1 Introduction

Aim to show that
(i) verbal prefixes, particles, adpositions (pre-/postpositions), and cases belong to one syntactic category P
(ii) the apparent differences between them are derived in the syntax and in the morphophonological processes after spell-out

Prefixes (morphologically attached to the verb)

(1) Russian
   On ot-prygnul ot okna.  
   he from-jumped from window
   ‘He jumped away from the window.’

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

Particles (‘intransitive prepositions’)

(3) English:
   John pushed { over } the chair { over }.  
   Mary put { out } the rubbish { out }.

(4) Dutch:
   Er is weg-gelopen / liep weg.  
   he is away-run / ran away
   ‘He ran away.’

Adpositions (prepositions and postpositions)

(5) English prepositions
   They went in/into/towards the house.  
   They had a picnic on the grass.

(6) Er rannte in den Wald.  
    he ran in the.ACC wood
    ‘He ran in(to) the wood.’

(7) Er lief den Berg hin-unter.  
    he ran the.ACC hill there-down
    ‘He ran down the hill.’
Cases (morphologically attached to the noun)

(8) Hungarian
   a ház-ba  the house-ILL
   a ház-ban  the house-INESS
   a ház-ból  the house-ELAT
   ‘into the house’  ‘in the house’  ‘out of the house’

(9) Lezgian (from van Riemsdijk 1998:34-5)
   sew-re-qh-di  bear-ERG-POST-DIR
   sew-re-qh  bear-ERG-POST
   sew-re-qh-aj  bear-ERG-POST-ELAT
   ‘to behind a bear’  ‘behind a bear’  ‘from behind a bear’

Cases and adpositions are more closely associated with the noun in syntax.
Prefixes and particles are more closely associated with the verb in syntax.

Structure of the talk:
2 Minimalist assumptions about Ps
3 Why argue that they are the same?
4 Possible counter-arguments
5 Towards an analysis of the differences
6 Conclusions

2 Minimalist assumptions about Ps (Chomsky 1995 etc.)

Generative syntax makes reference to part of speech categories.

Lexicon contains abstract feature bundles, including a categorial feature (also semantic features and, possibly, phonological information)

Lexical categories: N(ouns), V(erbs), A(djectives), P(repositions)
Functional categories: D(eterminer) (English the, a; German der, die, das, ein, etc.), T(ense), C(omplementiser)…etc.

Several clear categories on the basis of:
(a) derivational morphology
   N  -ation, -ology, -er
   V  -ise, -ify
   A  -al, -able
(b) interchangeability of one item for another
   N  John ate a banana/hat/horse.
   V  John ate/peeled/cooked the banana.
   A  the yellow/ripe/tough banana

Problem with the category P:
(a) lack of P-forming morphology: instead, P seems to attach to various categories
(b) Ps not always interchangeable for one another:
   John went up / down / to / *back the stairs.
   The inn-keeper turned the travellers back / out / down / *in / *to / *for.
3 Why argue that they are the same?

3.1 Similar meaning of Ps

Verbal prefixes, particles, adpositions (pre-/postpositions), and cases can all express spatial relations.

(10) Hungarian cases
   a. Imre el-ment Olaszország-ba.
      Imre PFX-went Italy-ILL
      ‘Imre went to Italy.’
   b. Géza olvas a kert-ben.
      Géza read the garden-INESS
      ‘Géza is reading in the garden.’

(11) Hungarian postpositions
   a. Négy szék van az asztal körül.
      four chair are the table round
      ‘There are four chairs around the table.’
   b. Fel-akasztotta a festményt a két ablak közé.
      up-hung the painting the two window between
      ‘She hung up the painting between the two windows.’

(12) Russian prefixes and prepositions
   a. On pere-šel (čerez) ulicu.
      he ACROSS-went (across) street-ACC
      ‘He crossed the street.’
   b. On pri-exal v Moskvu.
      he TO-drove in Moscow-ACC
      ‘He arrived in Moscow.’

3.2 Similar forms of Ps

* prefixes and prepositions: Slavic

(13) Russian goal and source prepositions and prefixes:

<table>
<thead>
<tr>
<th>prepositions</th>
<th>verbal prefixes</th>
</tr>
</thead>
<tbody>
<tr>
<td>do (+ GEN), k (+ DAT)</td>
<td>do-, pri-, *k-</td>
</tr>
<tr>
<td>k (+ DAT)</td>
<td>*k-</td>
</tr>
<tr>
<td>v (+ ACC) / (+ PREP)</td>
<td>v-, za-</td>
</tr>
<tr>
<td>na (+ ACC) / (+ PREP)</td>
<td>(na-)</td>
</tr>
<tr>
<td>ot (+ GEN)</td>
<td>ot-, u-</td>
</tr>
<tr>
<td>iz (+ GEN)</td>
<td>iz-, vy-</td>
</tr>
</tbody>
</table>

1 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).
(14) Czech goal and source prepositions and prefixes:

<table>
<thead>
<tr>
<th>Greek</th>
<th>Prepositional Counterparts of Additional Prefixes:</th>
</tr>
</thead>
<tbody>
<tr>
<td>prepositions</td>
<td>verbal prefixes</td>
</tr>
<tr>
<td>do (+ GEN), k (+ DAT)</td>
<td>do-, pri-, *k- to</td>
</tr>
<tr>
<td>k (+ DAT), vůči (+ DAT)</td>
<td>*k-, *vůči- towards</td>
</tr>
<tr>
<td>do (+ GEN) / (+ PREP)</td>
<td>do- in / into</td>
</tr>
<tr>
<td>na (+ ACC) / (+ PREP)</td>
<td>(na-) on / onto</td>
</tr>
<tr>
<td>od (+ GEN)</td>
<td>od-, u- (away) from</td>
</tr>
<tr>
<td>z (+ GEN)</td>
<td>vy- out of</td>
</tr>
</tbody>
</table>

(15) prepositional counterparts of additional prefixes:

a. pri (při) (+ PREP) ‘at, by’
b. za (+ ACC) / (+ INSTR) ‘within’ / ‘behind, at, with, …’
c. u (+ GEN) ‘at’
d. Old Slavonic von (+ GEN) > Mod. Russ. / Czech adverbial von / ven ‘outside’

* particles and prepositions: Germanic

(16) a. English: I ran down vs. I ran down the hill.

* cases and particles: Hungarian


* postposition and particles: Hungarian

(18) a. az autó mellé the car beside ‘beside the car’
b. János mellé lött a cél-nak John beside-POSS shot the target-DAT ‘John missed the target.’

4 Possible counter-arguments

Some traditional reasons for making a difference between cases and adpositions break down in the face of languages like Hungarian:

* Cases are affixes and adpositions are words.
BUT: both cases and postpositions form the head of pronominal forms
(19) Hungarian pronominal case and postposition forms
(én) vel-em (case)
(I) INSTR-1SG ‘with me’
(én) mögött-em (postposition)
(I) behind-1SG ‘behind me’

* Cases trigger agreement and adpositions usually don’t.
BUT: the demonstrative seems to agree with either a case or a postposition

(20) Hungarian demonstrative agreement with a case/postposition
en-nél a ház-nál (case)
this-ADESS the house-ADESS ‘at this house’
az alatt a fa alatt (postposition)
that under the tree under ‘under that tree’

Traditional reasons for making a difference between particles and adpositions:

* Particles do not take objects whilst prepositions do.
BUT: particles as intransitive prepositions, different valency (cf. transitive and
intransitive verbs).

(21) a. I ate. vs. I ate an apple.
b. The plane went up. vs. I went up the hill.

* Verbs with prefixes / particles are lexical items on their own, i.e. not syntactically
derived.
BUT: Dutch postpositions also seem to form a complex predicate with the verb in the
syntax so why not have a uniform account?

(22) Dutch postposition
a. Hij liep het huis in.
   he ran the house in ‘He ran into the house.’
b. Hij is het huis in-gelopen.
   he is the house in-run ‘He ran into the house.’

(23) Dutch particle
a. Hij diende een aanvraag in.
   he served an application in ‘He submitted an application.’
b. Hij heeft een aanvraag in-gediend.
   he has an application in-served ‘He submitted an application.’
5 Towards an analysis of the differences

How does the distribution of P get to be so variable?

- each individual lexical item P has its own core semantics
- position of P with respect to N/V is determined by its syntactic movement
- P is merged in the extended projection of the noun phrase (DP) as either a Place, Path or Dir head, depending on its core semantics
- postpositions (e.g. Hungarian, Dutch) are the result of raising of the noun to Spec-Dir, Spec-Path or Spec-Place
- verbal particles and prefixes are the result of further movement of the P to create a link between the verbal domain and the nominal domain
- difference between case suffixes, adpositions, particles and prefixes, is the result of phonological processes after Spell-Out
e.g. Hungarian monosyllabic Ps form cases, polysyllabic Ps form postpositions

6 Conclusions

- It is controversial which elements belong to the category P
- On the basis of similarities in form and meaning we argue for treating particles, prefixes, adpositions, and cases alike, as instances of the same category P
- Differences between these elements fall out of morphology, syntactic derivation etc.
- Within a clausal perspective Ps emerge as the syntactic glue between verbs and their arguments.