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# Prepositional passives in Danish, Norwegian and Swedish: A corpus study

Elisabet Engdahl & Anu Laanemets

There are conflicting reports in the literature concerning whether the Scandinavian languages use prepositional passives as in English. Maling & Zaenen (1985) showed that Icelandic does not have the construction; instead the Icelandic data should be analyzed as topicalization of the complement of a preposition in impersonal passives. They suggested that the same account would be appropriate for Danish and Swedish, whereas Norwegian is reported to have a rather productive prepositional passive (Lødrup 1991). In order to find out to what extent and in what ways prepositional passives are actually used, we carried out a series of investigations in Danish, Norwegian and Swedish contemporary text corpora, analyzing over 3600 potential prepositional passives, with a balance of periphrastic and morphological passive forms. We have found that prepositional passives are indeed used in all three languages, but rather infrequently, ranging from 3.4 per million words (3.4/mw) in Swedish, 5/mw in Danish to 16/mw in Norwegian. The majority of the prepositional passives are periphrastic *bli(ve)*-passives. The passive subject is typically animate, a person or an animal, who is psychologically affected by the action, or the lack of action, expressed by the participle. The notion of affectedness that is relevant for these languages thus differs from what has been described for English. Prepositional *s*-passives are found in coordinated structures and in infinitival complements of modal verbs, a context known to favour *s*-passive.

**Keywords** affectedness, animacy, Danish, Icelandic, impersonal passive, Norwegian, prepositional passive, pseudo-passive, Scandinavian, Swedish

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## 1. INTRODUCTION

Prepositional passives, henceforth PREP-PASSIVES, as illustrated in (1) from English and (2)–(4) from mainland Scandinavian (Danish, abbreviated Da., Norwegian – No. and Swedish – Sw.), have received a lot of attention from both traditional and generative grammarians.

(1) This bed has been slept in.

- (2) Vi er vant til at blive trådt på. (Da.)  
*we are used to TO become trodden on*  
 ‘We are used to being trodden on.’
- (3) Hun er lei av å ikke bli trodd på. (No.)  
*she is tired of TO not become believed on*  
 ‘She is tired of not being believed in.’
- (4) Jag begär ändå att bli lyssnad på. (Sw.)  
*I request still TO become listened on*  
 ‘I still request to be listened to.’

Regarding the Scandinavian languages, there are conflicting claims in the literature, concerning both the productivity and the grammatical status of Prep-passives. Herslund (1984) states that they are ungrammatical in his idiolect of Danish. Maling & Zaenen (1985:207) claim that they are ungrammatical in Danish and Swedish ‘or, at best, extremely marginal’, but the recent Danish reference grammar *Grammatik over det Danske Sprog* (Hansen & Heltoft 2011, henceforth *GDS*) treats Prep-passives as one of several options for forming the passive in Danish. The Swedish reference grammar *Svenska Akademiens Grammatik* (Teleman, Hellberg & Andersson 1999, henceforth *SAG*) notes that Prep-passives are sometimes used, primarily in spoken and informal written Swedish (*SAG* 4:369). Lødrup (1991:118) writes: ‘Norwegian has a rather productive pseudopassive (as opposed to the other Scandinavian languages),’<sup>1</sup> and *Norsk Referansegrammatikk* (Faarlund, Lie & Vannebo 1997, henceforth *NRG*) provides a number of examples without mentioning any genre restrictions.

The conflicting reports call for a wider investigation of the use of Prep-passives in contemporary Scandinavian. The articles cited above mainly base their conclusions on constructed data and judgments from a few informants. In order to clarify the situation, we have conducted a corpus study of written Danish, Norwegian and Swedish. We have in addition systematically investigated if there are any differences in the use of Prep-passives between the morphological passive, which we refer to as *S-PASSIVE*, and the periphrastic passive, which we refer to as *BLI(VE)-PASSIVE*.<sup>2</sup> Previous research (Engdahl 1999, 2006; Laanemets 2012, 2013) has shown that there are considerable differences between Danish and Norwegian on the one hand and Swedish on the other with respect to the use of the two types of passive. This motivates looking more closely at any correlations between the use of Prep-passives and the types of passive.

Although our primary aim is to investigate the use of Prep-passives, we also need to consider passives with particles in order to make the right distinctions with respect to Prep-passives. By particle passives, henceforth *PART-PASSIVES*, we understand passives where the passive participle is followed by a particle which normally carries stress, indicated by a stroke (ˈ), as illustrated by examples (5)–(8).

Part-passives are used productively in Danish, Norwegian and Swedish, just as in English.

- (5) a. The guests were thrown 'out.  
 b. We threw the guests 'out.  
 c. We threw 'out the guests.
- (6) a. Gæsterne blev smidt 'ud. (Da.)  
*guests.DEF became thrown.SG out*  
 b. Vi smed gæsterne 'ud.  
*we threw guests.DEF out*
- (7) a. Gjestene ble kastet 'ut. (No.)  
*guests.DEF became thrown.SG out*  
 b. Vi kastet gjestene 'ut.  
*we threw guests.DEF out*  
 c. Vi kastet 'ut gjestene.  
*we threw out guests.DEF*
- (8) a. Gästerna kastades 'ut. (Sw.)  
*guests.DEF threw.S out*  
 b. Gästerna blev utkastade.  
*guests.DEF became out-thrown.PL*  
 c. Vi kastade 'ut gästerna.  
*we threw out guests.DEF*

Note that the Swedish example in (8a) is in the *s*-passive. In periphrastic passives, particles are regularly incorporated in the passive participle in Swedish, as shown in (8b).

How to distinguish prepositions from particles is a much debated issue (see e.g. Emonds 1972, van Riemsdijk 1978, Toivonen 2003, Tungseth 2008). Svenonius (2003) uses a number of criteria such as whether the item can carry sentential stress and whether the preposition/particle forms a constituent with the complement which can be preposed. The stress criterion distinguishes the particles in (5)–(8) from the prepositions in (1)–(4), which are all unstressed. Note that the particles are stressed also in the active versions in the (b) and (c) examples in (5)–(8).

In active sentences, the particle follows the object in Danish and precedes it in Swedish, as is well known. In Norwegian both orders are sometimes possible, though under somewhat different conditions (Aa 2015). The theoretical implications of this difference between Danish, Norwegian and Swedish have been much discussed (see e.g. Taraldsen 1983; Holmberg 1986; Svenonius 1996, 2003; Lundquist 2014a, b). We here restrict our discussion to the possible impact of particle placement on the availability of Prep-passives.

In addition to Prep-passives with simple verbs, as illustrated above, many languages have Prep-passives formed with complex verbs containing e.g. a nominal argument, as shown for English in (9) and Norwegian in (10). We will refer to this type as V+N Prep-passives.

(9) He **was taken advantage of**.

(10) Utspelet **valt** ikkje ein gong **lagt merke til**. (NRG:844)  
*proposal.DEF became not one time put note to*  
 'The proposal wasn't even noticed.'

This has implications for the way the corpus searches are carried out, as discussed in Section 3, where we describe our corpus investigation. Common properties of the Prep-passives found in the three languages are presented in Section 4. In addition to genuine Prep-passives, our corpus investigation revealed a large number of confounding examples which may influence the characterization of Prep-passives; these are discussed in Section 5. More language-specific findings are discussed in Section 6, and in Section 7 we conclude by assessing some of the theoretical claims in the light of the larger collection of authentic examples we have gathered.

## 2. PREVIOUS STUDIES

There is a considerable amount of research on, or related to, Prep-passives. We will limit our survey to studies that bear directly on the mainland Scandinavian languages, but start with a brief overview of English Prep-passives as the research on English provides an important background for other studies.

### 2.1 English

In English, Prep-passives have probably been used since Middle English (Goh 2001) and are described in early reference grammars such as Jespersen (1909–49). Ward, Birner & Huddleston (2002) divide Prep-passives in English into two types. In the first type, a particular preposition is required by the verb, see (11), or by the verbal idiom as in (12).<sup>3</sup>

(11) a. My mother approved **of** the plan. (Ward et al. 2002:1433)  
 b. The plan **was approved of** by my mother.

(12) a. They all looked up **to** her.  
 b. She **was looked up to** by them all.

In the second type, the preposition is not selected by the verb, but typically has a locative or instrumental meaning, as shown in (13).

- (13) a. This bed **was slept in** by George Washington. (Ward et al. 2002:1446)  
 b. This bed has **been slept in**.  
 c. This cup **was drunk out of** by Napoleon. (Davison 1980:44)

Both types of Prep-passives are constrained by a notion of AFFECTEDNESS (Bolinger 1975, 1977; Anderson 1977:373f.). The passive sentence is only perceived as felicitous if the passive VP expresses a significant property, or a change in a significant property, of the subject-referent (Ward et al. 2002:1466f.).<sup>4</sup> This condition explains why the structurally similar examples in (14) are hard to make sense of.<sup>5</sup>

- (14) a. #The river **was slept beside**. (Ward et al. 2002:1446)  
 b. #A cup **was drunk out of** by Napoleon. (Davison 1980:44)

If George Washington has slept in a bed, as in (13a), the bed acquires historical interest but the fact that someone has slept beside a river, as in (14a), does not affect it in any significant way. But sleeping in a bed affects it (the sheets become rumpled) which is why (13b) might be a relevant comment even if the sleeper is unknown. Similarly, a particular cup used by Napoleon renders this cup historical interest (13c), but this does not hold for an arbitrary cup (14b).

Most theoretical approaches to Prep-passives in English assume some form of LEXICAL REANALYSIS whereby the verb and the preposition form a unit to which passive can apply, see e.g. Wasow (1977:351f.), Hornstein & Weinberg (1981), Bresnan (1982). Evidence in favour of this approach is that it is not possible to form Prep-passives in English if e.g. an adverb intervenes between the V and the P, as shown in (15b), whereas it is possible to front the complement of the preposition in e.g. a relative clause (15c). The following examples are from Bresnan (1982:51ff.).<sup>6</sup>

- (15) a. Everything is being **paid for** by the company.  
 b. \*Everything was **paid twice for**.  
 c. That's something that I would have **paid twice for**.

Examples like (15b) must be distinguished from examples like (9), where *take advantage of* is analyzed as a complex verb (see Bresnan 1982:57f.; Alsina 2009).

Law (2006:659) combines the reanalysis approach with the assumption that the passive morpheme in English must absorb Case, the Case absorption property. In Prep-passives it is the Case assigned by the preposition which is absorbed by the passive morpheme (Law 2006:660). The only way the complement can get Case is by moving to the subject position where it gets nominative Case. Law argues that this assumption furthermore explains why English does not have impersonal passives, in contrast with the other Germanic languages, as illustrated in (16), from Law (2006:658).

- (16) a. daß *pro* getanzt worden ist (German)  
           *that danced become is*  
           ‘that there was dancing’  
       b. \*that there/it had been danced

Since English passive morphemes must absorb accusative Case, it follows that passives of intransitive verbs, i.e. impersonal passives, are impossible; these verbs do not assign accusative Case at all. The availability of impersonal passives in the other Germanic languages means that passive morphemes in these languages do not need to absorb case, a fact further evidenced by the availability of passive subjects with oblique Case (see Section 2.2 below).

Alsina (2009), working in Lexical-Functional Grammar (LFG), capitalizes on the similarities between preposition stranding in Prep-passives and in long distance dependencies such as relative clauses, as in (15c) above. Adapting a proposal from Lødrup (1991), he provides an analysis which involves structure sharing between the surface subject argument and the complement of the preposition.

Although there are numerous studies about Prep-passives in English, we have not found any corpus studies which report on the frequency of Prep-passives in general or among passive clauses.<sup>7</sup>

## 2.2 Icelandic

In a seminal article, Maling & Zaenen (1985) show that what looks like Prep-passives in Icelandic is really a case of preposition stranding when an oblique complement has been topicalized in an impersonal passive. This analysis is adopted in Thráinsson (2007), from where we cite the Icelandic examples below (see 2007:262–264).

- (17) a. Fólk talaði (oft) um þennan mann.  
           *people talked often about this man.ACC.MASC*  
           ‘People often talked about this man.’  
       b. \*Þessi maður var (oft) talaður um.  
           *this man.NOM.MASC was often talked.NOM.MASC about*  
       c. þennan mann var (oft) talað um.  
           *this man.ACC was often talked.NOM.NEUT about*  
           ‘This man was (often) talked about.’

(17a) is an active sentence with the expression *tala um* ‘talk about’, which takes a complement in the accusative case. A passive version with a nominative subject, (17b), is clearly ungrammatical, but the version in (17c), where the first constituent retains the case assigned by the preposition, is grammatical. As is well-known, Icelandic has oblique subjects with both active and passive verbs. Applying the tests for subjecthood used in Zaenen, Maling & Thráinsson (1985), it is clear that the clause-initial accusative *þennan mann* ‘this man’ in (17c) does not behave as an

oblique subject. For instance, it cannot appear post-verbally in a yes/no question (18) or appear in an ECM construction as in (19).<sup>8</sup>

(18) \*Var þennan mann (oft) talað um?  
*was this man.ACC often talked about*

(19) \*Ég tel þennan mann hafa verið talað um.  
*I believe this man.ACC have.INF been talked about*

According to Maling & Zaenen (1985) and Thráinsson (2007), the grammatical example in (17c) is therefore to be analyzed as an instance of topicalization in an impersonal passive construction, as in (20a), but without the overt expletive *það* ‘it, there’. The expletive *það* is only used in clause-initial position, i.e. Spec,CP, as has been shown by several researchers (see Thráinsson 2007:Chapter 6 and references given there).

- (20) a. *það var (oft) talað um þennan mann.*  
*it was often talked.NOM.NEUT about this man.ACC*  
 ‘People often talked about this man.’
- b. *þennan mann var (\*það) (oft) talað um.*  
*this man.ACC was it often talked.NOM.NEUT about*  
 ‘This man was (often) talked about.’

Maling & Zaenen (1985:207) further claim that this analysis is appropriate also for apparent Prep-passives in Danish and Swedish.

### 2.3 Danish

Essentially the same analysis as in Maling & Zaenen (1985) was proposed for Danish by Herslund (1984) who also considers apparent Prep-passives to be fronted versions of impersonal passives with stranded prepositions. He renders the Danish counterpart to the English Prep-passive in (21a) as in (21b), a fronted version of the impersonal passive in (21c) (see Herslund 1984:50). Note that the fronted pronoun is in the accusative case.

- (21) a. *He<sub>i</sub> was spoken about e<sub>i</sub>.*
- b. *Ham<sub>i</sub> blev der talt om e<sub>i</sub>.*  
*him.ACC became there spoken about*  
 ‘There was talk about him.’
- c. *Der blev talt om ham.*  
*there became spoken about him.ACC*  
 ‘There was talk about him.’

Herslund (1984:70) mentions in a footnote that some speakers use and accept sentences as in (22), which involve initial pronouns in the nominative case and which are not interpreted as impersonal passives.

- (22) a. Vi kan ikke lide at **blive trådt på**. (Herslund 1984:70)  
*we can not stand TO become stepped on*  
 ‘We don’t like being stepped upon.’
- b. Vi skal ikke **grines ad**.  
*we shall not laugh.s at*  
 ‘We don’t want to be laughed at.’
- c. Hvornår **blev han kaldt på**?  
*when became he called on*  
 ‘When was he called?’

Herslund comments that these are ungrammatical in his idiolect but that they seem to have been fairly common until the 19th century, citing Mikkelsen (1911/1975:135). He does not agree with Hansen (1967:52), who claims that they are expanding.<sup>9</sup> Herslund also notes that most of the cited examples have the Prep-passive in an infinitival clause following a modal verb, whereas examples with finite verbs, as in (22c) above, are much rarer and considerably less acceptable to him.<sup>10</sup>

Herslund links the absence of Prep-passives in Danish to the lack of what he calls particle movement. By this he means a rule which would move a particle across an object, creating a structure like [v + p] which in turn would be a prerequisite for the reanalysis that gives rise to Prep-passives, as described for English above. As shown in (6b), repeated here as (23a), the stressed particle follows the object in Danish. The order particle–object is ungrammatical, (23b).

- (23) a. Vi smed gæsterne 'ud.  
*we threw guests.DEF out*  
 ‘We threw the guests out.’
- b. \*Vi smed 'ud gæsterne.  
*we threw out guests.DEF*

Herslund assumes that the languages which have particle movement, i.e. English, Norwegian and Swedish (see (5), (7) and (9) above), have productive Prep-passives (Herslund 1984:61), contrary to what is the case in Danish.

Given that the object precedes the particle in Danish, the existence of Part-passives is not surprising, (24a). Note, however, that this is only possible in predicative position in Danish, never in attributive position, (24b), whereas it is possible in English, (24c).



- (24) a. Gæsten blev smidt <sup>1</sup>ud.  
*guest.DEF became thrown out*  
 ‘The guest was thrown out.’  
 b. \*den smidte ud gæst  
*the thrown out guest*  
 c. the thrown out guest

Vikner (1995:246) also assumes that Prep-passives are ungrammatical in Danish, but the Danish reference grammar *GDS* (p. 1288) is less dismissive and includes, among the six morpho-syntactic options to form passive in Danish, constructions where the complement of the preposition is promoted to subject status, as exemplified in (25).<sup>11</sup>

- (25) a. de blev set <sup>1</sup>ned på  
*they.NOM became looked down on*  
 ‘People looked down on them.’  
 b. håndskriftet må ikke **blades i**  
*manuscript.DEF must not leaf.s in*  
 ‘It is forbidden to turn the pages of the manuscript.’

*GDS* (pp. 1295f.) also brings up the possibility of forming impersonal passives with the expletive *der* ‘there’ and a prepositional object, as in (26a) below, besides the passive with promoted complement of the preposition, as in (26b). Unlike Herslund (1984), both passive constructions are considered acceptable in Danish, and seen as two alternatives to the active counterpart in (26c).

- (26) a. der blev løjet for os  
*there became lied for us.ACC*  
 ‘People lied to us.’  
 b. vi blev løjet for  
*we.NOM became lied for*  
 ‘People lied to us.’  
 c. de løj for os  
*they lied for us*  
 ‘They lied to us.’  
 d. vi vil ikke lyves for  
*we will not lie.s for*  
 ‘We don’t want to be lied to.’

*GDS* says nothing about the frequency of Prep-passive in contemporary Danish, nor does it mention any constructional restrictions except for remarking that the construction is easiest to form with a modal verb, as illustrated in (25b) and (26d). *GDS* does not give any examples of V+N Prep-passives, but both Mikkelsen

(1911/1975:135) and Diderichsen (1962:122) provide some examples, see (27) from Diderichsen.

- (27) Nu skal hun **tages Maal af**.  
*now shall she take.s measure of*  
 ‘Now she shall be measured.’

## 2.4 Norwegian

As mentioned in the Introduction, Lødrup (1991) states that Prep-passive is ‘quite productive’ in Norwegian. He argues that this cannot be due to reanalysis as in English since the presence of intervening adverbs does not affect the construction in Norwegian.<sup>12</sup> Compare the well-formed Norwegian examples in (28a) with the ill-formed English examples in (15b), repeated here as (28b).

- (28) a. Ola **vart snakka to ganger med**. (Åfarli 1989:105)  
*Ola became talked two times with*  
 ‘Ola was talked to twice.’  
 b. \*Everything was **paid twice for**.

Instead of reanalysis, Lødrup proposes that the relation between the passive subject and the unexpressed propositional complement is similar to raising to subject and should be analyzed in the same way.<sup>13</sup> In order to account for the restrictions on Prep-passives, illustrated by the contrasts shown in (29)–(30), Lødrup cites Bolinger’s (1977) generalization: ‘the subject in a passive construction is conceived to be the true patient, i.e. to be genuinely affected by the action of the verb’ (1977:67).<sup>14</sup>

- (29) a. Taket **ble gått på** av to barn. (Lødrup 1991:120)  
*roof.DEF became walked on by two children*  
 ‘The roof was walked on by two children.’  
 b. ?Storgata **ble gått på** av to barn.  
*Main Street became walked on by two children*
- (30) a. Sengen **ble sovet i**. (Lødrup 1991:125)  
*bed.DEF became slept in*  
 ‘The bed was slept in.’  
 b. \*Åtte timer **ble sovet i**.  
*eight hours became slept in*  
 c. \*God samvittighet **ble sovet med**.  
*good conscience became slept with*

As discussed above in connection with (13), a bed is affected by someone sleeping in it, which would account for (30a), whereas measure phrases and abstract nouns like those in (30b) and (30c), respectively, cannot be genuinely affected.

The Norwegian reference grammar *NRG* (pp. 843f.) gives the impression that Prep-passives are possible in general, provided that the prepositional phrase (PP) is selected by the verb (in *NRG*'s terminology 'is a prepositional object'). If a verb takes both a nominal object and a prepositional object, only the nominal object can become subject, see (31).

- (31) a. De oppmuntret elevene til ulydighet. (NRG:844)  
*they encouraged pupils.DEF to disobedience*  
 'They encouraged the pupils to (show) disobedience.'
- b. Elevene ble oppmuntret til ulydighet.  
*pupils.DEF became encouraged to disobedience*  
 'The pupils were encouraged to (show) disobedience.'
- c. \*Ulydighet **ble oppmuntret** elevene **til**.  
*disobedience became encouraged pupils.DEF to*

However, if the verb, noun and preposition form a lexicalized expression, as in (10) above, then only the prepositional object can become subject.

- (32) a. Dei la ikkje ein gong merke til utspelet. (NRG:844)  
*they put not one time note to move.DEF*  
 'They didn't even notice the move.'
- b. \*Merke vart ikkje ein gong lagt til utspelet.  
*note became not one time put to move.DEF*
- c. Utspelet **vart** ikkje ein gong **lagt merke til**.  
*move.DEF became not one time put note to*  
 'The move wasn't even noticed.'

According to *NRG*, Prep-passives are normally not possible with adverbial PPs, with the exception of certain locatives where it is possible to interpret the action as intentional.<sup>15</sup>

- (33) Golvet må ikkje **gåast på** før om eit døgn. (NRG:845)  
*floor.DEF must not walk.s on before in one day*  
 'The floor must not be walked on until after 24 hours.'

## 2.5 Swedish

An early comparative study was carried out by Körner (1948, 1949) who investigated the development of Prep-passives in Swedish, with frequent comparisons with Danish, Norwegian and to some extent English, by excerpting novels and newspapers.<sup>16</sup> He claims that Prep-s-passives (i.e. morphological Prep-passives) are more common in Swedish than in Danish and Norwegian, whereas it is the other way round for Prep-*bli(ve)*-passives (i.e. periphrastic Prep-passives). Unfortunately, Körner does not give any frequencies for the different types in his material, which

means that it is difficult to assess his claim that examples like (34a) constitute the normal type in Swedish literature, whereas (34b) is unusual (Körner 1948:132).<sup>17</sup>

- (34) a. Alla hemliga skandaler från hela Balkan  
*all secret scandals from whole Balkan*  
 vädrades och **skrattades åt**.  
*aired.s and laughed.s at*  
 'All secret scandals from all of Balkan were aired and laughed at.'
- b. Han tål inte att bli skrattad åt.  
*he stands not TO become laughed at*  
 'He can't stand being laughed at.'  
 (Selma Lagerlöf, *Legender* [Legends], Stockholm, 1899, p. 37)

Körner furthermore proposes that the widespread use of periphrastic Prep-passives in Danish and Norwegian has to do with the way participles of particle verbs are formed, as also noted by Hulthén (1944:227f.). In Danish and Norwegian, there is a preference for a free-standing particle, just as in the active simple tenses, whereas the particle tends to prefix to the participle in Swedish. Compare Danish in (35) and Swedish in (36), (repeated here from the Introduction, (6) and (8)). As shown in the glossing, the past participle agrees with the subject in Swedish, but not in Danish, or Norwegian.

- (35) a. Vi smed gæsterne 'ud. (Da.)  
*we threw guests.DEF out*
- b. Gæsterne blev smidt 'ud.  
*guests.DEF became thrown.SG out*  
 'The guests were thrown out.'
- (36) a. Vi kastade 'ut gästerna. (Sw.)  
*we threw out guests.DEF*
- b. Gästerna blev utkastade.  
*guests.DEF became out.thrown.PL*  
 'The guests were thrown out.'

By analogy with free-standing particles like that in (35b), Körner writes, free-standing prepositions become possible and we get examples like (37) and (38) in Danish and Norwegian.<sup>18</sup> Note the intervening adverb *strængelig* 'severely' in the Danish example.

- (37) Han blev saa talet strængelig til af Præsten. (Da.)  
*he became so talked severely to by parson.DEF*  
 'Then he was talked to by the parson in a severe fashion.'  
 (Johannes V. Jensen, *Nye Himmerlandshistorier* [New stories from Himmerland], København, 1904)

- (38) **er** verden **nogensinde set paa** med blankere, mere nyvaakne øine (No.)  
*is world.DEF ever seen on with brighter more awakened eyes*  
 ‘is the world ever looked at with brighter, more alert eyes’  
 (Gunnar Heiberg, *Samlede dramatiske verker 4* [Collected dramatic works], Oslo, 1917)

Sundman (1987:476–483) discusses Körner’s arguments for Prep-passives in Swedish being true passives and comes to the conclusion that they are indeed an option in the grammar, but not obligatory since examples can be rephrased with an expletive subject, as shown in (39) (see Maling & Zaenen’s proposal for Icelandic in Section 2.2 above).

- (39) Detta har (det) inte **talats om** tidigare. (Sw.; Sundman 1987:482)  
*this has it not spoken.s about earlier*  
 ‘This has not been spoken about earlier.’

The Swedish reference grammar states that Prep-passives are primarily used in spoken language and informal written language (*SAG* 4:369ff.). It gives a few examples where the preposition is selected, see (40a), but notes that locative adverbials are also possible, see (40b).<sup>19</sup>

- (40) a. “Dagens dikt” tål att **skojas med** . . . (S) (*SAG* 4:369ff.)  
*today’s poem stands TO joke.s with*  
 ‘Today’s poem [radio program] can take being made fun of.’  
 b. Väggarna får absolut inte **klottras på**.  
*walls.DEF may absolutely not scribble.s on*  
 ‘The walls must not be scribbled on.’

Most of the examples provided are infinitival and *SAG* writes that Prep-passives in infinitival phrases, as in (40a, b), are considered more acceptable than in tensed clauses. V+N Prep-passives are possible, provided that the object has ‘weak referentiality’, as in (41).

- (41) Begåvningar ska **tas hand om**.  
*talents shall take hand about*  
 ‘Gifted people should be looked after.’

The examples in *SAG*’s main text are all *s*-passives. In the section on periphrastic passives, *SAG* comments, in a footnote, that Prep-*bli*-passives are even more marginal than Prep-*s*-passives (*SAG* 4:387). Three authentic examples are given, including (42).

- (42) Den som söker socialtjänsten ska känna trygghet och **bli lyssnad på**, understryker han. (S) (SAG 4:387)  
*and become listened on underlines he*  
 'A person who turns to the Social services must feel secure and be listened to, he underlines.'

## 2.6 Summary of predictions

Here we summarize the different predictions made in previous research, which we will address by our empirical investigation.

**FREQUENCIES.** Prep-passives should be more frequent and used in a wider variety of contexts in Norwegian than in Danish (Herslund 1984, Lødrup 1991, *NRG*). Herslund also predicts more Prep-passives in Swedish than in Danish.

The overall frequency of periphrastic Prep-passives should be higher in Danish and Norwegian than in Swedish, whereas the opposite should hold for *s*-passives (Körner 1948, *SAG*).

**DISTRIBUTION.** The majority of the Danish examples should be infinitival complements of modal verbs (Herslund 1984, *GDS*). In Norwegian, the majority should involve selected prepositional complements, rather than adjuncts (*NRG*).

In Swedish we should primarily find Prep-*s*-passives (Körner 1948, *SAG*). It should be possible to analyze the Prep-passives as impersonal constructions without an overt expletive (Maling & Zaenen 1985, Sundman 1987).

**AFFECTEDNESS.** If Prep-passives in Scandinavian resemble English Prep-passives, we should expect to find primarily affected subjects, including locative and instrumental subjects (Anderson 1977, Davison 1980, Ward et al. 2002).

## 3. CORPUS INVESTIGATIONS

Our empirical investigation of the use of Prep-passives in contemporary Danish, Norwegian and Swedish is based on written language corpora. In our selection of corpora, we wanted to include both newspapers and fictional texts, and we aimed for as high comparability across the three languages as possible. An overview of the materials used is given in Table 1 and the corpora are listed towards the end of the paper.<sup>20</sup>

The morpho-syntactic annotation of the corpora differs, both with respect to tagset and precision, and the available search options vary somewhat across the search interfaces, which may have affected the results. Simply searching for a passive verb or participle followed by a preposition gives a large number of false hits, e.g. passive verbs followed by locative or temporal PPs. In order to exclude these, we required

Language	Corpus	Period	Subcorpus used (million words)	Number of hits	
				<i>s</i> -passive	<i>bli(ve)</i> -passive
Danish	KorpusDK	1983–2002	56	4452	2081
Norwegian	Leksikografisk bokmålskorpus (LBK)	1985–2010	41.4	2087	3249
Swedish	Korp	1980–2013	65.86 (261.4)	1630	789

**Table 1. Overview of corpora used.**

	Da. <i>-s</i>	Da. <i>blive</i>	No. <i>-s</i>	No. <i>bli</i>	Sw. <i>-s</i>	Sw. <i>bli</i>	Total
Prep-passive	5	30	23	47	26	80	211
% of 600	0.8%	5%	4%	8%	4%	13%	6% of 3600

**Table 2. Number and percentage of Prep-passives in 1200 randomly selected passive examples in each language.**

that the preposition should be followed by a comma or a period, as this is often the case in the examples cited in the literature. Schematically, the search strings we used look as in (43).

- (43) a. V-PASS {0,2} PREP comma/period  
 b. lemma BLI(VE) {0,2} P.PART {0,1} PREP comma/period

To find examples with *s*-passives, we searched for passive verbs followed by up to two words, to allow both for V+N Prep-passives and for inverted subjects and adverbials. In the case of *bli(ve)*-passives, we limited the search to the lemma BLI(VE) ‘become’, followed by up to two words, a passive participle, possibly followed by an object. The total number of hits is shown in Table 1 above. From these hits, we took a random sample of 600 *s*-passives and 600 *bli(ve)*-passives in each language, which we went through and annotated manually.<sup>21</sup>

The overview in Table 2 shows that only 211, i.e. 6%, of the 3600 annotated examples qualified as Prep-passives. We will discuss what made up the remaining 94% in Section 5.

The overall frequency of Prep-passives in our sample is quite low and varies from below 1% for Danish *s*-passives to 13% for Swedish *bli*-passives with Norwegian in between. The frequency figures in Table 2 tell us what the relative frequency of Prep-passives is in our random sample of 1200 examples per language. However, given the differences in annotation and precision in the search strings, we cannot use them

		Da. -s	Da. <i>blive</i>	No. -s	No. <i>bli</i>	Sw. -s	Sw. <i>bli</i>
i	Prep-passives in 600 sample	5	30	23	47	26	80
ii	Prep-passives followed by punctuation in corpus (estimate)	36	104	79	253	70	105
iii	Prep-passives in corpus (estimate)	72	208	158	506	140	210
iv	Frequency per million words	1.3	3.7	3.8	12.2	2.1	1.2
v		5		16		3.4	
vi	% of total <i>s-bli(ve)</i> -passive in corpus	0.02%	0.1%	0.3%	0.6%	0.03%	0.2%
vii		0.06%		0.5%		0.04%	

**Table 3.** Estimated frequencies of Prep-passives in the corpora used.

directly to establish the overall frequency of Prep-passives in Danish, Norwegian and Swedish. But we can use the figures in Table 2 as a base for estimating the frequency in each of the corpora investigated, as shown in Table 3.

Starting from the number of actual hits in the 600 sample, we can estimate the number of Prep-passives in the total number of hits (row ii) produced by the search strings, shown in the rightmost column in Table 1. Since we have limited the search by requiring that the preposition should be followed by a comma or a period, we need to add occurrences of Prep-passives which are not followed by comma or period. In each language, we carried out additional searches on frequent Prep-passives without any contextual restrictions and then checked how many of these hits were followed by punctuation.<sup>22</sup> These lexical searches showed that about half of the Prep-passives were followed by punctuation. We therefore doubled our estimate (row iii) and used that to arrive at the frequency figures shown in rows iv–vii (the Swedish *bli*-passive is calculated with respect to the larger corpus of 261.4 million words). The frequency of Prep-passives, expressed as occurrence per million words, row v, is quite low. In the absence of comparable figures for English, we do not know how the frequency compares with this language. Comparing our three languages, we find that the prediction that Prep-passives should be more frequent in Norwegian is borne out; they are about three times more common in Norwegian texts (16 per million words, or 16/mw) than in Danish (5/mw) and Swedish (3.4/mw). Herslund's prediction that Prep-passives should be much more infrequent in Danish than in both Norwegian and Swedish is not correct since Danish and Swedish have similar frequencies. If we look at frequency in terms of proportion of passive clauses in the languages, shown in rows vi and vii, we see that Prep-passives constitute a higher proportion of passive clauses in Norwegian than in Danish and Swedish, by a factor of ten.

Table 3 also reveals that Prep-*bli(ve)*-passives are more common than Prep-*s*-passives, again by a factor of ten in Danish and Swedish, whereas they are twice



as common in Norwegian (row vi). Körner’s prediction that Prep-*s*-passives should be more common in Swedish than in Danish and Norwegian is thus not borne out. Furthermore, the finding that Prep-*bli*-passives constitute a higher proportion of passive clauses than Prep-*s*-passives in Swedish is quite surprising and goes against the descriptions in both Körner (1948, 1949) and SAG. Although the frequency of Swedish Prep-*bli*-passives, 1.2/mw (row iv), is lower than for Prep-*s*-passives, 2.1/mw, this is actually a surprisingly high figure, given that *bli*-passives in Swedish are much less common than *s*-passives. Laanemets (2012:92) found that only around 3% of the total number of passive clauses in Swedish newspapers are *bli*-passives (see further discussion in Section 6.3 below).

The rest of the predictions in Section 2.6 will be discussed in Sections 5 and 6.

#### 4. PREPOSITIONAL PASSIVES: COMMON FEATURES

We will now look closer at the 211 examples that meet our criteria for Prep-passives. Previous research on Scandinavian passives has established that animate subjects are more common with *bli(ve)*-passives than with *s*-passives, whereas inanimate subjects are more common with *s*-passives (Engdahl 1999, 2006:31; Laanemets 2012:113ff.). The high proportion of animate subjects in *bli(ve)*-passives was quite unexpected, given that direct objects of active transitive verbs tend to be inanimate (Dahl 2000, 2008).<sup>23</sup> We therefore investigated the proportion of animate subjects among the 211 Prep-passives, shown in Table 4.

	Da. <i>-s</i>	Da. <i>blive</i>	No. <i>-s</i>	No. <i>bli</i>	Sw. <i>-s</i>	Sw. <i>bli</i>
Prepositional passive	5	30	23	47	26	80
<i>s</i> - vs. <i>bli(ve)</i> -passive	14%	86%	33%	67%	25%	75%
Animate subjects	2	21	6	35	7	76
% animate subjects	40%	70%	26%	74%	27%	95%
	66%		59%		78%	

**Table 4. Prepositional passives: distribution and proportion of animate subjects.**

In all three languages, Prep-passives are more common among *bli(ve)*-passives than among *s*-passives. The difference is particularly strong in Danish (86% vs. 14%) and Swedish (75% vs. 25%) with Norwegian showing a somewhat more balanced distribution (67% vs. 33%). Note that the Swedish figures are the opposite of what Körner (1948) and SAG predict. Furthermore, it is much more common for Prep-*bli(ve)*-passives to have animate subjects than for Prep-*s*-passives. In Swedish, the difference is striking: 95% of the *bli*-passives have animate subjects, compared with 27% of the *s*-passives. It appears that Prep-*bli(ve)*-passives in mainland Scandinavian are most often predicated of animate, mostly human, subjects.

Let us now look at a few typical examples from the corpus search, starting with Prep-*bli(ve)*-passives.

#### 4.1 Prep-*bli(ve)*-passive

- (44) a. hvor fodgængere mødes . . . eller slår sig ned for et hvil,  
for at se eller **blive set på**. (Da.)  
*for to see or become seen on*  
'where pedestrians meet or sit down to rest, in order to watch or be looked at'
- b. Hvis en hund ikke **bliver snakket med**,  
*if a dog not becomes talked with*  
kan man ødelægge den på få dage.  
'You can destroy a dog in a few days if it isn't talked to.'
- c. Den største kanin så på ham . . . og stampede igen, som om den ville fortælle,  
at den ikke fandt sig i at **blive grinet af**.  
*that it not found REFL in TO become laughed of*  
'The largest rabbit looked at him and stamped again, as if it wanted to say  
that it wasn't going to put up with being laughed at.'
- (45) a. Man merker at man **blir sett på**, (No.)  
*one notices that one becomes looked on*  
'You notice that you are being looked at.'
- b. hun er lei av å ikke **bli trodd på**,  
*she is tired of TO not become believed on*  
'She is fed up with not being believed.'
- c. Han kanskje ikke engang **ble nevnt eller tenkt på**,  
*he maybe not once became mentioned or thought on*  
'Maybe he wasn't even mentioned or thought of.'
- (46) a. det märks att hon är van att **bli lyssnad på**,  
*it notice.s that she is used TO become listened on*  
van att få saker gjorda. (Sw.)  
'You can tell that she is used to be listened to, used to getting things  
done.'
- b. Inget är så farligt för en diktator  
som när han **blir skrattad åt**.  
*as when he becomes laughed at*  
'Nothing is so dangerous for a dictator as when he is laughed at.'
- c. journalistens allra viktigaste ord är förtroende,  
att **bli litad på**.  
*to become trusted on*  
'A journalist's most important word is confidence, to be trusted.'

Overall the Prep-*bli(ve)*-passives are remarkably similar in Danish, Norwegian and Swedish. The subject is typically an Experiencer who is psychologically affected by the action. In most of the cases the subject is human, but we also find animals, as in (44b, c). The understood Agent is normally another human or a social body. The

Experiencer is affected by something the Agent does, or often does not do, as in (44b), (45b, c). The verbs are often verbs of perception, communication or interaction, used to highlight the effect the action has on the passive subject. In (44a), the subject sits down in order to watch and ‘be looked at’. (44b) is a warning against ignoring a dog; it has to be ‘talked to’. In (45a) the subject perceives that s/he ‘is looked at’ and in (45b) the subject is fed up with not being ‘believed’. In (46a) the subject is a person in authority who is used to being ‘listened to’ whereas in (46b) a dictator should beware of being ‘laughed at’.

There are also examples like (47), where the subject is physically affected by the action.

- (47) a. Det er kun piloterne,  
der kan blive udsat for at **blive skudt på**. (Da.)  
*that can become exposed for TO become shot on*  
‘It is only the pilots that run the risk of being shot at.’
- b. Han var **blitt skutt på**,  
*he was become shot on*  
pepret med sand fra kulene . . . (No.)  
‘He had been shot at, peppered by sand from the bullets.’
- c. Den lilla katten hoppade upp i knät på henne  
och ville **bli kelad med**. (Sw.)  
*and wanted become cuddled with*  
‘The little cat jumped up into her lap and wanted to be cuddled.’

Some examples with physical contact verbs like ‘spit’ on and ‘tread on’ in (48) should probably be interpreted metaphorically and some of the inanimate subjects of Prep-*bli(ve)*-passives are assigned desires and feelings which are more suitable for animate referents, see (49).

- (48) a. När man blir stor **blir** man **spottad på**. (Sw.)  
*when one becomes big becomes one spat on*  
‘When you grow up, you are spat on.’
- b. En låg självkänsla gör  
att man låter sig **bli trampad på**. (Sw.)  
*that one lets REFL become stepped on*  
‘A low self-esteem makes you let yourself be stepped on.’
- (49) a. en aktuel politisk pamflet, der hager sig fast i én.  
Og beder om at **blive tænkt over** (Da.)  
*and asks about TO become thought over*  
‘a recent political pamphlet that hooks onto you and asks to be thought about.’
- b. Den betongen verker etter å **bli skatet på**, (No.)  
*that concrete aches after TO become skated on*  
‘That concrete aches to be skated on.’

There were only two examples, both in Swedish, where physical affectedness is highlighted (recall (40b) above, from *SAG*).

- (50) a. Det är uppenbart att manuset **blivit petat i**, (Sw.)  
*it is obvious that manuscript.DEF become poked in*  
 'It is obvious that the manuscript has been touched up.'
- b. Dörren har **blivit rispad och ritad på**. (Sw.)  
*door.DEF has become scratched and drawn on*  
 'The door has been scratched and drawn on.'

There is one further factor that must be mentioned in connection with the distribution of *s-* and *bli(ve)*-passives in the three languages and that is tense. As is well-known, *s*-passive is used very infrequently in the preterite and the perfect in Danish and practically not at all in Norwegian (Heltoft 2006; *GDS* :751ff.; *NRG*:513).<sup>24</sup> Instead the *bli(ve)*-passive is used in these tenses, with all types of subjects. Consequently it is not surprising that we find Danish and Norwegian examples with inanimate subjects like (51), which are all in the preterite tense.

- (51) a. han følte, at hans råd ikke længere **blev lyttet til**. (Da.)  
*he felt that his advice not longer became listened to*  
 'He felt that his advice was no longer listened to.'
- b. Et av de stedene som **ble sett** nærmere **på**,  
*one of those places.DEF that became looked closer on*  
 var nettopp eiendommen i Verftsgaten. (No.)  
 'One of the places that was looked closer at was  
 precisely the property in Verftsgaten.'
- c. Det viste seg raskt  
 at Olas fiskesupper **ble satt pris på**, (No.)  
*that Ola's fish.soups became put price on*  
 'It quickly turned out that Ola's fishsoups were appreciated.'

## 4.2 Prep-*s*-passives

Compared with Prep-*bli(ve)*-passives, we find more variation among the Prep-*s*-passives, with respect to the type of subject and the types of verbs used. Some representative examples with both inanimate and animate subjects are given in (52)–(54).

- (52) a. Børnemøbler ... skal kunne bruges og **leves med**,  
*children's.furniture shall can use.s and live.s with*  
 siger arkitekt Nicolai. (Da.)  
 'It must be possible to use and live with children's furniture,  
 says architect Nicolai.'

- b. Alle løsdele kan sparkes igang, **fingereres ved**,  
*all loose.parts can kick.s start finger.s with*  
 skrues på, **bankes** lidt opmuntrende **til**,  
*screw.s on bang.s a.bit encouragingly to*  
 nidstires, beglos og indstilles til det rette tempo.<sup>25</sup>  
 ‘All loose parts can be kick-started, fingered on, screwed on, banged on a bit encouragingly, stared at, gaped at and adjusted to the right tempo.’
- c. De er mennesker med gode uddannelser og job,  
 og de vil ikke **bestemmes over**.  
*and they want not decide.s over*  
 ‘They are people with good education and jobs and they don’t want to have decisions made for them.’
- (53) a. de **danses med**, svinges, slås opp og ned. (No.)  
*they dance.s with swing.s throw.s up and down*  
 ‘They are danced with, swung around and thrown up and down.’
- b. det sitter folk på alt som kan **sittes på**  
*it sit people on all that can sit.s on*  
 ‘There are people sitting on everything that can be sat on.’
- c. da inntreffer det en form for brist i brufundamentet,  
 som nok kan **lappes på**, skjøtes og repareres,  
*that PART can patch.s on handle.s and repair.s*  
 ‘Then there is a kind of break in the bridge foundation which probably can be patched up, handled and repaired.’
- (54) a. så har många uttryckt att det är högt till tak på [...],  
 att ens idéer **lyssnas på**, (Sw.)  
*that one’s ideas listen.s on*  
 ‘so many have expressed that there is an open atmosphere at [...], that one’s ideas are listened to,’
- b. Barnen **gullades med**, **lekted med**, **blöjbyttes på**,  
*children.DEF cuddle.s with played.s with nappychanged.s on*  
 nattades och matades.<sup>26</sup>  
*night.s and fed.s*  
 ‘The children were cuddled, played with, changed nappies on, put to bed and fed.’
- c. Vi behöver höra med våra myndigheter  
 vad som kan behöva **ändras på**,  
*what that can need change.s on*  
 ‘We need to check with our government bodies what might need to be changed.’

In all three languages, Prep-*s*-passives often involve coordination, with regular passives or other Prep-passives.<sup>27</sup> Coordinated *s*-passives are used regardless of whether the subject is inanimate (52a, b) or animate (53a, 54b). They are also commonly used in the complements of modal verbs, especially in Danish and Norwegian, see (52) and (53). In all three languages, we find more variation among the verbs than in the Prep-*bli(ve)*-passives. Some verbs are used with both passives,

	Da. -s	Da. <i>blive</i>	No. -s	No. <i>bli</i>	Sw. -s	Sw. <i>bli</i>
Prepositional passive	5	30	23	47	26	80
Infinitive	5	24	21	15	15	46
of which complements of modal verbs	5	0	21	5	9	6
%	100%	0%	91%	11%	35%	8%

**Table 5. Infinitival Prep-passives and co-occurrence with modal verbs.**

but note that when the Swedish verb *lyssna* ‘listen’ is used with an *s*-passive in (54a), the subject is the inanimate noun *ideas*; compare the *bli*-passive in (46a) above, where the subject is animate (*hon* ‘she’). In the Danish example in (52c), the animate subject appears in the complement of the verb *ville* ‘want’, where *s*-passive is preferred in Danish (see *GDS*:795ff.; Laanemets 2012:172f.).

In connection with the Prep-*bli(ve)*-passives in (44)–(46), we noted that many of them involve a somewhat special type of affectedness, viz. psychological affectedness applying to animate subjects. This does not seem to be as relevant for Prep-*s*-passives, where other factors such as coordination and presence of modals are more important, as mentioned above. In Table 5, we show the number of Prep-passives used in infinitival phrases and how many of them were used as complements of modal verbs.

We mentioned earlier, in Section 2.3, that Herslund (1984) observed that most Prep-passives occurred in infinitival complements to modal verbs. In Danish, all five Prep-*s*-passives are indeed infinitival complements of modal verbs. However, Table 5 shows that this only holds true for *s*-passives in Danish and not for the 30 *blive*-passives, 24 of which are infinitival but not complements of modals. In Norwegian the majority of the Prep-*s*-passives occur after modal verbs (91%) compared with only 11% of *bli*-passives. This preference for *s*-passives does not apply specifically to Prep-passives but reflects a more general tendency for *s*-passives to be used with modals, which we find in Danish and Norwegian, but not in Swedish.<sup>28</sup> According to *SAG*, infinitival Prep-passives should be more acceptable in Swedish, but we see that tensed examples are almost as frequent as infinitival in our sample.<sup>29</sup>

### 4.3 Affectedness

Let us now return to the notion of affectedness discussed earlier. We have suggested that a different notion of affectedness is implicated for the Scandinavian data than the notion used to predict well-formedness of Prep-passives in English (see Section 2.1). The majority of the attested examples are *bli(ve)*-passives with Experiencer animate subjects which are affected in some sense by the action expressed by the verb phrase.

This affectedness often amounts to socially relevant perception, as when the subject is, or is not, talked to, listened to, looked at, laughed at, thought of, believed in, etc. as in (44)–(46) above. Some examples involved a metaphorically used physical change, as in (2) and (48), but only a couple involve actual physical change, as in (50). In order to investigate whether this psychological affectedness is something typical of Prep-*bli(ve)*-passives, we compared the proportion of animate subjects in Table 4 above with the figures in Laanemets (2012:115) which show the proportion of animate subjects in regular passives in Danish, Norwegian and Swedish newspaper texts. It turns out that the proportion of animate subjects in Prep-*bli(ve)*-passives is consistently higher than for regular passives.<sup>30</sup> We take this as a further indication that Prep-*bli(ve)*-passives in mainland Scandinavian are used typically when a sentient subject is psychologically affected by the action, or the lack of action, as the case may be.

The examples of Prep-*bli(ve)*-passives and Prep-*s*-passives in (44)–(54) involve predicates which select a particular preposition. There are very few affected locative or instrumental subjects in our data, as has been described for English, e.g. that beds are affected by someone sleeping in them. We did not find any examples where a Prep-passive is used to express that the subject has undergone a significant change by being handled by a famous person as in the often cited English examples in (13).<sup>31</sup> Instead we found a few examples like (55) below, where the sound emitted from a physical object is brought out to describe the situation. These actions, of turning a page or walking on a stair, do not affect the passive subjects in any lasting manner.

- (55) a. hørte han lyden av papirer som **ble bladd i**, (No.)  
*heard he sound.DEF of papers that became leafed in*  
 ‘He heard the sound of papers being leafed through.’
- b. tregolv knirker, trapper **gåes i**, kasseroller skramler, (No.)  
*wood.floors squeak stairs walk.s in pans rattle*  
 ‘wooden floors are squeaking, stairs are being walked on, pans are rattling’

#### 4.4 Agent phrases

One shortcoming of our search method was that we did not find any agent phrases, given the restriction that the preposition should be followed by punctuation. In order to compensate for this, we carried out additional searches, using the most common Prep-passives in our 600 sample, as mentioned briefly in Section 3.<sup>32</sup> In general there were rather few examples with overt agent phrases with *af* or *av* ‘by’. The ones we found were very similar to the ones we have already discussed, see (56). Agent phrases are more often used in Prep-*bli(ve)*-passives than in Prep-*s*-passives.

		Da.	Da.	No.	No.	Sw.	Sw.		
		-s	blive	-s	bli	-s	bli	Sum	%
i	Prepositional passive	5	30	23	47	26	80	211	6%
ii	Particle passive	119	97	368	316	213	0	1113	31%
iii	Regular passive with preposed complement	200	249	95	98	246	357	1245	35%
iv	of which impersonal	60	19	16	12	22	0	129	4%
v	Potential Prep-passive	111	43	0	0	0	0	154	4%
vi	Irrelevant	165	181	114	139	115	163	877	24%
vii	Total	600	600	600	600	600	600	3600	100%

Table 6. Overview of types of false hits.

- (56) a. 67 procent af de HIV-smittede oplevede,  
 at de **blev set ned på** af deres kolleger  
*that they became looked down on by their colleagues*  
 på grund af deres sygdom. (Da.)  
 ‘67% of the people infected with HIV felt that they were being looked down upon by their colleagues because of their illness.’
- b. [de] **ble sett på** med frykt og beundring  
*they became looked on with fear and admiration*  
 av menneskene i landsbyen. (No.)  
*by people.DEF in village.DEF*  
 ‘They were looked upon with fear and admiration by the people in the village.’
- c. Fram, sade han och skrattade, och det var ljuvligt  
 att **bli skrattad åt** av honom. (Sw.)  
*TO become laughed at by him*  
 ‘Forward, he said and laughed, and it was lovely to be laughed at by him.’

## 5. DISTINGUISHING PREPOSITIONAL PASSIVES

As shown in Table 2 above, only 6% of our 3600 annotated examples turned out to be genuine Prep-passives. In this section we will look closer at what made up the large number of false hits which also met the criteria in the search string in (43), viz. contained a passive verb or participle followed by a preposition without complement.

We see in Table 6 that a fairly large proportion, 31% overall, of the hits consist of what we have called Part-passives (row ii), see (5)–(8) above. In most of the cases, it is straightforward to separate lexical particles (e.g. *op* ‘up’, *ned* ‘down’, *ind* ‘into’, *ud* ‘out’), which often have a directional meaning, from prepositions. The problematic cases are items like *af* ‘by, of, off’, *efter* ‘after’, *i* ‘in, into’, *med* ‘with’, *om* ‘about’,



*på* ‘on, onto’ and *til* ‘to’ which are used both as particles and prepositions. Here we need to use additional criteria. In Danish we use the diagnostic that particles follow the object in the active version (compare (23) above). In Swedish, the intonation criterion works well (see Svenonius 2003). Particles are clearly stressed, form a complex predicate with the verb and are often associated with a special meaning in the lexicon.

In Norwegian both the position criterion and the stress criterion must be used with caution as there is considerable dialectal variation.<sup>33</sup> In doubtful cases, we have checked if the corresponding expression in Danish and/or Swedish involves a particle. The Norwegian example in (57a) is classified as a Part-passive since the parallel Swedish example in (57b) has a clearly stressed particle. In (58a), *på* is classified as a preposition, since the active Danish example in (58b) has a prepositional complement. The order used with particles is impossible, see (58c).

- (57) a. Straks lyset ble slått på, (No.)  
*soon light.DEF became turned on*  
 ‘as soon as the light was turned on,’
- b. Så fort ljuset slogs ‘på, (Sw.)  
*as fast light.DEF turned.S on*
- (58) a. Mannen hadde merket at han **ble sett på,** (No.)  
*man.DEF had noticed that he became seen on*  
 ‘The man had noticed that he was being looked at.’
- b. Nogen så på ham. (Da.)  
*someone saw on him.ACC*  
 ‘Someone looked at him.’
- c. \*Nogen så ham på. (Da.)  
*someone saw him on*

The high overall proportion of Part-passives is mainly due to our Norwegian data, where 684/1200 were Part-passives. Corresponding figures for Danish and Swedish are 216/1200 and 213/1200, respectively. This difference is most likely due to the fact that the tagger used in the Norwegian corpus does not distinguish between prepositions and particles.<sup>34</sup>

The next category, regular passive with preposed complement, is also the largest, making up 35% of the annotated examples (row iii in Table 6). It consists of examples which at first glance look like Prep-passives, since there is no complement following the preposition. However, the missing complement is not realized as a subject, but is fronted and fulfills another grammatical function. These examples are in fact regular passives with subjects distinct from the complement of the preposition. Some examples with *s*-passives are given in (59). The subject of the passive verb is here given in italics.

- (59) a. og det<sub>i</sub> må folk beskyttes mot e<sub>i</sub>. (No.)  
*and it must people protect.s against*  
 ‘and this, people must be protected against.’
- b. Vi kommer att presentera en lista på samtliga brott;  
 som han misstänks för e<sub>i</sub>, (Sw.)  
*that he suspect.s for*  
 ‘We will present a list of all the crimes that he is suspected of.’
- c. Det är inte bara skandaler; vi bjuds på e<sub>i</sub>. (Sw.)  
*it is not only scandals we offer.s on*  
 ‘It isn’t just scandals that we are being offered.’
- d. et appendix til kontrakten, hvor kunstnerne stiller krav [ . . . ],  
 hvilken limousine<sub>i</sub>, man vil fragtes i e<sub>i</sub>, (Da.)  
*which limousin one wants transport.s in*  
 ‘an addendum to the contract where the artists specify . . . which type  
 of limousin they want to be driven in.’

In (59a), the prepositional complement has been topicalized, in (59b) relativized, in (59c) clefted and in (59d) questioned in an embedded interrogative construction. In (60) we show similar preposing constructions and stranded prepositions with *bli*-passives. In the infinitival clause in (60c), the subject is understood (PRO).

- (60) a. og det<sub>i</sub> er han blevet straffet for e<sub>i</sub>. (Da.)  
*and it is he become punished for*  
 ‘and this he has been punished for’
- b. hadde det ikke vært for  
 den aggresjonen<sub>i</sub> ordet ble uttalt med e<sub>i</sub>, (No.)  
*that aggression.DEF word.DEF became pronounced with*  
 ‘if it hadn’t been for the aggression that the word was pronounced with’
- c. nogle bud på, hvad<sub>i</sub> fremtidens danskere  
 kan risikere at blive udsat for e<sub>i</sub>, (Da.)  
*can risk TO become exposed for*  
 ‘some ideas concerning what future Danes might risk being exposed to,’
- d. man vet aldrig vad<sub>i</sub> man kan bli anklagad för e<sub>i</sub>. (Sw.)  
*one knows never what one can become accused for*  
 ‘You never know what you might be accused of.’

Given that regular passives with preposing and preposition stranding are quite frequent in all three languages, one may wonder if this affects the use of Prep-passives. The examples in (59) and (60) contain the same characteristics as the genuine Prep-passives in (44)–(56), viz. a passive verb phrase with a preposition without complement, and distinguishing them from true Prep-passives often requires a careful syntactic analysis.<sup>35</sup> An interesting question is whether the frequent use of examples like (59) and (60) can make Prep-passives appear to be more common in the language than they are, possibly leading to an increase in the use of such passives.

Among the regular passive examples with preposing, we have separated out the impersonal passive constructions, shown in row iv in Table 6. More than a quarter of

the regular Danish *s*-passives with preposing turn out to have an impersonal subject, *der*. A few typical examples are given in (61).

- (61) a. [han har] en 15 fods jolle, sammen med to andre. (Da.)  
 Jollen<sub>i</sub> fiskes *der* fra *e<sub>i</sub>*, når ...  
*dinghy.DEF fish.S there from when*  
 ‘He has a 15 ft dinghy together with two other men. The dinghy is used to fish from, when ...’
- b. Det<sub>i</sub> skulle *der* rådes bod på *e<sub>i</sub>*,  
*it should there advise.S cure on*  
 ‘There should be a remedy for this.’
- c. de<sub>i</sub> har været klare for alle og  
 dem<sub>i</sub> er *der* blevet skrevet om *e<sub>i</sub>*.  
*them is there become written about*  
 ‘They have been clear to everybody and there is stuff written about them.’

Given Herslund’s (1984) proposal that Prep-passives in Danish are really impersonal passives, we will look closer at these examples in Section 6.1.

In (62a, b) we give a couple of Norwegian examples of impersonal passives with preposing and in (62c) a Swedish *s*-passive example. The expletive subject in both languages is *det* ‘it’.

- (62) a. Det var papirservietter<sub>i</sub> *det* skulle snakkes om *e<sub>i</sub>*, (No.)  
*it was paper.napkins it should talk.S about*  
 ‘It was paper napkins there was going to be talk about.’
- b. Jo’a ... , svarer den<sub>i</sub> *det* blir ledd av *e<sub>i</sub>*, (No.)  
*yeah answers the.one it becomes laughed of*  
 ‘Yeah, replies he who is being laughed at.’
- c. Kärlekspar<sub>i</sub> skulle *det* smygas på *e<sub>i</sub>*, (Sw.)  
*lovers should it sneak.S on*  
 ‘Couples in love should be spied on.’

Note that there were no impersonal *bli*-passives among the Swedish hits, a fact that we return to in Section 6.3. The category Potential Prep-passives, row v in Table 6, is only relevant for Danish and will be discussed in Section 6.1. Finally, the 24% irrelevant examples (row vi) consist of a mixed bag of false hits, for instance regular passives where the prepositional complement appears later, as shown in (63).

- (63) a. Ordning ställs mot, kanske inte oordning,  
*order put.S against maybe not disorder*  
 men i alla fall en sorts bångstyrighet. (Sw.)  
*but in all cases a sort unruliness*  
 ‘Order is opposed to, maybe not disorder, but anyway a kind of unruliness.’

- b. produktets succes måles på, om det bliver solgt. (Da.)  
*product.DEF's success measure.s on if it becomes sold*  
 'The success of the product is measured by whether it sells or not.'
- c. uden at de ansvarlige bliver belært om,  
*without that the responsible become taught about*  
 hvad man kan tillade sig af dumheder (Da.)  
*what one can allow REFL of stupidities*  
 'without the responsible persons being taught about what kind of  
 stupidities one could allow oneself'

This is especially common in Danish, where clausal complements of verbs and prepositions should be separated with a comma, according to the guidelines for writing correct Danish at the time when the texts in KorpusDK were written (see *Retskrivningsordbogen* 1986:579f.).<sup>36</sup> We also coded as irrelevant examples with adverbs like (64a) and where the participle is used as an adjective, as in (64b); note the modifier *meget* 'very'.<sup>37</sup>

- (64) a. eller for at jeg skulle sendes hjemmefra, (No.)  
*or for that I should send.s home.from*  
 'or because I was going to be sent away from home'
- b. Men i dag skete der noget,  
 som jeg blev meget overrasket over. (Da.)  
*that I became very surprised over*  
 'But today something happened which I was very surprised over.'

## 6. LANGUAGE-SPECIFIC PATTERNS

### 6.1 Danish

We will now look closer at the mysterious category Potential Prep-passives in Danish (Table 6, row v), which applies primarily to relative clauses. The reason for having this category is the homography between *der* used as an expletive subject e.g. in presentational constructions, for example (65a, b), and *der* used as a relative marker when the subject has been relativized, as in (65c). As we will see, this may give rise to ambiguity. In the following section, we gloss expletive *der* as *there*, relative *der* as *that* and use *DER* in ambiguous cases.

- (65) a. *Der* er ikke penge til den opgave.  
*there is not money to that task*  
 'There is no money for that task.'
- b. Vi mener, at *der* ikke er penge til den opgave.  
*we think that there not is money to that task*  
 'We think that there is no money for that task.'

- c. Kender du ham, *der* sidder ved bordet?  
*know you him that sits by table.DEF*  
 ‘Do you know the man who is sitting at the table?’

As a relative marker, *der* alternates with *som*, which may be used also in non-subject relative clauses, as shown in (66b, c).<sup>38</sup> Note that *som* can be omitted in non-subject relative clauses (66b, c), i.e. where there is an overt subject, and that *der* cannot be used in non-subject relatives (66d).

- (66) a. Kender du ham, *som* sidder ved bordet?  
*know you him that sits by table.DEF*  
 ‘Do you know the man who is sitting at the table?’  
 b. Kender du ham, (*som*) vi vil invitere?  
*know you him that we will invite*  
 ‘Do you know the man (that) we will invite?’  
 c. Kender du ham, (*som*) jeg peger på?  
*know you him that I point on*  
 ‘Do you know the man (that) I am pointing to?’  
 d. \*Kender du ham, *der* jeg peger på?  
*know you him that I point on*

In the Danish grammar tradition, it is common to refer to *der* as a *subjektsmarkør* ‘subject marker’ which occupies the subject position of the clause, regardless of whether it is an expletive, as in (65a, b) or a relativizer, as in (65c) (see *GDS*:1518f.; Becker-Christensen 2012:146). Vikner (1991), following the generative tradition, makes a distinction. He analyzes expletive *der* as an XP which appears in subject position, Spec,IP, (65b), or preposed, in Spec,CP, as in (65a). Relative *der* is analyzed as a head, X<sup>0</sup> in C, (65c), just like *som*. For reasons which will soon be apparent, we will follow Vikner in distinguishing the positions for the expletive and the relativizer, as shown in (67).

- (67) a. Kender du ham<sub>i</sub>, [<sub>CP</sub> [*der*] [<sub>IP</sub> e<sub>i</sub> sidder ved bordet]]?  
*know you him that sits by table.DEF*  
 b. Det er en opgave<sub>i</sub>, [<sub>CP</sub> [*som*] [<sub>IP</sub> *der* ikke er penge til e<sub>i</sub> nu]]?  
*it is a task that there not is money to now*  
 ‘It is a task that there is no money for now.’  
 c. Det er en opgave<sub>i</sub>, [<sub>CP</sub> [∅] [<sub>IP</sub> *der* ikke er penge til e<sub>i</sub> nu]].  
 d. \*Det er en opgave<sub>i</sub>, [<sub>CP</sub> [*som*] [<sub>IP</sub> ∅ ikke er penge til e<sub>i</sub> nu]].  
 e. \*Det er en opgave<sub>i</sub>, [<sub>CP</sub> [∅] [<sub>IP</sub> *der* ikke er pengene til e<sub>i</sub> nu]].  
*there not is money.DEF to now*

In (67a) we see an example where *der* is a relativizer in C. In (67b) both positions are filled, which is not surprising if *som* is a relativizer in C and *der* an expletive subject in IP.<sup>39</sup> It is also not surprising that *som* can be omitted, as in (67c), since there is an

overt subject in the relative clause, viz. *der*. The expletive cannot be omitted, while retaining the presentational reading, see (67d). Finally, (67e) shows that the expletive *der* is impossible with a definite argument (*pengene* ‘money’). On this analysis, we thus expect examples with both *som* and *der* to be well-formed, provided *der* can be interpreted as an expletive subject, as in (67b). We also expect examples like (68a) to be ungrammatical since the expletive *der* is not licensed, see (68b).<sup>40</sup>

- (68) a. \*Kender du ham, *som der* sidder ved bordet?  
*know you him that there sits by table.DEF*
- b. \*Der sidder ham/manden ved bordet.  
*there sits him/man.DEF by table.DEF*

Given the two functions of *der*, we expect certain passive relative clauses with a single *der* to be ambiguous. Consider the example in (69a) from our Danish dataset.

- (69) a. Det er det forlig, *der bliver refereret til*.  
*it is this settlement DER becomes referred to*
- b. Det er det forlig<sub>i</sub>, [<sub>CP</sub> [*der*] [<sub>IP</sub> *e<sub>i</sub> bliver refereret til*]].  
 ‘It is this settlement that is being referred to.’
- c. Det er det forlig<sub>i</sub>, [<sub>CP</sub> [∅] [<sub>IP</sub> *der bliver refereret til e<sub>i</sub>*]].  
 ‘It is this settlement there are references to.’

If *der* is analyzed as a relativizer in C, as in (69b), the example should be classified as a Prep-passive since it is the subject of a passive clause that is relativized. However, if *der* is analyzed as an expletive, as in (69c), the example should be analyzed as an impersonal passive where the prepositional complement is relativized (compare (67c) above).<sup>41</sup> In order to determine which is correct, a careful analysis of the whole sentence, including the context, needs to be carried out and even then, there are cases which are hard to determine.

In order to show how often such ambiguities arise, we give a breakdown of the category Potential Prep-passives in our Danish dataset in Table 7 below.<sup>42</sup> There were 20 examples with *som der* (row i in the table), exemplified in (70). As predicted, these are unambiguous impersonal passives with an expletive *der* in subject position.

- (70) a. Der bliver klistret en mærkat<sub>i</sub> bag på kortet,  
*there becomes glued a sticker back on card.DEF*  
*som der kan skrives på e<sub>i</sub>,*  
*that there can write.s on*  
 ‘A sticker is glued onto the back of the card which can be written on.’
- b. Og her sad de ved flygelet<sub>i</sub>,  
*som der nu blev musiceret på e<sub>i</sub>.*  
*that there now became music.made on*  
 ‘And here they sat at the grand piano on which there was now music being made.’

- c. Ovenstående er blot to skræmmende eksempler på en fremgangsmåde<sub>i</sub>,  
*som der* omgående må sættes en stopper for *e<sub>i</sub>*,  
*that there immediately must put.s a stop for*  
 ‘The above gives only two frightening examples of an approach that  
 there must be put an end to.’

		Da. -s	Da. <i>blive</i>	Sum	% of total
	Potential Prep-passive	111	43	154	13%
i	relative clauses with <i>som der</i>	12	8	20	2%
ii	relative clauses with <i>der</i>	80	32	112	9%
iii	embedded interrogatives with <i>der</i>	19	3	22	2%
iv	Prepositional passive	5	30	35	3%
v	Impersonal passive with <i>der</i>	60	19	79	7%

**Table 7. Potential Prep-passives in Danish.**

There were 112 relative clauses with a single *der* (row ii in Table 7) which are ambiguous between a Prep-passive analysis and an impersonal passive analysis, as in (69) above. Additional examples are given in (71).

- (71) a. Det er følelser, personlige erfaringer  
 og skæbner, *der skal tales om*.  
*and fates DER shall talk.s about*  
 ‘It is feelings, personal experiences and fates that/there should be  
 talked about.’
- b. De medvirkende skal svare på det,  
*der bliver spurgt om*.  
*DER becomes asked about*  
 ‘The participants must answer that which is being asked about.’  
 ‘The participants must answer that which there are questions about.’

In addition there were 22 examples with *der* in embedded interrogatives (row iii in Table 7), as shown in (72). These can also be analyzed as Prep-passives or as impersonal passives.

- (72) a. Rigtige Elvis-fans er ikke i tvivl om,  
*hvem der tales om*, når man siger The King.  
*who DER talk.s about when one says The King*  
 ‘Real Elvis fans have no doubts as to who (there) is talked about when  
 one says The King.’
- b. men problemet med en spørgeskemaundersøgelse er, at vi ikke kan  
 være sikre på,  
*hvad der bliver spurgt om*.  
*what DER becomes asked about*  
 ‘but the problem with a questionnaire is that we can’t be certain what  
 (there) is being asked about’

- c. Det drejer sig f.eks. om oplysninger om,  
hvilket produkt, der **forskes i**,  
*which product DER research.s in*  
'It concerns for instance information about which product (there) is  
being investigated.'

Although these examples are structurally ambiguous, this does not appear to affect the interpretation in most cases. Regardless of whether (69a), (71) and (72) are analyzed as a relativized Prep-passive, as in (69b), or as a relativized impersonal passive, as in (69c), the interpretations are very similar, as suggested by the paraphrases given. On both analyses, there is a specific settlement which some unspecified agent or agents are referring to. In the absence of an agent phrase, an overt expletive subject does not make any difference to the interpretation. However, if we add an agent phrase, as in (73), only the Prep-passive analysis in (73b) is available.

- (73) a. Det er det forlig, *der bliver refereret til* af advokaten,  
*it is this settlement DER becomes referred to of lawyer.DEF*  
'It is this settlement that is being referred to by the lawyer.'  
b. Det er det forlig, [<sub>CP</sub> *der*] [<sub>IP</sub> *e<sub>i</sub> bliver refereret til af advokaten*]]

The reason that (73a) is unambiguous is that impersonal passives are seldom used with overt agent phrases in the Scandinavian languages. Indeed, impersonal passives are used primarily when the identity of the Agent is considered irrelevant.<sup>43</sup>

Both the fairly high proportion of ambiguous examples like (69a) in the Danish material and the lack of a clear interpretational distinction between the Prep-passive analysis and the impersonal passive analysis are clearly relevant to the wider issue whether Prep-passives in Danish should be considered a kind of impersonal passive, as Herslund (1984) suggests.

In this context it is worth mentioning that there were no examples of Prep-passives in our sample where the subject was relativized with *som*, i.e. there were no examples like (74a). In this respect, Prep-passives behave differently from Part-passives, where we found examples with both *der* and *som*, shown in (74b, c).

- (74) a. \*Det er det forlig, *som bliver refereret til*,  
*it is this settlement that becomes referred to*  
b. og dem, *der blev knebet af, skyder fra siderne*.  
*and them that became nipped off shoot from sides.DEF*  
'and those that were nipped off, shoot out from the sides'  
c. kagen kan overbetrækkes med . . .  
*smeltet smør og chokolade, som pensles på*.  
*melted butter and chocolate that smear.s on*  
'The cake can be covered by melted butter and chocolate which is  
smeared on.'



In order to see whether the absence of examples like (74a) was accidental, we carried out a small informant study. The informants consistently accepted Prep-passives with *der*, as in (75a), or *som der*, as in (75b), and rejected examples with a single *som* like that in (75c). As for Part-passives, they accepted *der* or *som*, but not *som der*, (75d).

- (75) a. Derovre ligger de håndskrifter<sub>i</sub>, *der* *e<sub>i</sub>* ikke må **blades** **i**.  
*there.over lie those manuscripts that not must leaf.s in*  
 ‘Over there are the manuscripts that are not allowed to be paged through.’
- b. Derovre ligger de håndskrifter<sub>i</sub>, *som der* ikke må blades *i e<sub>i</sub>*.  
*there.over lie those manuscripts that there not must leaf.s in*  
 ‘Over there are the manuscripts which it is not allowed to page through.’
- c. \*Derovre ligger de håndskrifter<sub>i</sub>, *som e<sub>i</sub>* ikke må **blades** **i**.  
*that not must leaf.s in*
- d. \*og dem, *som der* blev knebet af *e<sub>i</sub>*, skyder fra siderne.  
*and them that there became nipped off shoot from sides.DEF*

The absence of relativized Prep-passives with *som*, and the informants’ lack of acceptance of such constructions, is a further indication that passive relative clauses with a single *der* are primarily understood as impersonal passives.

As shown in Table 7, a majority of the structurally ambiguous examples are in the *s*-passive (row ii, iii). There seems to be a general tendency for *s*-passive to be used in impersonal constructions (row v). Recall in addition that the number of impersonal passives in our samples (Table 6, row iv) is much higher in Danish ( $n = 79$ ) than in Norwegian ( $n = 28$ ) and Swedish ( $n = 22$ ). The high incidence of both real and potential (due to structural ambiguity) impersonal passives in Danish has probably contributed to Herslund’s (1984) conclusion that Prep-passives in Danish are really impersonal passives. Note, however, that the 35 examples which we have categorized as Prep-passives in Danish (see e.g. (44)) cannot be analyzed as impersonal passives.

We end this section on Danish with an observation concerning V+N Prep-passives. There were only three such examples among the 30 Prep-*blive*-passives, see (76).<sup>44</sup>

- (76) a. Hvis de da overhovedet blev lagt mærke til.  
*if they then at.all became put note to*  
 ‘If they are noticed at all.’
- b. Siger [...]: “Dumme svin” – bare for at blive lagt mærke til.  
*says stupid swine only for TO become put note to*  
 ‘Says: “You stupid swine” only in order to be noticed.’
- c. at folkekirken er for kedelig  
 og trænger til at blive sat skub **i**.  
*and needs to TO become put push in*  
 ‘that the Danish church is too boring and needs to be activated.’

The situation is quite different among the impersonal passives with preposed complements (Table 6, row iv), where almost half have an explicit object: 24 of

the 60 impersonal *s*-passives and nine of the 19 *blive*-passives. Two examples are given in (77).

- (77) a. Det<sub>i</sub> skal *der* nu ikke her gøres bemærkninger om *e<sub>i</sub>*,  
*it will there now not here make.S comments about*  
 ‘That will not be commented on here.’
- b. bakterier, [hvis brug i naturen]<sub>i</sub> *der* generelt bør  
*bacteria whose use in nature.DEF there generally should*  
*sættes spørgsmålstegn ved e<sub>i</sub>*,  
*put.S question.mark by*  
 ‘bacteria, the use of which in nature should in general be questioned’

It thus seems that genuine V+N Prep-passives are very uncommon in Danish. Any impression that they occur frequently is probably due to impersonal passives with N arguments and preposed complements, as in (77).

## 6.2 Norwegian

According to the predictions from previous research, Prep-passives should be more productive in Norwegian than in Danish and Swedish (Lødrup 1991). In our estimate of the overall frequency, shown in Table 3 above, Norwegian does indeed have the highest frequency – approximately 16 Prep-passives per million words. This is three times more than in Danish and Swedish, but admittedly not particularly common. If we look only at passive clauses, the proportion of Prep-passives in Norwegian, 0.5%, is ten times higher than in Danish, 0.06%, and Swedish, 0.04%. Maybe it is this relative difference that lies behind Lødrup’s perception that Prep-passives are more productive in Norwegian, although it is unclear if a construction that is used in less than one percent of the passive clauses should be called productive.

Just as in Danish and Swedish, there are more *bli*-passives (67%) among the Norwegian Prep-passives than *s*-passives (33%), but the distribution is more even than in Danish and Swedish, see Table 4 above. Two factors probably contribute to this: the strong tendency in Norwegian to use *s*-passive after modal verbs, see Table 5 above, and the exclusive use of *bli*-passive in preterite and perfect. Compare the examples in (78), which both use the predicate *herse* ‘bully’.

- (78) a. både Ingrid og Åse skulle styres med, **herses over**,  
*both Ingrid and Åse should control.S with bully.S over*  
 og helst også knuses  
 ‘Both Ingrid and Åse should be controlled and bullied, preferably also be crushed.’
- b. at han **ble herset med**  
*that he became bullied with*  
 ‘that he was bullied’

In (78a) the *s*-passive *herses over* ‘be bullied’ is in the complement of a modal. Furthermore, it is part of a coordination, surrounded by another Prep-passive, *styres med* ‘be controlled’, and a regular passive, *knuses* ‘be crushed’. As mentioned in Section 4, coordination is another context that favours *s*-passives. The *bli*-passive in (78b) is expected, since the sentence is in the preterite tense.<sup>45</sup> The overall proportion of animate subjects in our sample is somewhat lower in Norwegian, 59%, than in Danish, 66%, and Swedish, 78%, see Table 4, but the proportion of animate subjects with *bli*-passives is considerably higher than with *s*-passives, just as in Danish and Swedish.

The prediction, from *NRG*, that the majority of Prep-passives should involve selected prepositional complements is also borne out. Among the 70 examples in our sample, there was only one clear example of a locative subject, viz. the staircase in (55b) above, but it was, not portrayed as being affected by the walking.

Unlike in Danish, there were no examples where it was difficult to say if they should be classified as Prep-passives or impersonal passives. In Norwegian, the relativizer *som* is distinct from the expletive pronoun *det*, which means that there is no ambiguity in passive relative clauses. Two examples are shown in (79)–(80). The Danish translations are ambiguous, as shown.

- (79) a. Og dette er ting *som* må **tenkes på**, (No.; Prep-passive)  
*and this is things that must think.s on*  
 ‘And these are things that must be thought about.’
- b. Og dette er ting, *der* skal tænkes på, (Da.; Prep-pass or Impersonal)  
*and this is things DER must think.s on*  
 ‘And these are things that must be thought about.’ or  
 ‘And these are things that one must think about.’
- (80) a. Uansett hvilket plan *det* snakkes om, (No.; Impersonal passive)  
*regardless which plan it talk.s about*  
 ‘Regardless of which plan there is talk about,’
- b. Uanset hvilket plan *der* tales om, (Da.; Impersonal or Prep-pass)  
*regardless which plan DER talk.s about*  
 ‘Regardless of which plan there is talk about,’ or  
 ‘Regardless of which plan is talked about,’

Even if the Norwegian examples in (79a) and (80a) are structurally unambiguous, we note that the two types receive very similar interpretations, as shown by the paraphrases provided for the Danish translations.

Ambiguities could arise, in principle, since *der* can be used both as a relativizer and as an expletive pronoun also in Norwegian. According to *NRG* (p. 1056), *der* as a relativizer may be used in conservative *Bokmål* (the written variety of Norwegian that has been influenced by Danish), especially when preceded by the comparative conjunction *som* ‘as’, see (81).<sup>46</sup>

- (81) Dette elementet defineres som et handlingselement  
*der* bringer undergang eller smerte. (NRG:1056)  
*that brings disaster or pain*  
 ‘This element is defined as an element in the action that brings disaster  
 or pain.’

As expletive pronoun, *der* is mainly used in presentational constructions in certain dialects, by speakers whose language is hardly influenced by *Bokmål* (Søfteland 2014). This means that the two functions of *der* are probably hardly ever used by the same speakers. There were no passive instances like (81) in our data.

V+N Prep-passives, which seem to be quite uncommon in Danish, are more common in Norwegian, both in terms of numbers ( $n = 13$ ) and in terms of the variation in the N argument. The expression *bli lagt merke til* ‘be taken notice of’ is most common.<sup>47</sup>

- (82) a. Jeg **blir** omtrent ikke **lagt merke til**,  
*I become almost not put note to*  
 ‘I am almost not taken notice of.’  
 b. Du forstår at du **blir satt pris på**,  
*you understand that you become put price on*  
 ‘You understand that you are appreciated.’  
 c. prinsippene er for viktige til at de **blir kastet vrak på**,  
*principles.DEF are too important to that they become thrown wreck on*  
 ‘The principles are too important to be discarded.’

### 6.3 Swedish

As already mentioned, there is a clear difference between *s*-passives and *bli*-passives in Swedish and we will discuss them in turn.

#### 6.3.1 *s*-passives

Recall from Section 2.2 that Maling & Zaenen (1985) suggested that their analysis of Icelandic – essentially that apparent Prep-passives are really topicalized impersonal passives without an overt expletive – should be extended to Swedish. Support for this analysis comes from examples like (39), repeated here as (83), which shows that an expletive subject is optional in such sentences. Note that the presence of the expletive *det* does not make a big difference for the interpretation although it matters for determining whether the initial constituent is a subject or not.<sup>48</sup>

- (83) Detta har (*det*) inte **talats om** tidigare. (Sw.; Sundman 1987:482)  
*this has it not spoken.s about earlier*  
 ‘This has not been spoken about earlier.’  
 ‘There has not been any talk about this earlier.’

In order to test this proposal, we examined the 26 Prep-*s*-passives and checked whether it was possible to insert an expletive *det*. We found about ten examples where this seems possible. These fall into two types where the first type is similar to (83), see the examples in (84).

- (84) a. Ytterligare fyra miljökrav har  
*additional four environment.demands have*  
 (det) bara delvis **tagits hänsyn till.**  
*it only partly taken.s consideration to*  
 'Four additional environmental demands have only been partly considered.'
- b. Barnen **gullades** (det) **med.**  
*children.DEF cuddled.s it with*  
 'The children were cuddled.'
- c. Detta måste (det) **ändras på,**  
*this must it change.s on*  
 'This must be changed.'

These examples are all matrix clauses which have in common that it is not possible to determine the grammatical function of the initial phrase by casemarking. Since lexical DPs in Swedish are not casemarked, the initial phrase could be either a subject or complement of the preposition. This also holds for the demonstrative *detta* in (84c), but we can test whether the initial phrase is a subject by turning the example into a question, as in (85).<sup>49</sup>

- (85) a. Måste detta **ändras på?**  
*must this change.s on*  
 'Must this be changed?'
- b. \*Måste detta *det* ändras på?  
*must this it change.s on*
- c. Måste *det* ändras på detta?  
*must it change.s on this*  
 'Must this be changed?'

When *detta* occurs after the finite verb, presumably in Spec,IP, it is impossible to insert an expletive subject, (85b). (85c) shows that the expletive is fine if *detta* appears in situ. Recall that this test has been used to show that the initial phrase is not a subject in Icelandic, recall the ungrammatical (18) above.

The second type where an expletive *det* can be inserted consists of certain relative clauses and embedded questions, i.e. precisely the contexts which may give rise to a structural ambiguity in Danish, cf. (69) above.

- (86) a. arbetet måste huggas ned i allt småttigare delprojekt  
*vilka<sub>i</sub> e<sub>i</sub> var för sig skall ansökas om och budgeteras för*  
*which separately shall apply.s about and budget.s for*  
 'The work must be chopped up into smaller and smaller subprojects  
 which shall be applied for and budgeted for separately.'

- b. vilka<sub>i</sub> *det* skall ansökas om *e<sub>i</sub>* och budgeteras för *e<sub>i</sub>* var för sig  
*which it shall apply.s about and budget.s for separately*  
 ‘which one shall apply for and budget for separately’
- (87) a. Vi behöver höra med våra myndigheter  
 vad<sub>i</sub> som *e<sub>i</sub>* kan behöva **ändras på**,  
*what that can need change.s on*  
 ‘We need to check with our departments what might need to be changed.’
- b. vad<sub>i</sub> *det* kan behöva ändras på *e<sub>i</sub>*,  
*what it can need change.s on*  
 ‘what one might need to change’

In Swedish, there is no structural ambiguity – (86a) and (87a) are clearly Prep-passives where the subject has been relativized or questioned – but adding an expletive subject, as in (86b) and (87b), does not affect the interpretation in any noticeable way.

The rest of the examples, 16 out of 26, resist insertion of an expletive subject. One common context for Prep-*s*-passives is in coordinated passive verb phrases, as mentioned in Section 4. Inserting an expletive subject in such coordinations often leads to ungrammaticality, as shown in (88).<sup>50</sup>

- (88) a. Hon var ju Den Nya Katty [...],  
 den som aldrig mer lät sig nedslås, **trampas på**, toppridas.  
*the.one that never more let REFL down-hit.s step.s on bully.s*  
 ‘She was The New Katty, the one who never again let herself be kicked down, stepped on, bullied.’
- b. den som (\*det) aldrig mer lät sig nedslås, **trampas på**, toppridas.

Many Prep-passives are infinitival with an unexpressed subject (PRO), as in (89a). Inserting an overt expletive is impossible, (89b).

- (89) a. [den är ...] mer skapad för att PRO **tittas på**, än för att PRO användas.  
*it is more created for TO look.s on than for TO use.s*  
 ‘It is created more for being looked at than for being used.’
- b. mer skapad för att (\*det) **tittas på**, än för att användas.

Apart from the type of relative and interrogative examples shown in (86)–(87), inserting an overt expletive subject into an embedded clause rarely works. In (90a) we have an example where a Prep-passive occurs in an embedded clause with clear subordinate clause word order; the sentential adverb *verkligen* ‘really’ precedes the finite verb. The subject *alla stenar* ‘all stones’ presumably appears in Spec,IP, which means that there is no available position for an expletive subject.

- (90) En oberoende kommission är enda sättet att vara säker på  
 ‘An independent commission is the only way to be certain
- a. [<sub>CP</sub> att [<sub>IP</sub> alla stenar (\*det) verkligen **vänds på**]], säger han.  
*that all stones it really turn.s on says he*  
 that all stones really are turned, he says.’

- b. [<sub>CP</sub> att [<sub>IP</sub> *det* verkligen vänds på alla stenar]]  
*that it really turn.s on all stones*  
 ‘that one really turns all stones’
- c. #[<sub>CP</sub> att [<sub>CP</sub> alla stenar<sub>i</sub> vänds [<sub>IP</sub> ? (*det*) verkligen på e<sub>i</sub>]]  
*that all stones turn.s it really on*

Inserting an expletive subject in Spec,IP, as in (90b), is possible but then the prepositional complement must appear in situ. (90c) shows the structure of an embedded topicalization with *alla stenar* ‘all stones’ in Spec,CP and the finite verb in C. Then it is possible to insert an expletive in Spec,IP, although the matrix word order is not entirely felicitous here, presumably since this is an idiom and topicalizing a part of an idiom is quite marked in Swedish (Sköldberg 2004).

Looking at Prep-*s*-passives in Swedish, we conclude that there are two syntactic constructions in Swedish which can be analyzed as topicalized impersonal passives where the expletive is optional, viz. in topicalized matrix clauses like (84) above and certain relatives and embedded interrogatives, like (86)–(87). However, the remainder of the examples, about 60%, cannot be analyzed as covert impersonal passives. Compared with Danish, the use of clear impersonal passives, i.e. ones with overt expletives, is notably less frequent in Swedish (see Table 6, row iv).

### 6.3.2 bli-passives

We will now investigate how the impersonal analysis fares with respect to Prep-*bli*-passives in Swedish. Recall that this is where we found the highest number in our sample: 80 out of the 600 Swedish *bli*-examples turned out to be Prep-passives.

A large majority of the Prep-*bli*-passive examples have animate subjects (95%, Table 4) and many of these are pronominal. These consistently appear in nominative case, (91a), not in accusative, as in Icelandic (see (17c) above).

- (91) a. Hon har **blivit** **spottad** på,  
*she has become spat.UTR on*  
 ‘She has been spat on.’
- b. \*Henne har blivit spottad/spottat på.  
*her has become spat.UTR/spat.NEUT on*

Note that the participle in (91a) agrees with the subject. The version with an initial accusative is ungrammatical regardless of whether the participle is in common gender or neuter gender, as would be expected if it agreed with a covert expletive subject.

We also checked if it was possible to insert an expletive *det* in the Prep-*bli*-passives, like we did with the Prep-*s*-passive examples. The constructed matrix (92a) sounds marginally possible to some speakers, provided that the pronoun is in the accusative, but the impersonal *s*-passive in (92b) is clearly preferred.<sup>51</sup>

- (92) a. ??Henne<sub>i</sub> har *det* blivit spottat på *e<sub>i</sub>*.  
           *her has it become spat.NEUT on*  
           ‘She has been spat on.’  
       b. Henne<sub>i</sub> har *det* spottats på *e<sub>i</sub>*.  
           *her has it spat.s on*  
           ‘She has been spat on.’

Overall, turning Prep-*bli*-passives into impersonal passives did not work as well as for Prep-*s*-passives. This is most likely due to the fact that *bli*-passive is hardly used at all in impersonal constructions in Swedish. As shown in Table 7, row iv, there were no Swedish impersonal *bli*-passives with topicalized prepositional complements in our sample, whereas there were 19 Danish and 12 Norwegian examples. We translated some Danish and Norwegian examples into Swedish, to see if they could be expressed as *bli*-passives. The translations are, if not ungrammatical, strongly dispreferred, as shown in (93)–(94). Instead an impersonal *s*-passive with overt expletive is used in Swedish, as shown in the c-examples.

- (93) a. dem<sub>i</sub> er *der* blevet skrevet om *e<sub>i</sub>*. (Da.; see (61c))  
           *them is there become written about*  
           ‘There has been stuff written about them.’  
       b. ??Dem<sub>i</sub> har *det* blivit skrivet om *e<sub>i</sub>*. (Sw.)  
           *them has it become written about*  
       c. Dem<sub>i</sub> har *det* skrivits om *e<sub>i</sub>*. (Sw.)  
           *them has it written.s about*
- (94) a. Jo’a [...], svarer den<sub>i</sub> *det* blir ledd av *e<sub>i</sub>*, (No.; see (62b))  
           *yeh answers the.one it becomes laughed of*  
           ‘Yeah, replies he who is being laughed at,’  
       b. ??Jodå, svarar den<sub>i</sub> *det* blir skrattat åt *e<sub>i</sub>* (Sw.)  
           *yeh answers the.one it becomes laughed at*  
       c. Jodå, svarar den<sub>i</sub> *det* skrattas åt *e<sub>i</sub>*. (Sw.)  
           *yeh answers the.one it laugh.s at*

Given that the examples with overt expletive in the Swedish *bli*-passives are strongly dispreferred, we conclude that the 80 Prep-*bli*-passives should not be analyzed as impersonal passives with unrealized expletives.<sup>52</sup> Instead it seems that they constitute a common type of *bli*-passive in Swedish. The most common participles are *lyssnad på* ‘listened to’ (22 occurrences), *trampad på* ‘trod on’ (8), *skälld på* ‘scolded’, *spottad på* ‘spat on’ and *tittad på* ‘looked at’ (3 each), see (46) and (48).

Most of the verbs used can be directed to both inanimate and animate referents, but when they are used in Prep-passives, the majority of the subjects are animate, see Section 4. As mentioned earlier, previous studies have shown that *bli*(*ve*)-passives in general have a higher proportion of animate subjects than *s*-passives in all three languages (see Laanemets 2012:113f.). The difference is particularly strong in Swedish, where 84% of *bli*-passives in Swedish texts have animate subjects,



compared with 28.6% of *s*-passives. Looking now at the Prep-passives in our sample, the difference is even more pronounced: 95% (76/80) of the Prep-*bli*-passives have animate subjects, compared with 27% (7/26) of the *s*-passives, see Table 4. It thus seems that Prep-*bli*-passives in Swedish are almost exclusively used about people and animals which are experiencing an action carried out by another person or social body.<sup>53</sup>

### 6.3.3 Frequency

The finding that the proportion of Prep-*bli*-passives is about ten times higher than Prep-*s*-passives (Table 3, row vi) is surprising and goes against both Körner's (1948) predictions and SAG's description. It is especially surprising in view of the fact that *bli*-passives overall are less frequent, only 0.3% of all finite verbs in Swedish texts according to Laanemets (2012:88), compared with *s*-passives, which amount to 9.8%.

Another surprising finding is the total absence of Part-passives with *bli* (Table 6, row ii). According to Körner (1948, 1949), we should expect more occurrences of *bli*-passives with free-standing particles in Danish and Norwegian than in Swedish, where particle incorporation in participles is the standard (see (36b) above).<sup>54</sup> Nevertheless, the fact that we found no particle passives at all with *bli* is surprising and raises a suspicion that there is something wrong in the corpus annotation or in the search string used. In order to investigate this, we also searched the Swedish corpus for *bli*-passives followed by a particle and a comma or period.<sup>55</sup> Apart from some irrelevant hits, all examples involved *kvar* 'left, remaining', which is tagged both as adverb and as particle, see (95a). In the same sub-corpus, there were five occurrences of incorporated *kvar*, as shown in (95b).

- (95) a. det är samhällets fattiga som blir lämnade kvar.  
*it is society's poor that become left.PL behind*  
 'It is the poor in society that are left behind.'
- b. Ingen ville bli kvarlämnad där nere.  
*nobody wanted become behind.left.SG down there*  
 'Nobody wanted to be left behind down there.'

It thus seems that the absence of *bli*-passives with stranded particles in Table 6 correctly reflects the usage in Swedish texts.<sup>56</sup>

## 7. CONCLUDING REMARKS

Previous research on Prep-passives in the Scandinavian languages has come to rather disparate conclusions concerning the grammaticality and the productivity of the construction. In order to remedy this, we have carried out investigations in comparable

text corpora in Danish, Norwegian and Swedish. We have established that Prep-passives are used, albeit rather infrequently. In view of Maling & Zaenen's (1985) analysis of Icelandic as involving not passivization but topicalization in an impersonal passive clause where the expletive subject is not expressed, see (20b), we investigated whether this could be the case also in the mainland Scandinavian languages. We have established that there are examples which must be analyzed as Prep-passives, in all three languages, for instance examples with nominative subjects. Such examples are not found in Icelandic.

An interesting finding, however, is that in some cases it is difficult to tell whether an example should be analyzed as a Prep-passive or as a topicalized impersonal passive with preposition stranding. This is the case with certain relative and interrogative clauses in Danish, where *der* can be analyzed either as a relativizer or as an expletive subject, see (69). The corresponding Norwegian examples are structurally unambiguous, but they are interpreted in similar ways. In certain Swedish *s*-passives, it is possible to insert an expletive subject, as would be expected on the impersonal passive analysis, see (84), (86) and (87). The observation that agentless Prep-passives and impersonal passives receive similar interpretations and often can be used interchangeably may explain why some researchers have claimed that Danish does not have Prep-passives, see Herslund (1984) and Vikner (1995). In many cases, however, the two construction types are clearly distinct and receive different interpretations, as for instance when there is an overt agent phrase, see (73). Swedish Prep-*bli*-passives are also not amenable to an analysis as impersonal passives since *bli*-passive in Swedish is hardly used in impersonal constructions, unlike in Danish and Norwegian.

According to Herslund (1984), only languages in which particles may precede complements should have Prep-passives, assuming that they arise through reanalysis whereby V+P forms a complex predicate. He predicts that Prep-passives should be less common in Danish, where particles follow complements, than in Swedish, where particles always precede complements, or Norwegian, which allows both orders, see (6)–(8). However, our frequency investigations do not show any correlation between Prep-passives and particle placement. Prep-passives have roughly the same frequency in Danish and Swedish. They are more common in Norwegian, as Lødrup (1991) correctly observes. According to our estimates, they are ten times more frequent in Norwegian, but still not very frequent, amounting to around 16 occurrences per million words or 0.5% of all passive clauses (see Table 3).

Prep-passives in Danish, Norwegian and Swedish are remarkably similar. They are primarily used with *bli(ve)*-passives and the subject is typically an Experiencer who is psychologically affected by the action. The (almost always) understood Agent is normally a human or a social body. The Experiencer is affected by something the Agent does, or often fails to do. We found very few examples where locative or instrumental subjects have been lastingly affected, and none at all where the action

was carried out by a famous person, properties which have been suggested as typical of Prep-passives in English.

Prep-passives are also found with the morphological *s*-passive in all three languages. These have a larger proportion of inanimate subjects, there is more variation among the verbs used and they are often used in coordinations and as infinitival complements of modals (see Table 5). Previous research (Laanemets 2012) has shown that the latter is a context that favours *s*-passive in general in Danish and Norwegian. In Swedish, Prep-*s*-passives are used in all tenses, unlike Danish and Norwegian, where *s*-passives are only found in the infinitive and the present tense. Thus, to a large extent, the differences we find between the languages in their use of Prep-passives reflect differences in their use of passive in general.

Although genuine Prep-passives are rather uncommon, examples that resemble Prep-passives are considerably more common in all three languages. These typically consist of regular passives with preposing and preposition stranding and are sometimes hard to distinguish from Prep-passives. An interesting issue for future research is whether the recurrent pattern of passive with preposition stranding will lead to an increase in the use of Prep-passives.

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## CORPORA

Korp: <http://spraakbanken.gu.se/korp/>

KorpusDK: <http://ordnet.dk/korpusdk>

Leksikografisk bokmålskorpus: <http://www.hf.uio.no/iln/tjenester/kunnskap/sprak/korpus/skriftsprakskorpus/lbk>

## NOTES

1. We avoid the term PSEUDO-PASSIVE in this article since it is sometimes used to include impersonal passives.
2. The morphological passive is formed by adding *-s* to the infinitive or the tensed form of the active verb, marked by ‘s’ in the glossing. The periphrastic passive is formed with an auxiliary, typically *bli* ‘become’ or *varda* ‘become’, and a past participle. In Danish, the infinitive is *blive*. We use the form *bli(ve)*-passive when we talk about all three languages and *blive*-passive when we refer specifically to Danish. Throughout the article, Prep-passives are rendered in **bold**. The infinitive marker is glossed as *TO*, and reflexive pronouns as *REFL*. In longer authentic examples, only the relevant part is glossed. In numbered examples, cited from published work or from our corpus data, we follow the convention of presenting the original example in its source format, preserving (lack of) capitalisation and punctuation. When the example is a complete sentence, we often translate it as such in English.
3. Example (12) contains a sequence of the particle *up* and the preposition *to*.
4. Davison (1980) discusses a large number of examples from several languages and shows how the Gricean maxims of relevance and manner can explain some of the variation in acceptability.
5. We use the symbol # when the example is grammatically well-formed but pragmatically odd.
6. The reanalysis approach also has some shortcomings, as pointed out by Alsina (2009).
7. Couper-Kuhlen (1979) contains an overview of relevant syntactic, semantic and pragmatic factors, based on an extensive acceptability study of passivized versions of all verbs with prepositions in the *Advanced Learner’s Dictionary of Current English*. She presents the results of the acceptability study as a 73-page-long lexicon of prepositional verbs, annotated as *p* (passivizable), *np* (not passivizable) and *?* (unable to determine). Unfortunately she does not give any quantitative information about the number of verbs in each category, nor to what extent the groupings of the verbs match the typical patterns she has identified.
8. The ungrammaticality of the examples in (18)–(19) should be compared with the grammatical examples in (i), involving a genuine oblique subject, viz. the dative subject of the verb *hjálpa* ‘help’ in the passive.

- (i) a. þeir hjálpaðu mannum. (Icelandic)  
 they.NOM helped man.DEF.DAT  
 ‘They helped the man.’
- b. þessum manni hefur verið hjálpað.  
 this man.DAT has been helped.NOM.NEUT  
 ‘This man has been helped.’
- c. Hefur þessum manni verið hjálpað?  
 has this man.DAT been helped.NOM.NEUT  
 ‘Has this man been helped?’
- d. Ég tel þessum manni hafa verið hjálpað.  
 I believe this man.DAT have.INF been helped.NOM.NEUT  
 ‘I believe this man to have been helped.’

For details about oblique subjects in Icelandic and the subject tests used, see Maling & Zaenen (1985), Zaenen et al. (1985) and Thráinsson (2007).

9. One reviewer asks if Herslund's and others' reluctance towards Prep-passives could be explained in terms of a prescriptivist 'ban' on preposition stranding. This seems highly unlikely since preposition stranding is common in topicalizations, relativizations and questions. See e.g. (i), from Herslund (1984:35).

- (i) *Sit udseende<sub>i</sub> tænker hun aldrig på e<sub>i</sub>.*  
*REFL looks thinks she never on*  
 'She never gives a thought to how she looks.'

In Section 5, Table 6 (row iii), we show that 35% of our hits involved regular passives with stranded prepositions.

10. Herslund (1984:70) includes (22a) among the example where the infinitival Prep-passive is introduced by a modal verb. Note, however, that *kunne lide* is a lexicalized combination with the meaning 'like' which takes an *at*-infinitive and not a bare infinitive, as modal verbs normally do.
11. In (25a), the passive participle *set* 'looked' is followed by a stressed particle (*ned* 'down') and an unstressed preposition (*på* 'on').
12. See also Lødrup (1985), Christensen (1986), Hestvik (1986) and Áfarli (1989).
13. Lødrup (1991), working in LFG, proposes the functional equation in (i) below, which states that the OBJ of the OBL grammatical function (i.e. the complement of the preposition) is equal to the SUBJ, compare the functional equation for raising to subject in (ii).
- (i)  $(\uparrow \text{SUBJ}) = (\uparrow \text{OBL OBJ})$   
 (ii)  $(\uparrow \text{SUBJ}) = (\uparrow \text{VCOMP SUBJ})$
- He notes that (i) would have to be limited to passive verbs (Lødrup 1991:123 note 4).
14. Note that the examples in (29) have an explicit Agent phrase. We will return to this in Section 4.
15. *NRG* (p. 845): 'der det er moleg å tolka inn ei intensjonale handling i setninga'.
16. Körner (1948) assumes that Prep-passives are a natural development in language, *pace* certain language purists who advise against the use of them. He devotes one chapter to discussing what he calls 'inhibiting factors'.
17. Note that (34a) involves coordination of the simple passive verb *vådredes* 'was aired' with the Prep-passive *skrattades åt* 'was laughed at'. Körner takes this as an argument that Prep-passives are genuine passives.
18. Somewhat problematic are examples like (i), from Körner (1948:132), which show that participles with free-standing and incorporated prepositions are used together in Norwegian.

- (i) Hun hadde vel så stor skræk som nogen (No.)  
 for at bli set på og omtalt.  
*for to become seen on and about.talked*  
 'She was just as afraid as anybody of being looked at and talked about.'  
 (Bjørnstjerne Bjørnson, *Samlede Værker* 2 [Collected works 2],  
 København 1893, p. 341)

Sandøy (1976) shows that the situation is far more complex.

19. In *SAG*, an (S) after the example indicates that it is an authentic example from *sakprosa* 'nonfiction'.

20. The smaller Swedish corpus consists of Göteborgs-Posten 2010–12, Bonniersromaner II, Norstedtsromaner, SUC-romaner. The larger corpus in addition contains Göteborgs-Posten 2001–09.
21. The complete dataset and the actual search strings used are available at [https://svn.spraakbanken.gu.se/sb-arkiv/pub/engdahl/Preposition\\_passive](https://svn.spraakbanken.gu.se/sb-arkiv/pub/engdahl/Preposition_passive). Due to the infrequency of *bli*-passives in Swedish, we had to increase the Swedish subcorpus to 261.4 million words, see note 20 above, in order to find 600 examples of *bli*-passives followed by a preposition and a comma or period.

Since the Swedish corpus is not tagged for passive verbs but for verbs ending in *-s*, we manually removed reciprocals and deponens from the dataset in order to increase compatibility with the Danish and Norwegian data. In additional searches, we used the following search string for *-s* verbs, brought to our attention by Malin Ahlberg.

(i) [lemma not contains ‘.\*s’ & msd = ‘VB.\*SFO’]

This finds all verbs tagged as having an *s*-form which do not end in an *-s* in their base form.

22. We searched for the following Prep-passive constructions: Danish *set på* ‘looked at’, *lyttet til* ‘listened to’, *snakket med* ‘talked to’, *skudt på* ‘shot at’, *slået på* ‘hit’. Norwegian *sett på* ‘looked at’, *hørt på* ‘listened to’, *snakkes/snakket til* ‘talked to’, *snakkes/snakket om* ‘talked about’, Swedish *lyssnad på* ‘listened to’, *trampad på* ‘trodden on’, *ändras på* ‘changed’.
23. Dahl (2000) found that 89% of active transitive verbs had inanimate objects in a corpus of spoken Swedish.
24. In Laanemets’ investigation of around 1000 *s*-passives in Danish and Norwegian newspaper text, there were 14 preterites and no perfects in Danish and no preterites or perfects in Norwegian (2012:97). See Lundquist (published online 19 July 2015) for a discussion of the role of syncretism in the *s*-passive.
25. According to a Danish informant, *skrues på* ‘turn on’ can be interpreted as either a Part-passive or a Prep-passive.
26. Note the coinage of the compound verb *blöjbytas på* ‘change nappies on’. A V+N Prep-passive *bytas blöjor på* is also attested.
27. This feature was pointed out in Danish already by Mikkelsen (1911:135).
28. Laanemets (2012:144) reports that 89% of *s*-passives in spoken Danish are used in complements of modals, compared to 44% in written Danish. But given that we only have five Prep-*s*-passives in our sample, it is difficult to draw any conclusions concerning Prep-passives.
29. The presence of modals does not appear to be as strong a licensing factor for Prep-*s*-passives as for *s*-passives in general in Swedish, see De Cuypere, Baten & Rawoens (2014:214f.).
30. The proportion of animate subjects with regular *bli(ve)*-passives was 39.3% in Danish, 40.5% in Norwegian and 84% in Swedish (Laanemets 2012: 115).
31. This holds also in the additional searches, where we did not limit the string to one containing a comma or period after the preposition.
32. This revealed that *bli sett på som* ‘be considered as’ is a frequently used construction in Norwegian, see (i).

- (i) For eksempel har regnet av enkelte blitt sett på  
 for example has rain.DEF by some become looked on  
 som en vekstkraft,  
 as a grow-power  
 'For example, rain has been considered a growing power by some people.'

33. As shown in (7b, c), particles may precede or follow the object. Aa (2015) shows that this depends both on the dialect and on the meaning, i.e. whether or not the expression is resultative or used in a more metaphorical way. As for intonation, in East Norwegian dialects, Romsdal and Trøndelag, the verb plus particle tends to be realized as a prosodic unit with a single word accent (Sandøy 1985:71; Aa 2015:84f.). In these dialects, a verb plus particle, as in (57a), is realized with a grave accent whereas a verb plus preposition, as in (58a), is realized with an acute accent. We are grateful to Marit Julien for clarifying this and to Tomas Riad who has confirmed that the option to realize the verb plus particle with a single word accent is found also in certain mid Swedish dialects, e.g. in Delsbo in Hälsingland (email 15 June 2015).
34. LBK is tagged using the Oslo–Bergen tagger where the tag 'prep' covers prepositions, particles and locative adverbs like *her* 'here', see <http://www.tekstlab.uio.no/obt-ny/taggsett.html>. The part-of-speech tagger used in Korp distinguishes between particles <PL> and prepositions <PP>. KorpusDK does not use a separate tag for particles; instead the tag ADV is divided into DIR, for directional, and LOC, for locative.
35. Mistakes are easily made, even by experienced syntacticians. See for example the authentic Danish examples provided in GDS:1295f.), some of which turn out to be regular passives, see Laanemets & Engdahl (2015).
36. These guidelines have been relaxed in more recent editions of *Retskrivningsordbogen*.
37. Distinguishing particles from directional adverbs is quite difficult, especially when it comes to short adverbs like *bort* 'away' which may be incorporated in participles in Swedish, as in *bortträngd* 'squeezed out'. However, this distinction is not important for the main purpose in this article, viz. to investigate Prep-passives.
38. For an enlightening overview of the development of *der* and *som* in Danish dialects, see Pedersen (2011).
39. GDS illustrates the point with the following example, involving an idiomatic expression.

- (i) en elev som der har været meget ballade med (GDS:1519)  
 a pupil that there has been much fuss with  
 'a pupil that there has been a lot of fuss about'

40. Nevertheless, examples like (68a) can be found, especially in spoken Danish. GDS (p. 1518) says that they are used in certain sociolectal registers and Becker-Christensen (2012:146) claims that they can be found in 'ukorrekt sprogbrug', i.e. 'incorrect language use'. This is further complicated by the fact that some speakers in addition insert the complementizer *at* between *som* and *der*, resulting in the complex relativizer *som at der* (GDS:1657).
41. Giving an adequate English paraphrase for impersonal passives is often difficult. We sometimes try to retain the presentational effect by using a *there*-construction with a nominal argument in English, see (16a), as also proposed by Carnie & Harley (2005).
42. For details about the Danish investigation, see Laanemets & Engdahl (2015).

43. See Hovdhaugen 1977:24; NRG:847; SAG 4:371, 375; GDS:1288ff. When agent phrases occur, as in (i), they often make a general, adverbial-like contribution (see Engdahl 2006:38; Maling 2006:219f.).

- (i) der blev kæmpet godt af hver eneste spiller (GDS:1289)  
*there became fought well by every single player*  
 ‘There was good fighting by every player.’

44. A few V+N Prep-*s*-passives were found in additional searches, see (i).

- (i) At danske i det fremmede altid lægges mærke til  
*that danes in the foreign always put.s note to*  
 for deres gode egenskaber,  
 ‘That Danes abroad are always noticed, because of their good characteristics.’

45. One reviewer pointed out that the verb *herse* ‘bully’ is normally construed with the preposition *med* ‘with’, as in (78b). However, *herse over* is also used in informal written Norwegian (over 1000 hits in a Google search 20 July 2015).

46. One reviewer asks whether there might be differences between the two written standards (*Bokmål* and *Nynorsk*) when it comes to the use of Prep-passives. The standardization mainly affects spelling, morphology and lexicon, and not syntactic constructions. We have not investigated whether there are differences in e.g. frequency between the two written standards – our corpus investigation only used *Bokmål* sources. However, we would expect to find a higher incidence of Prep-*bli*-passive in *Nynorsk* since *s*-passive seems somewhat more limited and is primarily used in infinitives (NRG:513).

47. All Norwegian V+N Prep-passives in our sample were *bli*-passives, but additional searches revealed that they are also used with *s*-passives, see (i).

- (i) at hvert individ skiller seg ut fra alle andre  
 og skal settes pris på for hva det er.  
*and shall put.s price on for what it is*  
 ‘that each individual is distinct from the others and should be appreciated for what he or she is’

48. See Engdahl (2012), who discusses additional contexts where expletive subjects may be omitted in modern Swedish.

49. Both Körner (1948:194ff.) and Sundman (1987:480ff.) mention case-marking and subject placement as diagnostics for Prep-passives.

50. Inserting an expletive *det* in the infinitival complement is also ungrammatical, as shown in (i).

- (i) den som aldrig mer lät sig (\*det) nedslås, **trampas på**, toppridas

As pointed out by one of the reviewers, *låta sig* ‘let oneself’ is a control verb which requires a theta marked subject in the infinitival complement. Without a reflexive, *låta* ‘let’ allows for expletive subjects (ii).

- (ii) Värden lät det öppnas flera tunnor med öl.  
*host.DEF let there open.s several kegs with beer*  
 ‘The host let there be several kegs of beer opened.’



51. Benjamin Lyngfelt (personal communication, March 2015) notes that impersonal passives with a preposed complement are noticeably better than without preposing, as in (i).

- (i) \*Det har blivit spottat på henne.  
*it has become spat on her*

52. The absence of impersonal *bli*-passives does not apply only to Prep-passives but to passive in general and seems to be a syntactic restriction in Swedish (Engdahl 1999). In Danish, and to some extent in Norwegian, minimal pairs as in (i) can be used to show that *s*-passive and *bli(ve)*-passive tend to be associated with different moods; *s*-passive is often used for general, objective statements whereas *blive*-passive is often used for particular, subjective statements (Heltoft & Falster Jakobsen 1996, GDS:741ff.).

- (i) a. Der snydes. (Da.; Heltoft & Falster Jakobsen 1996:223)  
*there cheat.s*  
 ‘People/they cheat, as a rule.’  
 b. Der bliver snydt.  
*there becomes cheated*  
 ‘Actual cheating is going on.’

This distinction clearly does not apply in Swedish where both the intended meanings conveyed by (i a,b) are expressed using the *s*-passive (ii a).

- (ii) a. Det fuskas. (Sw.; Engdahl 1999:33)  
*it cheat.s*  
 ‘People cheat.’ or ‘Someone is cheating.’  
 b. \*Det blir fuskat.  
*there becomes cheated*

For additional discussion of the proposed correlation between passive form and mood in Danish, see Heltoft & Falster Jakobsen 1996; GDS:741ff.; Laanemets 2012:101ff. Impersonal *bli*-passives in Swedish are primarily used with an amount expression, as in (iii) and (iv) (see SAG 4:386f.; Engdahl 1999:31ff.; Larsson 2014). We have not found any such examples with Prep-passives, and the constructed example in (v) is judged to be unacceptable.

- (iii) Sådana nätter blev det rätt lite sovet. (Sw.; SAG 4:386)  
*such nights became it rather little slept*  
 ‘During such nights one slept rather less.’  
 (iv) Det blev inte så mycket sagt kanske. (Sw.; Engdahl 1999:31)  
*it became not so much said perhaps*  
 ‘Not much was said, maybe.’  
 (v) \*Det blev rätt många skrattade åt.  
*it became rather many laughed.PL at*

See Engdahl & Laanemets (2015) for a corpus investigation of impersonal passives in mainland Scandinavian.

53. It would be interesting to investigate how this pattern has developed but a diachronic study would go beyond the scope of this article.
54. Particle incorporation is possible with some verbs in Danish and Norwegian, but used less than in Swedish, see Herslund 1984:45ff.; Svenonius 1996:19ff.; NRG:83ff.; GDS:249f.
55. We used the search string in (43), replacing the code for prepositions, [msd = “PP”], with the code for particles, [msd = “PL”].
56. At least in written Swedish. The preference for incorporated or free particles was tested in the Nordic Syntax Database (Lindstad et al. 2009). Lundquist (2014b) reports higher tolerance for free-standing particles among some Swedish informants than expected.

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