

# **One size fits all: prefixes, particles, adpositions and cases as members of the category P**

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## **1 Introduction**

### **Some history:**

Recent research on adpositions:

- van Riemsdijk 1990, Koopman 1997, van Riemsdijk & Huybregts 2001, Helmantel 2002, Den Dikken 2003, Svenonius 2004
- focuses on division of labour between direction and location heads in the extended projection of the PP
- general consensus (give or take functional structure) [<sub>PP</sub> [<sub>PathP</sub> [<sub>PlaceP</sub> [<sub>DP</sub>]]]]

Work uniting prefixes/particles and prepositions:

- Jackendoff 1973, Emonds 1976, van Riemsdijk 1978, Den Dikken 1995, Zeller 2001, Matushansky 2002
- particles/prefixes and prepositions belong to one category

Work uniting prepositions and cases:

- Fillmore 1968, Emonds 1985
- prepositions and cases belong to one category
- Fillmore: cases involve an empty P, Emonds: Alternative Realisation

### **Aims of this paper:**

- build on past work on specific languages, which unites particles, prefixes, adpositions & cases
- show that particles, prefixes, adpositions & cases belong to the category P in a cross-linguistic perspective
- integrate the additional elements (prefixes/particles and cases) into the structures found in research on adpositions
- show how the different orders and meanings can be accounted for in such structures
- account for morphological differences in the spell-out of the different items

What we will not talk about:

- nominative and accusative case (structural cases)
- Germanic inseparable prefixes (e.g. German *ver-*, *ent-*, etc.)
- other non-spatial items with an overlapping distribution with the items discussed here (e.g. Hungarian particles, *meg*, *el*, etc.)

Structure of the talk:

2. Evidence that prefixes/particles, adpositions & cases belong to one category;  
possible problems
3. Structural Analysis
4. Conclusion

## 2 Evidence

### 2.1 Prefixes/Particles and Adpositions

➤ Prefixes/particles and prepositions/postpositions often have similar forms and interpretations.

(1) Dutch particles

- a. Hij wou een aanvraag **in**-dienen  
he wanted an application in-serve  
'He wanted to make an application.'
- b. Hij diende een aanvraag **in**.  
he served an application in  
'He made an application.'

(2) Dutch postpositions & prepositions

- a. Zij wou het meer **in**-zwemmen.  
She wanted the lake in-swim  
'She wanted to swim **into** the lake.' (directional)
- b. Zij zwom het meer **in**.  
she swam the lake in  
'She swam **into** the lake.' (directional)
- c. Zij zwom **in** het meer.  
she swam in the lake  
'She swam **in** the lake.' (locative)

(3) German prefixes, prepositions & postpositions<sup>1</sup>

- a. Sie wollte **auf** den Berg hin-**auf**-laufen.  
she wanted on the.ACC mountain there-on-run  
'She wanted to run up the mountain.'
- b. Sie lief **auf** den Berg hin-**auf**.  
she ran on the.ACC mountain there-on  
'She ran up the mountain.'

(4) Modern Greek prefixes & prepositions

- Ton **ap**-e -val-an **apo** to sxolio.  
him-CL from-PAST-throw-3PL.PAST from the school  
'They expelled him from school.'

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<sup>1</sup> The following abbreviations are used in the example glosses: ABL=ablative, ACC=accusative, ADESS=adessive, ADJ=adjective, AGR<sub>o</sub>=object agreement, AGR<sub>s</sub>=subject agreement, APPL=applicative, CL=clitic, DAT=dative, DEL=delative, DIR=directional, ELAT=elative, ESS=essive, FUT=future, GEN=genitive, ILL=illative, INESS=inessive, INSTR=instrumental, PERF=perfect, PFX=prefix, PL=plural, POSS=possessive, POSTESS=postessive, PREP=prepositional case, SG=singular, SUB=sublative, SUP=superessive, T/A=tense/aspect, TERM=terminative.

- (5) Ancient Greek prefixes & prepositions  
**eis**-e-bal-on                      **eis**            ten                      Attike-n.  
 into-PST-throw-3PL            into            the.ACC                      Attica-ACC  
 ‘They invaded Attica.’

- (6) Russian prefixes & prepositions  
 On **ot**-prygnul                      **ot**            okna.  
 he from-jumped                      from            window  
 ‘He jumped away from the window.’

➤ **Case study: Slavic prefixes & prepositions**

- (7) Russian goal and source prepositions and prefixes:

prepositions	verbal prefixes	
<i>do</i> (+ GEN), <i>k</i> (+ DAT)	<i>do-</i> , <i>pri-</i> , <i>*k-</i>	to
<i>k</i> (+ DAT)	<i>*k-</i>	towards
<i>v</i> (+ ACC) / (+ PREP)	<i>v-</i> , <i>za-</i>	in / into
<i>na</i> (+ ACC) / (+ PREP)	<i>(na-)</i> <sup>2</sup>	on / onto
<i>ot</i> (+ GEN)	<i>ot-</i> , <i>u-</i>	(away) from
<i>iz</i> (+ GEN)	<i>iz-</i> , <i>vy-</i>	out of

- (8) Czech goal and source prepositions and prefixes:

prepositions	verbal prefixes	
<i>do</i> (+ GEN), <i>k</i> (+ DAT)	<i>do-</i> , <i>při-</i> , <i>*k-</i>	to
<i>k</i> (+ DAT), <i>vůči</i> (+ DAT)	<i>*k-</i> , <i>*vůči-</i>	towards
<i>do</i> (+ GEN)	<i>do-</i>	in / into
<i>na</i> (+ ACC) / (+ PREP)	<i>(na-)</i> <sup>3</sup>	on / onto
<i>od</i> (+ GEN)	<i>od-</i> , <i>u-</i>	(away) from
<i>z</i> (+ GEN)	<i>vy-</i>	out of

- (9) prepositional counterparts of additional prefixes:

- pri* (*při*) (+ PREP) ‘at, by’
- za* (+ ACC) / (+ INSTR) ‘within’ / ‘behind, at, with, ...’
- u* (+ GEN) ‘at’
- Old Slavonic *vbъn* (+ GEN) > Mod. Russ. / Czech adverbial *von* / *ven* ‘outside’

**Interim conclusion:**

- prepositions/postpositions are closer to the noun and prefixes/particles to the verb
- the identity of form and meaning between prepositions/postpositions and prefixes/particles in different languages constitutes evidence that they belong to the same category

<sup>2</sup> The prefix *na-* is only found on the motion verb *idti* / *jít* ‘go’. *Najti* and *najít*, however, do not convey the meaning of a motion on foot onto something but have the different lexical meaning of ‘find’. To describe a motion onto something, other prefixes are used depending on the particular perspective such as Russian *so-jti* ‘descend’ (lit. down-go) or Czech *vze-stoupit* ‘ascend’ (lit. up-step).

<sup>3</sup> See previous footnote.

## 2.2 Tying in Cases

Spatial meanings can be expressed by both case and adposition forms:

- (10) Latin cases vs English prepositions
- a. Neapoli-**m** cras iter faciemus.  
Naples-ACC tomorrow journey make.FUT.1PL  
'We will travel **to** Naples tomorrow.'
- b. loc-**o** idone-**o**  
place-ABL suitable-ABL  
'**in** a suitable place'
- (11) German case contributing to spatial meaning
- a. auf **den** Berg  
on the.ACC mountain  
'**onto** the mountain' (directional)
- b. auf **dem** Berg  
on the.DAT mountain  
'**on** the mountain' (locative)

### ➤ Case study: Hungarian case suffixes & adpositions/particles

Case is not always easily separable from the other P categories. In Hungarian the picture is more blurred.

No clear semantic distinction between case suffixes and postpositions.

- (12) Hungarian case suffixes and postpositions in spatial expressions
- a. Imre el-ment Olaszország-**ba**. (case)  
Imre away-went Italy-ILL  
'Imre went to Italy.'
- b. Géza olvas a kert-**ben**. (case)  
Géza read the garden-INESS  
'Géza is reading in the garden.'
- c. Négy szék van az asztal **körül**. (postposition)  
four chair be the table round  
'There are four chairs around the table.'
- d. Fel-akasztotta a festmény-t a két ablak **közé**. (postposition)  
up-hung the painting-ACC the two window between  
'She hung up the painting between the two windows.'

Potential morphological diagnostics for distinguishing cases and postpositions conflict with one another (c.f. Marác 1989:356-70, É. Kiss 2002).

- (13) Pronominal agreement: cases and inflecting postpositions pattern together
- a. Case agrees with pronoun  
(én) **vel-em**  
(I) INSTR-1SG  
'with me'

- b. Inflecting postposition agrees with pronoun  
 (én) **mögött**-em  
 (I) behind-1SG  
 ‘behind me’
- c. Non-inflecting postposition carries no agreement  
 (én) rajt-am **át**  
 (I) SUP-1SG over  
 ‘over me’
- (14) Demonstrative copying: cases and inflecting postpositions pattern together
- a. Case is copied after the demonstrative  
 en-**nél** a ház-**nál**  
 this-ADESS the house-ADESS  
 ‘at this house’
- b. Inflecting postpositions are copied after the demonstrative  
 az **alatt** a fa **alatt**  
 that under the tree under  
 ‘under that tree’
- c. Non-inflecting postpositions are not copied  
 az-zal a fiú-val **együtt**  
 that-INSTR the boy-INSTR together  
 ‘together with that boy’
- (15) Degree modification: cases and inflecting postpositions pattern together
- a. Case: degree modifier precedes whole phrase  
**majdnem** az utcá-**ban**  
 almost the street-INESS  
 ‘almost in the street’
- b. Inflecting postposition: degree modifier precedes whole phrase  
**majdnem** a ház **mellett**  
 almost the house near  
 ‘almost by the house’
- c. Non-inflecting postposition: degree modifier intervenes between N and postposition  
 az út-on **majdnem** **végig**  
 the road-SUP almost to.the.end  
 ‘almost to the end of the road’
- (16) Preposing: cases and inflecting postpositions pattern together
- a. Case: cannot prepose  
 \***val** János  
 INSTR John  
 ‘with John’
- b. Inflecting postposition: cannot prepose  
 \***mellett** János  
 near John  
 ‘near John’
- c. Non-inflecting postposition: can prepose  
**együtt** János-sal  
 together John-INSTR  
 ‘together with John’

- (17) Vowel harmony: inflecting and non-inflecting P pattern together
- a. Case harmonises  
a ház-ba/\*-be / a zsebé-be/\*-ba  
the house-ILL the pocket-ILL  
‘into the house’ ‘into the pocket’
- b. Inflecting postposition, no harmony  
a ház mellett/\*mallatt / a zseb mellett/\*mallatt  
the house near the pocket near  
‘near the house’ ‘near the pocket’
- c. Non-inflecting postposition, no harmony  
a ház-zal szemben/\*szamban / a zseb-bel szemben/\*szamban  
the house-INSTR opposite the pocket-INSTR opposite  
‘opposite the house’ ‘opposite the pocket’
- (18) Combination with adjectival suffix *-i*: postpositions pattern together
- a. Case, no addition of *-i*  
\*?a kert-ben-i virág  
the garden-INESS-ADJ flower  
‘the flower in the garden’
- b. Inflecting postposition allows addition of *-i*  
a híd mögött-i út  
the bridge behind-ADJ road  
‘the road behind the bridge’
- c. Non-inflecting postposition allows addition of *-i*  
a ház-on kívül-i virágok  
the house-SUP outside-ADJ flowers  
‘the flowers outside the house’
- (19) Sublative/delative case marking: postpositions pattern together
- a. Case, no addition of sublative/delative  
\*a híd-on-ról  
the bridge-SUP-DEL
- b. Inflecting postposition allows addition of sublative/delative  
három óra után-ra  
three hour after-SUB  
‘by after three o’clock’
- c. Non-inflecting postposition allows addition of sublative/delative  
a híd-on túl-ról  
the bridge-SUP beyond-DEL  
‘from behind the bridge’
- (20) Ellipsis under conjunction: postpositions pattern together
- a. Noun ellipsis in coordinated PPs:  
a ház előtt és (a ház) mögött  
the house before and (the house) behind  
‘before and behind the house’
- b. P-ellipsis in coordinated PPs:  
a ház (előtt) és a garázs előtt  
the house (before)and the garage before  
‘before the house and the garage’
- c. Unacceptability of noun ellipsis with coordinated case marked NPs:  
a ház-tól és \*(a ház)-ból  
the house-ABL and (the house)-ELAT  
‘from outside and from inside the house’

- d. Unacceptability of case suffix ellipsis with coordinated NPs :
- |                               |                     |     |     |                    |
|-------------------------------|---------------------|-----|-----|--------------------|
| a                             | ház-*( <b>nál</b> ) | és  | a   | garázs- <b>nál</b> |
| the                           | house(-ADESS)       | and | the | garage-ADESS       |
| ‘at the house and the garage’ |                     |     |     |                    |

(21) Summary of the morphological behaviour of Hungarian affixes and Ps

Characteristic	Affix	Inflecting postposition	Non-inflecting postposition
(a) pronominal agreement	✓	✓	-
(b) demonstrative copying	✓	✓	-
(c) degree modification intervening	-	-	✓
(d) preposing	-	-	✓
(e) vowel harmony with N	✓	-	-
(f) combines with adjectival suffix <i>-i</i>	-	✓	✓
(g) sublative/delative case marking	-	✓	✓
(h) ellipsis under conjunction	-	✓	✓

**BUT** There are borderline cases even for these groupings.

- (22) Non-inflecting Ps that do not prepose (mixed behaviour on (a) and (d)): *kezdve, fogva, nézve*  
 ??kezdve hétfő-től  
 from Monday-ABL  
 ‘from Monday’
- (23) *kívül* behaves variably with respect to pronominal agreement (cf. (a))  
 kívül-em / rajt-am kívül  
 outside-1SG / SUP-1SG outside  
 ‘outside me’
- (24) Case affixes with no vowel harmony: *-ért, -ként, -ig, -nként, -kor* (cf. (e))  
 a. épület-ig a'. épület-ben/\*-ban  
 bread-TERM building-INESS  
 ‘as far as the building’ ‘in the building’  
 b. város-ig b'. a város-ban/\*-ben  
 town-TERM the town-INESS  
 ‘as far as the town’ ‘in the town’
- (25) Cases with no pronominal form: *-va/ve, -ként, -ig, -nként, -kor, -nta/-nte, -stul/-stül* (cf. (e))  
 a. \*(én)-ként-em b. \*(én)-ig-em  
 (1SG)-ESS-1SG (1SG)-TERM-1SG  
 ‘as me’ ‘as far as me’
- (26) Ellipsis is acceptable in restricted circumstances with certain case suffixes (c.f. (h))  
 feleség- és anya-ként  
 wife and mother-ESS  
 ‘as wife and mother’

Furthermore, in Hungarian, both cases and postpositions can surface as verbal prefixes/particles.

(27) Identity of cases and postpositions and verbal particles

a. Cases as verbal particles

János **rá**-lépett a láb-**am-ra**.  
János SUB-stepped the foot-1SG.POSS-SUB  
'János stepped on my foot.'

**Be**-le-tette a cukr-ot a kávé-**ba**.  
ILL-3SG-put the sugar-ACC the coffee-ILL  
'He/She put the sugar into the coffee.'

**Nek**-i-mentem a fal-**nak**.  
DAT-3SG-went the wall-DAT  
'I bumped into the wall.'

b. Inflecting postpositions as verbal particles

**Alá**-írta az oklevel-et. az autó **alá** / (én)-**alá**-m  
under-wrote the document-ACC the car under / (1SG)-under-1SG  
'She signed the document.' 'under the car' / 'under me'

**Körül**-néztünk az üzlet-ben. az üzlet **körül** / (én)-**körül**ött-em  
round-looked the shop-INESS the shop round / (1SG)-round-1SG  
'We looked around the shop.' 'round the shop' / 'round me'

c. Non-inflecting postpositions as verbal particles

**Keresztül**-mentek a mező-n. a mező-n **keresztül**  
across-went the field-SUP the field-SUP across  
'They went across the field.' 'across the field'

The connection between adpositions and cases is not restricted to Hungarian.

Similar arguments have been made for:

- German (Vogel & Steinbach 1998, Bayer, Bader & Meng 2001)
- Finnish (Nikanne 1991, Kracht 2002)
- Lezgian (van Riemsdijk & Huybregts 2001)

**Interim conclusion:**

- In Hungarian it is impossible to draw a neat line between case suffixes and postpositions on the basis of the diagnostics previously used.
- In languages where the morphological distinction is clearcut, the semantic overlap still constitutes evidence that cases belong to the category P

## 2.3 Problems

Some reasons for making categorial distinctions between these elements:

### A. Ps as case *assigners*:

(28) Latin combinations of prepositions and cases

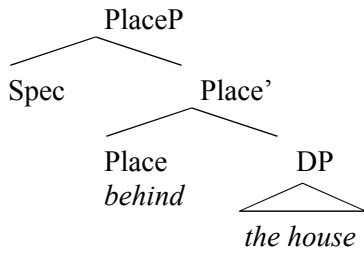
a. Milites **ad Rhenum** castra posuerunt.  
soldiers to Rhine-ACC camp.ACC place.PERF.3PL  
'The soldiers pitched camp near the Rhine.'

b. **Ab urbe**-e discessit.  
from city-ABL leave.PERF.3SG  
'He left the city.'

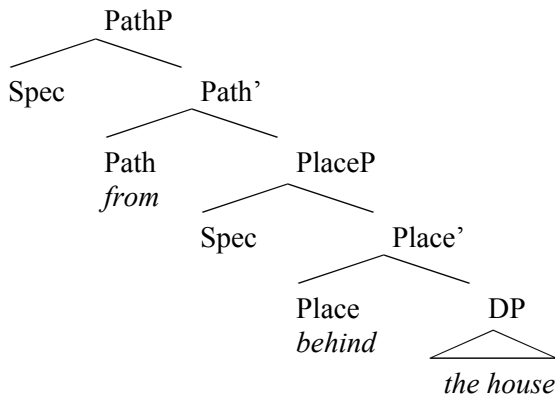




- (32) Locative P  
 behind the house



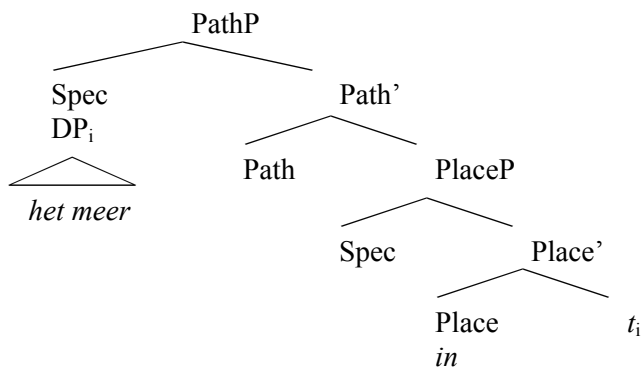
- (33) Directional P  
 from behind the house



**Difference between prepositions & postpositions:**

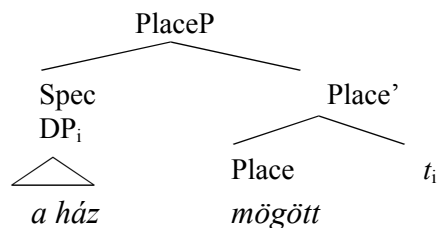
- universal Spec-Head-Comp ordering: P always precedes DP in its initial position
- postpositions (e.g. Hungarian and Dutch) are the result of DP-raising to Spec-p/Path/Place as appropriate

- (34) Dutch postposition (directional)  
 het meer in  
 the lake in  
 'into the lake'

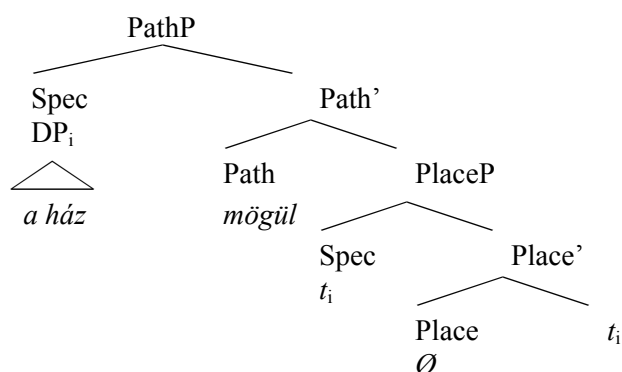


(35) Hungarian postposition

- a. a ház mögött  
 the house behind  
 ‘behind the house’ (locative)



- b. a ház mögül  
 the house behind.from  
 ‘from behind the house’ (directional)



**Difference between case suffixes and postpositions:**

- result of phonological processes after Spell-Out, at PF
- morphological merger between DP and P after movement

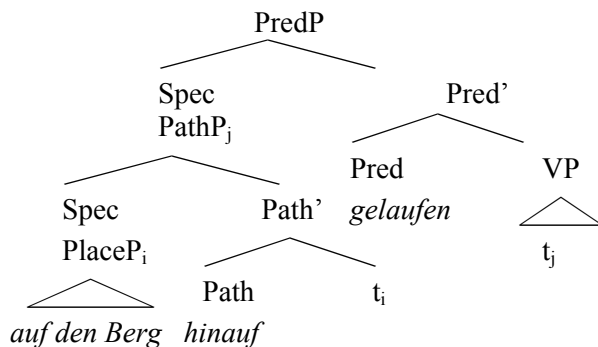
**Verbal particles and prefixes:<sup>4</sup>**

- created by further movement of the PathP to Spec, PredP
- link the verbal domain and the nominal domain

(36) German prefix

- Sie ist auf den Berg hin-auf-gelaufen.  
 she is on the.ACC mountain there-on-run  
 ‘She ran up the mountain.’

<sup>4</sup> See Ürögdi 2003 for a copy theory account of particle formation in Hungarian.



**Difference between verbal prefixes (affixes) and particles (independent words):**

- result of phonological processes after Spell-Out, at PF
- morphological merger between P and verbal projection after movement of P to Spec, PredP

**4 Conclusion**

**We have:**

- presented semantic and morphological evidence that prefixes, particles, adpositions & cases belong to one category, P
- explained some of the apparent counterevidence
- proposed a structural analysis whereby
  - different adposition-noun ordering and combination phenomena are accounted for by movements within the extended projection above the noun
  - particles/prefixes are formed by movement to PredP

**Possible extensions to account for Ps with non-spatial meaning:**

- metaphorical extensions from spatial Ps (e.g. temporal *at, up to*; general metaphorical use, *prices go up*) can probably be accounted for under the same analysis
- Ps selected by specific verbs (e.g. believe *in*, phone *up*), where P would normally have spatial meaning but does not in specific P-verb combinations
- Ps which never seem to have spatial meaning (e.g. *with, without, as*; comitatives, instrumentals etc.)
- applicatives

(37) Chi-Mwi:ni applicative (from Svenonius 2006, citing Marantz 1984:236)  
 Muti u-m-tuluk-**il**-ile mwa:limu.  
 tree AGR<sub>S</sub>-AGR<sub>O</sub>-fall-**APPL**-T/A teacher  
 ‘The tree fell **on** the teacher.’

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