

Why a bed can be slept in. On the passive of prepositional verbs in English

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0. Introduction

Prepositional verbs in English (PrVs) like *laugh at*, *sleep in*, *tamper with*, *talk about* etc., allow for a passive construction – the so-called prepositional passive (PPV) or pseudopassive – which differs from a canonical passive w.r.t. the position the subject NP is extracted from:

- 1) a [TP John_i was [_{VP/VP} laughed [_{PP} at [_{DP} t_i]]]]
b [TP John_i was [_{VP/VP} hit [_{DP} t_i]]]

Although they are often subsumed under phrasal verbs, PrVs differ from them in being modified by a P that behaves like a “real” preposition, i.e. taking a DP object, and not like a particle:

- 2) a John looked **up** *the word* in the dictionary
b John looked *the word* **up** in the dictionary
c John looked *it* **up** in the dictionary
d *John looked **up** *it* in the dictionary
- 3) a John looked **up** *the roof*
b *John looked *the roof* **up**
c *John looked *it* **up**
d John looked (carelessly) **up** *it*¹

As for the passive construction, if all prepositional objects (POs) could be extracted from inside the PP, no restriction on passivization would be expected, which is not the case:

Restrictions

(i) no unaccusative Vs allowed:

- 4) a John comes from Chicago
b *Chicago is come from (by John)
c The garden swarms with bees
d *Bees are swarmed with (by the garden)

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1 However, the question *What can I do you for?* is possible in a playful sense instead of *What can I do for you?*

(ii) no non-stranding Ps:

- 5) a Mary lived across the street
b *Which street did Mary live across?
c *The street was lived across by Mary

(iii) no stranding with “high PP adjuncts”:

- 6) a This house has been saved for (i.e. money has been put by to purchase this house)
b *Years have been saved for

(iv) “object of the P must be construed as attaining a relevant/salient ‘resultant’ state²” (Ramchand & Svenonius 2004):

- 7) a This bed was slept in
b *This bed was slept near (by John)

(v) no expletive subjects: the subject of a PPV must be its prepositional object, no expletive subject being allowed (differently from e.g. German or Swedish impersonal passives):

- 8) a *There/*it was slept in this bed
b Det har sovits i den sängen (Swedish)
There has slept-PASS in this bed.the
“People has slept in this bed”

(vi) P-stranding as result of wh-movement occurs more freely than as result of NP-movement:

- 9) a Which city does John come from t_{wh} ?
b *This city is come from t_{DP} (by John)
c Who did you look at t_{wh} that night?
d John was looked at t_{DP} that night
e Who did Sam talk to Harry about t_{wh} ? (Hornstein&Weinberg 1981)
f *John was talked to Harry about t_{DP}

Notice that among European languages Swedish (see 8b and 10d) displays the similar phenomena as English. In Dutch and German there is a class of inseparable verbal prefixes which often act as “transitivizers” alternating with Ps:

- 10) a Ik woon *(in) dit huis (Dutch)
I live in this house
b Ik *(be)woon dit huis
I PREF-live this house
c Ik bewoon (*in) dit huis
I PREF-live in this house
d Den här ugnen har (det) bakats i (Swedish)

2 We will see that this ‘relevant/salient resultant state’ will turn out to be crucial in the analysis proposed here.

This oven-the has baked-pass in
'Someone has baked in this oven'

I will propose that the analysis of English PrVs also carries over to Dutch inseparable prefixes.

Road map: pin down the properties of the PrVs that can passivize. Why just a subclass of PrVs can? Propose a ν P/VP structure taking these issues into account.

1. Tackling the puzzle

1.1 The Reanalysis way

The DP subject of a PPV starts out as the complement of a P which could be taken to possibly assign case to it, the P-domain being opaque to higher probes (e.g. V, I/T). However, previous research (Hornstein&Weinberg 1981; Kayne 1981 a.o.) has focused on P being unable to case-mark its complement for various reasons, which boil all down to a process of Reanalysis, where P enters into constituency with V:

11) **Reanalysis:** $V + PP \rightarrow (V+P) + DP$

Since P no longer heads a PP, the DP is a possible goal for a higher probe like I/T.

The solution proposed by Hornstein & Weinberg (1981) hinges on three assumptions:

- i. A universal filter of the form $*[NP \text{ oblique}]$ which states that silent NPs cannot be marked oblique³.
- ii. A general syntactic rule of Reanalysis $V \rightarrow V^*$ (where V c-commands all elements in V^*).
- iii. Case-marking rules occur after all transformation rules have applied (in particular, NP is marked [+oblique] if it is governed by P)

“[t]he only way to allow movement of a wh-element directly governed by a preposition is to prevent its trace from being marked oblique⁴. [...] the preposition can strand only if the Reanalysis rule can apply to “absorb” the preposition into the verb, i.e. if the PP is immediately dominated by VP”. (Hornstein&Weinberg 1981:63).

In a similar vein, Kayne (1981) assumed that the presence or absence of P-stranding in English and French respectively do not have to do with presence or absence of a Reanalysis rule – since French has V-NP (*Je veux que soit [mis fin] à la guerre*) and V-V (causatives) but no V-P Reanalysis. It is held that in French V governs NP structurally while P governs NP in the sense of subcategorization: if two elements do not govern in the same way they cannot enter Reanalysis together.

1.2 Why Reanalysis turns out to be problematic

(i) all PPs are seen as “adjuncts”: the distinction “dominance by VP” vs “dominance by S” does not capture all cases (cf. 12b); (ii) *semantic restrictions* on the internal DP end up being unaccounted for (12c):

3 It was assumed that NPs governed by Ps were assigned oblique case, differently from NP s governed by V.

4 See also van Riemsdijk (1978) who assumed a COMP node in PP (a P'') acting as “escape hatch” for wh-movement.

- 12) a This bed was slept in
b *This bed was slept near
c *New York was slept in

(iii) as Reanalysis is a syntactic word forming rule, no element is expected to turn up between V and P in a PPV configuration; however, this is not the case (cf. the English and Swedish examples in 13):

- 13) a John was spoken *critically* to
b Den här sängen har sovits *bekvämt* i (Swedish, Klingvall 2012)
this bed.the has slept-PASS comfortably in

However, some grammars rule out the presence of adverbs very sharply (data taken from my questionnaires):

- 13) c *This bed was slept repeatedly in
d *These proposals should be gone very carefully into
e These proposals should be gone into very carefully
f *?Mary delved completely into this issue

The analysis pursued here might shed light on this contradictory set of data.

1.3 Recent proposals.

Klingvall (2012) assumes that DP extraction from inside a PP is not case-driven; rather, it instantiates a case of topicalization and is therefore feature-driven. Taking Swedish PPVs into account she puts forward that the movement of the P-internal DPs be feature-driven: an obligatory movement is assumed due to agreement between a head in the C-layer and a phrase marked with a Top feature. Movement will target C directly, possibly moving via T (to satisfy T's EPP).

Space reasons do not allow me to devote attention to other frameworks which have dealt with this issue, like the Case Grammar Framework: Couper-Kuhlen (1979) and Westergaard (1977) among others assume that “deep case configurations” are crucial in determining whether a PrV can undergo passivization. More recently Castillo (2008), following the lead of Couper-Kuhlen, has capitalized on the features of arguments according to scales of animacy.

2 What is argued for here: “Incorporation without incorporation”

Following up on the lines of Baker (1988), I keep up the idea of incorporation to account for English PrVs: in what follows, I just try to rejig the structures and the projections he proposed, remaining faithful to the general idea.

2.1 Baker (1988) on PPVs in English

According to Baker, English PPVs can be accounted for in terms of abstract incorporation of P onto V (covert movement at LF). Preposition incorporation is believed to occur since there could not be passivization without it. To prove it, Baker compares English and Chichewa, a Bantu language, where no P-stranding is allowed: no NP can be extracted from a PP (either via NP- or wh-movement):

- 14) Msangalatsi a-ku-yend-a **ndi** ndodo (Baker 1988:260)
 Entertainer SP-PRES-walk-ASP **with** stick (SP=*Subj. agreement prefix*)
 “The entertainer is walking with a stick”
- 15) *Ndodo i-ku-yend-edw-a ndi
 Stick SP-PRES-walk-PASS-ASP with
 “the stick is being walked with”

However, if P incorporates onto V in an applicative⁵ construction (showing up as a suffix) the applied object can become subject of the passive:

- 16) Msangalatsi a-ku-yend-**er**-a ndodo
 Entertainer SP-PRES-walk-**with**_{Appl}-ASP stick
 “The entertainer is walking with a stick”
- 17) Ndodo i-ku-yend-**er**-edw-a
 Stick SP-PRES-walk-**with**-PASS-ASP
 “the stick is being walked with”

According to Baker, the V-P complex governs what the P governed before it moved: in other words, the object is properly governed by the V-complex. In English the derivation is the same but is taken to occur at LF.

3. Looking into *vP*

My analysis of English PrVs basically boils down to the following assumptions:

- i. *vP*'s⁶ make-up: [VoiceP [ApplP [FP/AspP [V]]]] along the lines of Pytkänen (2002)
- ii. VoiceP distinct from *vP* (Harley, 2013, a.o.)
- iii. P heading the Applicative Projection inside *vP*
- iv. DP object of the PrV merged in the specifier of a dedicated functional projection
- v. In PPVs, DP object of the PrV promoted to Spec,T, being a suitable goal for T

The whole event can be thought of as the composition of two subevents: an applicative event (e_1) taking the verbal root as subevent (e_2). ApplP is a functional head instantiated by the P; the complement of ApplP is a functional projection, that comes with ApplP, where the “prepositional” object is merged. This position is possibly connected with inner aspect (*aktionsart*); cf. Ramchand's (2007) *resP*.

In Sigurðsson's (2012) terms, Appl can be considered a Voice category itself since it alters argument structure; furthermore, arguments are assumed to be event-licensed by specialized heads, Voice → ext. arg.; *v* → DO; Appl → IO.

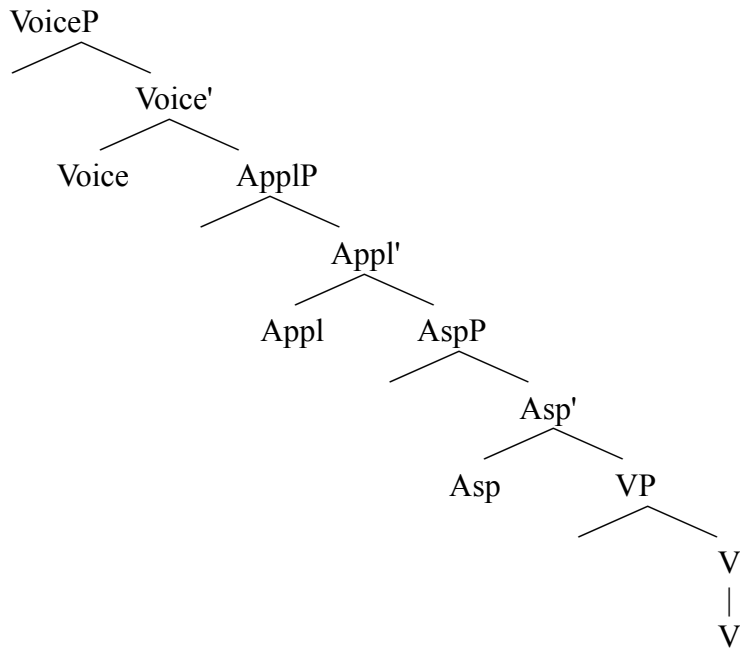
My argument slightly differs from Sigurðsson's in inferring that the Applicative head does not host the applied argument in its Spec: I take it to be a probe searching the downstairs projection AspP/*resP*.

5 **Applicative constructions** feature a V bearing a specific morpheme licensing an oblique (non-core) argument that would not be otherwise considered part of the verb's arguments. Applicatives are widespread in very many African languages. In English constructions with dative/accusative affected arguments are applicative constructions with a silent applicative marker (Marantz 1993).

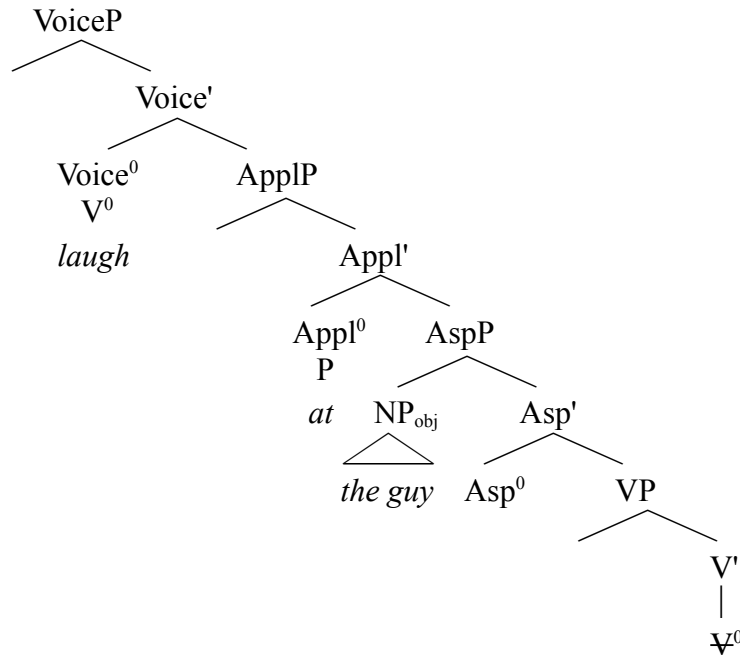
6 In much recent work (Ramchand 2012; Harley 2013 among many others) *vP* has been taken to display a rich inner structure; see also Nicol (2002) for *vP*-internal encoding of aspect with English phrasal verbs.

3.1 Derivation:

18)



19)



- i. the “prepositional object” NP is merged in Spec,AspP;
- ii. V⁰ moves past Asp⁰ to Voice⁰ where it ends up being adjacent to the applicative head. (Spec,AspP accessible for high probes like T → passivization OK).
- iii. Objects of PrVs are affected objects in the sense of Tenny (1987), Borer (1993), Fagan (1992) and Egerland (1998) among many others: *a slept-in bed* or *a laughed-at guy* are not affected in the same way as *an eaten apple* (purely affected object) or *a performed play* (delimited object) are; ‘sleep in a bed’ is an event in the same way as ‘sleep’ is; yet, the PO attains a resultative state as the object of the applicative event (V+P).

3.2 Basic unergativity of PrVs

Even if a PrV may consist of either a transitive V (*attend, bear, beat, break, call, deal, draw, drink, hear, learn, peck, pick, read, save, smell*⁷,... etc) and a P or an unergative V (*cope, delve, pander, peep, etc...*) and a P, I argue that all Vs entering a PrV construction be merged as unergative Vs even if they are transitive, their internal argument position being not accessible → the relevant merging position of the object is granted by AspP/resP.

Moreover, PrVs taking a direct object (along with a P) seem to be marginal or idiomatic. My consultants ranked 1 or 2 out of 3 (3 meaning ‘grammatical sentence’) sentences under 20:

- 20) a *These documents have been made *effective use* of by the attorney
 b *?Don’t worry about your children: they’ll be taken *good care* of

3.3 On the adjacency V-P

As we have seen, the fact the V and P have to be adjacent is not always borne out: some speakers allow for adverbial phrases to turn up in between, at least in some cases – see ex. under (13) and (21):

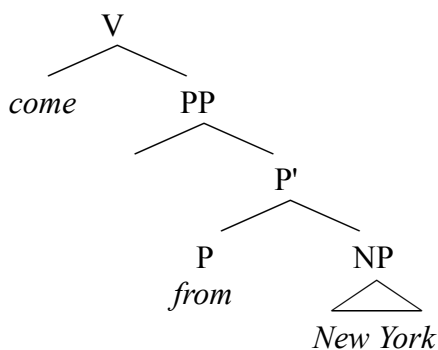
- 21) a %your family has been provided very well for
 b %This issue was delved completely into

If PPVs were accounted for in terms of incorporation we could not explain why – at least in some grammars – the sequence can actually be broken. Moreover, the expected order would be *P–V due to Kayne’s LCA.

3.4 Non-passivizing PrVs

a) “Intransitive” class: Unaccusative PrVs fail in general to passivize. My stance on this is that – quite obviously – unaccusative Vs are merged with a PP headed by a preposition → no NP extraction from inside it, no promotion to Spec,TP.

22)

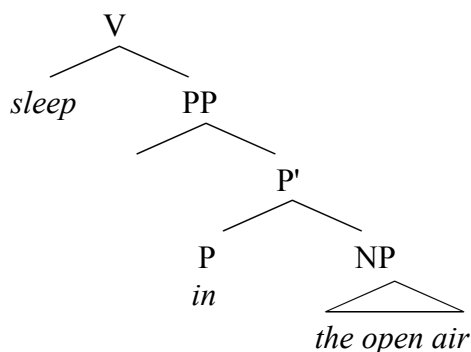


⁷ Only ‘smell at’ like in *This lamp post is smelled at by all dogs in the neighborhood*; ‘smell of’ is unaccusative and does not allow for passivization **Whisky was smelled of by John*, see §3.4.

b) PrVs selecting for unaffected objects cannot have a passive form:

23) *The open air was slept in

Phrases like “Sleep in the open air” or “sleep in New York” are different from “sleep in this bed” in the non-affectedness of the POs. I propose such PrVs be subsumed under the “intransitive” class⁸:



3.5 Generalization: Applicatives in different languages.

Bantu	Dutch	English
<i>inner morphology</i>	<i>prefixation</i>	<i>preposition</i>
-...-V- Appl -...- a-ku-yend- er -a	pref _{Appl} - V be -woon	V P _{Appl} sleep in
Incorporation of verbal morphology	Incorporation from Spec (Den Dikken 1995)	P heading ApplP – no incorporation

Hypothesis: (i) Bantu applicative morpheme (Appl⁰) directly incorporated via V movement; (ii) Dutch/German ‘be-’ as spell-out of Spec,ApplP.

As for Dutch/German, my proposal is reminiscent of Hoekstra’s (1992) who analyzed separable prefixes as P which incorporate into the verb:

[... P_i-woon [SC ik [t_i dit huis]]

This analysis suggested that inseparable prefixes can be treated as an autonomous syntactic category – P – and there is therefore an alternation between prefixes and full PPs.

Along the lines of Hoekstra, Damonte&Padovan (2011) extended this view by proposing that German (and Dutch) inseparable verbs derive from “prepositional” prefixes incorporating onto the verbal head. In particular, the syntactic mechanism which allows a non-argumental/adverbial P to

8 However, in my questionnaires a clear-cut difference in the acceptability between (i) and (ii) turned up:

(i) *Color was blazed with (by the garden)

(ii) *?The river was finally come to

The presence of a GOAL may be responsible for the different behaviors of the two unaccusative classes of verbs.

incorporate onto the verb as a prefix (respecting antisymmetry) is head-incorporation from a specifier (den Dikken (1995)):

- 22) a [F1P [... PREF ...] F1° ... [F2P [...PREF...]] F2° ... VP ...
b [F1P [...PREF...]] F1° ... PREF_i-V_j [F2P [... t_i ...]] F2° ... t_j ...

I take Dutch and German inseparable prefixes to lexicalize the Spec of ApplP.

a) *PrVs of the Applicative class; some verbs represent a semantic subclass; **Passive OK**.*

Attend to, agree with, apply for, beat at, believe in, break into, burst into, call for, cater for, conceive of, delve into, dispense with, drink to, gaze (glance; glare; peep; peer, squint, stare) at, hammer (pound) at, hear from, jump into, jump on, learn from, listen to, look at, lie on, pander to, pick at, pick on, play with, save for, sit in, sleep in, sleep on, speak to, talk about, tamper (interfere) with...

b) *PrVs of the “intransitive” class; some verbs represent a semantic subclass; **Passive ***.*

Awake from, blaze with, burn with, circulate through, clash with, come from, come to/at, die for, draw with, go at, glisten/glow with, go up, grow into/from, , return from, smell of, swarm with, pass for, run between...

References

- Baker, Mark C. 1988. *Incorporation: a theory of grammatical function changing*. The University of Chicago Press.
- Borer, Hagit. 1991/1993. “Derived Nominals.” Ms., University of Massachusetts, Amherst
- Castillo, Concha. 2008. “The class of prepositional passivizable verbs in English”, *Acta Linguistica Hafniensia* 42.2,143-174.
- Couper-Kuhlen, Elizabeth. 1979. *The prepositional passive in English*. Max Niemeyer
- Damonte, Federico and Andrea Padovan. 2011. “Un’origine avverbale per i prefissi del tedesco”, in Bertocci, Davide and Elena Triantafyllis. *I preverbi. Tra sintassi e diacronia*. Unipress
- Den Dikken, Marcel. 1995. *Particles*, Oxford, OUP
- Egerland, Verner 1998. “The Affectedness Constraint and AspP”. *Studia Linguistica*, 52, 19-47.
- Fagan, Sarah. 1992. *The syntax and semantics of middle constructions. A study with special reference to German*, Cambridge University Press: Cambridge.
- Harley, Heidi, 2013. “External arguments and the Mirror Principle: On the distinctness of Voice and v”. *Lingua* 125: 34-57
- Hoekstra, Teun. 1992. “Aspect and Theta Theory. Thematic Structure: Its Role in Grammar”, edited by I. M. Roca. Berlin: Mouton de Gruyter. 145-74.
- Hornstein, Norbert, and Amy Weinberg. 1981. “Case theory and preposition stranding”. *Linguistic Inquiry* 12:55–91.
- Jackendoff, Ray. 2002. “English particle constructions, the lexicon, and the autonomy of syntax”. In *Verb-Particle Explorations* (= Interface Explorations 1), ed. Nicole Dehé, Ray Jackendoff et al., 67-94. Mouton de Gruyter.
- Kayne, Richard. 1981 “On Certain Differences between French and English” in *Linguistic Inquiry* 12, 349-371
- Klingvall, Eva. 2012. “Topics in pseudo-passives.” in *Working Papers in Scandinavian Syntax* 90 (2012) 53–80.

- Marantz, Alec. 1993. “Implications of asymmetries in double object construction.” *Theoretical aspects of Bantu Grammar*. Ed. S. Mchombo, Stanford, CSLI Publications.
- McIntire, Andrew. 2001. *German Double Particles as Preverbs. Morphology and Conceptual Semantics* (= Studien zur deutschen Grammatik 61). Tübingen: Stauffenburg
- Nicol, Fabrice. 2002. “Extended VP-shells and the verb-particle construction”. In *Verb-Particle Explorations* (= Interface Explorations 1), ed. Nicole Dehé, Ray Jackendoff et al., 165-190. Mouton de Gruyter.
- Ramchand Gillian. 2008. *Verb Meaning and the Lexicon*. Cambridge University Press
- Ramchand Gillian and Svenonius, Peter. 2004. ‘Prepositions and External Argument Demotion’, in *Demoting the Agent: Passive and other Voice-related Phenomena*, ed. by Torgrim Solstad, Benjamin Lyngfelt, and Maria Filiouchkina Krave, University of Oslo, pp. 93-99
- Riemsdijk, Henk van. 1978. *A case study in syntactic markedness: The binding nature of prepositional phrases*. Dordrecht: Foris Publications.
- Sigurðsson, Halldór Ármann. 2012. “Minimalist C/case”, in *Linguistic Inquiry* 43, 191–227
- Svenonius, Peter. 1996. “The verb-particle-alternation in the Scandinavian languages”. Ms. University of Tromsø
- Tenny, Carol, 1987. *Grammaticalizing Aspect and Affectedness, unpublished Ph.D. dissertation*, Department of Linguistics and Philosophy, MIT, Cambridge, Massachusetts.