Verbal Prefixes are not Ps
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0. Preliminary questions and goals

Goal: To show that verbal prefixes are independently generated elements, non-derived by movement, different from (*res*) Ps, despite the morphophonological and lexicosemantic similarities.

Main ideas:

→ Verbal prefixes are base-generated as modifiers of *proc*. They are not heads.

→ They give information related to the properties of the process, like its last point.

→ Verbal prefixes don't trigger telicity or the presence of *res*. It is just that the presence of verbal prefixes may make a verb compatible with *res*.

(1) **Cartography:**

PP
P ... → Path PlaceP
Place DP

PathP

PathP

AP
A BP
B CP
C DP
D EP
E …

PlaceP
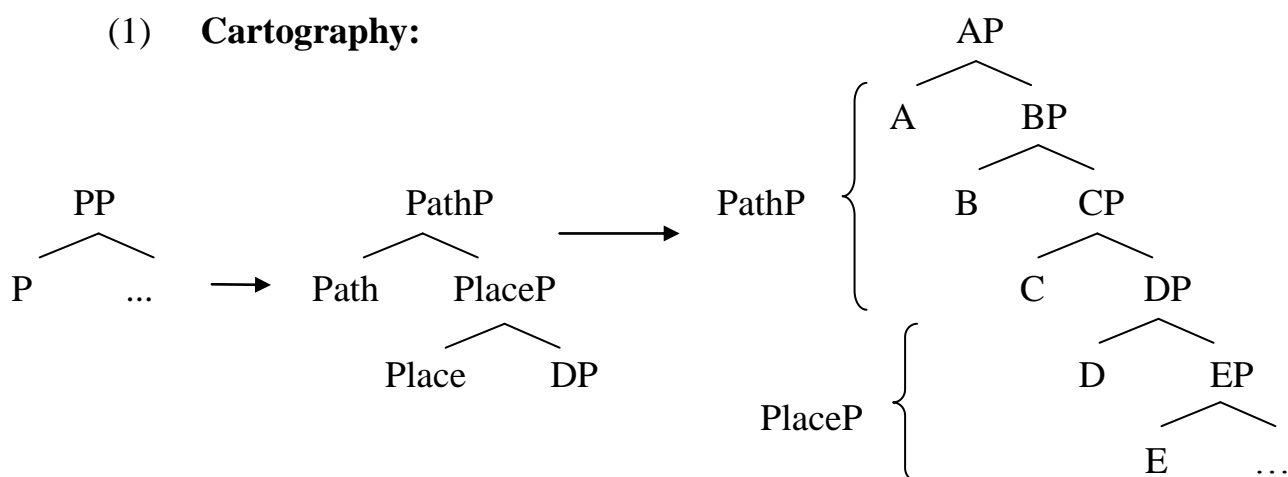
Jackendoff (1973, 1977)   Jackendoff (1983)   Koopman (2000), Den Dikken (2010), Svenonius (2010), Pantcheva (2011)...

→ The result is a structure where every semantic component of a spatial construction is located in a very well defined position in the structure.
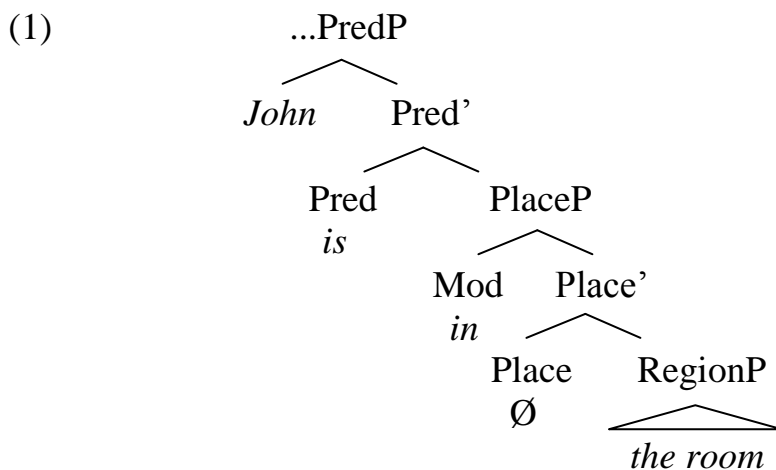
1. Introduction → Different positions of "Ps" in the structure

Tolskaya (2007): "the differences in meaning are claimed to arise from different syntactic positions, while the lexical entry of a prefix remains the same"

1.1. Different positions for *in*

Locative construction → *John is in the room*

- In English, the element *in* lexicalize a Modifier of *Place* (*Mod,Place*), which determines that the location expressed by *Place* corresponds to an inner part:

(1)

```
            ...PredP
           /       \
        John       Pred'
                  /     \
               Pred      PlaceP
                is      /      \
                      Mod      Place'
                       in     /      \
                           Place      RegionP
                             Ø        /      \
                                    the room
```

Region: gives the set of points that the Ground occupies.
Place: gives a spatial configuration

→ Languages in which there are neutral locatives that can be modified by other elements:

(2)   Greek:

           Kathomun epano ston Petro.
           was-sitting-1s on *se-* the Peter-acc
           'I was sitting on John.'
                         Terzi (2010:198)

(3)   Norwegian:
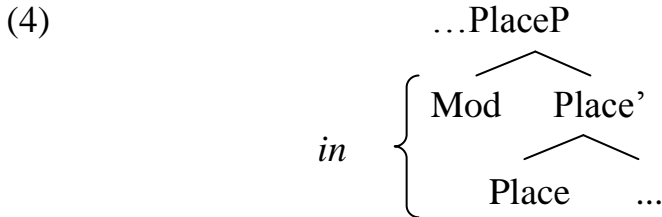
          Katten er inne i huset.
          cat.the is in in house.the
          'The cat is inside the house.'
                              Tungseth (2008:44)

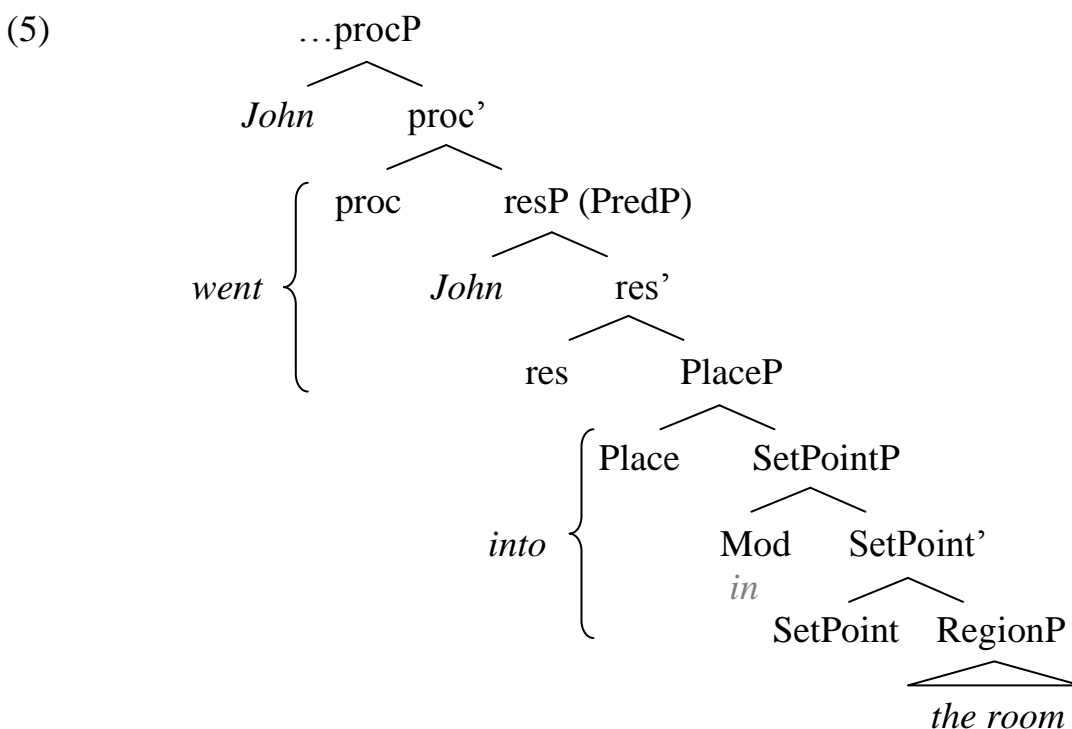   → *in* in *in front of* in English?

Other possibility:
   (4)   …PlaceP

                               Mod   Place'

          in   Place   ...

      → Possible by phrasal spell-out (Starke 2009, 2011, a.o.)

1.2. Directional construction with *res* → *John went into the room*

- In English, *in* in *into* corresponds to a Modifier of a *SetPoint* head.

- *SetPoint* determines that a Region is part of a set.

   (5)   …procP

                  John   proc'

                      proc   resP (PredP)

          went   *John*   res'

                              res   PlaceP

                                    Place   SetPointP

                          into   Mod   SetPoint'
                                            in
                                                 SetPoint   RegionP

                                                        the room

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- As a modifier, *in* gives the meaning that this set of points ends in an inner place. Thus, it entails that the Region is an inner place, but, as it is an entailment, it doesn't mean that the structure is [to[in]].

- This explains one problem that Noonan (2010) shows for the [to[in]] structure:

(6)   a. She fell in (the pool).
        b. She ran to *(the tree).

(7)   a. *She jumped/ran into.
        b. *It fell into.
                        Noonan (2010:179)

    - If *in* can behave as intransitive in (6)a, why can't it in (7)b?

    → *in* is just a modifier in the structure I propose

- And it could explain the other problem that she presents:

(8)   a. *She put the boxes to the tree.
        b. She put the book into the box/onto the wardrobe.
                        Noonan (2010:180-181)

    - If *to* can combine with *put*, why can't *into*?

    → There is not enough information

1.3. Other possibilities:

Directional constructions with locative Ps:

(9)   John went in the room. → modifier of *res*?

Postpositions in Dutch → lexicalizing *SetPoint* and *the lake* as a modifier?

(10)   Zij zwom het meer in. (postposition)
         She swam the lake in.
         'She swam into the lake'
                        Asbury et al. (2007:3)

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- *in* is an element that lexicalizes a Modifier related to an inner place. Its interpretation depends on its position in the structure:

→ If it modifies *Place*, the interpretation is that the Ground is an inner location.
→ If it modifies *SetPoint*, the interpretation is that the set of points to which the Ground belongs ends in an inner Region.

- Is it possible that an element like *in* modify *proc*? → Verbal prefixes
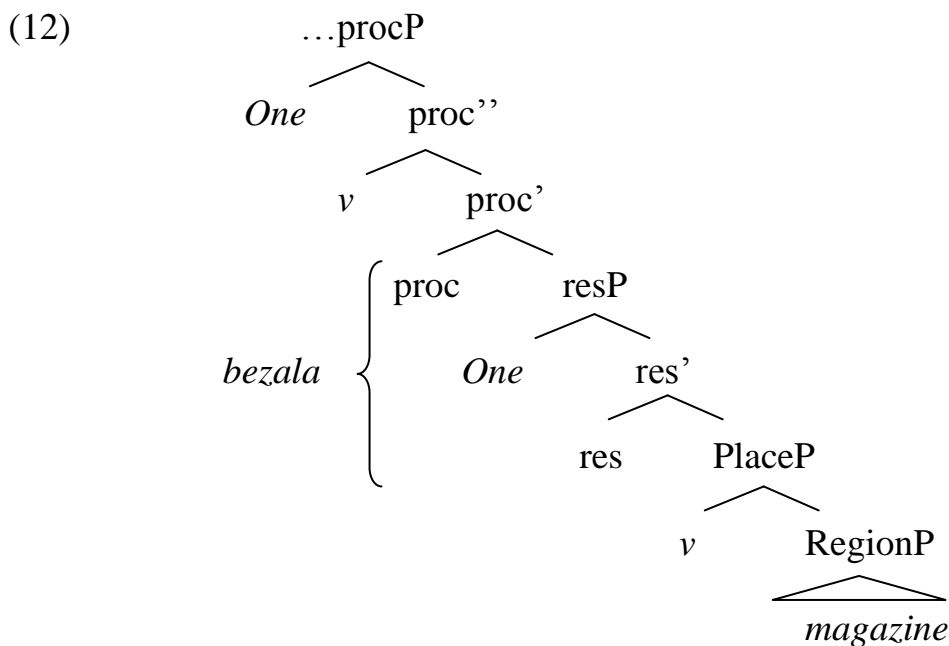

3. Verbal prefixes → One step beyond

3.1. Modifiers of *proc*

(11)   One v-bezala v magazin.
         she V-ran into the shop-ACC
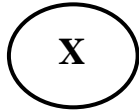   'She ran into the shop.'

Russian: Spencer & Zaretskaya (1998:28)

- Following the idea in Svenonius (2004) that Russian prefixes are phrasal, it is possible to assume that verbal prefixes are modifiers.

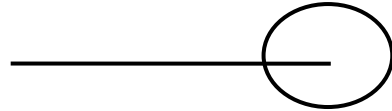- the first *v* corresponds to a Modifier of *proc*:

(12)   …procP
                    ⌄
              One   proc''
                        ⌄
                  v   proc'
                          ⌄
                    proc   resP
                              ⌄
          bezala   *One*   res'
                               ⌄
                          res   PlaceP
                                  ⌄
                            v   RegionP
                                      ⌄
                                   magazine

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in the room:	(X)
into the room:	the room is the last point of the *set* ....( )
v-bezala:	the process ends up in an inner place ——————( )

3.2. Against some tests in favour of a copy analysis

Biskup (2007):

    a. Morpho-phonological similarities between prefixes and prepositions

(13)   Russian and Czech:
          prefix: *v-*
          preposition: *v*

    b. similar lexicosemantic properties

(14)   a. v-bežat'   b. v komnate   (Russian)
        in-run   in room-loc
        'to get into a container by running'   'to be in a container (room)'
                                         Biskup (2007:2)

      → they lexicalize similar features

    c. combination between a prefix and a homophonous preposition

(15)   On na-nes na čerdak mnogo sena.   (Russian)
          he CUM-carried on attic-acc a lot of hay
          'He brought a lot of hay onto the attic.'
                                     Biskup (2007:2)

    → It is true that the prefix and the lower P need to be semantically compatible, but it is possible to have different elements:

(16)   a. Maša   vybežala   na   ulicu.
        M.   out-ran^P.dir.sg.fem. on(to) street.ACC
        'Maša ran out into the street'
                               Russian: Arylova et al. (2005)

b. Ne in aedis   ac-cederes.
   lest in house.ACC at-march.SBJV.IPFV.2SG
   'Lest you should come into the house.'

<div align="right">Latin: Acedo-Matellán (2010:214)</div>

d. prepositions can be multiplied in colloquial Russian:

(17)   Vošel on v dom v tot v zakoldovannyj.
        entered he into house into that into haunted
        'He entered that haunted house.'

<div align="right">Yadroff & Franks (2001, 73)</div>

e. not intervention of a PP between the homophonous prefix and preposition

(18)   a. Popugaj v-letel v komnatu na stol.
           parrot in-flew in room-acc on table-acc
           'The parrot flew into the room, onto the table.'
        b. * Popugaj v-letel na stol v komnatu.
           parrot in-flew on table-acc in room-acc

<div align="right">Biskup (2007:3)</div>

→ this could be due to the position of the goal complement, independently of the presence of the prefix.

f. Asbury et al. (2007), Gehrke (2008): there are no (Russian and Czech) verbal prefixes counterparts of atelic Ps (Gehrke 2008:187), which are exactly those that can't behave as locative constructions.

→ a process is already oriented, so atelic elements don't give new information

→ possibility of more than a single prefix (Svenonius 2004):

(19)   Tonček je **s-pod**-maknil stol.
        Tone is from-under-moved chair
        'Tone jerked the chair away' (Slovenian; Žaucer 2002:37–38)

But, if verbal prefixes are modifiers, why do they seem to trigger changes in:

1. Argument structure?
2. Telicity?

3.3. Verbal prefixes and argument structure

The semantic component that verbal prefixes lexicalize may change the argument structure of the verb:

(20)   v-rezat' zamok v dverj   ∗ rezat' zamok

into-cut^P lock.acc in door.acc   cut^I lock.acc

'insert a lock into a door'

                                    Ramchand (2008:139)

- Romanova (2006:70): "As lexical prefixes head a small clause, they introduce a predicational structure by their own"

→ prefixes don't introduce structure, but allow to have a different one.
If the meaning is that the process ends in an inner place, as in (20) then it is possible to have a result phrase in the structure.

- verbs like *sobrevolar* in Spanish:

(21)   a. *El avión voló la ciudad

b. El avión voló sobre la ciudad

c. El avión sobrevoló la ciudad.

'The plane flew *(over) the city'

3.4. Verbal prefixes and telicity

- In general, telicity is more natural when verbal prefixes are present:

(22)   a. Samoljot pere-letel granicu (*čas).

plane across-flew border hour

'The plane flew across the border.'

b. Samoljot pere-letel granicu za čas.

plane across-flew border in an. hour

'The plane flew across the border in an hour.'

                                    Ramchand (2008:141)

- This is "a surprise if prefixes were indeed modifiers" (Arsenijević 2004:16)

     - Arsenijevic (2006:16): prefixes "necessarily co-occur with a resultative interpretation of the event"

Ramchand (2008): as verbal prefixes are originated as *res* heads, when they are present the result is always telic.

→ In my account, as verbal prefixes indicate the last point of the process, the interpretation is that the process is bounded
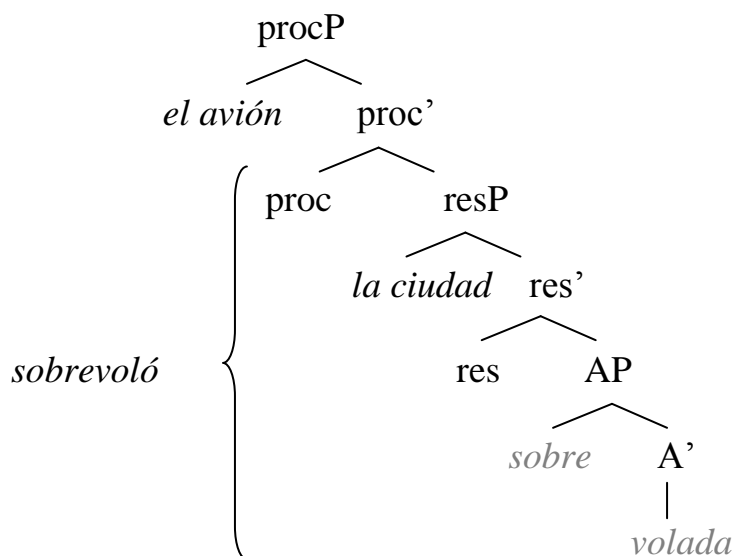
> → Although modifiers are not obligatory, in principle, they may be necessary to have a resultative structure. This doesn't mean that they trigger telicity.

- But, if the verbal prefix doesn't refer to the last point, both telic and atelic readings are possible. For example, in Spanish:
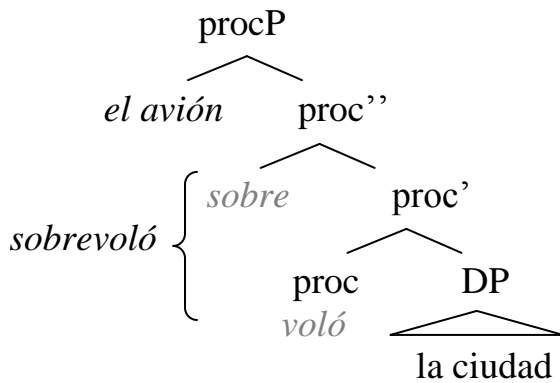
(23)   a. El avión sobrevoló la ciudad en una hora.
         b. El avión sobrevoló la ciudad durante dos horas.
           'The plane flew over the city

→ Telicity is not directly related to prefixes, but to the structure where prefixes appear (see also Filip 2003):

(24)   telic reading:

(25)   atelic/telic reading:

```
                    procP
                   /    \
         el avión      proc''
                       /    \
            ⎧  sobre      proc'
            ⎪            /     \
  sobrevoló ⎨       proc       DP
            ⎪       voló      /  \
            ⎩              la ciudad
```
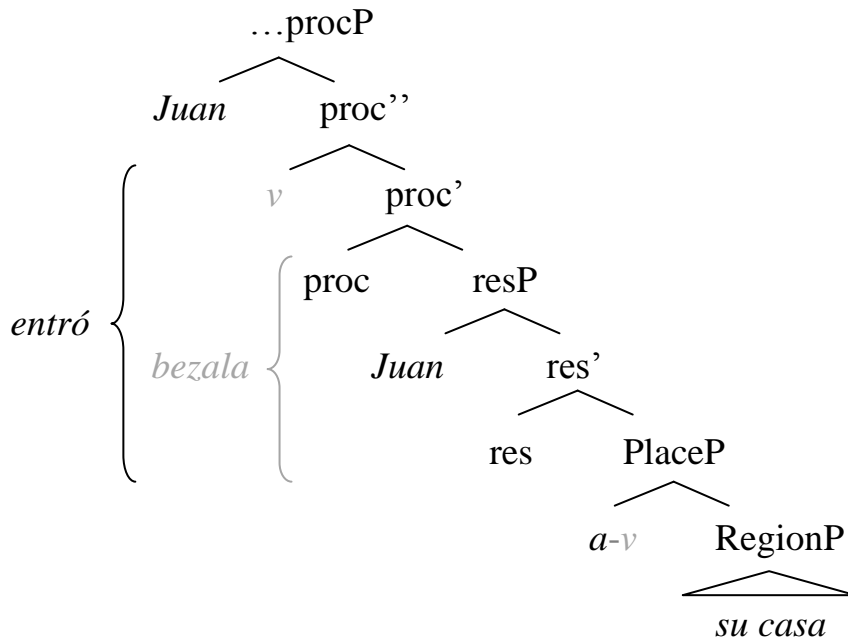
5. Talmy's typology and verbal prefixes:

In Spanish, as a verb-framed language (Talmy 1985, 2000), the modifier lexicalized by verbal prefixes can be lexicalized by the verb:

(26)   Juan entró a su casa

(27)

```
                        …procP
                       /     \
              Juan        proc''
                          /    \
            ⎧         v      proc'
            ⎪               /    \
            ⎪           proc      resP
  entró  ⎨    ⎧               /    \
            ⎪    ⎪         Juan      res'
            ⎪  bezala ⎨            /    \
            ⎪    ⎪            res      PlaceP
            ⎩    ⎩                    /    \
                                  a-v      RegionP
                                           /   \
                                        su casa
```

→ the meaning is that the process goes to an inner place. The goal has to correspond to a closed place.

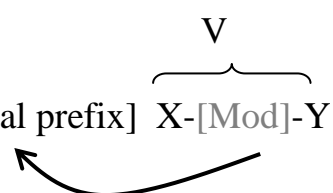- Apparent semantic redundancy, but never structural:

(28)   Juan entró dentro.
        Juan entered inside
        'Juan went inside'

→ Do particles in languages like English correspond to verbal prefixes?
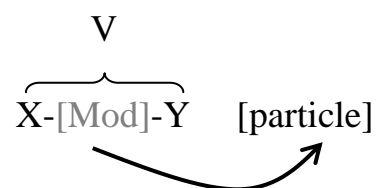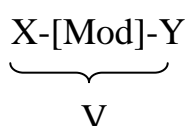(see Romanova 2006)

→ Slipping?

- X-[Mod]-Y

→ Russian: [verbal prefix] X-[Mod]-Y

→ English: X-[Mod]-Y   [particle]

→ Spanish: X-[Mod]-Y

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5. Conclusions

→ A cartographic analysis is necessary to determine the exact part of the structure that a lexical item is pronouncing.

→ A similar meaning may correspond to different structures.

→ Prefixes, particles, prepositions, case suffixes lexicalize different parts of the structure, although they can have similar meanings. If they modify:

- *Place*: they determine the locative configuration.
- *SetPoint*: they determine the properties of the *Place* wrt to the set it belongs to.
- *proc*: they determine the spatial properties of the process.

→ Verbal prefixes are not heads.

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