes, 1998, p. 410.)

Khanty (Ostyak):

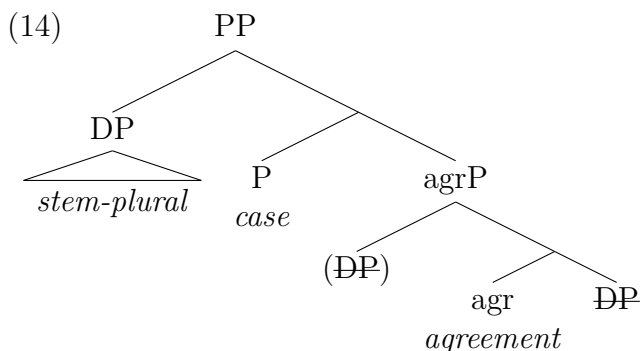
- (12) xääp-t-**am**  
boat-PL-POSS.1SG  
my 3 or more boats  
(Abondolo, 1998, p. 361)

- (13) xääp-**eem-na**  
boat-POSS.1SG-IN  
in my boat  
(Abondolo, 1998, p. 361)

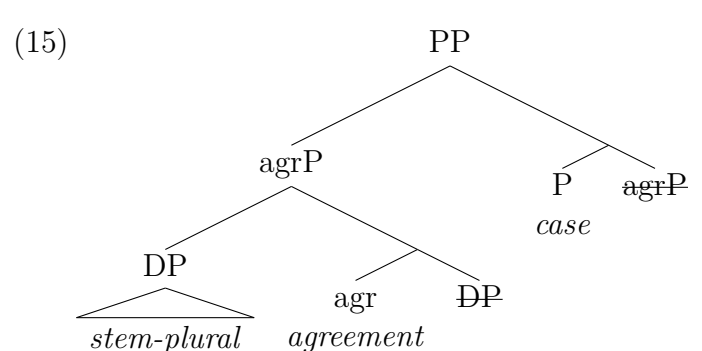
### 2.2. Word order derivation with phrasal movement

With an underlying PP > agrP > DP order

(Pl >) Case > Poss order

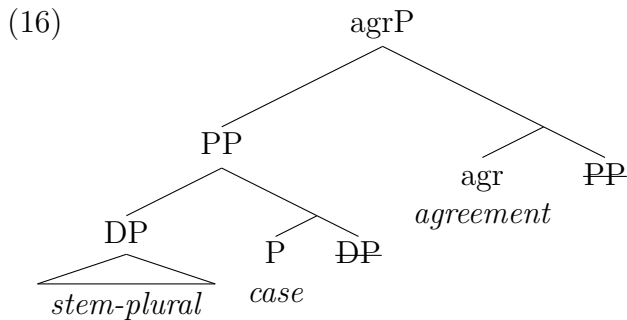


(Pl >) Poss > Case order

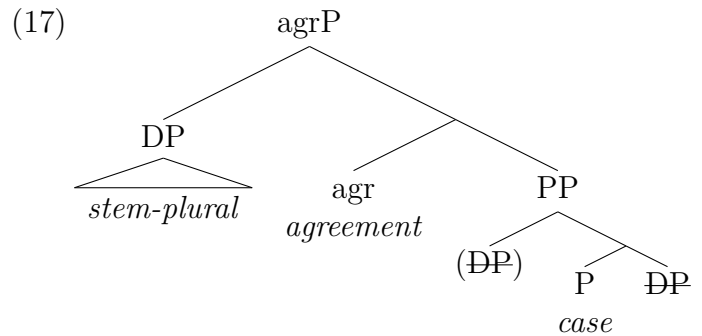


With an underlying agrP > PP > DP order

(Pl >) Case > Poss order



(Pl >) Poss > Case order



## 2.3. Problems with phrasal movement

Assuming a universal underlying order, is PP > agrP > DP or agrP > PP > DP the best? We cannot tell, neither can be supported over the other.

Argument 1: outside of Finno-Ugric, Poss > Pl > Case is also attested, so we have a third contestant for the base-generated structure...

Chuvash

- (18) kil-ěm-sen-čen  
house-POSS.1SG-PL-ABL  
from my houses

Kharia

- (19) kulam-ḍom-ki-ya?  
brother-POSS.3SG-PL-GEN  
of his brothers

Argument 2: all of the 3 possible underlying orders can derive the data and are compatible with current theory

Argument 3: impossible to support either on the basis of scope facts (agreement has no scope) or compositionality (agreement has no meaning contribution)

Argument 4: deriving affix order by phrasal movement is problematic in general, because the Mirror Principle doesn't apply to phrasal movement

**Proposal:** I suggest that the variation in the relative ordering of case markers and possessive agreement in Finno-Ugric is due to variation in the underlying order; agreement is generated lower when it is flanked by the plural and case.

## 3. Variation within Hungarian

### 3.1. The conundrum

Recap: Hungarian exhibits the N-plural-agreement-case order.

- (20) (az én) szem-em-ben  
the I eye-POSS.1SG-INESS  
in my eye

R-expression Ground

Personal pronouns bearing a spatial case marker (corresponding to meanings like *in me*, *to you*, *from him*) also obligatorily bear possessive morphology, which has to follow the case marker. This contrasts with the order attested for R-expressions.

- (21) *én-benn*-(em)  
 I-INESS-POSS.1SG  
 in me pronominal Ground

Question No1: why is possessive agreement obligatory in (21)?

Question No2: why is the order of case and agreement reversed?

### 3.2. A possessive syntax for PPs

I argue that the obligatory possessive marking of personal pronouns with spatial case supports the idea that PPs involve a possessive relationship.

PPs are projected from a silent PLACE noun. The adposition/case is located in a functional head of the PLACE noun's projection, and the Ground functions as the possessor of PLACE. (For the silent PLACE, cf. Katz and Postal, 1964; Carstens, 1997; Kayne, 2005, 2010. For PLACE in PPs, cf. Terzi, 2005, 2010; Pantcheva, 2008; Botwinik-Rotem, 2008; Terzi, 2008; Cinque, 2010b; Noonan, 2010; Dékány, 2011; Rákosi, 2012)

- (22)  $P_{path} > P_{place} > P_{apart} > P > [NP_{Place} [ DP_{ground=possessor} ] PLACE_{possessum} ]$

- (23) a *ház-hoz*  
 the house-ALLAT  
 to the house

- (24)  $P_{path} > P_{place} > P_{apart} > P > [NP_{Place} [ DP_{ground=possessor} ] PLACE_{possessum} ]$   
*-hoz* 'to' *a ház* 'the house'  $\emptyset$

In Hungarian, the possessive paradigm on personal pronouns with a spatial case is identical to the ordinary possessive paradigm, except for 3SG, which supports the possessive analysis.

- (25) -Vm, -Vd,  $\emptyset$ , -Vnk, -tVk, -Vk possessive agr
- (26) -Vm, -Vd, -e, -Vnk, -tVk, -Vk personal pronoun agr

### 3.3. Deriving the variation

PPs involve a possessive relation (22). Key to solving the conundrum: Hungarian possessa show  $\phi$ -feature agreement with pronominal possessors but not R-expressions possessors (Bartos, 1999; É. Kiss, 2002).

- (27) *az én szalag-ja-i-m-at* / *az te szalag-ja-i-d-at*  
 the I ribbon-POSS-PL-POSS.1SG-ACC / the you ribbon-POSS-PL-POSS.2SG-ACC  
 my ribbons, your ribbons
- (28) a *János szalag-ja-i-t*  
 the John ribbon-POSS-PL-ACC  
 John's ribbons

#### Proposal:

The possessum in Hungarian doesn't agree with R-expression possessors → the silent PLACE possessum also doesn't agree with its R-expression possessors, i.e. with R-expression Grounds. This is why R-expressions with a spatial case are not (and cannot be) formally possessed.

But the possessum in Hungarian does agree with pronominal possessors → the silent PLACE possessum also agrees with its pronominal possessors, i.e. with pronominal Grounds. This is why pronouns with a spatial case must be formally possessed.

### 3.3.1. Pronoun-case-agreement

On the basis of the Mirror Principle, the agrP in PP is located above  $P_{path}$  in Hungarian.

- (29) én-hozz-ám  
I-ALLAT-POSS.1SG  
to me

- (30) agr >  $P_{path}$  >  $P_{place}$  >  $P_{apart}$  > P > [ $NP_{Place}$  [ $DP_{ground=possessor}$ ] PLACE $_{possessum}$  ]  
-ám -hozz én  $\emptyset$   
1SG 'to' 'I'

PLACE agrees with the  $\phi$ -features of the Ground, like ordinary possessa do with possessors. Like in garden variety possessive constructions, the possessor (i.e. the pronominal Ground) precedes the possessum (PLACE), the affixes spelling out functional heads projected by the possessum line up on the possessum in the mirror order.

- (31) agr >  $P_{path}$  >  $P_{place}$  >  $P_{apart}$  > P > [ $NP_{Place}$  [ $DP_{ground=possessor}$ ] PLACE $_{possessum}$  ]  
-ám -hozz én  $\emptyset$

↓ linearization

- (32) [ $DP_{ground=possessor}$ ] PLACE $_{possessum}$ -P- $P_{apart}$ - $P_{place}$ - $P_{path}$ -agr  
én  $\emptyset$  hozz ám  
'I'  $\emptyset$  'to' 1SG

↓

- (33) én- $\emptyset$ -hozz-ám

Whenever the head noun is phonologically not overt, its suffixes cliticize on the rightmost overt element in the DP.<sup>1</sup> So on the surface we get

- (34) én-hozz-ám  
I-ALLAT-POSS.1SG  
to me

### 3.3.2. R-expression-agreement-case

The possessum in Hungarian doesn't agree with R-expression possessors → the silent PLACE possessum also doesn't agree with its R-expression possessors, i.e. with R-expression Grounds. Therefore R-expressions with a spatial case do not bear possessive agreement.

- (35) ő-hozz-á  
he-ALLAT-POSS.1SG  
to him
- (36) János-hozz-(\*á)  
John-ALLAT-POSS.1SG  
to John

<sup>1</sup>Cf. the following example with the case suffix?

- |     |    |  |    |  |
|-----|----|--|----|--|
| (i) | a. | hét szép piros almá-t<br>seven nice red apple-ACC<br>seven nice red apples | c. | hét szép-et<br>seven nice-ACC<br>seven nice ones |
|     | b. | hét szép piros-at<br>seven nice red-ACC<br>seven nice red ones             | d. | het-et<br>seven-ACC<br>seven ones                |

$$(37) \quad P_{path} > P_{place} > P_{axpart} > P > [NP_{Place} [ DP_{ground=possessor} ] PLACE_{possessum} ] \\
\text{-hoz 'to'} \qquad \qquad \qquad \text{János} \qquad \qquad \qquad \emptyset$$

After regular linearization, the possessor precedes the possessum, the suffixes modifying the possessum line up on the possessum in the mirror order.

$$(38) \quad [ DP_{ground=possessor} ] PLACE_{possessum} - P - P_{axpart} - P_{place} - P_{path} \\
\text{János} \qquad \qquad \qquad \emptyset \qquad \qquad \qquad \text{-hoz}$$

Surface order:

$$(39) \quad \text{János-}\emptyset\text{-hoz}$$

A silent noun's suffixes cliticize on the rightmost overt element in the DP.

$$(40) \quad \text{János-hoz} \\
\text{John-ALLAT} \\
\text{to John}$$

What about the suffix order in (41)?

$$(41) \quad \text{az (én) szem-em-ben} \\
\text{the I eye-POSS.1SG-INESS} \\
\text{in my eye}$$

**Key observation:** here the Ground itself is a possessed noun (*my eye*), the possessive relationship encoded by the agreement is **internal** to the Ground.

$$(42) \quad P_{place} > P_{axpart} > P > [NP_{Place} [ DP_{ground=possessor} ] PLACE_{possessum} ] \\
\text{-ben} \qquad \qquad \qquad \text{az (én) szem-em} \quad \emptyset \\
\text{'in'} \qquad \qquad \qquad \text{'the I eye-POSS.1SG'}$$

After regular linearization, the possessor precedes the possessum, the suffixes modifying the possessum line up on the possessum in the mirror order.

$$(43) \quad [ DP_{ground=possessor} ] PLACE_{possessum} - P - P_{axpart} - P_{place} \\
\text{az (én) szem-em} \quad \emptyset \qquad \qquad \qquad \text{ben} \\
\text{'the (I) eye-POSS.1SG'} \quad \emptyset \qquad \qquad \qquad \text{'in'}$$

Since all of the Ground is linearized in front of the silent PLACE and its suffixes, the Ground-internal agreement will also precede PLACE and its suffixes. Surface order:

$$(44) \quad \text{az (én) szem-em-}\emptyset\text{-ben}$$

A silent noun's suffixes cliticize on the rightmost overt element in the DP.

$$(45) \quad \text{az (én) szem-em-ben} \\
\text{the I eye-POSS.1SG-INESS} \\
\text{in my eye}$$

### 3.3.3. Interim summary

The Hungarian-internal variation is only apparent. The possessive suffix in (46) encodes a possessive relationship internal to the DP/Ground. The possessive suffix in (47) encodes a

possessive relationship bw. the DP/Ground and a silent PLACE (i.e. this agreement generated much higher, in the PP).

The two agreements never co-occur: the silent PLACE as a possessum only agrees with a pronominal possessor, in structures like (46) the possessor of PLACE is an R-expression.

R-expression possessor

(46) az (én) szem-em-ben  
the I eye-POSS.1SG-INESS  
in my eye

pronominal possessor

(47) én-**benn**-\*(em)  
I-INESS-POSS.1SG  
in me

## 4. Summary

Variation across Finno-Ugric:

N>case>agreement and N>agreement>case is variation in the underlying representation.

Variation internal to Hungarian:

only apparent; N>agreement>case and pronoun>spatial case>agreement involve different agreement morphemes, the former encodes possession internal to DP, the latter possession bw. the Ground and PLACE in the PP. Main ingredient of the analysis: PPs involve possession

Methodological point:

A superficial look at suffix order is not enough, the analysis of any phenomenon must take into account the broader grammatical system of the language in question.

## 5. Outlook for further research

Is it true that the position of case markers relative to possessive agreement is fixed within any particular language? No.

Variation but possible explanation No1: North Sami (data from Sammallahti, 1998b)

K > Poss: Acc, Gen, Illat, Loc, Essive, Comitative singular

Poss > K: Comitative plural

(48) DP > Nom > Acc > Gen > Dat > Inst > Comit (Caha, 2009)

→ all low cases are K > Poss, change at the highest point in the hierarchy, no \*ABA

(49) DP + P > Nom > Acc > Loc > Allat > Ablat (Pantcheva and Caha, 2011)

→ all cases that Sami has behave the same, no \*ABA

Variation but possible explanation No2: Mari (data from Kangasamaa-Minn, 1998)

Poss > K: Acc and Gen

Poss > K or K > Poss: Dat

K > Poss: Iness, Lat, Illat, Ablat, Modal, Comitative, Caritive

(50) DP > Nom > Acc > Gen > Dat > Inst > Comit (Caha, 2009)

→ on the lower part of the hierarchy Poss > K, variability at Dat, K > Poss on the higher part, no \*ABA

(51) DP + P > Nom > Acc > Loc > Allat > Ablat (Pantcheva and Caha, 2011)

→ on the lower part of the hierarchy Poss > K, on the higher part K > Poss, no \*ABA

However, the language-internal variation in Udmurt (Winkler, 2001) and Selkup (Helimski, 1998) does not appear to lend itself to any generalizations so far . . .

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