

Prepositions and External Argument Demotion

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1 Introduction

Hypothesis: Abstractly, all predications consist of an asymmetric relationship between an entity (the external argument) which is being described and a property constructed from a head and its internal argument (Williams 1994).

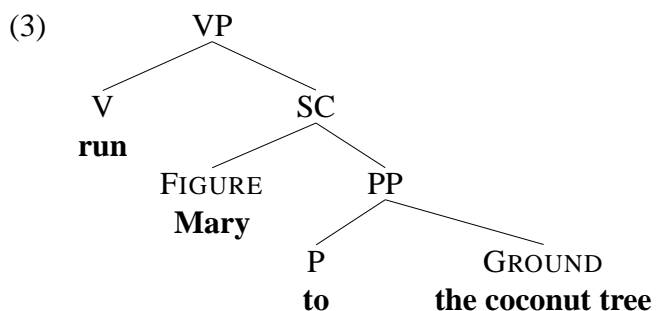
1.1 ‘Transitive’ Prepositional Structures

Prepositions represent an asymmetric relation between two entities in a spatial configuration: the FIGURE is the entity in motion or at rest which is located with respect to the GROUND (Svenonius 1994, Svenonius to appear).

- (1) (a) The helicopter flew the firefighters up the mountain.
- (b) The cook twisted the lid off the jar.

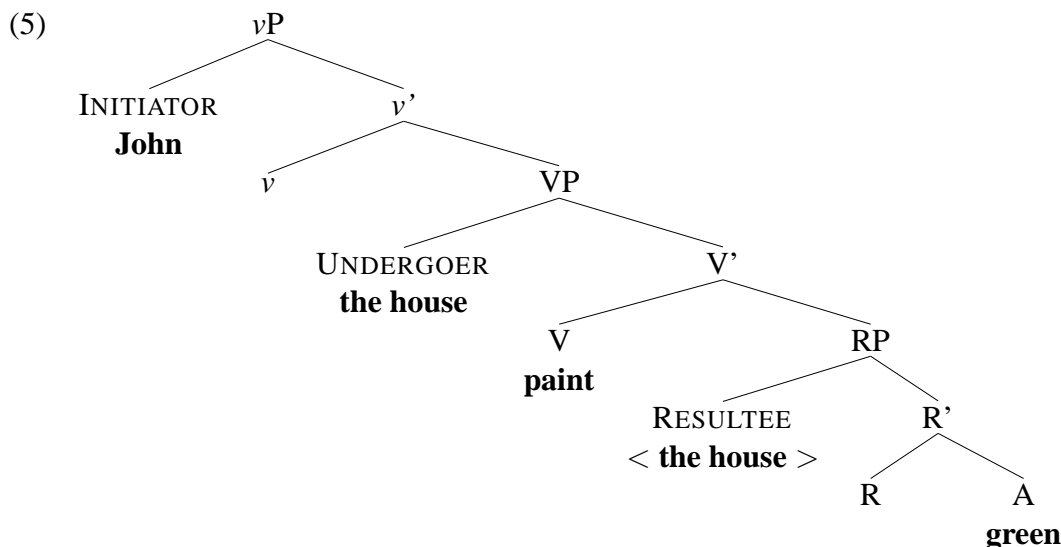
The object of verb may be ‘unselected’ in the sense that it is only licensed by being the FIGURE of the small clause result relation (Hoekstra 1988).

- (2) (a) ??John ran Mary.
- (b) John ran Mary to the coconut tree.



On Hoekstra's account, the surprise is that (4) entails that *John painted the house*. On our account, this is because *the house* moves into the specifier of V and gets an Undergoer theta-role.

(4) John painted the house green.



1.2 Prepositional Phrases as Event Modifiers

Not all prepositional phrases give rise to a complete predicational structure in this sense.¹

- (6) (a) John talked about the movie.
 $\exists e[\text{talking}(e) \ \& \ \theta_{init}(e, \text{'John'}) \ \& \ \text{About}(e, \text{'the movie'})]$
 (b) John talked for three hours.
 $\exists e[\text{talking}(e) \ \& \ \theta_{init}(e, \text{'John'}) \ \& \ \text{Duration}(e, \text{'three hours'})]$
- (7) I bought [_{DP} the dog in the window]

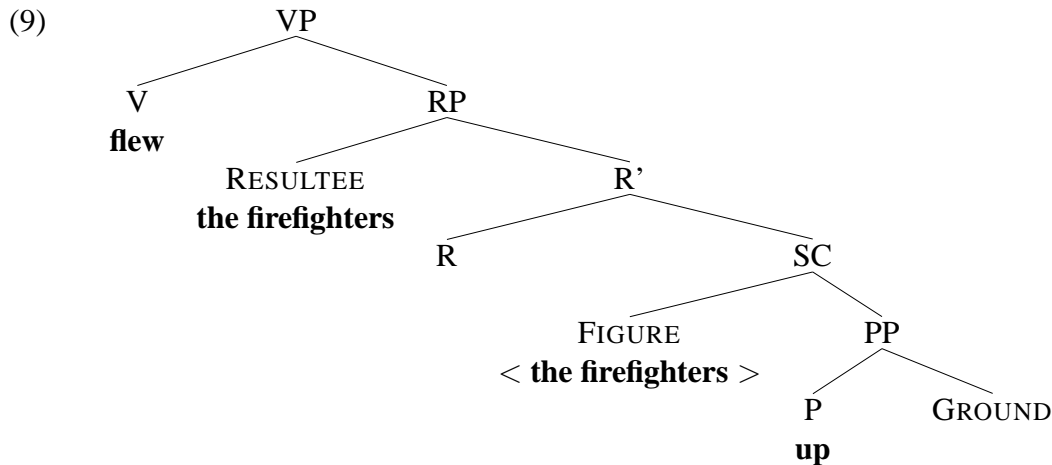
In what follows, we concentrate on the clear cases of FIGURE-GROUND PP predications where the case properties of the higher verb allow both arguments to be seen, bearing in mind however, that some uses of PPs seem to be 'event' modifiers.

1.3 'Intransitive' Prepositions

Essentially the same structure for the verb-particle construction: Svenonius (1996), Svenonius (2003), Ramchand and Svenonius (2002), inter alia.

- (8) (a) The helicopter flew the firefighters up.
 (b) The helicopter flew up the firefighters.

¹In the Davidsonian representations we use the thematic role label INITIATOR for the external argument, UNDERGOER for the theme which undergoes change, and RESULTEE for the argument which achieves a final state, following Ramchand 2003.

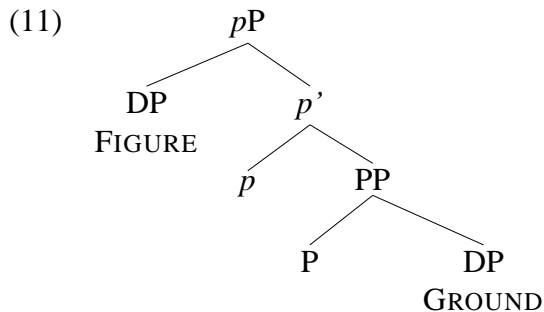


What is the structure of the SC in (9)?

On analogy with v (cf. Kratzer 1996), There is a head p responsible for introducing the external argument of the preposition (cf. the v of Kratzer 1996 inter alia; on the complex structure of P, compare Riemsdijk 1990, Rooryck 1996, Koopman 2000, Zeller 2001).

- (10) P c-selects the Ground.
P does not c-select the Figure

(Svenonius to appear).



Question: Are there prepositional phrase analogues of (i) passivization and (ii) unaccusativity?

2 Assumptions about the Verbal Passive

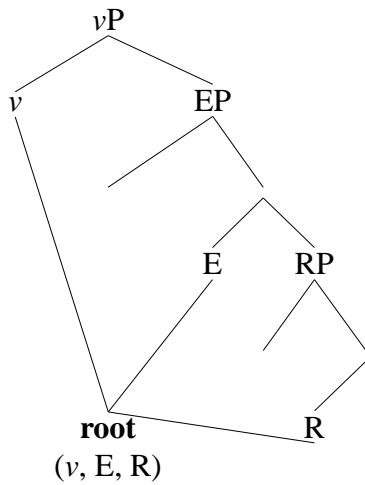
There is a salient external argument in the passive construction, not so in the unaccusative.

- (12) (a) The ship was sunk to collect the insurance.
(b) *The ship sank to collect the insurance
- (13) (a) The ship was sunk by the enemy.
(b) *The ship sank by the enemy.

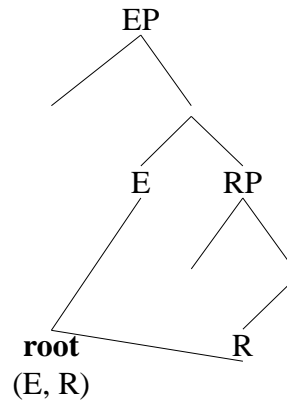
Analysis: Passives have v , Unaccusatives do not.

Roots have category features for v , E and R (adopting the verbal decomposition of Ramchand (2003) into initiation (v), process (E) and result (R)).

(14) PASSIVE



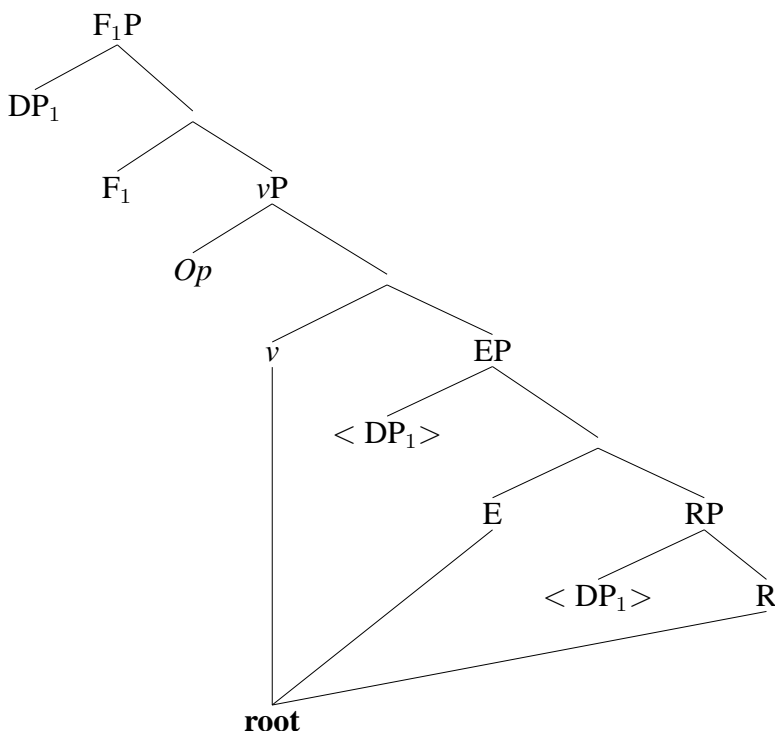
UNACCUSATIVE



Passive

- The perfective/passive participial morphology allows the root to identify R (result state), and also removes the ability of the root to agree with Tense— the participial morphology is *not* itself ‘passive,’ just necessary for it.
- The root identifies *v* but instead of projecting an argument in Spec, an operator is merged which existentially binds that position. This existential binding is one component of the passive.
- There is a higher head, F_1 , which contains an EPP feature which forces raising of an argument to its specifier position. The constituent formed by merging F_1 with the trace-containing element is interpreted as property abstraction over the trace position. This property is predicated as a *resultative* property of the argument in its Spec. This is the second component of the passive.

(15)



(16) for the F_1P in *A house was built*

$[[F'_1]] = \lambda z [\text{BECOME } \lambda x \lambda e \exists y [\text{building}(e) \ \& \ \text{Initiator-build}(e,y) \ \& \ \text{Undergoer-build}(e,x) \ \& \ \text{Resultee-build}(e,x)] (z)$

This interpretation of the passive has a number of features that allows us to capture the generalizations we need, and distinguish it from unaccusatives.

(i) The agent exists implicitly, and its selectional properties from the root verb remain even though it is not obligatorily expressed (cf. examples (12) and (13)).

(ii) The passive can only apply to verbs that already have a little v in their lexical specification (i.e. it cannot itself be a special v head that is added to verbal structures, otherwise we would predict the passivizability of unaccusatives).

(iii) The agent suppressing function is separated from the object raising function of the F_1 , a point that will be important later to capture crosslinguistic differences.

(iv) The semantics of *BECOME* is necessary to give the eventive properties of the whole, and to account for the ‘result’ semantics. This too is separable from the raising head, since we can find it in adjectival perfect participles in the construction of nominal modifiers (17).

- (17) (a) The fallen man.
(b) The broken window.
(c) The cut rope.
(d) *The danced man

Under this story, neither the participial morphology nor the auxiliary verb *be* can be strictly identified as the passive. Rather, we have decomposed passive into its necessary components, each of which can be found in other constructions.

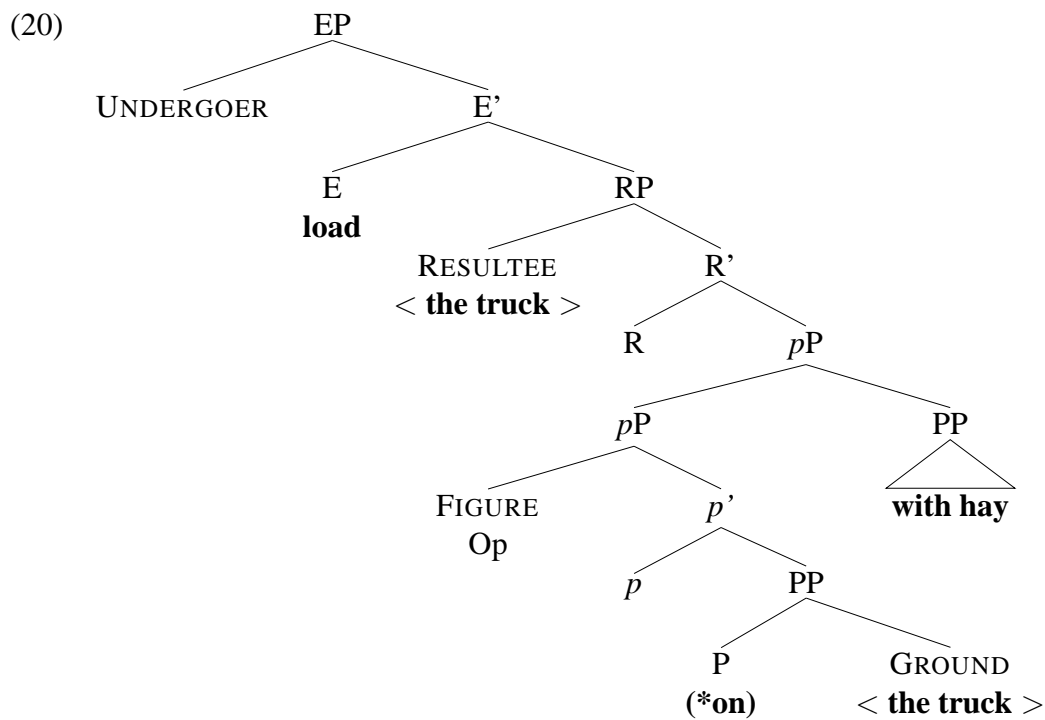
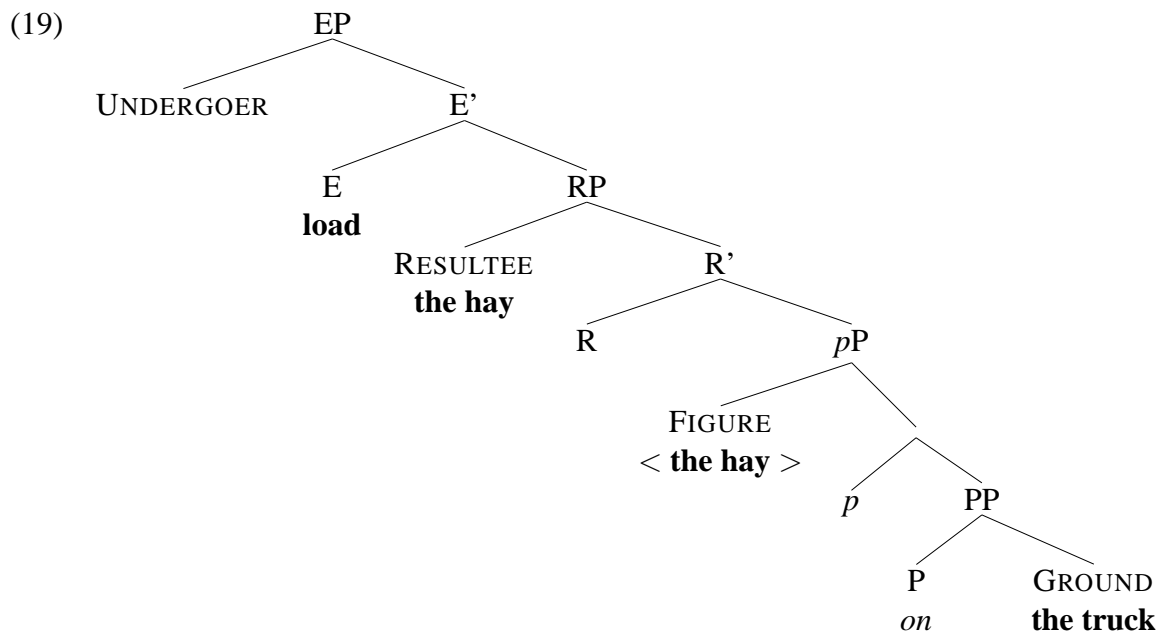
3 The Spray-Load Alternation

If the equivalent of passive prepositions is to be found, there are the following expectations.

- (i) The *FIGURE* should still be present to be picked up by adjuncts.
(ii) The *GROUND* should be ‘raised’ to the position otherwise occupied by the *FIGURE*.

- (18) (a) John loaded hay on the truck.
(b) John loaded the truck with hay.

Under a small clause analysis of these constructions, ‘the hay,’ in addition to being the thematic object of ‘loading,’ is also the *FIGURE* of the prepositional ‘on’ relation, while ‘the truck’ is the *GROUND*.



Problems:

-Why is it not always possible to form the 'passivized' alternative for all verbs that take a locatum and a location (cf. (21–22))?

- (21) (a) John put the book on the table.
 (b) *John put the table with books.

- (22) (a) John poured water on the plants.
 (b) *John poured the plants with water.

-Why does the passivized preposition completely disappear in these forms?

4 Verb-Particle Constructions with GROUNDS

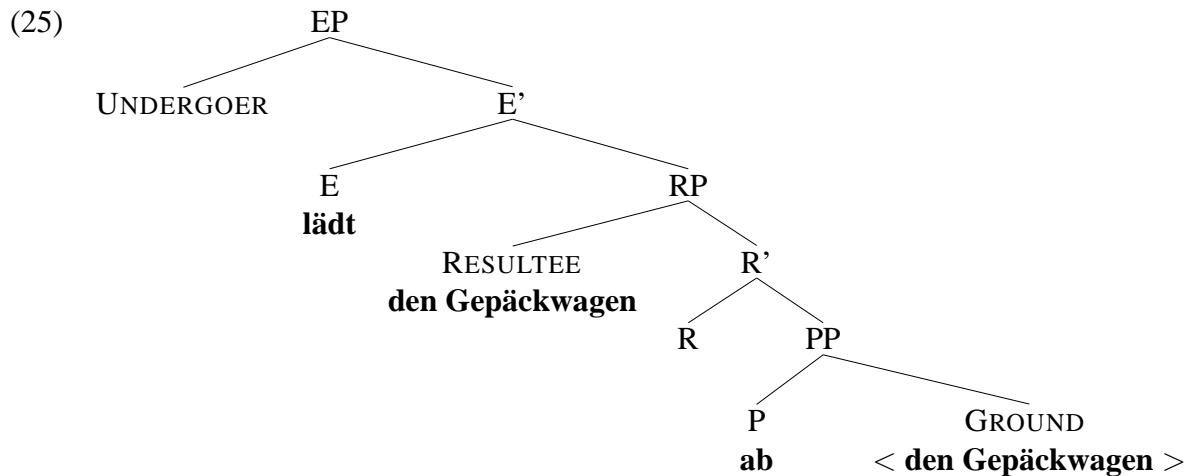
Some Germanic languages allow Verb-particle constructions with GROUNDS (Svenonius 2003); these resemble *spray-load* but without P disappearing.

- (23) (a) Er lädt die Koffer ab German
 He loads the suitcases off
 ‘He loads the suitcases off.’
 (b) Er lädt den Gepäckwagen ab
 He loads the baggage cart off
 ‘He loads the baggage cart off.’

- (24) (a) Ingrid smeert henna in haar haar Dutch
 Ingrid smears henna in her hair
 ‘Ingrid smears henna in her hair.’
 (b) Ingrid smeert haar haar in (med henna)
 Ingrid smears her hair in with henna
 ‘Ingrid smears her hair (with henna).’

Note however, that not all such particle constructions allow the expression of the FIGURE by means of an adjunct.

Svenonius (2003) analyzes these as ‘unaccusative’ prepositions.



5 Passivizing Prefixes (Romanova 2004)

Russian lexical prefixes parallel the Verb-particle constructions of Germanic in many ways (cf. Svenonius 2004).

LPREFIX-V DP_{Figure}

- (26) *v-litj vodu* – in-pour water.
vy-katitj telegu– out-roll a cart.
za-katitj telegu—behind-roll a cart.
iz-litj dušu — away-pour soul.

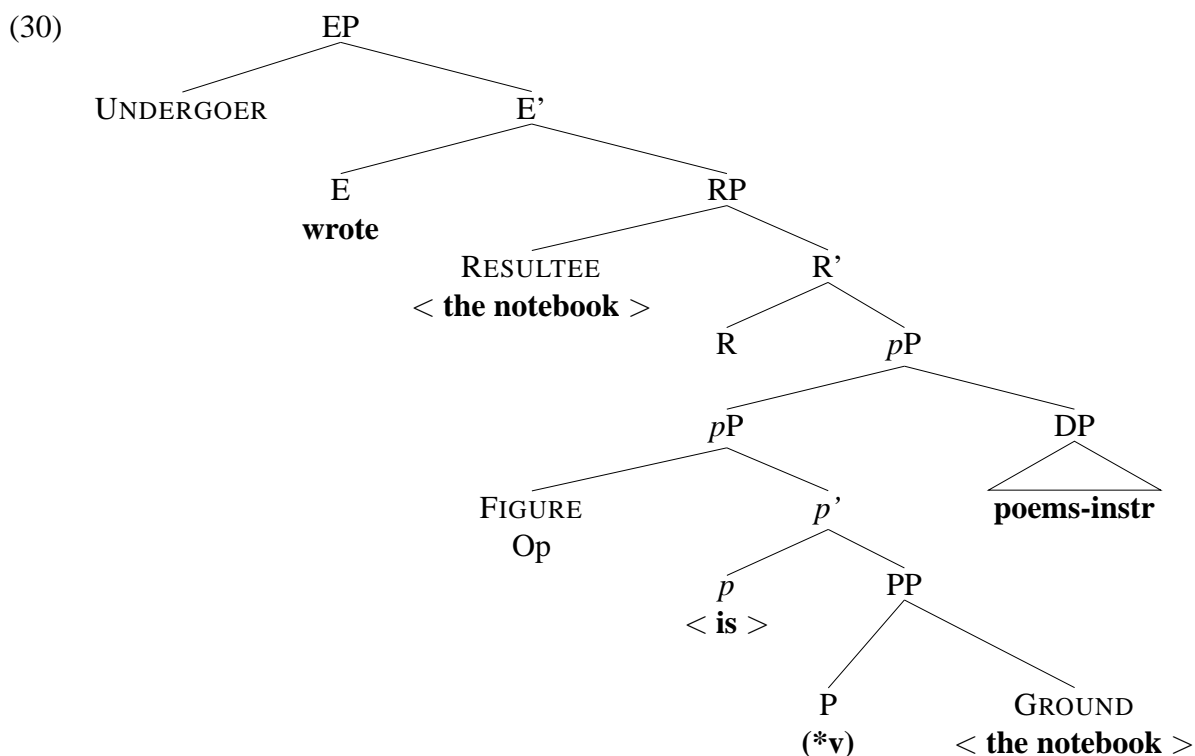
LPREFIX-V DP_{Ground}

- (27) *o-katitj sosedo vodoj*– around-roll a neighbour (with water)
ob-sypatj tort pudroj– around-spill a cake (with sugar powder).

- (28) Jussi pisal stixi v tetradj Russian
 Jussi wrote^I-3SM poems-ACC into notebook-ACC
 ‘Jussi was writing poems into the notebook.’

- (29) Jussi ispisal tetradj (stixami)
 Jussi **is**-wrote-3SM notebook-ACC poems-INSTR
 ‘Jussi used up the notebook by writing poems in it.’

Romanova (2004) analyses these cases as passivization of an initial small clause structure with a prefix in the higher *p* position. Passivization induces a change in morphology, converting the original little *p* head to *is*-, which then raises to prefix to the verb.



The FIGURE, being suppressed, is expressed optionally as an instrumental adjunct, while the GROUND promotes to become the direct object of the Verb-prefix combination.

However, like the Germanic case, there are also cases of apparent GROUND promotion to direct object, where no adjunct is possible. This seems to be true with the prefix *pere*-‘across’.

- (31) Vasja pereplyl reku Russian
 Vasja over-swam^P-MS river-ACC
 ‘Vasja swam across the river.’

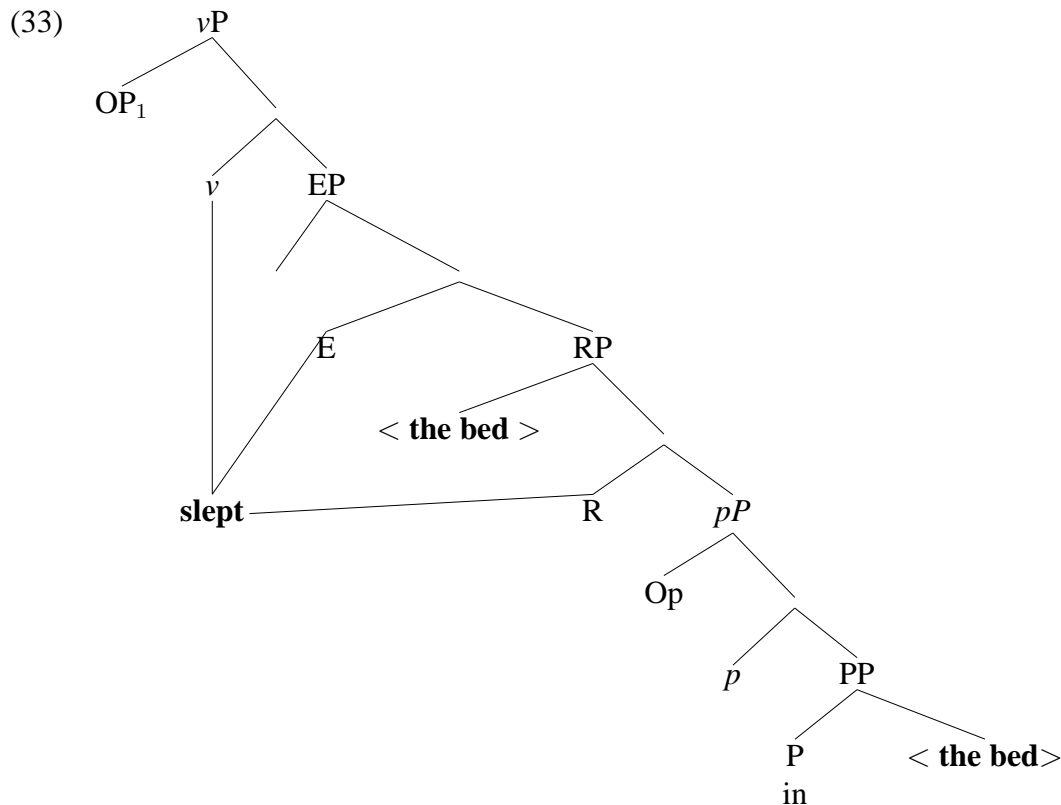
Problems:

- Why does the preposition change into a completely different one under ‘passivization’?
- What is the difference between the forms that allow FIGURE ‘adjuncts’ and those which do not?

6 Pseudopassive

The GROUND of the preposition is promoted all the way to the subject position of the clause, getting nominative Case.

- (32) (a) This bed was slept in by Napoleon.
 (b) These carpets have never been walked on.



- Special properties of pseudopassive mirror those of intransitive impersonal passivization in languages like Norwegian (Åfarli 1992).

-no unaccusatives

- (34) (a) *The bed was died in.
 (b) *The border was come to.
 (c) *This bowl was melted in (by the chocolate).

- (35) (a) *Det blir mørkna
 It becomes darkened

Nynorsk

- (b) *Det vart kome av utsendingen
 It was come by the messenger

-no non-actor subjects

- (36) (a) The chair was stood on by John.
 (b) *The chair was stood on by the lamp

(37) Det vart stått på bordet av mannen
It was stood on the table by the man
'There was stood on the table by the man'

Nynorsk

(38) *Det vart stått på bordet av vasen
It was stood on the table by the vase

This shows that the restriction is related to the passivization of unergatives and not to any independent 'prepositional' passivization.

-if the structure really were as in (36) above, we would expect the possibility of the intermediate passivization of just the preposition, giving the equivalent of the German GROUND-particle constructions, contrary to fact (see Svenonius 2003).

(39) (a) *They ran the house out.
(b) *She smeared her hair in (with henna).
(c) *She stuck the cushion in (with a pin).

6.1 Constraints on Pseudopassivisation

There are a number of different constraints operating on pseudopassive in English, as is well known from the literature (Couper-Kuhlen 1979).

-No non-stranding prepositions

(40) (a) Mary lived across the street.
(b) * Which street did Mary live across ?
(c) * The street was lived across by Mary.

-No 'high' PP adjuncts

(41) (a) *Ten minutes were played for.
(b) *Sheer boredom was slept from.

-Object of preposition must be construed as attaining a relevant/salient 'resultant' state.

(42) (a) This bed has been slept in.
(b) ??This bed has been slept beside.
(43) (a) These woods have never been walked through before.
(b) ??These woods have never been walked next to before.

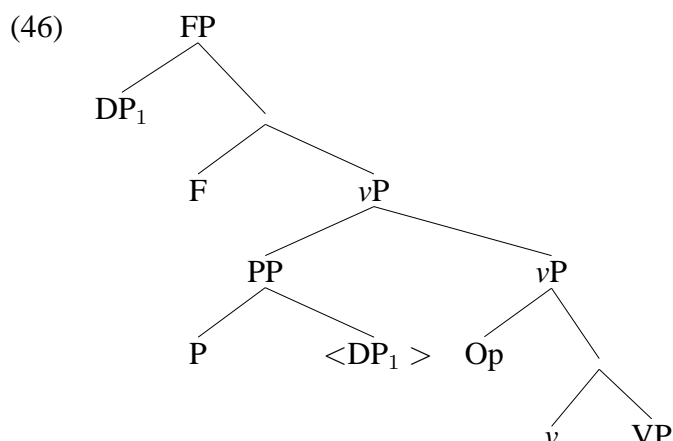
In the following, we see successful pseudopassivisation with (a) an instrument PP, (b) a locative PP, (c) a directional PP, (d) a benefactive PP.

(44) (a) These dolls have been played with.
(b) The bed was slept in.
(c) The tunnel was passed through.
(d) Mary was provided for.

-Pseudopassives can also be the input to adjectival constructions, whether from reduced relatives or not.

(45) (a) Mary is well provided for.
(b) That was an unlooked for compliment.

6.2 Pseudopassivization as Passivization



The verbal passive analysis predicts:

- Same constraints on external argument demotion as in the intransitive passives
- Restriction to PPs in the c-command domain of the passive head(s).
- Same ability to form reduced relative and stative adjectival constructions based on property abstraction
- The restriction on the affectedness of the prepositional object can be seen to derive from the felicity conditions on property abstraction— the property in question needs to be construable as a salient distinguishing feature of the prepositional object which arises because of the event
- Because the resultative semantics of the F head is distinct from the result expressed within an accomplishment, it is technically possible to predicate such a resultative property of a DP (in this case the prepositional object) which is not actually the RESULTEE in the verbal domain.

The PPs under this analysis must be ‘unaccusative,’ since the object of the preposition receives nominative case.

7 Conclusion

- I Prepositions show evidence of the same kind of predicational structure as verbs: they come in transitive, unergative and unaccusative varieties
- II The process which existentially binds/operates over the external argument in the verbal passive seems to be thematically restricted, and there is no clear evidence of it operating within the prepositional domain.

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