

Topics in pseudo-passives

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Abstract

This paper is concerned with the derivation of pseudo-passives, in particular in Swedish (e.g. *den här sängen har sovits i* ‘this bed has been slept in’). Previous analyses of pseudo-passives typically focus on English and take the preposition to be unable to assign case in these sentences, with the result that the prepositional complement is forced to move to T to get case. Such analyses are problematic for Swedish (as well as for English). Based on the Swedish data, this paper instead proposes that pseudo-passives are a type of topicalization structures. The prepositional complement moves because it carries a topic feature.

1 Introduction

This paper looks at a type of non-canonical A-movement in Swedish. A-movement typically involves displacement of a DP from non-subject to subject position. A canonical example of this is the movement of the underlying object to subject position in passives:

- (1) a. John read the book.
b. The book was read.

There are different analyses of what triggers movement in (1b). A very widespread view has it that movement is triggered by the DP’s need to get case (see e.g. Chomsky, 1981; Burzio, 1986; Jaeggli, 1986; Baker et al., 1989; Áfarli, 1992). On an alternative view, it is triggered by the DP’s need to be fully A-licensed (basically, fully ϕ -licensed, as will be described below) (see e.g. Sigurðsson, 2011). Crucially, on both accounts, the key lies in the passive verb. It is argued that the passive verb differs from the active verb either in

being unable to assign case to the internal argument or in being unable to A-license this argument.

In view of this, it is not immediately obvious what triggers A-movement in pseudo-passives. Like canonical passives, pseudo-passives feature a passive verb. The derived subject, however, does not originate as an object of the verb but as the complement of a preposition:

- (2) a. Mary has slept in that bed.
 b. This bed has been slept in.

While movement of the *object* can be related to properties of the passive verb, it is not clear that these properties could also account for movement of the prepositional complement. Previous analyses have argued that pseudo-passives do not only have a verb that is unable to assign case, but also a preposition that fails to do so. According to these analyses, P's inability to give case in pseudo-passives is the result either of an optional reanalysis rule (which can be lexical or syntactic) (e.g. Bresnan, 1982; Hornstein and Weinberg, 1981), or of P being of the 'unaccusative' type (Ramchand and Svenonius, 2004), or of the passive morpheme's absorbing the case feature on P (Law, 2005). Movement of the prepositional complement is thus triggered by a need to get case also in pseudo-passives, according to these analyses. The analyses assume, then, that P in pseudo-passives has properties it does not have in other structures. An obvious problem is of course that if P has these properties *only* in pseudo-passives, there is no independent evidence for the analyses. Since the data do not give any positive evidence for a defectiveness in the PP, I am instead going to pursue the idea that movement in pseudo-passives takes place for information structural reasons and is thus neither case-driven nor to do with ϕ -licensing. The intuition behind the proposal is the semantic effect that movement in pseudo-passives leads to, namely that a DP inside an adjunct is turned into the subject of predication and becomes the Topic of the sentence. With this in mind, I will therefore propose that pseudo-passives in Swedish are structures involving topicalization. On this view, topicalization is movement triggered by agreement between a phrase carrying a Topic

(Top) feature and a (Topic) head in the C domain. By assumption, the Top feature on DP will make the DP visible to T even if it is not in need of case or ϕ -licensing. In the absence of any other DP, the Top marked complement of P will therefore pass through T on its way to the C-domain and thereby become subject of the sentence, (3a). If some other DP appears in T, such as the expletive element *det* in (3b), the Top marked DP will move directly to the C-domain:

- (3) a. Den sängen har sovits i.
 this bed-the has slept-PASS in
 ‘This bed has been slept in.’
- b. Den sängen har det sovits i.
 this bed-the has it slept-PASS in
 ‘This bed has been slept in.’

On this proposal, movement to T is triggered by an EPP feature. While EPP explains why a constituent has to appear in (or move via) the specifier of T, it does not in itself regulate which DP is to satisfy this requirement. This, I will argue, is instead determined by information structural features such as the Top feature and a focus feature, Foc.

The paper has the following structure: since the main issue in this paper is related to A-movement, I begin, in section 2, by looking at two different views on what triggers A-movement. My conclusion is that on neither view do pseudo-passives fall out naturally. After this background section, I present the relevant data in section 3. Section 4 discusses some previous analyses of these constructions and the problems they face. I conclude that the analyses, which are all concerned with English and argue that P can't assign case in pseudo-passives, are satisfactory for neither English nor Swedish. The Swedish data lead me to an analysis building on the information structural properties of these constructions, which I present in section 5. I argue, then, that A-movement in pseudo-passives is *not* case-driven (nor due to ϕ -licensing). Section 5.2 offers a short discussion on the cross-linguistic data and section 6 concludes.

2 Case and Argument licensing

It is a common view in the literature that A-movement is driven by a need to get case (see among many others Burzio, 1986). Passive objects can be taken to be prime examples of this. On such a view, it is thus because the passive verb fails to assign case to its internal argument that this argument has to move to the subject position to get case. This usually also means that particular cases are taken to be directly linked to specific positions in the clause: accusative case is assigned to the complement of V and nominative to the specifier of T.

Arguments against this view can be drawn from languages with ergative case systems as well as languages with quirky case, such as Icelandic (see among many others Sigurðsson, 1989; Marantz, 1991). These languages show that the relation between morphological case and argument position is not one-to-one cross-linguistically. In a number of papers, Sigurðsson has therefore argued that morphological case be divorced from abstract case, i.e. A-licensing (see Sigurðsson 1989, 2010, 2011, 2012 as well as, for instance, Marantz 1991, among others). On Sigurðsson's view, morphological case is a morphological reflex of properties of verbs and event licensing heads (Voice heads), under which the verbs are embedded (Sigurðsson, 2011, 2012). As in Chomsky (2001), Sigurðsson annotates an accusative assigning verb as v^* -V, although the $*$ -property is independent from the ϕ -properties of v (unlike in Chomsky, 2001).¹ If v lacks $*$, nominative case will simply be assigned (Sigurðsson, 2011, 163):

- (4) The central NOM-ACC system
- a. $v^* \rightarrow \text{ACC}$
 - b. $v \rightarrow \text{NOM}$

The actual morphological marking will also be affected by the event licensing Voice head that the verb is embedded under (Sigurðsson 2010, 168, see also Schäfer 2008). More precisely, certain types of Voice heads delete the $*$ on

¹Other cases, such as dative and genitive, are the result of several $*$ s on v or of a number of $+$ -signs following the $*$, see Sigurðsson (2011, 2012).

v , so that accusative case will no longer be assigned at PF. In a number of languages, this is what happens, for instance, in passives. In such languages, the object of a passive verb will thus get nominative case instead of accusative. In this system, then, morphological case marking is a PF phenomenon and there is no such thing as ‘lack of case’ (since nominative will be assigned in the absence of any other case instruction). Consequently, the need for morphological case cannot be a trigger for movement in syntax.

Movement to the subject position (high A-movement) is instead triggered by the DP’s need to get values for its ϕ -features and to match these features with context licensing heads in the C domain. The DP gets its ϕ -values from Person (Pn) and Number (Nr) heads appearing on top of T (see Sigurðsson, 2012, 207):

- (5) $[_{TP} \dots Pn \dots Nr \dots T \dots Voice \dots [_{vP} \dots v \dots]]$

A DP valued as +Pn denotes a person and needs to enter into a further matching relation with logophoric “Speaker” and “Hearer” heads in the C domain in order to be properly licensed (Sigurðsson, 2004, 2011).^{2,3} The latter matching relation can only happen locally, i.e. if the DP moves to T, otherwise T will intervene.⁴ For objects of active verbs, this matching takes place within the vP . If the features are not matched inside the extended vP , however, the DP has to move to T. In this way, definiteness effects are accounted for. That is, unlike definite DPs, indefinite ones do not have to match their features against the context licensing heads and therefore do not have to move to T but can stay in situ.

In brief then, “high A-movement boils down to full ϕ -licensing” (Sigurðsson, 2012, 211, ex 50):

²True person DPs as well as definite ones are probably valued as +Pn (see Sigurðsson, 2010).

³To exemplify, a DP valued as +Pn will be interpreted as 1st person if it matches the Hearer head, λ_A (logophoric Agent), positively, and the Speaker head, λ_P (logophoric Patient), negatively (see Sigurðsson, 2012, 208).

⁴Sigurðsson assumes that the DP tucks in to the right of the probe rather than to its specifier. Strictly speaking, movement is thus not to T itself, but to the *vicinity* of T (see e.g. Sigurðsson, 2010, 163, and references cited there). I disregard this in the present account.

- (6) High A-movement is driven by ϕ -licensing under Double Matching, NP_{+Pn} matching, and raising to $\text{T}\phi$, from where NP_{+Pn} matches $\text{C}\phi$, thereby getting fully ϕ -licensed.

On this account, passivization in a language like English would involve both *-deletion under passive Voice (yielding nominative case on the object in PF) and a change in v so that it can no longer A-license its object. It is this latter change that results in A-movement of definite DPs. As noted above, however, something more still needs to be said about pseudo-passives, since they do not involve movement of an object.

3 Pseudo-passives

While ordinary passives involve movement to the subject position of an underlying object, pseudo-passives promote the complement of a preposition:⁵

- (7) a. Nobody has walked on that floor.
b. That floor has never been walked on.

Pseudo-passives can be seen as a special instance of preposition stranding (see e.g. Law, 2005; Truswell, 2009). Unlike other contexts with preposition stranding, however, pseudo-passives involve A-movement into the subject position rather than A-bar movement. Agreement facts, (8a), case marking, (8b), and question tags, (8c)–(8d), show that the promoted DP is the subject in the pseudo-passive:

- (8) a. These beds have/*has not been slept in.
b. They/*Them have not been slept in.
c. These beds have not been slept in, have they?
d. This bed has not been slept in, has it?

Swedish has both genuine pseudo-passives and apparent ones which involve P stranding but not movement into the subject position. The latter ones are

⁵In both English and Swedish, pseudo-passives are subject to a number of semantic restrictions on the PP. For different characterizations of these restrictions in English, see e.g. Couper-Kuhlen (1979); Takami (1992); Truswell (2009).

a type of impersonal constructions with an expletive subject.⁶ In the latter, the expletive element can optionally be left out.⁷ Since these sentences too allow for the complement of the preposition to be moved to the sentence-initial position, they can look identical to pseudo-passives. Notably though, only in the pseudo-passive does the promoted DP behave as a real subject, as case marking, (9a)–(9b), and position in questions, (9c)–(9d), show:⁸

- (9) a. De här sängarna/De har sovits i.
these beds-the/they have slept-PASS in
'These beds/They have been slept in.'
- b. De här sängarna/Dem har (det) sovits i.
These beds-the/them has (it) slept-PASS in
'These beds have been slept in.'
- c. Har de här sängarna/de/*dem sovits i?
have these beds-the/they/*them slept-PASS in
'Have these beds been slept in?'
- d. Har det sovits i de här sängarna/dem?
has it slept-PASS in these beds-the/them
'Have these beds been slept in?'

⁶Pseudo-passives can furthermore be both of the morphological and periphrastic passive types. The examples given in this paper are mainly of the morphological type.

⁷See Platzack (To appear) for a recent syntactic account for when and how this can take place. See also Falk (1988); Engdahl (2010).

⁸Furthermore, in periphrastic passives, the subject agrees morphologically with the participle (showing neuter, (1a), non-neuter, (1b), or plural agreement (not illustrated below)):

- (1) a. Det har blivit klottrat på väggen.
it has been scribbled-NEUT on wall-the
'Someone's scribbled on the wall.'
- b. Väggen har blivit klottrad på.
wall-the has been scribbled-NON-NEUT on
'The wall has been scribbled on.'
- c. Väggen har (det) blivit klottrat på.
wall-the has (it) been scribbled-NEUT on
'The wall has been scribbled on.'

Lack of agreement between *väggen* ('the wall') and the participle *klottrat* ('scribbled') in (1c) indicates that the expletive *det* is the subject, whether it appears overtly or not.

In English, pseudo-passives lack expletive counterparts. This is perhaps not surprising, however, since English also lacks impersonal passives formed from intransitive verbs, although those formed from transitive verbs are acceptable (at least in some dialects):

- (10) a. *It/*There was slept in this bed.
 b. *It/*There was danced yesterday.
 c. There were many letters written yesterday.

In Swedish, where both ordinary passives and pseudo-passives have expletive counterparts, the former but not the latter give rise to definiteness effects. That is, only indefinites and weakly quantified DPs can stay in situ, (11a). These restrictions do not apply to the complement of the preposition, (11b):⁹

- (11) a. Det lästes en bok/många böcker/*böckerna igår.
 it read-PASS a book/many books/*books-the yesterday
 ‘A book/many books was/were read yesterday.’
 b. Det har sovits i många sängar/de där sängarna.
 it has slept-PASS in many beds/those beds-the
 ‘Many beds/Those beds have been slept in.’

In English, pseudo-passives do not generally allow for an object to be present:¹⁰

- (12) a. That stove has been cooked (*meat) on.
 b. That bed has been read (*many novels) in.

⁹With regard to the lack of definiteness effect, the expletive counterparts to pseudo-passives pattern with TCs:

- (1) a. Den där sängen är lätt att bädda.
 that bed-the is easy to make
 ‘That bed is easy to make.’
 b. Det är lätt att bädda den där sängen.
 it is easy to make that bed-the
 ‘It is easy to make that bed.’

¹⁰Exceptions such as *That stove has been cooked dinner on* can be found.

However, certain idiomatic expressions with an indefinite object can undergo pseudo-passivization (examples from Takami 1992, 104, see also Truswell 2009, 40–41):

- (13) a. Word processors are being made effective use of by many novelists nowadays.
 b. Don't worry about the children while you're away: they'll be taken good care of.
 c. Every lighter talent had been done full justice to.
 d. What the boss said was taken no/particular notice (note) of by the employees.

In Swedish, pseudo-passives can be formed even when there is an object present (although such sentences are less acceptable to some speakers). Crucially, however, the object cannot be a definite DP:¹¹

- (14) a. Den där ugnen har bakats (bullar/*bullarna) i.
 that oven-the has baked-PASS (buns/*buns-the) in
 'That oven has been baked in.'
 'In that oven, buns have been baked.'
 b. Den sängen har lästs (romaner/*romanerna) i.
 that bed has read-PASS (novels/*novels-the) in
 'In that bed, novels have been read.'

¹¹In Swedish, either of the objects in a double object passive can be promoted to subject. Interestingly, however, the prepositional complement in the corresponding construction can't be promoted to subject:

- (1) a. Anna gavs en bok.
 Anna gave-PASS a book
 'Anna was given a book.'
 b. En bok gavs (till) Anna.
 a book gave-PASS Anna
 'A book was given (to) Anna.'
 c. *Anna gavs en bok till.
 Anna gave-PASS a book to

Pseudo-passives are thus precisely like ordinary passives in showing a definiteness effect on the object.

4 Previous analyses

It has been quite widely assumed that passive verbs differ from their active counterparts in neither assigning their external theta-role (to a DP argument) nor checking case on the object (e.g. Chomsky, 1981; Jaeggli, 1986; Baker et al., 1989; Áfarli, 1992).¹² Since the external argument has been demoted, the object will have to raise to the subject position. As part of this process, it will also get case. Even on the view that A-movement is not driven by a lack of case (see section 2 above), the basic property of passives holds. That is, in the passivization process the object is no longer fully licensed in its vP-internal position and must therefore move to the subject position (unless it is indefinite). Irrespective of which of these views is taken on case and A-licensing, A-movement in passives comes as a result of a change in the verb.

While also pseudo-passives involve a passive verb, the promoted DP is not an object of this verb but originates as a complement of a preposition. As such, the DP would normally be given case by P and would not be accessible to higher probes. The question is therefore what happens in pseudo-passive formation such that the complement of P can become the subject.

Previous analyses of pseudo-passives have argued that the key to the problem lies in the preposition (see e.g. Hornstein and Weinberg, 1981; Brennan, 1982; Law, 2005; Ramchand and Svenonius, 2004). More precisely, in pseudo-passives, the preposition fails to give case to its complement DP. On one type of approach, P does not give case as a result of a *reanalysis* process resulting in P no longer heading its own phrase. A second type of approach takes P's case feature to be *absorbed* by the passive verb, and yet another approach argues that the PP in pseudo-passives is headed by an *unaccusa-*

¹²Collins (2005) takes a different view, arguing that there is indeed an external argument in passives and that accusative case is assigned.

tive functional little *p*. These analyses are concerned with pseudo-passives in English but if they are applied to Swedish, they run into the same problems as they do with English.

4.1 Reanalysis

The basic idea of reanalysis approaches to pseudo-passives is that the preposition is no longer the head of a PP but has become part of a complex verb:

$$(15) \quad V + PP \rightarrow V\text{-}P + DP$$

Since the preposition is part of the verb, and since this verb is passive, the DP will get case from neither P nor V and will therefore be available when T probes the structure.

Reanalysis is either taken to be a lexical operation involving intransitive verbs and their prepositional complements (e.g. Bresnan, 1982, 51) or a syntactic process involving V and elements appearing immediately to its right (e.g. Riemsdijk, 1978; Hornstein and Weinberg, 1981; Kayne, 1984).¹³ Lexical reanalysis presupposes that there is a pre-syntactic module where lexical operations apply. This view is rejected in non-lexicalist frameworks such as Distributed Morphology (e.g. Halle and Marantz, 1993; Harley and Noyer, 1999). The syntactic reanalysis operation, on the other hand, is theoretically problematic since it allows for removal of phrasal nodes in syntax (Hornstein

¹³ The syntactic rule of Reanalysis states that “a V and any set of contiguous elements to its right can form a complex V” (Hornstein and Weinberg, 1981, 60). The result is only well-formed, however, if the formed predicate is a “natural predicate” or a “possible semantic word” (Hornstein and Weinberg, 1981, 65–67):

- (1) a. * John was talked to Harry about.
 b. Who did Sam talk to Harry about.
 c. * The table was put the mouse on.
 d. What table did Harry put the mouse on?

The sentences in (1a) and (1c) are filtered out because ‘talk to Harry about’ and ‘put the mouse on’ are not possible semantic words.

and Weinberg, 1981, 60).¹⁴

Reanalysis approaches also face empirical problems. Both approaches predict that nothing should be able to appear in between the verb and the preposition. Takami (1992) shows, however, that there are well-formed pseudo-passives where an adverb is situated between these elements (examples from Takami, 1992, 99):

- (16) a. John was spoken critically/severely to.
 b. John's lecture was listened carefully/attentively to by his students.
 c. These toys have been played outside with.

Such examples are also found in Swedish:

- (17) a. Den här sängen har sovits bekvämt i.
 this bed-the has slept-PASS comfortably in
 'This bed has been slept in comfortably.'
 b. Den här ugnen har bakats länge i.
 this oven-the has baked-PASS long in
 'This oven has been baked in for a long time.'

Law (2005) maintains that reanalysis approaches also make the wrong predictions about morphology. Although it is argued that a V-P complex is formed, the passive morpheme does not appear at the end of this complex word but appears between the verb and the preposition, attaching to the right end of the verb.¹⁵ Reanalysis approaches furthermore predict that the DP complement of the preposition should behave like other object DPs, and that the verb and preposition should be syntactically inert. This is however not the case, as discussed in detail by, among others, Baltin and Postal (1996) and Alsina (2011).¹⁶

¹⁴For an overview on reanalysis approaches in the context of restructuring predicates, see Wurmbrand (2003, 11ff), and references cited there.

¹⁵Bresnan (1982, 51) states, however, that it is not "necessary to stipulate [in the rule, EK] that verbal inflections attach to the verbal base or the complex verb (*paid for* vs. **pay for-ed* [. . .]), for endocentric inflection is characteristic of English complex verbs."

¹⁶As discussed by Truswell (2009), there are also examples where movement has to precede reanalysis, and examples where non-contiguous material must have been reanalyzed. These

4.2 Feature movement

Law (2005) proposes an analysis of pseudo-passives where the inability of P to assign case to its DP complement is the result of the case properties of the passive verb. More precisely, in English the passive morpheme obligatorily absorbs the case feature on V (Law 2005, see also Baker 1988 and Áfarli 1992). Passivization can therefore not take place if there is no case feature to absorb, as is the situation with intransitive verbs. If the intransitive verb is followed by a PP, however, the passive morpheme can absorb the case feature on P and passivization is legitimate (Law, 2005). Since P's case feature moves to the verb to satisfy the absorption requirement of the passive morpheme, the DP in the complement of P position cannot be assigned case and is therefore available as a goal for T.

Law's analysis faces at least two empirical problems. The first one is the fact that idioms with objects can form pseudo-passives.

- (18) a. This should be made considerable allowance for.
 b. This man should be paid close attention to.
 c. She has been taken advantage of.

Crucially, the post-verbal noun-phrase can be promoted to subject in the passive. It thus behaves like a real object in the sense of being affected by passivization (examples from Takami, 1992, 104):

- (19) a. Considerable allowance will be made for special cases.
 b. Close attention is being paid to present movements in the money market.
 c. Proper advantage is not being taken of this splendidly equipped sports hall.

Sentences like (18)–(19) are problematic for Law because they would mean that the case feature of P could be affected even in the presence of an object.

The second problem is that of intervening adverbs. Law discusses examples where adverbs are ill-formed between the verb and preposition, arguing that things are problematic for Hornstein and Weinberg's analysis, see footnote (13) above.

in those cases the PP is in an adjoined position from which both NP movement and features movement are banned. The observation that adverbs are not always illicit in this position then becomes problematic. It would either have to be stipulated that the PP is *not* in an adjoined position in the well-formed cases or be shown that the illicit adverbs are out for some other reason.

From a theoretical point of view, it is worth noting that the analysis presupposes a representation rather than a derivation: although case is a syntactic feature on this account, P does not assign case to the DP as soon as the two are merged but case assignment is deferred until the passive morpheme has been merged.

In his analysis of pseudo-passives, Law thus argues that the same mechanism is responsible for the absence of impersonal passives and availability of pseudo-passives in English. The analysis is not without empirical problems though, as discussed above. In the case of Swedish, the analysis would run into problems, since both impersonal passives and pseudo-passives are found in the language.¹⁷

4.3 Unaccusative *p*

A third type of analysis takes P not to assign case to its DP complement because, like unaccusative verbs, it lacks the functional head responsible for case assignment.

Following the line of thought in among others Riemsdijk (1990), Rooryck (1996) and Koopman (2000), Svenonius (2003) argues that *p*Ps have the same structure as *v*Ps. That is, the external argument, the Figure, is assigned by *p*, while the internal argument, the Ground, is assigned by P:

- (20) a. [Figure *p* [P Ground]]
 b. We loaded [hay]_{figure} on [the wagon]_{ground}.

If *p* is missing or inert, the Figure will not be assigned in the usual way but

¹⁷Law (2005) does not claim however that the analysis should be applicable to Swedish. In fact he claims, based on Maling and Zaenen (1990), that Swedish lacks pseudo-passives, and only has the expletive counterparts.

can appear in a separate PP, and the Ground argument will not get case. In the following Dutch examples (originally from van Hout 1998, 48, cited by Svenonius 2003), the sentence in (21a) has a full *p*P structure, as in (20a), while the sentence in (21b) has an inert *p*:

- (21) a. Ingrid smeert henna in haar haar.
Ingrid smears henna in her hair
- b. Ingrid smeert haar haar in (met henna)
Ingrid smears her hair in (with henna)

Ramchand and Svenonius (2004) propose that the PPs undergoing pseudo-passive formation in English are of the unaccusative type (contra Svenonius, 2003).¹⁸ Similarly to (21b), thus, the complement DP (i.e. the Ground) does not get case from the preposition in the pseudo-passive and can therefore function as a goal when a higher head probes the structure (T in the pseudo-passive, *v* in (21b)).

Crucially, the analysis hinges on the claim that there are unaccusative prepositions in English. There is indeed a group of locative alternating verbs in English that seem to allow either full or unaccusative *p*Pps as complements. These verbs belong to the *spray/load* group (see Levin, 1993, 50–51, 117–119):

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

However, unlike the unaccusative member of the pair in (21b), the sentence in (22b) lacks the preposition found in the transitive member of the pair (*on* in (22a)). This, then, makes it radically different from the Dutch counterparts, and also, and even more importantly, radically different from the allegedly unaccusative prepositions in pseudo-passives. Furthermore, although

¹⁸Truswell (2009), building on Abels (2003), proposes a similar analysis. According to Truswell, the features responsible for case assignment have been suppressed in pseudo-passives. Since the complement of P lacks case, it will have to move. Precisely as with the unaccusative analysis, it seems problematic that this feature suppression happens only in pseudo-passives.

spray/load-verbs show the location-locatum alternation, other verbs that are semantically similar do not (cf Svenonius, 2003, 441):

- (23) a. * Would you put the refrigerator in?
 b. * They poured the glass in.
 c. * We set the table on.
 d. * We loaded the baggage cart off.

The transitive and (potentially) unaccusative forms thus cannot be used interchangeably, except in the *spray/load* alternation.

4.4 Summing up

The analyses of pseudo-passives discussed in the previous sections focus on English. As pseudo-passives in English do not have expletive counterparts, it is tempting to locate the trigger for A-movement in these constructions to the preposition. Pseudo-passivization would thus always affect the preposition such that it cannot assign case to its complement. The complement would therefore be available as a goal for T. As discussed, however, there is a lack of independent evidence for a defective P (or *p*) in English. While it has been argued that there are unaccusative prepositions in English, the ones appearing in pseudo-passives do not behave and look like the putatively unaccusative ones. The fact that the verb and the preposition do not behave like a single syntactic unit is problematic for reanalysis approaches. Furthermore, the observations that pseudo-passives can be formed even when there is an object present (in idiomatic expressions) or when an adverb appears between the verb and the preposition are a problem for all the analyses.

In Swedish unlike in English, pseudo-passives and passives in general have expletive counterparts. There is however no visible difference between the prepositions in the two variants and thus, as in English, no overt evidence for P manipulation in pseudo-passives. Furthermore, in the expletive counterpart to passives (and pseudo-passives), objects show definiteness effects. Crucially, however, the complement of the preposition is not affected in this way.

The fact that pseudo-passives alternate with expletive constructions in Swedish is an indication that A-movement in these cases is triggered neither by a need to get case nor by a need to be A-licensed. In the next section, I will instead propose that pseudo-passives in Swedish are a type of structure involving topicalization. DP movement in these structures is thus the result of feature checking between the Top marked DP and a head in the C domain.

5 Towards an analysis

Passive formation typically involves movement of an object argument to the subject position. In pseudo-passive formation, in contrast, where the moved element is the complement of a preposition, it is a DP that originates inside an adjunct that is turned into a subject. This movement operation could be seen as a means of making a non-topical element a topic, i.e. as an instance of topicalization.

As argued above, the type of movement I look at here is not case-driven, nor to do with ϕ -licensing. The moving elements are complements of P which are otherwise well-formed in situ. In this respect, they are similar to indefinite objects of passive verbs and different from definite objects of passive verb. As we have seen, indefinite objects of passive verbs unlike definite ones are not forced to move to the subject position. For definite objects, I assume the analysis in Sigurðsson (2012), according to which they need to move to be fully ϕ -licensed. Prepositional complements and indefinite objects of passive verbs, in contrast, are thus different and both of these will be relevant in the discussion below.

5.1 Topic and Focus

I will take all movement to be feature-driven. In the case of topicalization, movement is triggered by agreement between a head in the C domain and a phrase carrying an optional topic (Top) feature.¹⁹ Since movement is obligatory, I will assume that agreement in this case can only take place locally, such

¹⁹I do not take a stand here on the exact lay-out of the heads in the C domain.

that the relevant DP needs to appear at least as high as Spec,TP (cf Sigurðsson, 2010, 166ff, on local matching between DPs and the logophoric heads in the C domain).²⁰ The Top marked phrase will either move directly to the C domain, or move via the T projection. More specifically, in the absence of another element in the specifier of T, the Top marked phrase will also pass through this position, thereby satisfying T's EPP feature. This is the case in the pseudo-passives in (24a)–(24b), where *den här ugnen* ('this oven') is the subject. In the expletive and passive sentences in (25a)–(25d), on the other hand, some other element appears in the subject position:

- (24) a. Den här ugnen har bakats i.
 this oven-the has baked-PASS in
 'Someone has baked in this oven.'
- b. Den här ugnen har bakats bullar i.
 this oven-the has baked-PASS buns in
 'In this oven, buns have been baked.'
- (25) a. Den här ugnen har (det) bakats i.
 this oven-the has it baked-PASS in
 'Someone has baked in this oven.'
- b. Det har bakats i den här ugnen.
 it has baked-PASS in this oven-the
 'Someone has baked in this oven.'
- c. Bullar har bakats i den här ugnen.
 buns have baked-PASS in this oven-the
 'Buns have been baked in this oven.'

²⁰In case some other element appears in the C domain, the DP stays in Spec,TP and agrees from there with the relevant head in the C domain:

- (1) a. Nu har den här ugnen bakats i.
 now has this oven-the baked-PASS in
 'Now this oven has been baked in.'
- b. [_{CP} XP [_{TP} DP_{Top} T [_{vP} v V [_{PP} P <DP_{Top}>]]]]

- d. Den här ugnen har bullar bakats i.
 this oven-the has buns baked-PASS in
 ‘In this oven, buns have been baked.’

To account for the sentences in (24)–(25), I will assume the following:

- (26) a. A DP carrying a Top or Foc feature is visible to T even if the DP’s ϕ -features have already been valued.
 b. Minimality: In the absence of any DP in need of ϕ -feature valuation, T targets the closest possible DP marked with a Top or Foc feature.

Importantly, as stated in (26b), T cannot target a Top or Foc marked P complement if there is a definite DP closer to T than the P complement. The definite DP will always need to move to T to get values for its ϕ -features (see Sigurðsson, 2011, 167ff). It is also worth noting, however, that in the absence of a definite DP, Spec,T can be filled not only by an indefinite DP or an expletive element, but also by one of the adverbs *här* (‘here’) or *där* (‘there’) (for discussion and examples, see Falk, 1988, 5):

- (27) a. Kan där finnas ormar?
 can there be snakes
 ‘Can there be snakes there?’
 b. Brukade här städas till jul?
 used-to here clean-PASS for Christmas
 ‘Did they use to clean here for Christmas?’

In Swedish, thus, T’s EPP property can be satisfied by elements of different types. As seen for instance in (24b), however, T does not simply attract the closest DP, but can in fact by-pass an indefinite object in favour of a prepositional complement further away. The analysis of pseudo-passives needs to be able to account for this.²¹

²¹As stated in (26a)–(26b), I take the presence of a Top or Foc feature on the DP to be crucial when T searches its C-command domain for an appropriate goal in pseudo-passives. The Top or Foc marked DP needs to move in order to match its features against a head in the C domain. Potentially problematic are then pseudo-passives embedded under ECM verbs, (1a),

Let's now return to the sentences in (24)–(25) to see how they can be derived. To begin with, it can be established that the DP *den här ugnen* ('this oven') is a Topic in all sentences except (25b)–(25c). In all these cases, it is the entity over which something is predicated, and it can fill the topic slot in questions of the type *What about X?* ($X = \text{topic}$). In all these cases, then, the DP *den här ugnen* carries a Top feature. In accordance with (26a), this means that the DP is visible to T, although it is not in need of ϕ -licensing.

The derivations of (24a) and (25a) are straight-forward. In the former, the Top marked DP moves through Spec,T while in the latter, it moves directly to the C domain:²²

- (28) a. Den här ugnen har bakats i.
 [_{CP} ... DP_{Top} Top ... [_{TP} <DP_{Top}> T [_{vP} v V [_{PP} P <DP_{Top}>]]]]
- b. Den här ugnen har det bakats i.
 [_{CP} ... DP_{Top} Top ... [_{TP} Expl T [_{vP} v V [_{PP} P <DP_{Top}>]]]]

The sentence in (25b), repeated as (29) below, is like the one in (25a)/(28b) except that the complement of P does not have a Top feature, and therefore does not move. In contrast to (28a)–(28b), which ascribe a property to the sentence-initial phrase *den här ugnen*, the sentence in (25b)/(29) involves

since the verbal complement in these cases are taken to include T but not the C domain. Note though that also the simple EPP analysis is problematic in these cases, since strict minimality can be violated, (1b) (and some mechanism for choosing one DP over another has to be stated):

- (1) a. Jag såg barnet bytas på.
 I saw child-the become changed-PASS on
 'I saw that they were changing the child's nappy.'
- b. Jag såg barnet bytas blöja på.
 I saw child-the become changed-PASS nappy on
 'I saw that they were changing the child's nappy.'

²²I take the auxiliary (*har*) to be merged in a verbal projection on top of vP, and to subsequently move to one of the head positions in C. This is not shown in the structures in (28)–(32).

existential quantification over the event variable (see e.g. É. Kiss, 2002, 117), essentially stating that a baking event has taken place:

- (29) Det har bakats i den här ugnen.
 [_{CP} Expl C [_{TP} <Expl> T [_{vP} v V [_{PP} P DP]]]]

The sentences in (24b) and (25c)–(25d) are seemingly more complicated because they contain two non-expletive DPs each: the prepositional complement as well as an indefinite object. In (25c), repeated as (30), the indefinite object receives stress (indicated with capital letters below) and has narrow focus.^{23,24} It serves as the answer to the question *What has been baked in this oven?*, and evokes the idea of a set of things that can be baked. In (25c)/(30), then, the indefinite object has a Foc feature, making it visible to T and a goal for a Focus head in the C domain:²⁵

- (30) BULLAR har bakats i den här ugnen.
 [_{CP} ... DP_{Foc} Foc ... [_{TP} <DP_{Foc}> T [_{vP} v <DP_{Foc}> V [_{PP} P DP]]]]

Finally, the sentences in (24b) and (25d) (repeated as (32a)–(32b)) differ only as to whether the indefinite object remains inside the VP or moves to T. When the indefinite DP appears in the subject position, it gets a narrow focus reading, similarly to (25c)/(30). Crucially, however, there is no focus reading when it stays in situ.²⁶ In (24b)/(32a), then, the prepositional complement has a Top feature, while the object has neither a Top nor a Foc feature and is therefore not visible to T. In (25d)/(32b), in contrast, the prepositional complement is Top marked, while the object is Foc marked. In this case, minimality comes into play: T will target the closest possible DP with a Top or Foc feature and cannot bypass one in favour of another one further away:

²³Narrow focus on the sentence-initial phrase is necessarily contrastive (see e.g. Molnár, 2006).

²⁴Both topic and contrastive focus relate to the context and this explains why both types move to the C domain (Molnár, 2006).

²⁵In the structures in (30) and (32), I take the object to appear in the specifier of V, and the PP to be the syntactic complement of V.

²⁶Focus here refers to structural narrow focus, see e.g. É Kiss (2006).

- (31) * Bullar har den här ugnen bakats i.
 buns have this oven-the baked-PASS in

The derivations of (24b) and (25d) are the following:

- (32) a. Den här ugnen har bakats bullar i.
 $[_{CP} \dots DP_{Top} Top \dots [_{TP} <DP_{Top}> T [_{vP} v DP V [_{PP} P <DP_{Top}>]]]]$
- b. Den här ugnen har bullar bakats i.
 $[_{CP} \dots DP_{Top} Top DP_{Foc} Foc \dots [_{TP} <DP_{Foc}> T [_{vP} v <DP_{Foc}> V [_{PP} P <DP_{Top}>]]]]$

To sum up the proposal sketched above, I analyze movement of the prepositional complement and the indefinite object in the sentences in (24)–(25) to be due to these DPs carrying a Top or Foc feature. The Top or Foc marked DP moves to T in the absence of another DP in this position. These DPs can thus undergo either A-movement or A-bar movement. Movement to T (A-movement) is in these cases not forced by a lack of case on the DP but is a response to T's EPP feature. The DP is visible to T because it carries a feature not yet valued by the corresponding head in the C domain. As Sigurðsson (2010, 2011, 2012), I take morphological case marking to be post-syntactic and language-specific. In Swedish, where there are no quirky subjects and where only pronouns show a morphological case distinction, it might be argued that pronouns get accusative case-marking in PF unless they move through T. Alternatively, since pronouns need to match their features with the logophoric heads for the actual person value to result (see Sigurðsson, 2011, 166), case marking could perhaps follow from this. Matching with these heads in the C domain would result in Nom in PF, while matching with these heads vP internally (and pP internally) would result in Acc.

5.2 Pseudo-passives cross-linguistically: some remarks

In the proposal for Swedish pseudo-passives presented above, I take movement to be triggered by a Top feature on the DP complement of P. The Top marked DP is visible to T although it is not in need of case (or ϕ -licensing).

The question that arises is then if this analysis can be applied to other languages as well.

An important thing to note is that very few languages have pseudo-passives, but that this might be *not* because T can only target DPs in need of case (or ϕ -licensing) but for independent reasons. Thus, a pre-requisite for having pseudo-passives is that the language in question allows for preposition-stranding in general. Cross-linguistically however, P-stranding is very rare, which means that languages that have pseudo-passives are even more rare (see e.g. Truswell, 2009).

One property that seems to be crucial for the possibility of P-stranding in a language is that the DP complement of P remains morphologically separate from P. That is, a potential property blocking P-stranding (and thereby also pseudo-passive formation) is incorporation of the complement DP's determiner into the preposition (see Law, 2005). This happens in both Romance and German (see e.g. Law (2005) for Romance, and Riemsdijk (1998, 653) for German). In (33) this is illustrated for French (from Law, 2005):

(33) French

- a. au = à le, aux = à les 'to the'
- b. auquel = à lequel, auxquels = à lesquels 'to the which'
- c. du = de le, des = de les 'of the'
- d. duquel = de lequel, desquels = de lesquels 'of the which'

Possibly, if there is morphological evidence that D incorporates into P in some cases in these languages, it could be argued that D always incorporates into P, even when there is no suppletive form. If this is the case, the fact that P-stranding is blocked across the board in these languages is expected. The DP can't move out of the PP if D has incorporated into P.

In English, P and its DP complement remain morphologically separate and both P stranding in general and pseudo-passives in particular are possible. If, as discussed in section 4, there is very little (if any) independent evidence for analyses which take P to be unable to assign case in English, then the question is if there is any evidence that T can see a DP merely because it carries a Top

feature?

Recall that the motivation for treating the Swedish cases as involving topic-triggered movement, rather than movement for case or ϕ -licensing reasons, is the observation that the DPs in question are not forced to move. That is, precisely like indefinite objects of passive verbs, they are well-formed in situ if some other element appears in the subject position. While there are more restrictions than in Swedish, English in fact has impersonal passives of sorts. That is to say, in English too, indefinite (or weakly quantified) objects need not raise to the subject position in passives (at least in some varieties of English):

- (34) a. There were many letters written yesterday.
 b. Many letters were written yesterday.

While (34a) is about the existence of an event (or events) of letter-writing, (34b) talks about a property of the subject *many letters*, namely that they were written yesterday. In the latter case, then, the subject is also the topic of the sentence. Tentatively, then, it could be assumed that the object in (34b) moves to the subject position because it carries a Top feature, not because it needs case. The situation is not as clear as in Swedish, however, since the object moves to the left of the participle even when it does not raise all the way to the subject position, (34a).

6 Concluding remarks

In this paper I have discussed the derivation of pseudo-passives in Swedish. Pseudo-passives involve movement of a DP from inside an adjunct PP, into the subject position. While previous analyses of pseudo-passives have argued that the DP moves for case reasons (because P is unable to assign case in these structures), I have proposed that it moves for information structural reasons. There are two observations motivating this analysis. Firstly, similarly to indefinite objects of passive verbs, prepositional complements can always stay in situ if some other element appears in the subject position. There is thus no independent evidence for P's inability to assign case (or license its complement). Secondly, the prepositional complement receives a Topic interpreta-

tion when it appears in the left periphery, but not otherwise. Pseudo-passives are thus similar to other structures involving topicalization. If the proposal sketched in this paper is on the right track, it would mean that not all high A-movement is for case-reasons (or ϕ -licensing reasons, contra e.g. Sigurðsson 2012, 211).

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