

**Pseudopassives as complex predicates:
A Scandinavian perspective**

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Abstract

Passives in which the subject corresponds to the object of a preposition in the active are usually called pseudopassives or prepositional passives (e.g. *John was talked about*). Both in traditional and modern grammar, the standard opinion on the English pseudopassive is that the verb and the preposition are reanalyzed into one complex verb (e.g. Bresnan 1982). Scandinavian allows pseudopassives in which the verb and the preposition are not adjacent, and this has been used as a decisive argument against this approach. The strategy in the present paper is to move the reanalysis of verb + preposition from c-structure to f-structure. Verb + preposition then constitute a complex predicate (an option mentioned in Richards (2017) within Minimalism, and in Lødrup (2022) within LFG). This kind of analysis can accommodate the Scandinavian situation, and it is suggested that it could also be transferred to English.

1 Introduction

Passives in which the subject corresponds to the object of a preposition in the active are usually called pseudopassives or prepositional passives.¹ Examples are (1)-(2).

- (1) John was **talked about**.
- (2) John ble **snakket om**. (Norwegian)
John became talked about
'John was talked about.'

The pseudopassive is a rare and marked phenomenon in the world's languages, which represents a problem for all approaches to grammar. Both in traditional and modern grammar, the common opinion on the English pseudopassive is that the verb and the preposition form one complex verb (e.g. Jespersen 1969:138-39, Hornstein and Weinberg 1981, Bresnan 1982). This is often called reanalysis — unfortunately a term used of various phenomena, which will here only be used of verb + preposition reanalysis.

A pseudopassive can have a retained object, in more or less idiomatic expressions, as in (3)-(4).

- (3) She has been **taken advantage of**.
- (4) I don't like to be **told lies about**. (Bolinger 1977:62)

Sentences with retained objects are often marginal in English (but see Ziv and Sheintuch 1981, Riddle and Sheintuch 1983). Where such sentences are accepta-

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ble, it has been observed that a retained object is often non-specific (Ziv and Sheintuch 1981), and it has been proposed that retained objects must be "abstractly" incorporated in the verb, in a way that is not well understood (Asudeh and Mikkelson 2000, Mills 2008, Kiparsky 2013). This type of pseudopassive will be put aside here.

Pseudopassives prototypically involve a PP that is selected by the verb. It is well known that non-selected PPs sometimes occur, as in (5).

(5) This bed has been **slept in** by Napoleon.

This fact must be seen in connection with the fact that verbs sometimes extend their a-structure to include e.g. locatives and benefactives and instrumentals (see e.g. Alsina 2009:55, Needham and Toivonen 2011, Toivonen 2021).

2 State of the art

It is a common opinion that the verb and the preposition in the English pseudopassive are reanalyzed into one word, a complex verb. The state of the art for this analysis is unusual, however. On the one hand, a number of problems have been pointed out, see e.g. Postal (1986) and Baltin and Postal (1996). The recurring point is that various phenomena show that verb + preposition do not constitute one word. An example from Postal (1986:283, note 14) is (6).

(6) The bridge was **flown over** and then, but only then, **under**.

There seem to be no attempts to counter these objections to save the standard analysis. On the other hand, there does not seem to be any accepted alternative. Alternative analyses have been proposed, but there does not seem to be any analysis that is taking over as a new standard.

Within Minimalism, there are some proposals based upon Case theory and phase theory, see e.g. Law (2005), Truswell (2008), Abels (2012), Drummond and Kush (2015). Klingvall (2012) gives a critical discussion on the basis of Swedish, and presents an analysis where the subject of a pseudopassive has moved for information structural reasons.

Within LFG, Lødrup (1991) and Alsina (2009) propose that the passive subject is raised from the object position of the preposition to the sentential subject position (see also Tseng 2006). Findlay (2014, 2016) criticizes this analysis, and accounts for pseudopassives in the mapping between f-structure and semantics. In his analysis, pseudopassives represent a mismatch between f-structure and semantics. Dyvik et al. (2019:82-83) give an analysis in which the mismatch is between c-structure and f-structure. The same kind of mismatch is found in the analysis to be discussed below. An important difference from Dyvik et al. (2019) is that the analysis discussed here has verb + preposition as a complex predicate — an option

that has been mentioned briefly in the literature by Richards (2017) in a Minimalist setting, and by Lødrup (2022) in an LFG setting. The a-structure of this complex predicate is derived from the a-structures of the elements involved, in the same way as in a complex predicate consisting of two verbs (see e.g. Butt 1995, Alsina 1996, 1997).

3 The Scandinavian situation

3.1 Some facts

Insular Scandinavian does not have pseudopassives (Maling and Zaenen 1985, Truswell 2008), so Scandinavian is here Mainland Scandinavian. There has been some discussion and confusion about the distribution of pseudopassives in Scandinavian. Danish and Swedish pseudopassives have sometimes been claimed to be ungrammatical or "extremely marginal" (Maling and Zaenen 1985:207, see also e.g. Herslund 1984). However, pseudopassives are discussed in the standard reference grammars of all three Mainland Scandinavian languages: Faarlund et al. (1997:843-45) on Norwegian, Hansen and Heltoft (2011:1295-97) on Danish, and Teleman et al. (1999b:369-70) on Swedish.² Engdahl and Laanemets (2015) present a corpus-based study of Scandinavian pseudopassives.

Examples are the Norwegian (7) from the Web, the Swedish (8) from Teleman (1999b:370), and the Danish (9) from Hansen and Heltoft (2011:1295).

(7) Slik **snakkes** han **om** av andre. (Norwegian)

this.way talk.PRES.PASS he about by others

'He is talked about this way by others.'

(8) Den förtjänar inte att **satsas** **på**. (Swedish)

it deserves not to focus.INF.PASS on

'It doesn't deserve to be focused on.'

(9) Vi er blevet **løjet for**. (Danish)

we are become lied for

'We have been lied to.'

Engdahl and Laanemets (2015:326) say that pseudopassives in these languages are "remarkably similar". A difference is that they are more frequent in Norwegian. Scandinavian will be represented by Norwegian in the following, unless otherwise stated. Norwegian is here understood as urban south-eastern Norwegian and the Bokmål written standard. Most example sentences are from the Web, in some cases modified.

² Teleman et al. (1999b:369-70) says that Swedish pseudopassives occur "primarily in spoken language and informal writing" [my translation]. It is noteworthy that the pseudopassive is not a new phenomenon. Körner (1949:66) says that Swedish examples can be found from the 17th century. Mikkelsen ([1911] 1975:135) gives Danish examples from the 19th century.

An account of pseudopassives presupposes a distinction between regular prepositions and verbal particles. Some words can have both uses, e.g. *på* 'on'. Verbal particles behave differently in different Scandinavian languages and dialects (Lundquist 2014a, b). Regular prepositions and verbal particles can be distinguished using different criteria (Engdahl and Laanemets 2015:287-88). In eastern Norwegian, a verbal particle can trigger the so-called word tone 2 when cliticized, and it can follow the nominal phrase, cf. (10)-(11). A regular preposition can neither, cf. (12)-(13).

- (10) ²Ta -på klærne!
 take on clothes.DEF
 'Take your clothes on!'
- (11) ²Ta -dem-på!
 take them on
 'Take them on!'
- (12) *²Sats-på barna!
 focus on children.DEF
 'Focus on the children!' [intended]
- (13) *²Sats-dem-på
 focus them on
 'Focus on them!' [intended]

3.2 Reanalysis in Scandinavian

As mentioned, the common opinion on the English pseudopassive is that the verb and the preposition are reanalyzed into one word, a complex verb. Reanalysis has also been assumed in traditional Scandinavian grammar (e.g. Western 1921:155-56, 133-137, Körner 1949, Knudsen 1967:83-85). The situation is different in modern Scandinavian grammar, understood as grammar in the generative tradition. Reanalysis is rejected in Lødrup (1985, 1991), Christensen (1986), Hestvik (1986), and Åfarli (1989, 1992:86-88). I am not aware of modern work on Scandinavian that argues for reanalysis, except a short discussion in Holmberg and Platzack (1995:221-22).

The Scandinavian criticism of reanalysis was based upon a couple of differences between Scandinavian and English. Two arguments for reanalysis in Bresnan (1982) are the following:

- 1) English has adjectives that are derived from a passive participle + a preposition, as in (14).

(14) Each unpaid for item will be returned (Bresnan 1982:53)

2) English requires that verb + preposition are adjacent in pseudopassives. This requirement only applies to pseudopassives, cf. (15) — not to preposition stranding with unbounded dependencies, cf. (16).

(15) *Everything was **paid twice for**. (Bresnan 1982:54)

(16) That is something that I would have paid twice for. (Bresnan 1982:54)

Scandinavian is different in both respects.

1) Scandinavian does not have adjectives that are derived from a passive participle + a preposition as in (14).

2) Scandinavian allows sentences that violate the requirement that the verb and the preposition should be adjacent.

It is necessary to distinguish two kinds of adjacency violations in Scandinavian: violations in sentences with a finite main verb, and violations in sentences with a non-finite main verb. Norwegian and Swedish and Danish have both an inflectional passive and a periphrastic passive, as in (17)-(18).

(17) Pølsene blir spist nå.
sausages.DEF become eaten now
'The sausages are eaten now.'

(18) Pølsene spises nå.
sausages.DEF eat.PRES.PASS now
'The sausages are eaten now.'

Only Swedish has the full paradigm for the inflectional passive. Norwegian and Danish have the infinitive and the present, and Danish also has some options for preterit forms. Finite forms of the inflectional passive behave syntactically like all other finite verbs — they must be in the C or I position in main clauses. In a pseudopassive, it is impossible to realize the finite verb and the preposition as one unit in the C or I position, cf. (19)-(20).

(19) Selvfølgelig **satses** de **på**.
obviously focus.PRES.PASS they on
'Obviously, we focus on them.'

(20) *Selvfølgelig **satses** **på** de.
obviously focus.PRES.PASS on they

Non-finite main verbs can also violate the adjacency constraint in Scandinavian. Examples (21)-(22) show adjacency violations with the infinitive of the inflectional passive, where an adjunct occurs between the infinitive and the preposition.

- (21) Elevene bør **snakkes** mye **med**.
 pupils.DEF should talk.INF.PASS much with
 'The pupils should be talked to a lot.'
- (22) Systemet må også **sees** grundig **på**.
 system.DEF must also look.INF.PASS thoroughly on
 'The system must be looked at thoroughly.'

Examples (23)-(24) show adjacency violations with the periphrastic passive, where an adjunct occurs between the passive participle and the preposition.

- (23) Jentene ble **glodd** intenst **på**. (Hestvik 1986:191)
 girls.DEF became stared intensely at
 'The girls were stared at intensely.'
- (24) Du blir **ledd** høyt **av** her i stuen.
 you become laughed loudly of here in living.room.DEF
 'You get laughed at loudly here in our living room.'

Sentences with corresponding adjacency violations are also found in Swedish and Danish.³

- (25) Han sa "Snuskhummel" vilket har **skrattats** mycket **åt**. (Swedish)
 he said "Snuskhummel" which has laughed.PASS much of
 'He said "Snuskhummel", which has been laughed at a lot.'
- (26) Deres sag bliver **set** grundigt **på** fra begge vinkler. (Danish)
 their cause becomes seen thoroughly at from both angles
 'Their cause is looked at thoroughly from both angles.'

4 A complex predicate analysis

4.1 Introduction

A classical and influential version of reanalysis can be found in Bresnan (1982). She proposed a lexical rule which incorporates a preposition into a verb, making verb + preposition a unit in the lexicon and in c-structure. This analysis accounts for the adjacency requirement in English pseudopassives. The complex predicate analysis discussed in the present paper keeps the assumption that verb + preposi-

³ Some French dialects in Canada allow pseudopassives (King and Roberge 1990). It is striking that one of the few published examples violates adjacency. Example (i) could be translated word-by-word into Scandinavian.

(i) Robert a été **parlé** beaucoup **de** au meeting. (King and Roberge 1990:356)
 Robert has been talked a lot about at.DEF meeting
 'Robert was talked about a lot at the meeting.'

tion are one unit. It can therefore be seen as a new version of reanalysis. The important difference is that verb + preposition constitute a complex predicate, and not a constituent in c-structure.

Another traditional assumption is that this unit of verb + preposition exists independently of the passive (e.g. Western 1921:155-56, 133-137, Jespersen 1969:138-39, Kiparsky 2013). Ideally, there should be no special rule for the pseudopassive (see e.g. Kiparsky 2013). A pseudopassive should be a passive of a corresponding active which can be shown to have the passive subject as a sentential object. Establishing object status is not without its problems, however (see e.g. Baltin and Postal (1996) on English). Even so, there is some reasonably clear evidence for an object analysis. One case concerns the option of functional control. This type of control requires the controller to be a subject or an object. In some cases, functional control is possible with an object that is the result of (some kind of) verb + preposition reanalysis. An example is (27).

- (27) Vi **ser på** ungene spille.
 we look at kids.DEF play
 'We look at the kids play.'

The c-structure and f-structure assumed are shown in figures 1 and 2.

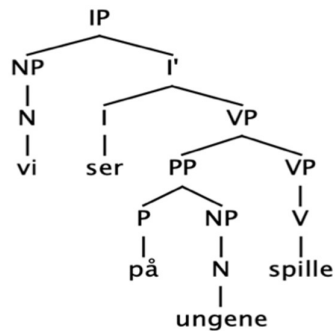


Figure 1

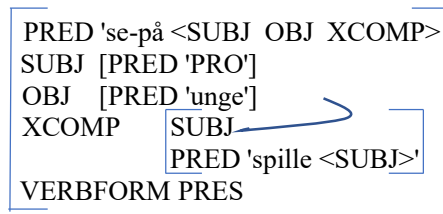


Figure 2

Reanalysis of verb + preposition must be optional (see e.g. Bresnan 1982:52). There are phenomena that require that reanalysis does not take place. Consider the impersonal sentence (28).

- (28) Det ble snakket om John.
 EXPL became talked about John
 'John was talked about.'

The nominal argument following the preposition in (28) is definite. It is not subject to the definiteness constraint in presentational sentences, which shows that it is not the object of a reanalyzed verb *snakke om* 'talk about' but rather the object of the preposition in the OBL_{θ} *om John* 'about John'.⁴

Dyvik et al. (2019:82-83) present the analysis of pseudopassives that is implemented in the Norwegian Bokmål grammar for the parsing system XLE (<https://clarino.uib.no/iness/xle-web>). This analysis also involves a mismatch between c-structure and f-structure. The preposition is the head of a PP in c-structure, while it is "incorporated" (Dyvik et al. 2019:82) in the PRED in f-structure. This analysis differs from the one proposed here in that the PRED does not derive its a-structure from the a-structures of the elements involved. Dyvik et al. (2019) assume that the prepositions involved do not have a PRED. The PRED of the pseudopassive is then not a complex predicate, because it does not combine two PREDs.

The analysis in the present paper is based upon the assumption that the relevant prepositions in the relevant languages have a PRED which can assign a thematic role. (However, there is no implication that prepositions without a PRED do not exist.) It is clear that pseudopassives are possible with prepositions that are not desemantized, both in English (examples (5) and (6) above) and Scandinavian, cf. (29).

- (29) Huset har ikke vært **bodd i** på 15-20 år.
 house.DEF has not been lived in for 15-20 years
 'The house has not been lived in for 15-20 years.'

⁴ One possible argument against the complex predicate analysis comes from binding. The traditional account of simple and complex reflexives in Norwegian (Hellan 1988) says that the complex reflexive is used when the binder and the reflexive are arguments of the same predicate. Following a preposition that is selected by the verb, a reflexive must be complex.

(i) Ola tenkte på seg selv / *seg
 Ola thought about REFL SELF / REFL
 'Ola thought about himself'

Given these premises, the complex predicate analysis would predict the complex reflexive in (i), when the verb and the preposition are one predicate. However, the problem would be that verb + preposition reanalysis is optional, so one would expect the simple reflexive to be possible when reanalysis has not taken place. This problem disappears if one rejects the traditional account of simple and complex reflexives. Lødrup (2007) says that the simple reflexive is used locally when the verbal action is on or in relation to a person's physical body, or something is located relative to a person's physical body — which is not the case in a sentence such as (i), independently of reanalysis.

The first verb of a complex predicate is usually assumed not to take an internal argument (Cinque 2004). This assumption correctly accounts for the ungrammaticality of a pseudopassive with a retained object, such as (37).⁵

- (37) *Bordet ble lagt en bok på.
 table.DEF became put a book on
 '*The table was put a book on.'

Pseudopassives with non-specific objects such as (38) are then not accounted for, but these sentences must probably be derived by "first" incorporating the object in some way to be worked out, and "then" creating a complex predicate (Asudeh and Mikkelsen 2000, Mills 2008, Kiparsky 2013).

- (38) Brevet ble klistret frimerker på. (Taraldsen 1979:49)
 letter.DEF became pasted stamps on
 'Stamps were pasted on the letter.'

Another prediction of the complex predicate analysis is that the preposition cannot be in the position for discourse functions in a main clause, as shown in (39)-(40).

- (39) Gardinene kan ikke sees gjennom.
 curtains.DEF can not see.INF.PASS through
 'One cannot see through the curtains.'
 (40) *Gjennom kan de ikke sees.
 through can they not see.INF.PASS

This follows from the complex predicate analysis. The preposition is a part of the PRED in f-structure. It does not have a syntactic function, which is a general requirement for having a discourse function (see e.g. Kaplan to appear).⁶

5 English vs Scandinavian pseudopassives

5.1 English again

This paper has argued for a complex predicate analysis of Scandinavian pseudopassives. The question is now if this analysis can be transferred to English. The adjacency constraint appears to be an important difference between Scandinavian and English. The complex predicate analysis has nothing to say about adjacency.

⁵ Wurmbrand (2004:997-98) shows that German can allow a dative argument with restructuring verbs such as *erlauben* 'allow' or *empfehlen* 'recommend'. These arguments should be considered OBJ_θ, so the relevant generalization must be that the first verb of a complex predicate cannot take OBJ.

⁶ A possible problem for this account is that German can topicalize the second verb (phrase) in a long passive; see Wurmbrand (2007).

The strategy in this paper will be to try to make the relevant difference between English and Scandinavian smaller, partly by pointing out that the adjacency constraint is less than absolute in English, and partly by arguing that Scandinavian also has some kind of adjacency constraint.

The English adjacency constraint is not absolute. Non-specific objects can to some extent occur between the verb and the preposition, both idiomatic and non-idiomatic ones (see (3)-(4) above). Even when these cases are put aside, there are phenomena that undermine the adjacency constraint, as pointed out by Tseng (2006), Truswell (2008:168) and Findlay (2014, 2016).

First, a verbal particle can appear between the verb and the preposition, as in (41) (text example from Findlay 2014:117).

(41) As the first local settler he was **looked up to** by most.

However, this could be accounted for by assuming that verb + particle "first" form a complex predicate (Forst et al. 2010), which is "then" combined with the preposition to a larger complex predicate.

Second, the preposition can be modified, as in (42) (text example from Findlay 2016:258)

(42) I've stood there, heavily pregnant (and obviously so), and been **looked straight through**.

Third, sentences with an adjunct between the verb and the preposition have been reported. Example (43) is a text example from Findlay (2016:259). Examples (44)-(45) are "quite acceptable" according to Truswell (2008:168).

(43) Yerba mate (..) is **relied especially on** by poor Argentines when food is scarce.

(44) John has been **talked sternly to**.

(45) This door has been **leaned heavily on** once too often.

Even if the relative acceptability of adjacency violations in English has not been investigated, adjacency gives the impression of being a constraint that is not absolute.

5.2 Scandinavian again

As discussed above, Scandinavian allows sentences that violate the adjacency constraint. This fact motivated Scandinavian grammar to reject the traditional reanalysis in the eighties. Violations of adjacency in Scandinavian fall into two distinct types. Finite forms of the inflectional passive behave syntactically like other finite verbs — they follow the V2 rule, being in the C or I position in main clauses. It

was mentioned in section 3.2 that the preposition cannot be with the finite verb in these positions. Examples (15) and (16) are repeated as (46) and (47).

- (46) Selvfølgelig **satses** de **på**.
 obviously focus.PRES.PASS they on
 'Obviously, we concentrate on them.'
- (47) *Selvfølgelig **satses** **på** de.
 obviously focus.PRES.PASS on they

This is an argument that verb + preposition are not one constituent in c-structure. It might be objected that there could be a general constraint saying that nothing but a "pure" finite verb can be in I and C. This is not clear, however. Among young children in Oslo, it is common to incorporate verbal particles in verbs. When the resulting complex verb is finite, it can appear in C or I. For example, the preposition *på* 'on' can be used as a regular preposition, or as an intransitive particle (cf. examples (10)-(13) above). In the latter case, the children can have it as a part of a complex finite verb in C or I, as in (48).⁷

- (48) Har-på du sokker? (grandchild, 3.2 years, March 2021)
 have on you socks
 'Do you have socks on?'

This option seems to be limited to intransitive verbal particles. Even so, this incorporation phenomenon suggests that it is not unthinkable that a verb + preposition constituent in a pseudopassive — if it existed — could be in I or C in c-structure.

Richards (2017) gives a Minimalist analysis of English pseudopassives, building upon the analysis of complex predicates consisting of two verbs in Wurmbrand (2001). Richards (2017) gives the structures in Figure 3 (below) for the sentence *They talk about the movie*. The tree to the left has the functional projection *pP* above the PP (cf. the arrows), while the tree to the right doesn't. This is what distinguishes the analyses without and with a complex predicate. The general idea is that the second part of a complex predicate lacks functional structure.

⁷ This kind of sentences are well known to me from my grandchildren, as well as discussions with people who interact with the relevant age group. The phenomenon has never been discussed in the literature. It is mentioned briefly in Aa (2020: 52-53, note 20).

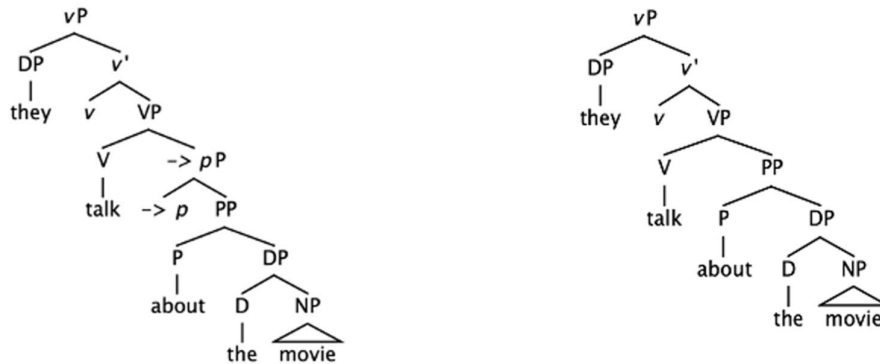


Figure 3

If Richards' analysis should be transferred to Scandinavian, the finite verb must be in the C or I position. There is no reason the preposition should move with the verb given the structure proposed by Richards, so this analysis seems to give the right prediction for sentences with finite main verbs in Scandinavian. However, the analysis could not be extended to pseudopassives with non-finite main verbs and adjacency violations, such as (21)-(25) above. Richards (2017:313) says explicitly that his goal is to account for the adjacency constraint in English.

We will now focus on pseudopassives with a non-finite main verb, and the first question is what can appear between a non-finite main verb and the preposition. We will only discuss prototypical pseudopassives without retained objects.

Just like English, Scandinavian can have a particle between the verb and the preposition, as in (49) as well as a modified preposition, as in (50). (Compare examples (41) and (42) above.)

- (49) Jeg blir **sett** ned **på**.
 I become looked down on
 'I get looked down upon.'
- (50) Vi andre blir **sett** tvers **gjennom**.
 we others become looked straight through
 'We others are looked straight through.'

When it comes to pseudopassives with an adjunct between a non-finite main verb and the preposition, it is first necessary to put pseudopassives aside, and say a few words about Scandinavian constituent order in general. The ordering of adjuncts and obliques following a non-finite verb is not very strict. Unfortunately, too little is known about their order, and this is a serious impediment to understanding the options for violations of the adjacency constraint. There seem to be various competing rules and tendencies for the order of adjuncts following the non-finite main verb, which can be formal, functional or semantic. Some remarks can be found in

the standard Scandinavian reference grammars: Faarlund et al. (1997:896), Telemann et al. (1999a:489-490), and Hansen and Heltoft (2011:1612-17).

One general tendency is that following the non-finite main verb, obliques precede adjuncts. Even so, there are also options for adjuncts to precede obliques. An important group is adjuncts of manner, which most often precede obliques in Norwegian (Faarlund et al. 1997:896, see also Telemann 1999a:481, 489-490 on Swedish). An example is (50)-(51). Example (51) is degraded because the adjunct of manner follows the oblique. The same tendency can be found with some adjuncts of degree, intensity, etc, as shown in (52)-(53).

- (50) Hun la boka pent på bordet. (Faarlund et al. 1997:896)
 she put book.DEF nicely on table.DEF
 'She put the book nicely on the table.'
- (51) ??Hun la boka på bordet pent. (Faarlund et al. 1997:896)
 she put book.DEF on table.DEF nicely
- (52) Vi har arbeidet mye/ intenst med saken.
 we have worked much / intensively with case.DEF
 'We have worked a lot / intensively with the case.'
- (53) ??Vi har arbeidet med saken mye/ intenst.
 we have worked with case.DEF much / intensively

Adjuncts that are found between the non-finite verb and the preposition in pseudo-passives are of the type that require or prefer the position preceding the oblique. If this position had been disallowed by a strict adjacency constraint, there would be no fully acceptable post-verbal position for them. In some cases, these adjuncts could have been realized in a position preceding the non-finite main verb. However, these positions are often marked or unavailable for the adjuncts in question.⁸

Adjuncts of place and time are different from the adjuncts discussed above. They usually follow an oblique, but they can also precede it, under conditions that are not known. Example (54) has a time adjunct following an oblique, while (55) has the adjunct preceding the oblique. (The reason (54)-(55) are impersonal passives is that they are more similar to pseudopassives than personal actives are.)

- (54) Det ble snakket om landbrukspolitik i timevis.
 EXPL became talked about agricultural.policy for hours
 'They talked about agricultural policy for hours.'

⁸ Too little is known about adjunct positions in Scandinavian, and adjuncts in the relevant groups do not necessarily behave the same way. In Norwegian, relevant adjuncts are ungrammatical left-adjoined to the top VP, while the option for being left-adjoined to the main verb VP varies.

- (i) Han er (*mye) blitt (mye) **ledd** (mye) **av**.
 he is (much) been (much) laughed (much) of
 'He has been laughed at a lot.'
- (ii) Han er (*alvorlig) blitt (*alvorlig) **snakket** (alvorlig) **med**.
 he is (seriously) been (seriously) talked (seriously) with
 'We talked seriously to him.'

- (55) Det ble snakket i timevis om landbrukspolitikk.
 EXPL became talked for hours about agricultural.policy
 'They talked for hours about agricultural policy.'

In corresponding pseudopassives, an adjacency effect shows up: Having the time adjunct preceding the preposition is not good, even if it is acceptable in the impersonal passive (55). There must be adjacency, as in (57).

- (56) ??Landbrukspolitikk ble **snakket i timevis om**.
 agricultural.policy became talked for hours about
 (57) Landbrukspolitikk ble **snakket om i timevis**.
 agricultural.policy became talked about for hours
 'Agricultural policy was talked about for hours.'

This adjacency effect seems to be special for pseudopassives. It is not +/-passive or +/-preposition stranding per se that is decisive, as can be seen from sentences such as (55) (which is passive) and (58) (which has preposition stranding).

- (58) Hva er det de har snakket i timevis om?
 what is it they have talked for hours about
 'What have they talked about for hours?'

There is evidence, then, that Scandinavian — like English — has an adjacency constraint which is special to pseudopassives. However, it must be possible to violate the adjacency constraint. For a finite main verb in a pseudopassive to satisfy the V2 constraint, adjacency must be violable. With a non-finite main verb, pseudopassives show adjacency when higher ranked rules do not require otherwise. Adjuncts of manner, degree, intensity, etc. have a general preference for the position preceding an oblique, and they are allowed to violate adjacency. Adjuncts of time, place etc. are often realized following obliques, so they have no "need" to violate the adjacency constraint.⁹ This seems to be the type of situation that is called "the emergence of the unmarked" in Optimality Theory (see e.g. McCarthy and Prince 2004).

Adjacency could be seen as a kind of iconicity effect: It is natural, but not strictly necessary, for the parts of a complex predicate to be adjacent in c-structure. This

⁹ Åfarli (1989:105, 1992) used the Nynorsk Norwegian example (i) to establish that Norwegian does not have the adjacency constraint in pseudopassives.

(i) Ola vart **snakka to gonger med**.
 Ola became talked two times with
 'Ola was talked to twice.'

Linguists I have asked consider it to be degraded. The reason must be that the adjunct could have followed the preposition; it is acceptable both preceding and following a selected PP in the active.

(ii) Vi har snakka to gonger med Ola / med Ola to gonger.
 we have talked two times to Ola / to Ola two times
 'We have talked twice to Ola.'

is also true of complex predicates consisting of two verbs. They must follow the V2 constraint, but those with a non-finite restructuring verb seem to have an even stricter requirement for adjacency than pseudopassives. Example (59) with a manner adjunct preceding the second verb of the complex predicate is ungrammatical.

- (59) *Dette må **forsøkes** skikkelig å **gjøres**.
 this must try.INF.PASS properly to do.INF.PASS
 'We must try properly to do this.' [intended]

Other cases of complex predicates also show an iconicity effect. Lødrup (2016) discusses complex predicates in Norwegian with a present participle as their second part. The verb *ha* 'have' can form a complex predicate with some present participles. The present participle can then take the position between the verb and the object. Other present participles cannot take this position (Faarlund et al 1997:752-53, Lødrup 2016).

- (60) Jeg **har stående** en fin gammel portvin. (Faarlund et al 1997:753)
 I have standing a fine old port.wine
 'I have a fine old port wine standing.'
 (61) *Vi **har snokende** en skatteinspektør her.
 we have snooping a tax.inspector here
 'We have a tax inspector snooping here.' [intended]

Note that there is no absolute requirement for adjacency. When *ha* 'have' is finite, it can be followed by the subject, a sentence adverbial, etc.

Other languages also give examples of a preference for the parts of a complex predicate to be adjacent in c-structure. For example, French perception verbs such as *voir* 'see' can take subject-to-object-raising or a complex predicate construction. The two verbs are adjacent in (62) with the complex predicate construction, but not in (63) with subject-to-object-raising. (Examples from Sheehan 2016:982, 983.)

- (62) Jean **voit manger** le gâteau à Marie.
 Jean sees eat the cake to Marie
 'Jean sees Marie eating the cake.'
 (63) Jean **voit Marie manger** le gâteau.
 Jean sees Marie eat the cake
 'Jean sees Marie eating the cake.'

The general conclusion of this section is that English and Scandinavian are less different than previously thought when it comes to adjacency. Both have some kind of adjacency requirement, which is only to be expected given the complex predicate analysis. An account of how this requirement interacts with other syntactic restrictions in the languages involved must be left to future research.

6 Conclusion

This paper has not discussed all aspects of pseudopassives. Some problems were put aside, such as the treatment of pseudopassives with retained objects, and pseudopassives with adjunct PPs.

The complex predicate analysis can be seen as a development of the reanalysis approach of traditional and modern grammar. It keeps the basic intuition, and avoids the problem raised by word order in Scandinavian pseudopassives. A complex predicate analysis also has the advantage that it can build upon insights from decades of work on other types of complex predicates. LFG with its distinction between c-structure and f-structure is a framework that is ideal for this kind of analysis.

References

- Aa, Leiv Inge. 2020. *Norwegian verb particles*. Amsterdam: Benjamins.
- Abels, Klaus. 2012. *Phases: An essay on cyclicity in syntax*. Berlin: de Gruyter.
- Åfarli, Tor A. 1989. Passive in Norwegian and in English. *Linguistic Inquiry* 20.1, 101–108.
- Åfarli, Tor A. 1992. *The syntax of Norwegian passive constructions*. Amsterdam: Benjamins.
- Aissen, Judith L. and David M. Perlmutter. 1983. Clause reduction in Spanish. In David M. Perlmutter (ed.) *Studies in Relational Grammar 1*, 360–403. Chicago: University of Chicago Press.
- Alsina, Alex. 1996. *The role of argument structure in grammar: Evidence from Romance*. Stanford, CA: CSLI Publications
- Alsina, Alex. 1997. Causatives in Bantu and Romance. In Alex Alsina, Joan Bresnan and Peter Sells (eds.) *Complex predicates*, 203–246. Stanford, CA: CSLI Publications.
- Alsina, Alex. 2009. The prepositional passive as structure-sharing. In Miriam Butt and Tracy Holloway King (eds.) *Proceedings of the LFG'09 conference*, 44–64. Stanford, CA: CSLI Publications.
- Andrews, Avery D. Complex predicates. To appear in Mary Dalrymple (ed.). *Handbook of Lexical Functional Grammar*. Berlin: Language Science Press.
- Asudeh, Ash and Line Hove Mikkelsen. 2000. Incorporation in Danish: Implications for interfaces. In Ronnie Cann, Claire Grover and Philip Miller (eds.) *Grammatical interfaces in HPSG*, 1–15. Stanford University: CSLI.
- Baltin, Mark and Paul M. Postal. 1996. More on reanalysis hypotheses. *Linguistic Inquiry* 27.1, 127–145
- Bolinger, Dwight. 1977. Transitivity and spatiality: The passive of prepositional verbs. In Adam Makkai, Valerie Becker Makkai, and Luigi Heilmann (eds.) *Linguistics at the crossroads*, 57–78. Padova: Liviana Editrice.

- Bresnan, Joan. 1982. The passive in lexical theory. In Joan Bresnan (ed.) *The mental representation of grammatical relations*, 3–86. Cambridge, MA: The MIT Press.
- Butt, Miriam. 1995. *The structure of complex predicates in Urdu*. Stanford, CA: CSLI Publications.
- Butt, Miriam, Tracy Holloway King, and John T. Maxwell III. 2003. Complex predicates via restriction. In Miriam Butt and Tracy Holloway King (eds.) *Proceedings of the LFG'03 Conference*, 92–104. Stanford, CA: CSLI Publications
- Christensen, Kirsti Koch. 1986. Complex passives, reanalysis, and word formation. *Nordic Journal of Linguistics* 9.2, 135–162.
- Cinque, Guglielmo. 2004. Restructuring and functional structure. In Adriana Belletti (ed.) *Structures and beyond: The cartography of syntactic structures* 3, 132–191. New York: Oxford University Press.
- Drummond, Alex and Dave Kush. 2015. “Reanalysis” is Raising to Object. *Syntax* 18.4, 425–463.
- Dyvik, Helge, Gyri Smørdal Losnegaard and Victoria Rosén. 2019. Multiword expressions in an LFG grammar for Norwegian. In Yannick Parmentier and Jakub Waszczuk (eds.) *Representation and parsing of multiword expressions*, 69–108. Berlin: Language Science Press.
- Engdahl, Elisabet. 2022. Passive with control and raising in mainland Scandinavian. *Nordic Journal of Linguistics* 45.1, 1–41.
- Engdahl, Elisabet and Anu Laanemets. 2015. Prepositional passives in Danish, Norwegian and Swedish: A corpus study. *Nordic Journal of Linguistics* 38.3, 285–337.
- Faarlund, Jan Terje, Svein Lie and Kjell Ivar Vannebo. 1997. *Norsk referansegrammatikk*. Oslo: Universitetsforlaget.
- Findlay, Jamie Y. 2014. *The prepositional passive: A lexical functional account*. University of Oxford: MPhil Thesis.
- Findlay, Jamie. 2016. The prepositional passive in Lexical Functional Grammar. In Doug Arnold, Miriam Butt, Berthold Crysmann, Tracy Holloway King and Stefan Müller (eds.) *Proceedings of the joint 2016 conference on Head-Driven Phrase Structure Grammar and Lexical Functional Grammar*. Stanford, 255–75. CA: CSLI Publications.
- Forst, Martin, Tracy Holloway King and Tibor Laczkó. 2010. Particle verbs in computational LFGs: Issues from English, German, and Hungarian. In Miriam Butt and Tracy Holloway King (eds.) *Proceedings of the LFG'10 Conference*, 228–248. Stanford, CA: CSLI Publications.
- Hansen, Erik and Lars Heltoft. 2011. *Grammatik over det Danske Sprog*. København: Det Danske Sprog- og Litteraturselskab.
- Hellan, Lars. 1988. *Anaphora in Norwegian and the theory of grammar*. Dordrecht: de Gruyter.
- Herslund, Michael. 1984. Particles, prefixes and preposition stranding. *NyS – Nydanske Studier & Almen kommunikationsteori 14: Topics in Danish Syntax*, 34–71.

- Hestvik, Arild. 1986. Case theory and Norwegian impersonal constructions: Subject–object alternations in active and passive verbs. *Nordic Journal of Linguistics* 9.2, 181–197.
- Holmberg, Anders and Christer Platzack. 1995. *The role of inflection in Scandinavian syntax*. New York: Oxford UP.
- Hornstein, Norbert, and Amy Weinberg. 1981. Case theory and preposition stranding. *Linguistic Inquiry* 12.1, 55–91.
- Jespersen, Otto. 1969. [1937]. *Analytic syntax*. New York: Holt, Rinehart and Winston.
- Kaplan, Ronald M. Unbounded dependencies. To appear in Mary Dalrymple (ed.). *Handbook of Lexical Functional Grammar*. Berlin: Language Science Press.
- King, Ruth and Yves Roberge. 1990. Preposition stranding in Prince Edward Island French. *Probus* 3, 351–369.
- Kiparsky, Paul. 2013. Towards a null theory of the passive. *Lingua* 125.1, 7–33.
- Klingvall, Eva. 2012. Topics in pseudo-passives. *Working Papers in Scandinavian Syntax* 90, 53–80.
- Knudsen, Trygve. 1967. *Kasuslære*. Volume 1. Oslo: Universitetsforlaget.
- Körner, Rudolph. 1949. The prepositional passive formations: A contribution to West European syntax. *Moderna språk* 43, 53–67.
- Law, Paul. 2005. Preposition stranding. In Martin Everaert and Henk van Riemsdijk (eds.) *The Blackwell companion to syntax*, volume III, 631–684. Malden, MA: Blackwell.
- Lødrup, Helge. 1985. Om reanalyse. *Skriftserie* 21, 97–110. University of Bergen: Department of Phonetics and Linguistics.
- Lødrup, Helge. 1991. The Norwegian pseudopassive in lexical theory. *Working Papers in Scandinavian Syntax* 47, 118–129.
- Lødrup, Helge. 2007. A new account of simple and complex reflexives. *Journal of Comparative Germanic Linguistics* 10.3, 183–201.
- Lødrup, Helge. 2014. Long passives in Norwegian: Evidence for complex predicates. *Nordic Journal of Linguistics* 37.3, 367–391.
- Lødrup, Helge. 2016. Verbal present participles in Norwegian: Controlled complements or parts of complex predicates. In Doug Arnold, Miriam Butt, Berthold Crysmann, Tracy Holloway King and Stefan Müller (eds.) *Proceedings of the Joint 2016 Conference on Head-driven Phrase Structure Grammar and Lexical Functional Grammar*, 380–400. Stanford, CA: CSLI Publications
- Lødrup, Helge. 2022. Some problems and mysteries of the long passive in Norwegian. Invited talk at the LFG'22 Conference.
- Lovestrand, Joseph. 2020. F-structure and s-structure of Urdu complex predicates. In Miriam Butt and Ida Toivonen (eds.) *Proceedings of the LFG'20 conference*, 232–249. Stanford, CA: CSLI Publications.
- Lowe, John J. 2015. Complex predicates: an LFG+glue analysis. *Journal of Language Modelling* 3.2, 413–462.
- Lundquist, Björn. 2014a. Verb–particles: Active verbs. *Nordic Atlas of Language Structures (NALS) Journal* 1, 110–118.

- Lundquist, Björn. 2014b. Verb–particles: Particle placement in passives. *Nordic Atlas of Language Structures (NALS) Journal* 1, 119–126.
- Maling, Joan and Annie Zaenen. 1985. Preposition-stranding and passive. *Nordic Journal of Linguistics* 8.2, 197–209.
- McCarthy, John J. and Alan Prince. 2004. The emergence of the unmarked. In John McCarthy (ed.) *Optimality Theory in phonology: A reader*, 483–494. Malden, MA: Blackwell.
- Mikkelsen, Kristian. 1975. [1911] *Dansk Ordføjningslære*. København: Hans Reitzels forlag.
- Mills, Jillian Louise. 2008. *Non-specific objects in the pseudopassive: The syntax and semantics of English pseudo-incorporated pseudopassives*. Massachusetts Institute of Technology: MA Diss.
- Mohanran, Tara. 1997. Multidimensionality of representations: NV complex predicates in Hindi. In Alex Alsina, Joan Bresnan and Peter Sells (eds.) *Complex predicates*. 431–472. Stanford, CA: CSLI Publications.
- Needham, Stephanie and Ida Toivonen. 2011. Derived arguments. In Miriam Butt and Tracy Holloway King (eds.) *Proceedings of the LFG'11 conference*, 401–421. Stanford, CA: CSLI Publications.
- Niño, Maria-Eugenia. 1997. The multiple expression of inflectional information and grammatical architecture. In Francis Corblin, Danièle Godard and Jean-Marie Marandin (eds.) *Empirical issues in formal syntax and semantics*, 127–47. Bern: Peter Lang.
- Postal, Paul Martin. 1986. *Studies of passive clauses*. Albany: Suny Press
- Richards, Norvin. 2017. Multiple case assignment and the English pseudo-passive. In Nicholas LaCara, Keir Moulton and Anne-Michelle Tessier (eds.) *A Schrift to Fest Kyle Johnson*, 313–319. University of Massachusetts - Amherst: Linguistics Open Access Publications.
- Riddle, Elizabeth and Gloria Sheintuch. 1983. A functional analysis of pseudo-passives. *Linguistics and Philosophy* 6.4, 527–563.
- Rizzi, Luigi. 1978. A restructuring rule in Italian syntax. In Samuel Jay Keyser (ed.) *Recent transformational studies in European languages*, 115–158. Cambridge, MA: The MIT Press.
- Sells, Peter. 2004. Syntactic information and its morphological expression. In Louisa Sadler and Andrew Spencer (eds.) *Projecting morphology*, 187–225. Stanford, CA: CSLI Publications.
- Sheehan, Michelle. 2016. Complex predicates. In Adam Ledgeway and Martin Maiden (eds.) *The Oxford guide to the Romance languages*, 981–993. Oxford: Oxford University Press.
- Taraldsen, Knut Tarald. 1979. Remarks on some central problems of Norwegian syntax. Review article of Torstein Fretheim (ed.) 'Sentrale problemer i norsk syntaks'. *Nordic Journal of Linguistics* 2.1, 23–54.
- Teleman, Ulf, Staffan Hellberg and Erik Andersson. 1999a. *Svenska akademiens grammatik. Volume 3 Fraser*. Stockholm: Svenska Akademien.
- Teleman, Ulf, Staffan Hellberg and Erik Andersson. 1999b. *Svenska akademiens grammatik. Volume 4 Satser och meningar*. Stockholm: Svenska Akademien.

- Toivonen, Ida. 2021. Arguments and adjuncts across levels. In Miriam Butt, Jamie Y. Findlay and Ida Toivonen (eds.) *Proceedings of the LFG'21 Conference*. 306–331. Stanford, CA: CSLI Publications.
- Truswell, Robert. 2008. Preposition stranding, passivisation, and extraction from adjuncts in Germanic. *Linguistic variation yearbook* 8.1, 131–178.
- Tseng, Jesse. 2006. English prepositional passives in HPSG. In Gerhard Jäger, Paola Monachesi, Gerald Penn and Shuly Wintner (eds.) *FG-2006: Proceedings of the 11th Conference on Formal Grammar*, 147–159. Stanford, CA: CSLI Publications.
- Western, August. 1921. *Norsk riksmåls-grammatikk for studerende og lærere*. Kristiania: Aschehoug.
- Wurmbrand, Susanne. 2001. *Infinitives: Restructuring and clause structure*. Berlin: Mouton.
- Wurmbrand, Susi. 2004. Two types of restructuring: Lexical vs. functional. *Lingua* 114, 991–1014.
- Wurmbrand, Susi. 2007. How complex are complex predicates? *Syntax* 10.3, 243–288.
- Wurmbrand, Susi. 2014. Restructuring across the world. In Ludmila Veselovská and Markéta Janebová (eds.) *Proceedings of the Olomouc linguistics colloquium 2014: Language use and linguistic structure*, 275–294. Olomouc: Palacký University.
- Wurmbrand, Susanne and Koji Shimamura. 2017. The features of the voice domain: Actives, passives, and restructuring. In Roberta d'Alessandro, Irene Franco and Ángel Gallego (eds.) *The verbal domain*, 179–204. Oxford University Press.
- Ziv, Yael and Gloria Sheintuch. 1981. Passives of obliques over direct objects. *Lingua* 54.1, 1–17.