Word order variation in Hungarian PPs*

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1 Introduction

1.1 Naked Ps are true adpositions

Hungarian has two kinds of postpositions: so-called "dressed"/agreeing Ps take morphologically unmarked complements, while so-called "naked"/non-agreeing Ps take oblique complements.

naked P

(1) a   híd-on át
     the bridge via
     across the bridge

dressed P

(2) a   híd   mellett
     the bridge next.to
     next to the bridge

On these two classes, see Marácz (1986, 1989); É. Kiss (1999); Hegedűs (2006); Asbury et al. (2007); Asbury (2008); Surányi (2009b); Dékány (2011); Laczkó and Rákosi (2011); Hegedűs (2013).

In this talk, we are interested in the distribution of "naked" Ps only. We assume that naked Ps are also Ps, and involve a complementation structure.

postposition	meaning	case	agreement with pronouns
alul	below	superessive	doesn't co-occur with a pronoun
belül	inside of	superessive	doesn't co-occur with a pronoun
felül	over	superessive	doesn't co-occur with a pronoun
innen	on this side of	superessive	doesn't co-occur with a pronoun
kívül-re	outside-to, beside-to	superessive	doesn't co-occur with a pronoun
kívül-ről	outside-from	superessive	doesn't co-occur with a pronoun
túl-ra	beyond-to	superessive	doesn't co-occur with a pronoun
túl-ról	beyond-from	superessive	doesn't co-occur with a pronoun
át	through, across, via	superessive	yes, on the case-marker
együtt	together	instrumental	yes, on the case-marker
keresztül	through, across, via	superessive	yes, on the case-marker
kívül	outside, beside	superessive	yes, on the case-marker
közel	close to	allative	yes, on the case-marker
szembe	opposite.to	instrumental	yes, on the case-marker

szemben	opposite.at	instrumental	yes, on the case-marker
szemből	opposite.from	instrumental	yes, on the case-marker
szemközt	opposite.at	instrumental	yes, on the case-marker
túl	beyond	superessive	yes, on the case-marker
végig	(along) to the end of	superessive	yes, on the case-marker

Table 1: Naked postpositions

1.2 Aims

- show that while the literature makes claims about the class as a whole, there are important, so far unnoticed differences between the word order possibilities of different Ps

- show that that there are so far unnoticed correlations between different types of extraction out of the PP

- analyze the observed word orders

- show that there are differences between the word order possibilities of different readings of the same element, too

1.3 Claims

- PPs structure includes positions for Ps denoting place and path, and a functional position p for prepositions and for particles (for cross-linguistic proposals cf. Van Riemsdijk 1990, Cinque and Rizzi 2010, etc.).

  (3) $[_{pP}$ particle/non-agreeing P $[_{PathP}$ Path $[_{PlaceP}$ Place KP $]\,]\,]$

- the elements in p are the ones with freer word order properties, and they can be separated from their complement (PathP/PlaceP). This derives the differences we observe within the class of adpositions.

- naked Ps with a more free word order involve a PP-internal escape hatch, extraction from PP proceeds through CP_{PP}

1.4 Roadmap

Section 2: PP structure
Section 3: The literature's claims regarding naked Ps
Section 4: PP-internal differences: word order
Section 5: Differences in clausal positions
Section 6: Analysis
Section 7: PP-internal differences: complements
Section 8: Extensions
Section 9: Conclusions

2 PP structure

Variation in details, but everybody agrees that there is a PathP above PlaceP.
Semantic arguments: Zwarts (1997); Zwarts and Winter (2000)
Morphosyntactic arguments: van Riemsdijk and Huybregts (2002); Pantcheva (2011)
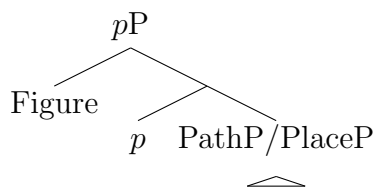Syntactic arguments: van Riemsdijk (1990); Koopman (2000); Cinque (2010); den Dikken (2010); Svenonius (2010).
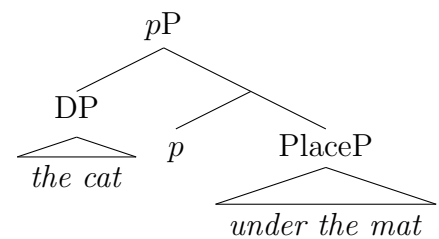
(4)

```
        PathP
        /   \
      Path  PlaceP
            /   \
         Place  DP
```
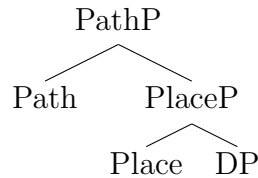
p: parallel with v, it introduces the Figure (the PP's subject) in its specifier

(5)

```
         pP
        /  \
    Figure  \
           / \
          p  PathP/PlaceP
```

(6)

```
          pP
         /  \
       DP    \
      /  \   / \
    the cat p  PlaceP
               under the mat
```

left periphery: what Koopman (2000, 2010); den Dikken (2010) call $\mathrm{CP}_{Place/Path}$, we call it CP_{PP}.

(7)

```
           CP_PP
          /    \
       C_PP     pP
               /  \
           Figure  \
                   / \
                  p  PathP/PlaceP
```
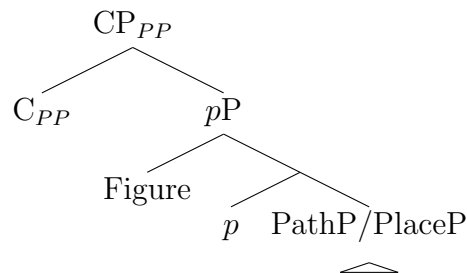
3 The literature's claims regarding naked Ps

- Complementation

  - Case-marking of the complement is oblique

    (8) a   fal-on   át
         the wall-sup   through
         through the wall

  - Can be used without an overt complement

    (9) János át-jött/ment.
         John through-come.past.3sg/go.past.3sg
         John came/went over.

3

- Agreement

    - No agreement with the complement

        (10)   rajt-am át-*(am)
                    sup-1sg through-1sg
                    through me

    - No demonstrative concord

        (11)   *ez-en   át   a   fal-on   át
                    this-sup through the fall-sup through
                    through this wall

- Word order effects within the PP

    - May precede their complement

        (12)   át   a   fal-on
                    through the wall-sup
                    through the wall

    - Separable from their complement by degree modifiers

        (13)   a   ház-on   teljesen kívül
                    the house-sup entirely outside.of
                    entirely outside of the house

- Separability in the clause

    - Wh-movement with P-stranding

        (14)   Mi-n   ment   át?
                    what-sup go.past.3sg through?
                    What did he go through?

    - Preverbal position, acting as a verbal particle

        (15)   János át-ment   a   híd-on.
                    John through-went the bridge-on
                    John crossed the bridge/walked across the bridge.

4   PP-internal differences: word order

Most neutral position: postpositional, immediately behind the complement.
Other possible PP-internal positions: i) KP > degree expression > P, and ii) prepositional.
Empirical question: is one of these orders systematically available to more Ps than the other?
We expect that if any of the orders is easier to get, it is the KP > degree expression > P order, because it is still postpositional.

Degree modifier intervention   **P > KP order**

Both grammatical

(16)   a   fal-on   teljesen át   (17)   át   a   fal-on
       the wall-sup wholly   through   through the wall-sup
       entirely through the wall   through the wall

(18)   a   ház-hoz egészen   közel   (19)   közel a   ház-hoz
       the house-all completely close   close the house-all
       very close to the house   close to the house

(20)   a   ház-zal   közvetlenül szemben (21)   szemben   a   ház-zal
       the house-ins immediately opposite.at   opposite.at the house-ins
       right opposite the house   opposite the house

(22)   a   folyó-n   teljesen   túl   (23)   túl   a   folyó-n
       the river-sup completely beyond   beyond the river-sup
       completely beyond the river   beyond the river

(24)   a   folyó-n   teljesen   végig   (25)   végig a   folyó-n
       the river-sup completely end.to   end.to the river-sup
       all along the river   all along the river

Asymmetry I.

(26)   a   folyó-n   teljesen   keresztül (27)   ?keresztül a   folyó-n
       the river-sup completely through   through the river-sup
       completely across the river   across the river

Asymmetry II.

(28)   a   ház-on   teljesen   belül   (29)   *belül a   ház-on
       the house-sup completely inside   inside the house-sup
       completely inside the house   inside the house

(30)   a   csapat-tal teljesen   együtt   (31)   *együtt   Mari-val
       the team-ins   completely together   together Mary-ins
       completely together with the team   together with Mary

(32)   a   ház-on   közvetlenül kívül   (33)   *kívül   a   ház-on
       the house-sup immediately outside   outside the house
       right outside the house   outside of the house

(34)   a   ház-zal   egyenesen szembe   (35)   *szembe   a   ház-zal
       the house-ins straight   opposite.to   opposite.to the house-ins
       straight opposite to the house   opposite to the house

(36)   a   ház-zal   majdnem szemközt   (37)   *szemközt a   ház-zal
       the house-ins almost   opposite.at   opposite.at the house-ins
       almost opposite to the house   opposite to the house

(38) vel-ünk egyenesen szemből
ins-1pl straight opposite.from
(from) right opposite to us

(39) *szemből vel-ünk
opposite.from ins-1pl
(from) opposite to us

Asymmetry III.

(40) ?a vonal-on közvetlenül alul
the line-sup immediately under
right under the line

(41) *alul a vonal-on
under the line-sup
under the line

(42) ?a folyó-n teljesen innen
the river-sup immediately this.side
right this side of the river

(43) *innen a folyó-n
this.side the river-sup
on this side of the river

(44) ??a vonal-on közvetlenül felül
the line-sup immediately above
right above the line

(45) *felül a vonal-on
over the line-sup
above the line

Discussion:
1) most naked Ps can be separated from the complement by a degree modifier, this order does not yield severe ungrammaticality with any naked P.
2) the prepositional order is much more restricted, some naked Ps reject it entirely
3) correlation bw. the 2 orders: the prepositional order is more restricted than the separated postpositional

Conclusion: i) the KP > modifier > P order is almost always good (in this they sharply contrast with dressed Ps), ii) the literature is not right in claiming that naked Ps can generally be prepositional

5 Differences in clausal positions

Separability in two ways: i) P is immediately preverbal (particle), DP is postverbal, and ii) wh-movement of DP with P-stranding.
Empirical question: is one of these orders systematically easier to get than the other?
We expect that if any of these orders is easier to get, it is the one with the preverbal (particle) P, as P-stranding is a cross-liguistically marked structure (Van Riemsdijk 1978).

Acting as a verbal particle
P > V > DP+case

wh-movement, P-stranding
(+wh)DP+case > V > P

Both grammatical

(46) János át-ment a híd-on
John throught-went the bridge-sup
John crossed the bridge.

(47) Mi-n ment át János?
what-sup went through John
What did John cross?

(48) Együtt vacsoráz-ott Mari-val.
together done-past.3sg Mary-with
He dined together with Mary.

(49) Ki-vel vacsoráz-ott együtt?
Who-with dine-past.3sg together
Who did he dine with?

(50) János keresztül-ment a   híd-on
John across-went   the bridge-sup
John crossed the bridge.

(51) Melyik híd-on   ment keresztül János?
which bridge-sup went through John
Which bridge did John go through?

(52) A posta   közel   van   a
the post.office closet.to be.3sg the
híd-hoz.
bridge-allat
The post office is close to the bridge.

(53) Mi-hez   van   közel   a   posta?
what-allat be-3sg close.to the post.office
What is the post office close to?

(54) János szem-be   jött Mari-val.
John opposite-to came Mary-with
John and Mary walked towards each other.

(55) Ki-vel   jött szembe   János?
who-with came opposite.to John
Who did John walk towards?

(56) János végig-sétál-t   a híd-on.
John along-walk-past.3sg the bridge-sup
John walked along the bridge.

(57) Melyik híd-on   sétál-t   végig?
which bridge-sup walk-past.3sg along
Which bridge did he walk across?

Asymmetry

(58) A játékos belül volt a   vonal-on.
the player   inside was the line-sup
The player was inside the line

(59) ?Melyik vonal-on volt belül a   labda?
which   line-sup was inside the ball
Which line was the ball inside?

(60) A fa   szemben van   a híd-dal.
the tree opposite be.3sg the bridge-with
The tree is opposite the bridge.

(61) ?Mi-vel   van   szemben a   fa?
what-with be.3sg opposite the tree
What is the tree opposite to?

(62) A festék túl-folyt   a   vonal-on.
the paint over-went the line-sup
The paint went over the line.

(63) ?Mi-n   folyt túl   a   festék?
what-sup went beyond the pain
What did the paint go beyond?

Both degraded

(64) ?(?)A kórház szemközt van   a
The hospital opposite be.3sg the
postá-val
post.office-ins
The hospital is opposite the post office.

(65) ??Mi-vel   van szemközt a   posta?
what-with be opposite the post.office
What is the post office opposite to?

Both ungrammatical

(66) *Az almá-t   alul   ad-ta   az
the apple-acc below give-past.3sg the
ár-on
price-sup
He sold the apple cheaper than expected.

(67) *Mi-n   üt-ött   alul?
what-sup hit-past.3sg below
What did he hit below?

7

(68) *a kép felül van a kandalló-n
the picture abov be.3sg the fireplace-sup
The picture is above the fireplace.

(69) *Mi-n van feül a kép?
what-sup be.3sg above the picture
What is the picture above?

(70) *A ház innen van a fá-k-on.
the house this.side be.3sg the tree-pl-sup
The house is between us and the trees.

(71) *Mi-n van innen a ház?
what-sup be.3sg this.side the house
The house is on this side of what?

(72) *A labda kívül-re es-ett a
the ball outside-to fall-past.3sg the
vonal-on.
line-sup
The ball fell outside of the area enclosed
by the line.

(73) *Mi-n es-ett kívül-re a
What-sup fall-past.3sg outside-to the
labda?
ball
What did the ball fall outside of?

(74) *Az utazó túl-ról jött a
the traveller beyond-from came the
hegy-en.
mountain-on
The traveller came from beyond the moun-
tain.

(75) *Mi-n jött túl-ról János?
what-sup came beyond-from John
What did John come from beyond?

(76) *A labda kívül van a vonal-on.
the ball outside be.3sg the line-sup
The ball is outside of the line.

(77) *Mi-n es-ett kívül a labda?
what-sup fall-past outside.of the ball
What did the ball fall outside of?

We also expect that the opposite (i.e. P-stranding is easier than P as a particle) may possibly be attested with source Ps, as these never serve as verbal particles in Hungarian (É. Kiss, 2002; Surányi, 2009a).

Source (Ablative) Ps:

(78) *A labda túl-ra es-ett a
the ball beyond-to fall-past.3sg the
vonal-on.
line-sup
The ball landed on the other side of the
line.

(79) *Mi-n es-ett túl-ra a
what-sup fall-past.3sg beyond-to the
labda?
ball
What did the ball fall beyond?

(80) *A hang kívül-ről jött a
the sound outside-from came the
ház-on.
house-sup

The sound came from outside the house.

(81) *Mi-n jött kívül-ről a hang?
what-sup came outside-from the sound
Whatdid the sound come outside of?

(82) *A lövés-ek szem-ből jött-ek a
the shot-pl opposite-from came-3pl the
postá-val.
post.office-with
The shots came from opposite the post of-
fice.

(83) *Mi-vel jött-ek szem-ből a
what-with came-3pl opposite-from the
lövés-ek?
shot-pl
What did the shots come opposite from?

8

Discussion:
1) not every naked P is equally separable from the complement in the clause
2) there is no significant asymmetry bw. the two kinds of separability
3) SourcePs, which may potentially show an asymmetry (might separate by P-stranding only), are inseparable

Conclusion: the literature is not right in claiming that naked Ps can be generally separated from their complement in the clause.

6 Analysis

6.1 Recapitulation of the empirical findings

Naked Ps behave alike wrt to the type of complement they take (case-marked) and their agreement properties. However, a few of them are degraded when they are not immediately behind the complement.

Within the PP, most can be separated from the complement if postpositional. The prepositional order, however, is fairly restricted (not available to all naked Ps).

In the clause, not every P is separable from the complement. Separability by verbal particle movement and by P-stranding for the same P are roughly equally possible.

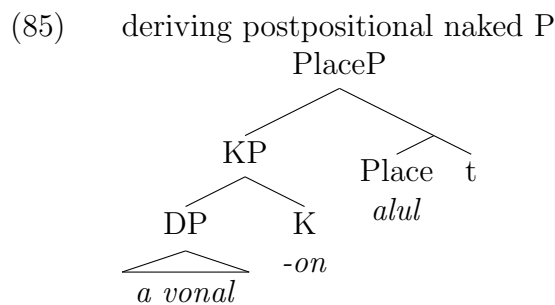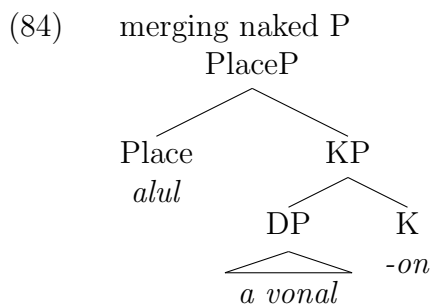So being "naked" is a necessary but not sufficient condition for separability from the complement.

postposition	meaning	prepositional	particle use	P-stranding
át	through, across, via	yes	yes	yes
közel	close to	yes	yes	yes
szemben	opposite.at	yes	yes	?
végig	(along) to the end of	yes	yes	yes
keresztül	through, across, via	?	yes	yes
túl	beyond	yes	yes	?
belül	inside of	no	yes	?
együtt	together	no	yes	yes
szembe	opposite.to	no	yes	yes
szemközt	opposite.at	?(?)	??	??
alul	below	no	no	no
felül	over	no	no	no
innen	on this side of	no	no	no
kívül-re	outside-to, beside-to	no	no	no
kívül-ről	outside-from	no	no	no
túl-ra	beyond-to	no	no	no
túl-ról	beyond-from	no	no	no
kívül	outside, beside	no	no	no
szemből	opposite.from	no	no	no

Table 2: Word order possibilities of naked postpositions

Interestingly, there is an almost complete correlation between a P having a prepositional order and being able to be separated from its complement.
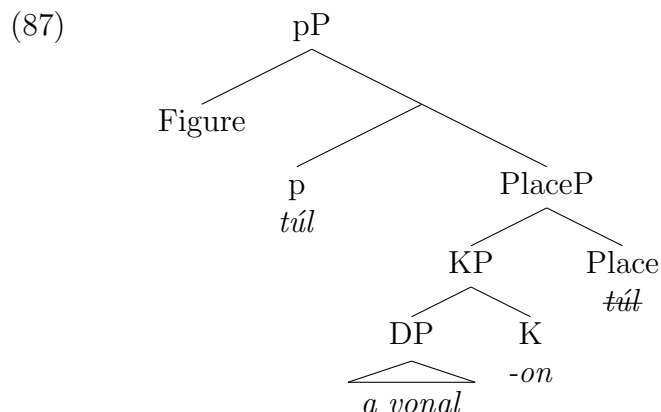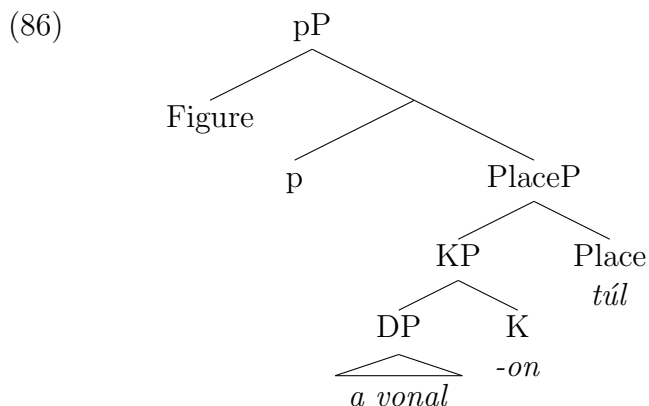
6.2 Proposal

Postpositional Ps are in Place or Path (regardless of whether naked or dressed)

(84) merging naked P

```
              PlaceP
             /      \
         Place       KP
         alul       /  \
                  DP    K
                 /\     -on
              a vonal
```

(85) deriving postpositional naked P

```
              PlaceP
             /      \
           KP      Place   t
          /  \     alul
        DP    K
       /\     -on
    a vonal
```

PlaceP and PathP always move as a unit (i.e. KP is not extracted from them).
The Figure is merged in the specifier of pP, a higher functional projection (cf. vP in the verbal domain, and den Dikken, 2010; Svenonius, 2010 for parallels bw. v and p). Prepositional Ps are derived from moving the adposition to the p head.[1]

(86)

```
              pP
             /  \
       Figure    \
                 / \
                p   PlaceP
                   /      \
                 KP       Place
                /  \      túl
              DP    K
             /\     -on
          a vonal
```

(87)

```
              pP
             /  \
       Figure    \
                 / \
                p   PlaceP
               túl /      \
                 KP       Place
                /  \      túl
              DP    K
             /\     -on
          a vonal
```
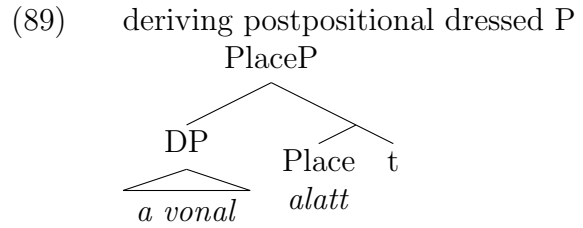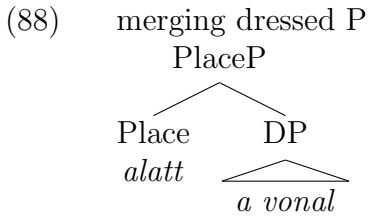
The obvious alternative is that prepositional naked Ps don't involve movement of the complement to spec, PlaceP, they correspond to the base-generated order.
Problem No1: this could not capture the observed correlation bw. prepositinal order and separability
Problem No2: this doesn't allow a unified account of PlaceP: with dressed Ps, KP always moves to spec, PlaceP

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[1] Hegedűs (2013) argues that naked Ps are base-generated in p with a Place/PathP complement and free head-initial or head-final ordering. In order to derive the restrictions on the word order variation observed here, an additional projection would have to be assumed for the strictly postpositional naked Ps.

(88) merging dressed P

PlaceP
├─ Place *alatt*
└─ DP *a vonal*

(89) deriving postpositional dressed P

PlaceP
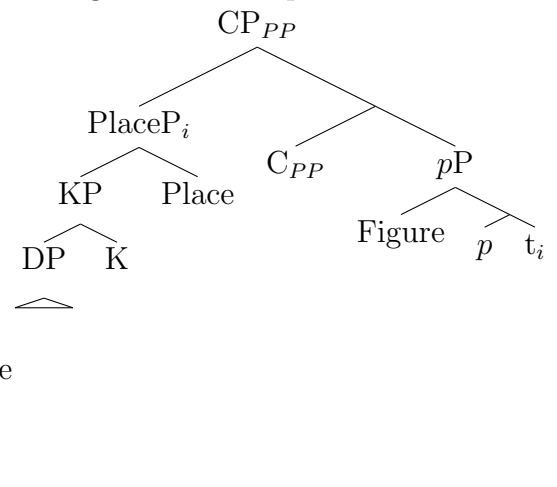├─ DP *a vonal*
└─ Place *alatt* — t

The prepositional order and the separability from the complement correlate because both involve the P in a higher position in the extended PP. Both particle use and P-stranding involve a step where PlaceP moves to a PP-internal escape hatch (this is an optional movement). Such an escape hatch has also been argued for in den Dikken (2010); we adapt his term for the relevant projection and call it CP_{PP}

(90) The escape hatch

CP_{PP}
├─ **escape hatch**
└─ C_{PP} — pP
   └─ pP: Figure, p, PlaceP
      └─ PlaceP: KP (DP, K), Place
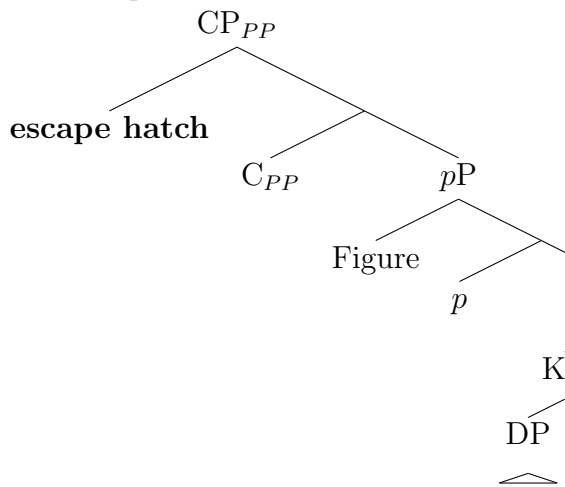
(91) Configuration for separation

CP_{PP}
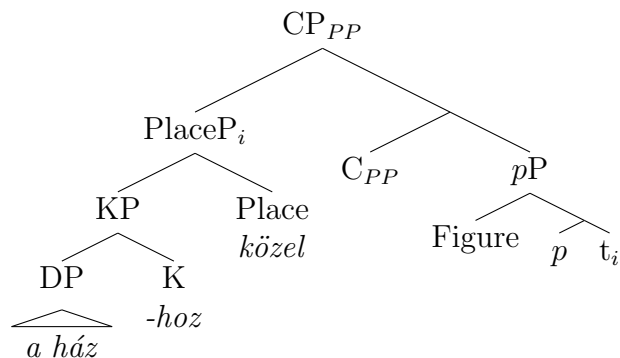├─ $PlaceP_i$: KP (DP, K), Place
└─ C_{PP} — pP (Figure, p, t_i)

P-stranding: extraction of PlaceP from spec, CP_{PP}
particle use: extraction of pP from under CP_{PP}, leaving PlaceP behind
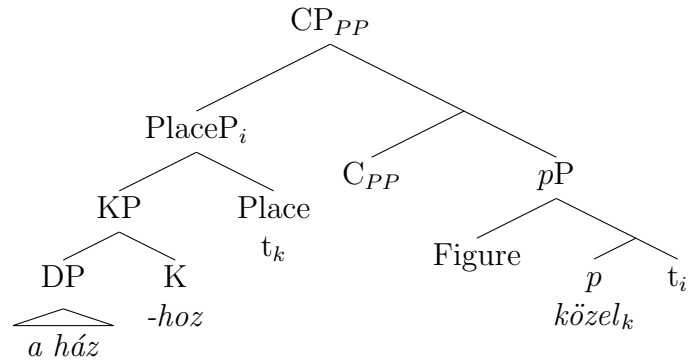
Note that these movements separate the naked P and its complement only if the naked P moves out of PlaceP, up to p. If the naked P stays in the Place head, PlaceP extraction or pP extraction from CP_{PP} won't affect its post-KP position.
This is a good result, as we have observed (and now derived) that the prepositional order and separability in the clause do correlate.

(92) naked P staying low

CP_{PP}
├─ $PlaceP_i$: KP (DP *a ház*, K *-hoz*), Place *közel*
└─ C_{PP} — pP (Figure, p, t_i)

(93)   naked P moving to p

$$
\begin{array}{c}
\text{CP}_{PP} \\
\diagup \quad \diagdown \\
\text{PlaceP}_i \qquad \qquad \text{C}_{PP} \quad p\text{P}
\end{array}
$$

Tree diagram:

- CP$_{PP}$
  - PlaceP$_i$
    - KP
      - DP (*a ház*)
      - K (*-hoz*)
    - Place (t$_k$)
  - C$_{PP}$
  - pP
    - Figure
    - p (*közel$_k$*)
    - t$_i$

Which naked Ps can move to p?

This appears to be a lexically idiosyncratic property. We argue that for those naked Ps that can be prepositional, a grammaticalization process has begun. Grammaticalization involves elements moving up the tree first, then being merged directly in the higher position. Naked Ps at this stage involve movement rather than higher base-generation.

The semantic content of p is different from Place and Path, cf. van Riemsdijk (1990), it is less lexical/more functional. Locatives involve an orientation component, while directionals involve a goal component. (The source meaning is excluded, which fits well with the observation that Source Ps are never particles.)

Our results thus provide further evidence for the idea that extended XPs show cross-categorial parallelisms, cf. the escape hatch in CP or DP (on the latter, see esp. Szabolcsi (1994)).

7 PP-internal differences: complements

7.1 The data

Grammatical

(94) A táská-d   alul van
      the bag-poss.2sg below be.3sg
      Your bag is down there.

(95) A táská-d   belül van
      the bag-poss.2sg inside be.3sg
      Your bag is inside.

(96) A táská-d   fölül van
      the bag-poss.2sg above be.3sg
      Your bag is up there.

(97) A szék-ek kívül   vannak.
      The chair-pl outside be.3pl
      The chairs are outside.

(98) A labda kívül-re   es-ett.
      the ball   outside.to fall-past.3sg
      The ball landed outside.

(99) A hang kívül-ről   jött.
      the sound outside.from came.3sg
      The sond came from outside.

(100) János át-jött.
       John through-came.3sg
       John came over.

(101) együtt van-nak/*van
       together be-3pl/be.3sg
       they are together/he is together

(102) A posta   közel   van
       the post.office close.to be.3sg
       The post office is close by/to here.

(103) A lövés-ek szemből   jött-ek.
       the shot-pl opposite.from came-3pl
       The shots came from the opposite side.

(104)   A posta   szemben van.
the post.office opposite be.3sg
The post office is opposite (to us/here).

(105)   Éppen szembe-jött,   amikor
just   opposite-came.3sg when
He was coming towards me when

Not perfect

(106)   (?)túl   ment.
beyond went.3sg
It went too far.

(107)   ??A posta   szemközt van.
the post.office opposite be.3sg
The post office is opposite.

Ungrammatical

(108)   *János túl-ra   megy
John beyond-to go
John goes beyond

(109)   *János túl-ról   jön
John beyond-from come
John comes from beyond

(110)   *A   táska innen   van
the bag   this.side.of be.3sg
The bag is on this side.

(111)   *János végig   sétál-t
John along.to.end walk-past.3sg
John walked to the end
NB: ok iff *végig* is a temporal adv.

(112)   János keresztül *lovagol-t/?*ment
John through ride-past.3sg/went.3sg

Conclusion: not all naked Ps can appear without an overt complement.

7.2   Analysis

We suggest that there is a neat pattern behind the grammatical / not perfect / ungrammatical divide above.

Grammatical:
The Figure is interpreted wrt an implicit ground *here/there*, the spatial center of deixis of the discourse. We suggest that "no overt complement" means the presence of an implicit complement rather than a genuine intransitive P.

(113)   [$_{PP}$ naked P [$_{PP}$ ~~(here/there)~~]]

NB: Svenonius (2010, p. 137) also observes a correlation bw. a null complement and the possibility of an overt *there* complement in English, and likewise suggest the presence of an unpronounced complement.

Not perfect: *túl* "beyond" and *szemközt* "opposite"
The Ground cannot be interpreted as *here/there*, the spatial center of deixis of the discourse. The these data require a strong context, whereby a specific Ground is recoverable from the speech situation. We suggest that these are elliptical structures.

(114) Túl-ment-ünk   a   sark-on   (115) Túl-ment-ünk
       beyond-went-1pl the corner-sup   beyond-went-1pl
       We went beyond the corner.   We went beyond.

Structure for (115):

(116) $[_{pP}$ túl $[_{PlaceP}$ ~~a sark-on~~ $]]$

Ungrammatical: *túl-ra* "beyond-to", *túl-ról* "beyond-from", *innen* "on this side of", *végig* "along to the end", *keresztül* "via"
The meaning of these Ps is such that they require a Ground different from *here/there*. As only *here/there* can be implicit, these Ps have an overt complement. Further question: why don't they allow ellipsis?

Conclusion: naked Ps cannot be intransitive, but their complement *here/there* can appear with a zero phonological form.

8   Extensions

Old observation: Even if a naked P is separable from the complement on a locative reading, it is never separable from it in the temporal reading (Marácz, 1984; Asbury, 2008; Surányi, 2009a)
This sounds like a systematic contrast on a large number of lexical items.
But: only 4 naked Ps have temporal readings in the first place.

postposition	meaning	temporal	reading
át	through, across	yes	through
belül	inside of	yes	within
keresztül	through	yes	through
túl	beyond	yes, but restricted	beyond

Table 3: Naked Ps allowing a temporal reading

Of these, *belül* is not prepositional and separable on the spatial reading either.

(117) a   doboz-on belül   (118) *belül   a   doboz-on
       the box-sup   inside.of   inside.of the box-sup
       inide the box   inside the box

túl is more complicated even on the spatial reading than it seems at first sight. The prepositional order appears to be good in isolation, but severely degrades in specific sentences, and the particle reading is always directional instead of locative.

(119) a   folyó-n   túl   (120) túl   a   folyó-n
       the river-sup beyond   beyond the river-sup
       beyond the river   beyond the river

(121) *Túl   a   folyó-n 3 erdő is   van
       beyond the river-sup 3 forest too be.3sg
       beyond the river there are as much as 3 forests

(122) *3 erdő is van túl a   folyó-n
3 forest too be.3sg beyond the   river-sup
beyond the river there are as much as 3 forests

(123) *A repülő túl a   folyó-n esett le.
the plane the river-sup beyond fell   down
The plane fell down beyod the river.

Particle use only with dynamic verbs.

(124) A festék túl-folyt a   vonal-on.   (125) *A ház   túl van   a   folyó-n.
the paint over-went the line-sup   the house over be.3sg the river-sup
The paint went over the line.   The house is over the river.

It is not obvious if the temporal use is locative or directional. Maybe always locative?

(126) A határidő-n túl   beadott pályázatok érvénytelenek.
the deadline-sup beyond submitted applications invalid-pl
Applications submitted beyond the deadline are invalid.

(127) a 60 nap-on túl   lejárt kötvények
the 60 day-sup beyond expired bonds
bonds that have expired more than 60 days ago (lit. beyond 60 days)

(128) A sérülések 8 nap-on túl   gyógyulnak.
The inuries   8 day-sup beyond heal
The injuries heal in over 8 days (lit. beyond 8 days)

át and *keresztül*: in the temporal use they have no goal meaning component, but the particle use involves that meaning.

Temporals are usually not complements. As adjuncts, they are merged fairly high, above the position that Surányi (2009a) identifies as the incorporation position of particles (which is below Source PPs). Complement temporal PPs remain a problem.

(129) Evidential > Temporal > Locative > Comitative > Benefactive > Reason > Source > Goal > Malefactive > Path/means >Instrumental > Matter > Manner (Schweikert, 2005)

(130) Temporal > Locative > Comitative > Reason > Source > Goal > Instrumental/means > Locative > Comitative > Source > Goal > Instrumental/means > Material > Manner (Takamine, 2010)

9   Conclusions

After investigating the variation we have found that
- the separated postpositional order is almost always good
- the prepositional order is restricted
- and correlates with the extraction of the P or its complement from the extended PP

We have proposed that
- the prepositional order is derived by adposition movement to p
- there is no subextraction from PathP/PlaceP, but there is subextraction from pP
- the particle use and P-stranding involve PathP/PlaceP movement to spec, CP_{PP}
- spec, CP_{PP} is a PP-internal escape hatch
- this corroborates cross-linguistic findings about the fine structure of the PP and contributes to our understanding about the universal structure of adpositions

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