

THE ROLE OF TENSE-COPYING, SYNCRETISM AND FORM-COMPETITION IN MAINLAND SCANDINAVIAN PASSIVES

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Abstract

This paper discusses the two passive strategies in the Mainland Scandinavian languages: the periphrastic passive (the so called *bli*-passive) and the morphological passive (the so called *-s*-passive). The aim of this paper is to (1) explain the differences between the languages with respect to interpretation and distribution of the two passives, with special focus on the restrictions on *-s*-passives imposed by tense and conjugation class in Danish, Bokmål and Nynorsk, and (2) to model the choice of passive within the different languages. I will argue that, when available, the morphological passive will always be preferred over the periphrastic passive (which will be argued to follow from an economy principle). Swedish will be argued to be different from the other MLS languages in that it allows copying/agreeing of tense features on to a lower event projection located below a Voice/predicative head, which makes the morphological passive available in all tenses. Due to lack of this mechanism in the other MLS languages, the *-s*-passive will be unavailable in tensed context for these languages since it gives rise to a mirror violation.

1 Introduction

All the Mainland Scandinavian languages have two types of passives; one synthetic/morphological passive and one periphrastic passive.¹ In the morphological passive, the the passive marker *-s(t)* attaches outside of Tense (though present tense final *-r* is missing). I will in this paper refer to this passive as the *-s(t)*-passive.) The *-s(t)*-passive is illustrated in the Swedish example below:

- (1) Han misshandlades av två män klockan åtta igår
He manhandle.PAST.PASS by two men clock.DEF eight yesterday
'He was manhandled by two men at eight o'clock yesterday'

In the periphrastic passive, a (passive) participle combines with an auxiliary (*bli* for eventive verbs, *vara* for derived and lexical states). The copula encodes predication, (some kind of)

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¹I leave the Insular Scandinavian languages outside of the discussion since the status of the synthetic passive in these languages is not entirely clear.

aspect and tense, while the participle carries the encyclopedic load of the complex predicate. The periphrastic passive will go under the name *bli*-passive in this paper, and is illustrated for Swedish below:²

- (2) Han blev misshandlad av två män klockan åtta igår.
 he was manhandle.PART.SG.CG. by two men clock.DEF eight yesterday
 ‘He was manhandled by two men at eight o’clock yesterday’

In the previous literature on Mainland Scandinavian passives a number of factors have been claimed to influence the choice of passive (see Engdahl 1999 for overview). Heltoft and Jakobsen (1996) claims that the difference between the two passives lies in Mood: he *-s(t)*-passive indicates non-subjective mood, the *bli*-passive indicates subjective mood. Other researchers have emphasized the role of aspect (Mikkelsen 1911, etc.), while researchers focusing on Swedish (Sundman 1987 and Engdahl 1999) has pointed out that the derived subject has a higher degree of control over the event in the periphrastic passive than in the morphological passive. Modality (Hansen 1972 and Vikner 1988) and argument structure (Engdahl (2006), especially in impersonal passives) are also factors that have been mentioned. Finally, it is well known that the *-s*-passive is highly restricted by tense and conjugation class in Danish, Bokmål and Nynorsk, but not in Swedish, as shown in table 1:

TABLE 1: <i>-s(t)</i>-PASSIVE: RESTRICTIONS ON TENSE AND CONJUGATION CLASS				
	Swedish	Danish	Bokmål	Nynorsk
Infinitive	✓	✓	✓	✓
Present	✓	✓	✓	*
Past (preterite)	✓	✓Weak, * Strong	✓ conj. 2, * rest	*
Participle/Supine	✓	*	*	*

The factors that determine the choice of passive seem to span all the domains of the clause, from idiosyncratic lexical information (conjugation class) to semantic-pragmatic information like mood, via lexical semantics (Argument structure and Volition) and structural semantic notions like tense and aspect, as illustrated in (3):

- (3) [CP Mood [IP Modality [Tense [Aspect [vP Volitionality/control [Argument structure [V Conjugation class]]]]]]]

I will argue that the two passives are in competition with each other, in the same sense that e.g. two morphemes can compete for the same slot, i.e., one morpheme can “block” another morpheme due to the fact that it is a “better match”. The problem that this article deals with is thus parallel to the choice of analytic or synthetic comparative adjectives, i.e. *small-er* – ??*more small* vs. **intelligent-er* – *more intelligent*, recently discussed by Poser (1992) and Embick and Marantz (2008). This article deals in particular with the problem of how to model competition between two forms when the relevant factors determining the outcome are not in a strictly local relation, but rather cover the whole clause, i.e. the outcome of the competition seems to be determined on a global basis. I will try show in this article the competition actually takes place on a more local level than what is depicted in the structure

²I will not say much about the passives containing the stative copula *vara* in this paper. See Lundquist (2008) for discussions on *bli* vs. *vara* in passives.

in (3) above.

As has been discussed in detail by Marit Julien (see Julien 2007), the Scandinavian *-s(t)*-passive poses a problem for modern *syntactic* approaches to word formation (see Baker 1996, Brody 1997 and Julien 2002): the passive marker *-s(t)* attaches outside of tense morphology, i.e., further away from the verbal root than tense morphology, and given that we have good reasons to assume that the Voice-projection is lower than T (as in (4)), we would expect Voice-markers to appear closer to the root than tense markers.

(4) Fin [Tense [Aspect [Voice [Aspect? [vP]]]]]

If we take the functional sequence in (4) as a starting point, we clearly see that the *-s*-poses problems for the syntactic approaches, i.e., it constitutes a mirror violation.

In the paper I aim to pin down what determines the choice of passive, with focus on variation within the Mainland Scandinavian varieties. I will derive the cross-scandinavian differences from subtle morphological differences in the verbal paradigms. I will further argue that the *bli*-passive in Swedish is thematically different from the *-s(t)*-passive in Swedish, but probably not in the other Mainland Scandinavian varieties.

The main ingredients of my proposal are given in 1-4 below:

1. The *-s(t)* passive is the default passive all over Mainland Scandinavia: synthetic forms are preferred over periphrastic forms. This should follow from a principle of economy — “do not insert dummy elements (here, copulas) unless necessary” , see Poser 1992, Kiparsky 2004, Embick and Marantz 2008, Lundquist 2008 and Siddiqi 2009 for different takes on “blocking”, or “minimize exponence”.
2. The *-s(t)*-passives in Danish and Bokmål are never truly tensed — they are rather morphologically and semantically parasitic on existing non-finite forms. The Mirror Principle is not violated, given that T is not truly present.
3. The *-s(t)*-passives in Swedish can be tensed: due to rich tense copying/agreement in Swedish, tense morphology can end up lower than the tense-node (see Wiklund 2007 and Platzack To appear for discussion).
4. Given the full tense paradigm for the *-s(t)* passive in Swedish, and given the preference for synthetic forms, the *bli*-passive will only be used when the verb-phrase is thematically altered. I will argue that the participial passive can alter the thematic structure in ways that are unavailable for the *-s(t)*-passive.

In the end, I will argue that the differences in interpretation and distribution between the two passives can be fully explained with the help of the following two principles:

- The order of morphemes should mirror the semantic scope/underlying syntactic positions of the morphemes.
- Do not insert extra morphemes/words unless necessary (i.e., a simple form “wins” over a complex form)

I will claim that there is only one “parametric” difference between the languages under discussion: is copying of a tense value to a lower projection available or not. Swedish will

be claimed is the only language of the languages under discussion where tense-copying is available. The differences between the other languages is only triggered by the amount of syncretism that exists between finite and non-finite forms.

While previous accounts of the Mainland Scandinavian passives have focused mainly on the semantic and/or pragmatic differences (i.e., mood, modality and control) between the two passives, putting the morphosyntactic (morpho-phonological) constraints (i.e., on tense and declension class) aside as morphological quirks in no need of explanation, I will show that understanding the morphosyntactic constraints is crucial for understanding the semantic constraints. In modern syntactic theory where morphology and syntax are to an increasing degree handled in the same module, as in Distributed Morphology and Nanosyntax, and where semantics play a major role in the syntactic computation, as in modern cartographic approaches, the goal must be to find a common source for both the semantic/pragmatic constraints and the morpho-syntactic constraints. The obvious goal of my paper is then to find this source.

This paper deals with passive constructions in four Mainland Scandinavian varieties: Swedish, Danish, Bokmål and Nynorsk. As I mentioned above, it is not possible to describe the passive in these languages without making explicit reference to modality, aspect, tense and even conjugation class. This makes the scope of the paper very big. Given this, I will not be able to account for all details in all languages under discussions, and some theoretical issues will unfortunately not be fully worked out. I however think that both a cross-linguistic perspective and a detailed account of clause-internal properties is absolutely necessary if one wants to understand competition that is determined by both syntactico-semantic and morpho-phonological factors. Hopefully, the results of this paper will give rise to more detailed studies of the four Mainland Scandinavian varieties under discussion, and also inspire work that investigates some of the technical innovations proposed in this paper.

2 Passives in Scandinavian – Background

As briefly described in the introduction above, the *-s(t)*-passive is restricted by tense and declension class in all Mainland Scandinavian varieties except Swedish. The restrictions were shown in table 1 above. The *bli*-passive show no restrictions with respect to tense or conjugation class. The difference in tense/class restrictions seem to be mirrored in the difference in frequency of the two passives across MLS, as shown in table 2 below (written language data from Engdahl 2006, spoken language data from Laanemets (2009)), note that Nynorsk and Bokmål has not been split in the table below):

	Written language		Spoken language	
	<i>-s</i> -passive	periphrastic	<i>-s</i> -passive.	periphrastic
DANISH	64.1 %	35.9 %	23.1 %	76.9 %
NORWEGIAN	62.5 %	37.5 %	20.4 %	79.6 %
SWEDISH	98.7 %	1.3 %	84.2 %	15.8 %

The numbers in the table above seem to indicate that the *-s(t)*-passive is rare in spoken language, or possibly on the way out in Danish and Norwegian. It further seems like the periphrastic passive is highly marked in Swedish, especially in written language. I will however argue that even though the *-s(t)*-passive is restricted in non-Swedish MLS, there

are contexts in all MLS varieties where the *-s(t)*-passive is required. This will be returned to in section 5. I will further argue that the difference between spoken and written language with respect to choice of passive is not necessarily triggered by register-sensitivity of the two passives (e.g., the *-s(t)*-passive could be seen as the high-register choice). Rather, the difference has its source in a higher degree of empathy with the grammatical subject from the speaker's perspective in spoken language (which partly can be derived from high frequency of first and second person subjects in spoken language). This will be returned to in section 5. Further, despite the low number of periphrastic passives in spoken language Swedish, I will argue that the periphrastic passive is highly alive, though restricted to contexts where the *-s(t)*-passive is semantically inappropriate.

Below I will present two previous analyses of choice of passive in MLS: Julien (2007) and Heltoft and Jakobsen (1996). Though my own analysis will differ qualitatively from these two analyses, it draws heavily on the insights from them.

Julien (2007) and the Mirror Principle

Julien (2007) argues for a syntactic account of word formation, i.e., an account where the morphemes that build up words are directly manipulated by the syntax. There is in other words no generative lexicon that puts morphemes together into words, which later can be operated on by the syntax (Julien even argues that the notion of 'word' is irrelevant to the syntax). The linearization of morphemes should follow the same restriction as the linearization of phrases. If the *-s(t)* is taken to be an instantiation of Voice, and if voice is taken to be located between V and T (as in e.g., Travis 1992 and Kratzer 1996), we expect *-s(t)* to surface between V and T, and not outside T, as in (5):

- (5) [Tense [Voice [V]]] →
 a. VERB-VOICE-TENSE or
 b. TENSE-VOICE-(ASP)-VERB or
 c. VERB-TENSE-VOICE

The Mirror Principle has its origin in Baker (1985). Baker's original formulation only says that syntactic derivation and morphological derivations mirror each other:

- (6) Morphological derivations must directly reflect syntactic derivations (and vice versa) (Baker 1985, p. 375.)

In subsequent years linguists have tried to capture the fact that morphemes tend to be realized in the mirrored order, compared to their hierarchical order (i.e., it looks like a head-final order) by appealing to constraints on head movement (see e.g. Travis (1992). Lately, Brody's (Brody 2000) idea that heads are by default linearized from right to left has gained more influence. In Brody's account, the mirrored order is the basic order, and non-mirrored orders are in need of explanation. For the purpose of this paper, it is not of direct importance if mirror-effects are taken to be derived by movement, or explained by a spell-out algorithm (as in Brody 2000). My analysis is however compatible with both Brody's analysis, and a head-movement analysis.³

³The morphological make-up of words has also been derived by phrasal movement (see e.g. Julien 2007 and Svenonius 2007 etc.. I think that there are many details that are still fairly poorly understood about e.g. the

Svenonius (2007) looks at morpheme orders in different domains cross-linguistically, and shows that morpheme orders of the type exemplified in the Swedish synthetic passive are indeed very rare, as shown in table 3 below:

TABLE 3: MORPHEME ORDERING, FROM SVENONIUS (2007)

	C-T-V	T-Asp-V	T-Cause-V	Art-PL-N
1-2-3	typical	typical	typical	typical
1-3-2	typical	typical	typical	typical
3-2-1	typical	typical	typical	typical
3-1-2	rare	rare	rare	rare
2-3-1	occasional	rare	occasional	rare(?)
2-1-3	rare	rare	rare	rare

The Swedish morphological passive is an example of the order 3-1-2 (where the verb is the most deeply embedded element, as indicated by the number 3, and tense is the topmost element (1) and passive is the middle element (2)). The three common morpheme orders for passives (1-2-3, 1-3-2 and 3-2-1) are exemplified below:

1. 1-2-3 Seri (data from Marlett 1990) (taking the distal realis marker to be an instantiation of Tense):

(7) Tóm ki? ?p-yo-m-p-e:.
 money def 1SG-DIST.REAL-NEG-PASS-give
 ‘I was not given the money’

2. 1-3-2: Swedish periphrastic passive (taking the auxiliary to realize Tense, and the participial ending to realize Voice):

(8) Han blev misshandlad av två män klockan åtta igår.
 he was manhandle.PART.SG.CG. by two men clock.DEF eight yesterday
 ‘He was manhandled by two men at eight o’clock yesterday’

3. 3-2-1: Oromo (data from Owens 1985):

(9) Makiináa-n ni tolf-am-t-a.
 car-NOM FOC repair.PASS-3FEM-IMPF
 ‘The car will be repaired’

Mirror-violating orders are however attested, and even though are rare (as is clear from the table above), they are in need of an explanation.⁴ In section 5, I propose that we can deal with the 1-3-2 order in the Swedish morphological passive with the help of agreement/copying of tense-features on to a lower node.

external syntax of the verbs arguments (where they are introduced and where they move to), so it will not be relevant for me to dabble into the details of phrasal movements.)

⁴Kiparsky 2010 makes the follow generalizations based on mirror-obeying and mirror-violating orders:
 ex. Generalizations:

Julien (2007) offers another explanation. She argues that *-s(t)* is not voice head, but instead a pronoun-like element that is generated inside the vP. The passive *-s(t)* is argued to be generated in SpecVoiceP, while non-passive *-s(t)* could be generated in other positions within the verb phrase. *-s(t)* later cliticizes to the verb when the verb moves to a higher position, e.g. Tense, as in (10). In this sense, *-s(t)* would be similar to the reflexive pronoun *sig*, which also most naturally cliticizes to the verb⁵

$$(10) \quad [\text{Verb}_i [\text{Tense } [_{vP} \text{ } -s(t) \text{ } t_i]]]$$

The obvious problem with Julien's account is how to account for the restrictions on tense and conjugation class: if the *-s(t)* is just a clitic, we would not expect it to be sensitive to the tense and conjugation class of the verb. Note that these restrictions are not seen for reflexive pronouns, that could also be argued to cliticize to a preceding verb. Nor do we see it in all uses of *-s(t)*: *-s(t)* can also function as a reciprocal marker on a verb (lexically restricted), and it is also seen on deponent verbs, and in some absolute uses of verbs. In these contexts, there are no restrictions on tense and conjugation class. Further, we would expect tensed verbs to be more likely to take *-s(t)* given that we know that tensed verbs move to a higher position (at least in main clauses), which would make it possible for a clitic generated to the left of the verb to cliticize to the moved verb. But as we have seen, the *-s(t)* is most likely to appear on infinitives, i.e., the verb form that shows no obvious indication of verb movement. In short, the following facts are hard to explain in Julien's account:

1. If we take the the passive *-s(t)* to be generated in an agent position (for example SpecVoiceP, as in Julien's account), how can *s(t)* end up cliticized to the verb in infinitives?
2. Why can passive *-s(t)* not cliticize to any tensed verbs (or participles) in Nynorsk?
3. Why are there the restrictions on participles and certain declension classes in Bokmål and Danish?

In section 4 I will lay out a tentative solution to the restrictions on certain tenses, that crucially assumes that *-s(t)* is a verbal morpheme and not a pronoun, and that still assumes a syntactic approach to word formation (or rather, the restriction on tense and declension class even provide further support for a syntactic approach to word formation).

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- a. When different orders have different meanings, they always mirror semantic scope.
 - b. When morpheme order is fixed, then either:
 1. the fixed order is ambiguous between two scopes (as in Bantu),
 2. only the interpretation that reflects the fixed order is available (as in Sanskrit and Finnish)

The Mainland Scandinavian *-s*-passive does not really fit into Kiparsky's generalization, since here only one order is possible, and it does not mirror the underlying order of the morphemes. However, Voice and Tense do not scopally interact with each other, that is, we can not semantically tease apart the two different scope interpretations: a passive applied to a tensed verb would have the same interpretation as a tense morpheme applied to a passive verb.

⁵Julien's account makes it easy to unify the passive *-s(t)* with other instances of suffixed *-s(t)*, for example deponens, absolutive and reciprocal *-s(t)*. I will not discuss non-passive *-s(t)* in this paper. It is however worth to point out that non-passive *-s(t)* does not show the same tense/declension class restrictions as passive *s*, and it is further not obvious that non-passive *-s(t)* is productive. Julien's account is probably correct for non-passive *-s(t)*, and it is probably correct for all instances of *-st* in Icelandic, where the *-st*-forms are probably not passives.

Julien points out that her analysis has a couple of welcome consequences. First, her analysis may bring some understanding to the interaction between modality and the passive form. As pointed out in the introduction, it has been noticed that a deontic reading is triggered when a *-s*-passive is embedded under a modal, while an epistemic reading is preferred when a *bli*-passive is embedded under a modal (as pointed out by Vikner 1988, Hansen 1972 and Vinje 1987, but see Eide 2005 for criticism)). The example below is from Norwegian (from Vinje 1987):

- (11) a. Brevet skal sendes
 letter.DEF shall send.PASS
 ‘The letter must be sent’
 b. Brevet skal bli sendt
 letter shall BLI.PAST send.PTC
 ‘The letter will be sent’

In the deontic reading, the modality is most likely to be oriented towards the demoted agent, i.e., in (11-a), it is understood that it is the demoted agent that has the obligation to send the letter. If we take *-s* to realize the agent, this argument is possibly directly linked to the obligation-role. In (11-b), there is no external argument present to which the obligation can be ascribed. I will return to this pattern in section 5, but I will now point out two problems with this proposal. First, as we see in the English translation line in (11-a), a periphrastic passive can occur in deontic contexts in other languages, indicating that demoted agents in participial passives are present enough to be interpreted as “obligees”. Secondly, deontic readings are possible in cases where an agent is neither syntactically nor semantically present in a clause, as in (12), where the obligation presumably is directed towards the hearer:

- (12) Det ska ligga tre äpplen i varje låda
 it should lie three apples in every box
 ‘There should be three apples in every box’

(12) is perfectly natural where someone is giving instructions about how to package apple: ‘make sure that there is three apples in every box’. The connection between the *-s*-passive and deontic modality can in other words not be seen as an argument for a syntactically present external argument (i.e., *-s*) in synthetic passives.

Julien further points out that the synthetic and analytic passive behave differently in the complement of the verb *försöka* (as originally noticed by Engdahl 1999, and which I will return to below):

- (13) a. Han försökte bli omvald.
 he try.PAST become re-elect.PART
 ‘He tried to be re-elected’
 b. ??Han försökte omväljas.
 he try.PAST re-elect.-S
 int. ‘He tried to be re-elected’

In (13-a), the derived subject is interpreted as the “try-er”. This interpretation is not available in (13-b), and according to Julien this is due to the fact that there is a syntactically present external argument in the the *-s*-passive. The interpretation that we would expect from *försöka* +

-s-passive would be something like ‘he tried people/someone to re-elect him’, which would be infelicitous. Julien extends this analysis to cover the impossibility of using the -s-passive in imperatives:

- (14) a. Bli inte arresterad!
 become not arrested
 ‘Don’t get arrested’
 b. *Arresteras inte!
 arrest -s not
 int. ‘Don’t get arrested’

(14-b) would in Julien’s analysis be interpreted as something like ‘don’t let they/people arrest you’, which is not compatible with the general syntax/semantics of imperatives. In section 5 I will point to a couple of cases where the -s-passive actually is felicitous in imperatives, which indicates that there is something that is not quite right about Julien’s analysis.

I will in section 5 offer an alternative analysis that can explain the data in (13) and (14) above. I will argue that the *bli* passive and the -s passive are underlyingly similar, in that they both involve manipulation of some sort of Voice head (though I will use the label Pred) – an analysis which is incompatible with Julien’s proposal, though in accordance with Åfarli (1992)’s take on Norwegian passives.⁶ In the next section I will go through another recent proposal that locates the difference between the two passives in the Mood-domain.

Heltoft and Jakobsen (1996) and the mood hypothesis

Heltoft and Jakobsen (1996) analyse the -s(t)-suffix as a mood marker and they claim that the -s(t) adds a layer of non-subjective mood. According to them, the s(t)-passive is used when the speaker wants to report on an event in an objective way, without the speakers own point of view. The non-subjective mood can be seen in the following contexts:

1. Rules:

- (15) Indledningen skrives til sidst. *Danish*
 introduction.DEF write-S to last
 ‘The introduction is to be written last.’
 (16) Døren åpnes utover. *Bokmål*
 the.door open-S outward
 ‘The door opens outward.’

2. Generic (maybe habitual) statements:

- (17) Der tales ikke mere dansk i Skåne. *Danish*
 there speak-S no longer Danish in Scania
 ‘Danish is no longer spoken in Scania.’

⁶Åfarli (1992) dismiss the possibility that -s is an argument of the same status as e.g. reflexive clitics in the Romance languages, that, even though they are able to “demote” external arguments, *se* marked predicates are not compatible with agent *by*-phrases in contrast to Mainland Scandinavian -s marked passives.

3. “Re-telling stories”/historical present (Context: the story of Jurassic Park is retold... “They meet the guy and...”)

(18) de inbydes til en rundtur. *Danish*
 they invite-s to a round-trip
 ‘they are invited on a round-trip’

There are a number of problems with the mood-hypothesis which I list below:

1. Why would there be a mood distinction in the passive voice, and not the active voice?
2. If we take Mood to be encoded at the very top of the clause, why would you find the mood marker on non-finite predicates in clearly mono-clausal contexts?

(19) Spidsmus kan ikke spises *Danish*
 shrews can not eat.INF.PASS
 ‘Shrews can not be eaten’ (i.e. are inedible)

3. Why the tense restrictions? Why the conjugation class restrictions?
4. Empirical problem: many sentences with the *s-passive* have highly subjective mood:

(20) You go to the police and express a wish that you want to be arrested:
 a. Jeg vil arresteres
 I want arrest.INF.PASS
 b. ??Jeg vil blive arresteret (only OK with a future interpretation – ‘I will be arrested’) I want BLI.INF arrestPART

The last two problems are the most severe for Heltoft and Jakobsen (1996) – the first two can probably be explained away (or, we can at least cross-linguistically investigate whether mood-distinctions are confined to specific voices, and to which extent mood-markers appear on non-finite verbs in mono-clausal contexts). The author’s observations are however in need of explanation, and I will try to fit them into a larger picture where both the semantic and morpho-syntactic restrictions can be explained. I will claim that the mood-facts reported by Heltoft and Jakobsen (1996) rather can be derived from the following two factors:

1. The *-s(t)*-passives are found in contexts that are temporally “defective”, or even “non-tensed”. This observation can shed new light on the restriction on tenses in Danish, Bokmål and Nynorsk, and at the same time be an important ingredient in the solution of the mirror-violation we see in *-s(t)*-passives.
2. *-s(t)* should not be seen as a non-subjective mood, but rather as a way of marking that the derived subject is not the mental center of the clause. The *bli*-passive on the other hand is used when the emotional focus has shifted to the derived subject, and away from the demoted agent, as will be discussed in section 5.

In section 3 I will lay out my general take on passives, in section 4 I will try to explain the morpho-syntactic restrictions on passives (i.e., the interactions of tense and declension class), and in section 5 I will try to give an alternative analysis to semantic differences between the two passives. I want emphasize that the reason we need a new account of the Scandinavian passives is that the previous ones are not empirically adequate, as has been pointed out above.

3 What is a passive

An eventive passive has the same event structure and thematic structure as an active predicate. (21-a) and (21-b) both refer to punctual events that have an agent argument a patient argument, and (22-a) and (22-a) both refer to states that have an experiencer argument and a patient/subject matter argument. Whether the external argument is syntactically present or not is not relevant for the semantic interpretation, which is seen in the fact that the *by*-phrase picking out the external argument is optional in the passive sentences.

- | | | | |
|------|----|----------------------------------|-------------------|
| (21) | a. | John hit Bill | Active, Punctual |
| | b. | Bill was hit (by John) | Passive, Punctual |
| (22) | a. | The neighbors love John | Active, State |
| | b. | John is loved (by the neighbors) | Passive, State |

Passive marking does thus not alter any of the thematic relations or the event structure, i.e., the passive does not modify the content of the verb phrase (in contrast to e.g. adjectival passives, causative-inchoative alternations or reflexivizations). Following Åfarli (1992), I will assume that the function of the passive is to make sure that the highest argument of the verb phrase does not end up as the syntactic subject, i.e its main function is to “demote” the external argument from subject-hood, rather than promote the internal argument to subject. In this paper I will propose that the passive *-s* is located in the same syntactic node as the copula in periphrastic passives (and in other copular construction as well). I will label this projection Pred(ication), following Bowers (1993), instead of Voice.⁷ Pred is the head that syntactically introduces the subject, and this head will be present in all contexts where there is a nexus (a subject applied to a predicate). Pred comes in two variants. It can either be a “raising” predicate, where the highest argument of the verb phrase has to be co-indexed with Pred. It can also carry an index that is disjoint from the highest argument of the verb phrase. In that case it can carry the index of the internal argument (in regular passives), or an expletive can be inserted there (in impersonal passives).⁸ The copula in a periphrastic passive and the suffix *-s* are crucially Pred heads of the second type. The raising Pred will be used in all active sentences.

⁷Often, the the projection that hosts passive morphology is labelled “Voice” (e.g. Kratzer 1996), and this projection is also responsible for introducing external arguments. In my account, I strictly separate projections that introduce arguments (or change the thematic structure), from projections that deal with syntactic functions like “subject” and “object”.

⁸In regular copular constructions (with a nominal or adjectival complement of the copula, the subject is presumably thematically related to the complement of the copula in some way, but it does not carry the status of argument of that complement.

I will in this paper assume a syntactically decomposed verb phrase in the style of Ramchand (2008b), though I will make some minor changes. Ramchand decomposes the vP into three layers, InitiationP, ProcessP and ResultP. I will assume that the top layer, InitiationP, introduces either a mentally affected participant, or a participant that has a goal with the event. I will call this projection Men(tal)P rather than Initiator. For the discussion of Danish, Bokmål and Nynorsk, I will disregard this projection, and only make use of two layers, Process and Result, more in the style of Pustejovsky (1995) (though Pustejovsky does not decompose the vP in the syntax but rather in the lexicon). The nature of MenP will be discussed in section 5 (I will sometimes indicate the presence of it (in parenthesis) in the phrase structures of Danish, Bokmål and Nynorsk).

The verbal heads Process and Result come with indices that encode co-reference between the arguments of the verb, and individual verbs carry explicit information about the value of the indices. The indices are later bound by the argument DP's (see Baker 2003 for a similar proposal). Lexical entries of typical transitive, unaccusative and unergative verbs are given below:⁹

- (23) a. Transitive: [Proc_i, Res_j]
b. The binder of *i* is the argument¹⁰ of a process that leads to a result in which the binder of *j* is the argument, where the nature of the process and the result is given by the lexical content of the verb.
- (24) a. Unaccusative: [Proc_i, Res_i]
b. The binder of *i* is the argument in a process that leads to a result in which the binder of *i* is the argument, where the nature of the process and the result is given by the lexical content of the verb.
- (25) a. Unergative: Proc_i
b. The binder of *i* is the argument of a process, where the nature of the process is given by the lexical content of the verb.

I will further extend the functional sequence with the projection Event (see e.g. Travis 2010, Higginbotham XX), which functions to bind the event introduced in the verb phrase, and/or make it accessible for higher tense and aspect related functional projections. Following Travis (2010) I take the Event head to host infinitival morphology, and as I will argue, tense morphemes spell out both T(ense) and Event. The Event projection is located above the highest projection in the verb phrase (either Proc or Men).

- (26) Event (MenP) [ProcP [ResP]]

The representations for passive and active verbs are thus the following (here, I use indices on Pred in parallel fashion to main verbs):

- (27) Active: Pred_i [Event [Proc_i [Res_j]]] (John closed the door)
- (28) (Eventive) Passive: Pred_j [Event [Proc_i [Res_j]]] (The door was closed (by John))

⁹I will have nothing to say about how and where direct objects are syntactically introduced.

¹⁰Argument should be interpreted as 'the most prominent participant'.

Ramchand further allows lexical items to underassociate, i.e. a lexical item may be inserted when only a subset of the features specified in the lexical item are present in the syntax (see Ramchand 2008a for possible restrictions on underassociation for lexical verbs, and see Caha 2009 and Starke 2009 on the superset principle). This means that an unaccusative or transitive verb can be inserted in a context like (29-b), as well (29-a):

- (29) a. [Proc_{i/j} [Res_j]]
 b. [Res_i]

We will make use of underassociation to explain adjectival passives (which only have a Res-projection, as in (29-b)), and also Swedish periphrastic passives, as will be returned to in section 5. Following Ramchand (2008b), Caha (2007) and Starke (2009) I will assume that a lexical item can spell out a sequence of heads. (See Caha 2007 and Ramchand 2008b for discussions of different predictions made by head-movement accounts and this type of account. For the purpose of this paper, the reader can feel free to internally rephrase it to “head-movement”.)

In this paper we will focus on five (classes of) lexical elements, which will be enough for covering the Mainland Scandinavian passives:

1. Copulas: Crucially spell out Pred, and Event (and presumably some type of aspect as well). The inflected forms spell out Tense and Finiteness as well. Note that the copulas *bli* and *vara* have very irregular paradigms. They do not combine with tense affixes but will themselves lexicalize T, Fin etc..
2. Tense affixes (present/preterite), and the infinitive suffix: Similar to copulas, though distinct in that Pred has a “raising”-flavor: they have to be co-indexed with the highest projection of the vP. The infinitive suffix differs from the present and preterite endings in not being able to spell out a Finiteness. Due to underassociation/superset principle, the infinitive suffix can realize the following strings as well (at least): [Event], [Pred [Event]], [Tense [Pred [Event]]].¹¹
3. Main verbs: [(Men) [Proc [Res]]]
4. *-s(t)*: Spells out Pred with a non-raising flavor, basically carrying the following information: don’t make the highest argument the subject (a marked value of Pred).
5. *-de* (participial ending): Semantically vacuous, aborts the verbal functional sequence either above MenP or ProcP (in event-denoting participles), or Res (in stative passives). The result is an adjectival element (and let us for present purposes agree with Baker 2003 that adjective is the default category). A main verb with this ending spells out a verbal functional sequence (just MenP/ProcP in event denoting participles, or ResP in stative participles).

The result of this system is that both periphrastic passives and morphological passives can realize the string Pred_j [Event [Proc_i [Res_j]]] (i.e., an infinitival passive):

¹¹The preterite and present tense morphemes could in principle underassociate as well, in similar fashion as the infinitive. However, due to the elsewhere condition of the superset principle (use the morpheme with less unused features), the infinitival morpheme will

(30) Pred *-s(t)* [Event INFINITIVAL SUFFIX [Proc VERB [res VERB]]]

(31) Pred COP [Event COP *-de* [Proc *verb* [Res *verb*]]]

The strings above would give you infinitival passives (morphological in (31-a) and periphrastic in (31-b)). Note that there is no mirror-violation here for the morphological passive (and neither for the periphrastic passive). The passive infinitive is rather an instantiation of 3-2-1 (Verb - Event - Pred). I will argue that the passive structures that are not bigger than PredP always are realized as morphological passives, even though a copula and a participle together could spell out the relevant sequence of heads. The morphological passive competes and wins over the periphrastic passive, since it realizes the structure with help of fewer morphemes.

As described above, a tense suffix lexicalizes Event, Pred (with a default value), Tense and Fin. The question is then what happens when Tense is present, and Pred has a marked value, i.e. when Pred is already lexicalized by *s(t)*. When Pred is realized by *-s(t)*, morphologically tensed forms of a main verb would have to lexicalize a discontinuous stretch of the functional sequence (or, phrased in head-movement terminology, it would violate the head movement constraint). Such forms are in fact ungrammatical in Danish, Nynorsk and Bokmål, as will be shown below. In Swedish however, I argue that the morphological form in question bears only a copy of a higher tense feature, and can therefore co-occur with *-s(t)*. In the other languages, the periphrastic passive has to be used as soon as a Tense projection is merged on top of Pred, due to lack of tense-copying. This is, as we will see, the only parametric point of variation between the Mainland Scandinavian languages, and this single difference gives rise to all the distributional and interpretational differences between the two passives and between the different languages, as described in the section 1 and 2 above. The rest of the paper focuses on motivating this single difference. The next section will focus on Nynorsk, Danish and Bokmål, and section 5 focuses on Swedish.

4 The role of Syncretism in Danish, Bokmål and Nynorsk

So far we have learned the following:

1. The *-s(t)*-passive is highly restricted by tense and conjugation class in Danish, Bokmål and Nynorsk.
2. The *-s(t)*-passive is problematic for various accounts of linearization (either the mirror-principle or more general rules about spanning/head movement, since it either looks like Voice (or Pred) and Tense end up in the reverse order, or that a morpheme spells out a discontinuous stretch of the functional sequence, Julien (2007)).
3. When the *-s(t)*-passive is tensed in Danish and Norwegian, it seems to have only a defective tense interpretation (a re-analysis of the data from Heltoft and Jakobsen 1996, to be expanded below).

Ideally, it should be possible to show that these three points are all related. I will show below that a closer look at the verbal paradigms in Danish, Bokmål and Nynorsk provide further insight to the tense/conjugation class problem. The following two generalizations emerge:

1. Present tense *-s(t)*-passives are only available in the varieties where infinitival and present tense form are homophonous in all conjugation classes.
2. Past tense/preterite form of *-s(t)*-passives are only available in the MLS varieties that allow present tense *-s(t)*-passives, and in these languages, only in the conjugation classes where the simple past tense (preterite) and the strong participial form are identical in form.

I will claim that, except for Swedish, passive *-s(t)* can only attach outside a tensed form that is “parasitic” on a non-tensed form. More specifically, I will claim that even in the tensed *-s(t)* forms, the tense morphology is never spelling T, but only Event. They are in other words finite non-tensed verbs. I will in section (33) lay out how a non-tensed form can occur in “finite” contexts.

Restrictions on interpretation and availability of the present tense

Swedish and Nynorsk has present tense forms of the *-s(t)*-form, that is distinct from the infinitival form (in all but conjugation 1 in Swedish, and conjugation 2 in Nynorsk), Danish and Bokmål have identical forms for all verbs (strong verb exemplified below):

- (32) a. Swedish: *skrivas_{inf}* – *skrivs_{pres}*
 b. Nynorsk: *skrivast_{inf}* – *skriv(e)st_{pres}* (Pres only with reciprocal reading)
 c. Danish/Bokmål: *skrives_{inf}* – *skrives_{pres}*

The form-identity is due to the fact that infinitives end in *-e* in Bokmål and Danish, and the present tense end in *-er*.¹² Since the present tense *-r* disappears in the present tense passive, the present passive and the infinitival passive look identical. In Nynorsk, the paradigm is more complex, but in the first conjugation class (which is the biggest of the conjugation classes), the infinitive ends in *-e*, while the present tense ends in *-ar*, giving rise to different forms for passive infinitives and passive present tense (though they do not strictly speaking exist – the *-s*-forms in the present are rather reciprocal or deponent). For strong verbs, as exemplified in (32-b), the pattern is different. In Swedish, we see form identity in only the first conjugation class, where infinitives end in *-a* and the present tense ends in *-ar*. In the other classes, the infinitival suffix is *-a* (though sometimes another vowel, see last footnote), and the present tense suffix is *-er*. In the present passive forms, *-er* drops, giving active-passive pairs like *köp-er* – *köp-s*.¹³

I will here focus on the interpretational restrictions on the present tense passive in Danish, as reported on in Heltoft and Jakobsen 1996. I will assume that the interpretational restrictions are more or less the same in Danish and Bokmål. Since Nynorsk has no present tense *-s(t)*-passive, I will not say anything more about Nynorsk here. Swedish will be discussed in detail in section 5.

¹²There are also verb stems that end in a vowel, and in these cases the infinitive is \emptyset . For these verbs the present tense is only marked with *-r*, and the present passive is only marked with *-s*, giving rise to form-identity as well. This is true in all the MS languages.

¹³Note also that the present tense *-s*-form in Bokmål have the same tonal pattern as infinitives rather than present tenses, as seen for strong verbs: *synges₂* (*inf.*) – *synger₁* (*pres.*) vs. *synges₂* (*inf.*) – *synges₂* (*pres.*). In Swedish as well, there is an archaic passive form that look like the Bokmål passives: *säljes₂* (‘sell’-pass, meaning ‘for sale’), compare with present tense *säljer₁*, present passive *säljs₁* and infinitival passive *säljas₂*.

As was noted in Heltoft and Jakobsen 1996, the present tense *-s*-passive is mainly used in (1) rules, (2) generic sentences and (3) the historical present tense. It is crucially not used in the episodic present tense, i.e., in sentences reporting on events that take place simultaneously with speech time. I take it that the function of Tense is to locate an event with respect to speech time (possibly via a viewpoint aspect projection, which will not be relevant for this paper), and that tense in the unmarked case is anchored to speech time. As laid out in sec 3 I assume that tense affixes spell out at least Tense and Event. A present tense affix is inserted when Tense and Event carry the same temporal index, i.e., when the Event is located at speech time.

In the context where the present tense *-s*-passive is used, there is crucially no straightforward link between speech time and event time. In the historical present, the speech time and the event time are surely not the same. The temporal interpretation is rather given by the context. In rules and generic sentences, specific events are not located in time. I will therefore assume that Tense is simply absent in the present tense *-s*-passives.¹⁴ The structure of an *-s*-passive in Danish and Bokmål is thus the following:

(33) Fin [Pred [Event [Proc [Res]]]]

The absence of Tense leads to the lack of a direct link between the event and the speech situation. It should be noted that my solution in practice is not that different from that of Heltoft and Jakobsen 1996, since the crucial element in both proposals is the deficient link between the event and the speech situation/speech situation. While they make reference to the grammatical category Mood to describe the *-s*-passive, I only rely on the absence of Tense. My proposal is more in accordance with the morphological patterns, and does not have to make reference to a special mood-marker that is only available in the passive paradigm. and as we will see in section (33), it can capture the interaction between passives and modal more straightforwardly as well. We will also assume that the restriction on present tense *s(t)*-passives in Nynorsk directly is triggered by the by the lack of syncretism between infinitives and present tense *s(t)*-forms.

The proposal I offer is however theoretically quite problematic, and I will return in section (33) to the question why a non-finite verb can be interpreted as tensed.

Past tenses in Danish and Bokmål

The *-s(t)* form is used in the past tense marginally in Danish and Bokmål, mainly in past generic contexts, and maybe past habituais, though restricted to certain conjugation classes. The relevant paradigms are given below:

- Danish: Two weak conjugation classes + strong conjugation classes (+ irregular verbs): Only the two weak classes take passive *-s(t)* in the past tense.

TABLE 4: DANISH

	Inf.	Pres.	Past	Participle
Weak 1	kaste(s)	kaster/kastes	kastede(-s)	kastet(*-s)
Weak 2	bruge(-s)	bruger/bruges	brugte(-s)	brugt(*-s)
Strong	syng(-s)	synger/synges	sang(*-s)	sunget(*-s)

¹⁴The present tense *-s*-passive in Danish and Bokmål can thus be characterized as a non-tensed finite form. The existence of non-tensed finite verbs have been argued for by Kiparsky in discussion of the Vedic injunctive.

- Bokmål: Two weak conjugation classes + strong conjugation classes (+ irregular verbs): Only the second weak conjugation class takes passive *-s(t)* in the past tense (as reported in Faarlund et al. 1997).

TABLE 5: BOKMÅL

	Inf.	Pres.	Past	Participle
Weak 1	kaste(s)	kaster/kastes	kastet(*-s)/kasta(*-s)	kastet(*-s)/kasta(*-s)
Weak 2	bruke(-s)	braker/brukes	brukte(-s)	brukt(*-s)
Strong	drikke(-s)	drikker/drikkes	drakk(*-s)	drukket(*-s)

As we saw above, the present tense *-s*-verbs in Danish and Bokmål seemed to be form-parasitic on infinitival forms. By appealing to form-parasitism it was possible to give an explanation to the fact that Nynorsk is more restricted than Bokmål and Danish. In the past tense, we seem to have the similar case form-parasitism in Bokmål and Danish. Looking carefully at the verb-paradigms, it turns out that only the conjugation classes that show form identity between the simple past tense and the weak participial form allow past tense *-s*-passives:

- **Danish:**

- (34)
- den lejede bil — de lejede en bil (conj. 1)
the rented car — they rented a car
 - den brugte bil — de brugte en bil (conj 2)
the used car — they used a car
 - den sungne/*sang melodi - de sang/*sungne en melodi (strong)
the sung melody - they sang a melody

As seen above, the weak/non-agreeing participle is identical to the simple past tense form in the conjugation 1 and conjugation 2. In the strong paradigm (34-c), the weak participial form is clearly different from the simple past tense.

- **Bokmål:**

- (35)
- den **kastede**/*kasta/*kastet maten — de kasta/kastet/*kastede maten (1 conj)
the thrown food — they threw the food
 - den brukte grillen — de brukte grillen (conj 2)
the used grill — they used the grill
 - den revne/rev osten — de rev/*revne osten
the grated cheese — they grated the cheese

Bokmål differs from Danish in that the verbs in the first conjugation class show no syncretism between the weak participial form and the simple past tense form. The syncretism is only seen in the second conjugation class, and this is the only class the allows *-s(t)*-passives in the past tense.

Why would syncretism between the preterite and weakly agreeing participle matter? One could argue that there only are two non-agreeing, non-finite forms in Danish and Norwegian: (1) the infinitive and (2) the weak participle form. There could very well be a restriction on attaching passive morphology outside of an agreeing form.¹⁵¹⁶

Given that I have argued that the present tense -s-passives are tenseless in Danish and Bokmål, it is not obvious what a past tense -s-passive would actually mean, especially if they are argued to be semantically parasitic on the non-finite participle just like the present -s-passive is parasitic on the infinitive. It should be noted that past tense -s-passives are extremely rare in both Danish and Bokmål. In Bokmål it is even possible that the past tense -s-passive is absent in many speakers' grammar, especially younger speakers' grammar (and it is not unexpected that a form that is applicable to such a small part of the verbal paradigm sooner or later would disappear). Heltoft and Jakobsen 1996 argue that the Danish past tense -s-passive is still alive, but its low frequency is due to its very specific semantics (as they describe, past tense passive non-subjective mood). Heltoft and Jakobsen 1996 give two contexts where the form is still used:

1. Rules and norms in the past.
2. Specific event, marking the distance between the speaker/source and the content of the clause. (as Heltoft and Jakobsen 1996 puts it: 'The past -s-mood is also the way to a text as the minutes of a meeting, marking the text as the decision of others rather than of the person writing'.) (36) is from Heltoft and Jakobsen 1996, p. 16:

(36) Alle pengene *uddeltes* og adskillige medarbejdere
 All money.DEF award.PAST.PASS and several employees
oprykkedes i andre lønklasser. Mødet
 promote.PAST.PASS in other salary.grades. Meeting.DEF
afsluttedes kl. 18.30
 terminate.PAST.PASS clock 18.30
 'All the money was awarded and several employees were promoted to
 other salary grades. The meeting was terminated at 18.30'

Heltoft and Jakobsen (1996) note that the periphrastic passive and the -s-passive can be used more or less interchangeably in the past tense, especially when talking about norms in the past.

I want to claim that past tense -s-passives are tenseless as well. They contain only a Pred plus an EventP. However, the EventP must have another value in the past tense passives than in the present tense -s-passive. Without going into technical details, I will for now assume that EventP can have either a +Terminated value, or a -Terminated value. When carrying a +Terminated value, the EventP will spell out as a past (passive) participle, or possibly past tense if a T node is present in the structure as well. (This claim is not unproblematic, but I will leave it for further works to fully work out the consequences.)

¹⁵It should be noted that Nynorsk also have identical forms for the weak participle and the simple past tense in some conjugation classes, though they still do not allow passive past tense verbs. Presumably you need a passive present tense form in order to have a passive past tense form.

¹⁶One could of course also claim that the active past participle/supine is a non-finite, non-agreeing form. I will return to the supine in section (44).

In relation to the issue of form-syncretism, we must ask ourselves why “syntax” would care about form-syncretism, especially in the case of the passive paradigm. Below I will present the beginning of an analysis, that builds on comparisons to other phenomena where surface form-identity (rather than identity in category) licenses certain syntactic structures (i.e., where phonology seems to “fool” syntax). First I will lay out some basics about finiteness and the licensing of (nominative) subjects. For this purpose, I will assume the basics of Holmberg and Platzack (1995) (with minor modifications).

Holmberg and Platzack (1995) argue that the finiteness feature [+F] in the Scandinavian languages is located in C^o , and that a C^o with [+F] needs to be lexicalized, either by a verb moving there, or by a complementizer (C^o with [+F] is what I have called Fin above). Nominative case is directly dependent on the feature F.¹⁷ Note that I previously made use of morphemes spanning many functional heads rather than lexical items moving to certain positions, i.e. head-movement. I will however assume that items always move from the inflectional or v domain to the C-domain. Let’s for now assume that there is a phase-boundary between inflectional domain and the C-domain, and that morphemes in general cannot span across a phase-boundary. Let’s further assume with recent phase-theory that syntactic structures are spelled out at phase-boundaries. If this assumption is correct, it should mean that the C-domain does not really care about the underlying structure of the elements inhabiting it, but rather the surface form. I will below briefly look at three cases where form-identity rather than category-identity matters, and which can shed light on the homophony requirement of Danish and Norwegian passives.

1. **German free relatives:** As noted by Groos and van Riemsdijk (1981), the gap in a free relative clause needs to match in case with the case of the relative pronoun, as assigned by the matrix clause, unless the form of the relative pronoun happens to be identical for both the required cases (see Vogel 2001 for clear discussion of this topic, and for variation within German).

- (37) a. Ich nehme, wen du mir empfiehlst.
I take who.ACC you me.DAT recommend
‘I take whomever you recommend to me.’ (Accusative in both matrix and embedded clause)
- b. *Ich nehme, wer/wen einen guten Eindruck macht.
I take WHO.NOM/WHO.ACC a good impression makes.
‘I take whoever makes a good impression.’ (Accusative in matrix clause, nominative in embedded clause)
- c. Ich habe gegessen was noch übrig war.
I have eaten WHAT-NOM/ACC.NEUT still left was
‘I ate what was left.’ (Accusative in matrix clause, nominative in embedded clause, but nominative-accusative syncretism in Neuter)

¹⁷In the Holmberg-Platzack approach, it is not obvious if the [+F] licenses nominative case, or if nominative case licenses the finiteness feature (see Holmberg and Platzack 1995[44-46]. I will have nothing new to add on this topic.

In the examples above, the matrix verb requires a direct object with accusative case. (37-a) is then unproblematic since the relative pronoun is assigned accusative in the relative clause. (37-b) does not work because of a case-clash. (37-c) is structurally identical to (37-b), but comes out as grammatical since the relative pronoun looks like a nominative on the surface. If we assume that the underlying structure of the relative pronoun is invisible at the top phase of the clause, i.e., the C-domain, form-matching should be all that is required to make the sentence licit.

2. **Bound-variable reading of indexicals in German:** As discussed in Kratzer (2009), possessive first and second person pronouns can be interpreted as bound-variables, but only if the subject agreement on the verb shows syncretism with 3rd person. The following pattern is reported in Kratzer (2009):

- (38) a. Wir sind die einzigen, die unseren Sohn
 1PL be.1/3PL the.PL only.ones who.PL 1PL.POSS.ACC son
 versorg-en.
 take.care.of-1/3PL
 'We are the only ones who are taking care of our son.'
 b. Ihr seid die einzigen, die euren Sohn
 2PL be.2PL the.PL only.ones who.PL 1PL.POSS.ACC son
 versorg-en.
 take.care.of-1/3PL
 'We are the only ones who are taking care of our son.'

According to Kratzer, (38-a) is ambiguous, while (38-b) is not, at least for most speakers. (38-a) can have the following two readings: (1) "no one takes care of our son, except for us" and (2) "we are the only X such that X takes care of X's son" (bound variable). Only reading (1) is available for (38-b). The agreement on the finite verb (*versorg-en*) is controlled by the subject relative pronoun in both examples, but in the a-example, the agreement could in principle hold between the first person pronoun and the verb. This ambiguity is presumably what triggers the possibility of interpreting the possessive pronoun as a bound variable.¹⁸ Just like in the case of the German free relatives, the syntax (or semantic computation) seems to be fooled by the syncretism. Here as well, we are dealing with dependencies that stretch over a clause boundary (a C-phase).

3. **Restrictions on topicalizations in Norwegian.** Taraldsen (1981) reports that form syncretism between subject- and object form is necessary in certain topicalizations across clause boundaries in Norwegian. This is seen in (39-b), where a topicalization of first singular or plural subject pronoun, or a singular second person subject pronoun across a clause boundary is unavailable. (39-a) shows that this operation is available for names (and other DP's not showing any case-marking):

- (39) a. Per_i hadde de trodd [t_i ville komme for sent.
 Per had they thought would arrive too late

¹⁸I will not have anything to say about how the possessive pronoun gets its person marking. See Kratzer (2009) for discussion of this issue.

- 'Per had they thought would arrive too late.'
- b. *Jeg/du/vi_i hadde de trodd [t_i ville komme for sent.
 I/you/we had they thought would arrive too late
 'I/you/we had they thought would arrive too late.'

As Taraldsen (1981) shows, this is not a restriction on pronouns, but only on pronouns that have special subject- and object forms. Pronouns with syncretic subject and object forms can be topicalized across a clause boundary, as shown in (40) for the second person plural pronoun (*dere* is both the subject and object form)¹⁹

- (40) Dere_i hadde de trodd [t_i ville komme for sent.
 you.PLUR had they thought would arrive too late
 'You had they thought would arrive too late.'

Let's assume that the ungrammaticality in (40-b) is triggered by a restriction on unambiguously nominative elements in a clause (in Norwegian): a nominative element must be interpreted as a subject.²⁰ The main clause cares only about the form of the topicalized pronoun, or in other words, the morpho-syntactic feature set-up of the pronoun is not visible to the main clause (alternatively, to the embedded clause).

I will assume that syncretism plays essentially the same role in the Danish and Bokmål -s-passive paradigms as it does in the three cases above. In the cases discussed above, the C-domain mediates between two clauses, but this is not the case for the passives (these are mono-clausal structures). However, the C-domain presumably has a similar function in mono-clausal contexts, only with the difference that it does not mediate between two clauses, but between the clause and the speech situation. In both cases, we can assume that the C-domain cares about the form of the elements occupying it, rather than their feature set-up.²¹

It should be noted that, in all the cases discussed above, including Danish and Norwegian passives, there seem to be a lot of speaker variation with respect to the effect of form syncretism in the licensing of certain structures. My impression is that many Norwegians today do not accept any past tense forms of the -s-passive. Syncretism that is restricted to a few inflectional classes will probably not have very robust syntactic effects (but it is not really clear why). When the syncretism extends to all inflectional classes of a paradigm, the effect is more robust.²²

¹⁹The object forms for *jeg*, *du* and *vi* are *meg*, *deg* and *oss*, and these forms can neither be used when the subject is topicalized.

²⁰Taraldsen claim that the same restriction holds for topicalization of object pronouns that are non-syncretic with the subject form, at least for some speakers. For many (most?) speakers, the effect is only seen for the object forms, and I will only take into consideration speakers showing this pattern here.

²¹I have nothing really to say about embedded clauses, where the verb does not move to C. I will just assume that there is some sort of agreement between C and the finite verb in embedded clauses, and that form identity is sufficient.

²²Another case of syncretism with syntactic consequences is the English *go/come get*-construction. This construction is only licensed when both verbs can appear in their bare form (see Bjorkman (2010) for a recent discussion and references). Third person singular agreement is therefore not possible: **he go(es) get(s) the paper every day* – OK *I go get the paper every day*. All English verbs (except for auxiliaries) surface in the bare form in the infinitive and present tense, and the pattern for present tense sentences seems very robust. As has been noted, at least

Restrictions on the infinitive

As was mentioned in section 2, the infinitive *-s*-passive is mainly used after root modals, while the periphrastic passive is used after epistemic modals. The relevant data are repeated in (41):

- (41) a. Brevet skal sendes
letter.DEF shall send.PASS
'The letter must be sent'
b. Brevet skal bli sendt
letter shall become send.PTC
'The letter will be sent'

Research within the cartographic approach has shown that epistemic modals are located higher up on the functional hierarchy than root modals (see e.g. Cinque 2002, the observation goes back to Jackendoff (1972)). Research on modals have also indicated that epistemic modals take complements that carry their own tense, or propositional force, which is seen in the fact that complements of epistemic modals easily take independent temporal modifiers (42), and in some cases even negations (43):

- (42) Han måste ha kjøpt bilen igår
he must have bought car.DEF yesterday
'He must have bought the car yesterday'
(43) Han lær visst inte vara på jobbet
he MOD.HEARSAY apparently not be at work.DEF
'He is apparently not at work'

Root modals can in general not take tensed complements, which can be seen in the fact that (42) is unambiguously interpreted as an epistemic modal.²³ There are certain exceptions to the generalization about passive choice in the complement of modals, which will be returned to in section 5, most clearly seen in the fact that periphrastic passives can be used in the complement of root modals. For now, we at least have an explanation for the basic pattern, i.e., that *-s*-passives are licit in the complement of root modal but not epistemic modals in Norwegian and Danish: *-s*-passives are illicit in the complement of epistemic ("high") modals since epistemic modals select for a tensed complement, and *-s*-passives are not tensed. This point is very important, since it shows that the *-s*-passive is not primarily restricted by the form of the stem, but rather the temporal information encoded in the stem. Infinitives can be either tensed or tenseless (see e.g. Wiklund 2007 and Wurmbrand 2001), but they can only spell out the default value of Pred, just like present and past tense forms. The complement of a modal can thus be of two different sizes:

- (44) a. Passive complement of epistemic modals: Tense (COP.) [Pred (COP.) [Event

some speakers allow the *come get*-construction in the perfect as well, but only for the handful of verbs that have a "bare" form as a participle (Carden and Pesetsky, 1977): OK *Helen has come put the vase on the stand* – **Alex has come knock(ed) on my door three times*. Here again we see that syncretism that is only restricted to a small inflection class has less clear syntactic consequences.

²³Note that deontic modals are fine with future temporal modifiers, like *You must come to the party tomorrow*, but in these cases the temporal modifier might very well belong to the superordinate modal itself.

(COP.) [Proc (PART.) ...

- b. Passive complement of root modal: Pred (-s) [Event (INF.) [Proc (VERB) ...

A passive tensed infinitival needs to be spelled out as two separate words, i.e. a copula taking care of Event, Pred and Tense, and a participle taking care of the verb-phrase. The restriction on the two passives in the complement of modals reported by Julien (2007) and Heltoft and Jakobsen 1996 now follow from the size of the infinitival complement (combined with a particular spell-out mechanism).

What is important to point out is that the morphological passive seems to be the only suitable choice when the complement of a modal is non-tensed (i.e., when it is only a PredP). As we have set up the structure, a copula plus a participle could in principle spell out the structure in (44-b), but due to an economy principle (“use as few morphemes as possible to lexicalize a structure”), the morphological passive is chosen.

The restrictions on the perfect

Only in Swedish can the -s-passive be used in the perfect tenses. There are basically two ways of explaining the absence of -s-passives in Danish, Bokmål and Nynorsk.

1. **The present/past perfect as bi-clausal:** Julien (2001) and Larsson (2009) argue that all perfects are bi-clausal. The perfect auxiliary selects for a tensed complement which is realized by a perfect participle. Since the perfect participle is tensed, the -s-passive of the perfect should be illicit, just as it is illicit for tensed infinitives.
2. **The Norwegian and Danish perfect participle as Pred-less:** In Swedish, the active (perfect) participle (traditionally labelled the supine) is distinct from the passive participle:

- (45) a. Jag har skjutit djuret
I have shoot.SUP animal.DEF
‘I have shot the animal’
b. Djuret blev skjutet
animal.DEF BLI.PAST shootPART.NEUT
‘The animal was shot’

In all the other Mainland Scandinavian varieties, the active and passive participle are identical in form. Further, Danish (and to some extent Nynorsk and Bokmål), have the typical Have/Be-alternation, found in e.g. Italian, Dutch and German. In Swedish, all perfects come with the auxiliary *have*. Based on these two facts (among others), Platzack (1989) argued that the Swedish active participle is a full, voice-specified verb-form. Christensen and Taraldsen (1989) argued on the same grounds that the Norwegian and Danish active and passive participle are of the same type, basically participles without voice specification, where the auxiliary encodes the voice of the sentence (see Kayne 1993 for discussion). The differences between the participles in Swedish and Danish/Norwegian is sketched below:

- (46) Swedish active participle/supine: Pred [Event [Proc [Res]]] (at least)

(47) Danish “active” (and passive) participle: Event [Proc [Res]]

If this is the right way of characterizing the difference between Swedish and Danish/Norwegian participles, we do not expect to find the passive -s on active participles in Danish and Norwegian, since Pred is not present in these structures, or rather, Pred is always lexicalized by the auxiliary, and the auxiliary selecting for a perfect complement, needs to lexicalize the Pred-node.

For now I will not decide on the exact analysis of the perfect. Anyway, by locating the passive -s in Pred, we have at least one good explanation why -s cannot go on perfects in Danish and Norwegian. Note that it would be hard to explain why perfects could not carry “non-subjective mood” (as in Heltoft and Jakobsen 1996), since perfects do not require a special speaker-focus on the event. On the contrary, perfects are often found in perspective neutral reports, similar to contexts like the meeting-report in (36) above, from Heltoft and Jakobsen (1996). For example, a police report where a corpse is described would naturally contain the perfect: *The victim has been shot twice in the back and stabbed with a sharp object in chest.*²⁴

Note also that syncretism could not save supine/participial -s-passives in Danish and Bokmål, since the supines/participles are not finite, i.e., they are not directly related to the C-domain.

Summarizing non-Swedish MLS

If we accept the proposal of the passive structure and the feature specification of the relevant vocabulary items as set up in section 3, the choice of passive in Danish, Bokmål and Nynorsk can easily be explained. The following points summarize the patterns:

1. If a tense node is present, the periphrastic passive has to be used. This follows from the feature specification of tense morphemes: [T [Pred_{rais} [Event]]]. A tense morpheme can not spell out a Pred-node with a non-raising flavor.²⁵
2. In tense-less contexts (i.e., PredP's) the morphological passive has to be used. This follows from an economy principle (use as few morphemes as possible to lexicalize a structure).
3. Finite morphological passives in Danish and Bokmål are tense-less, and are only licensed under syncretism with a non-agreeing non-finite form (the infinitive or weak participle).

²⁴It should be pointed out that the restriction on -s-passive perfects in Danish and Norwegian could follow naturally from Julien's analysis of the passive, if we take the Danish and Norwegian perfects to lack a position for the external argument, i.e., if the “pred-less perfect” hypothesis is correct. The restriction would be harder for Julien to explain if the bi-clausal analysis is correct.

²⁵One can ask why you would not split up the tense marker, with the predicative -s in between, i.e., you could have one morpheme spelling out Event (infinitival or supine form), and one morpheme spelling out T, with the -s sandwiched between them. This would avoid the mirror violation. There actually seem to be one dialect that does this, namely the Narpes dialect in southern Österbotten (Finland). Here, the morphological passive marker comes out as -s in the present tense and the infinitive, and -st in the supine and past tense, as has been noted by Ivars (2010). It could very well be the case that the -t in -st spells out a past tense node.

Point 2 above will be modified slightly section 5, where we look at Swedish, and where a slightly more fine-grained decomposition of the verb-phrase is presented.

Tense-agreement in Swedish

As we have seen, Swedish has a full tense paradigm for the -s-passive, and the interpretational restrictions seen in Danish and Norwegian are not seen in Swedish, i.e., the -s-passive can have episodic interpretations in both the present and the past tense, and it can also be used in the complement of epistemic modals. There is in other words an obvious violation of the mirror principle in Swedish, or alternatively, there is a way to spell out a structure with a discontinuous stretch of heads with a single morpheme.

One could in principle argue that the -s in Swedish passives is not a simple suffix, but rather part of a “portmanteau” morpheme, that expresses both tense and passive voice, and in that way get rid of the mirror-violation. There would in that case exist four different portmanteau-suffixes in the passive paradigm: present passive, past passive, infinitival passive and perfect/participle passive.²⁶ However, given the regularity in the paradigms, it is hard to argue that the language learner would not segment e.g. *-as_{inf.pass}* into *-a_{inf.}* and *-s_{pass}*, and so forth for the other tenses. Further, it is hard to give an account of the passive form of the strong verbs, where tense is expressed by changing the stem vowels. One would have to store all the -s-forms of the all the strong verbs.

I will argue that -s is a morpheme in Swedish, and that it spells out Pred, just like in the other Scandinavian languages.

(48) T [Pred_s [Event [...

Below I will point out two differences between Swedish and the other MLS varieties (though most clearly seen in Danish), that seem highly relevant for the problem discussed in this paper. In short, it seems to be possible in Swedish to spell structures that are arguably smaller than T that still expresses tense, and that still contains tense morphology. I will argue that Event can spell out a tense value due to agreement with a higher T node. In general, Swedish has much more TMA-copying/agreement (see Wiklund 2007) than the other MLS languages (most notably danish) as seen in the following two contexts:

1. **VP-topicalization** (From Platzack (To appear)): In Swedish, a topicalized verb most naturally carries tense marking, in sharp contrast with English (compare (49-b) and (49-c)):

- (49) a. John said that he would drive the car....
 b. and *drove/drive the car he did.
 c. och körde/??köra bilen gjorde han.
 and drive.PAST/drive.INF. car.DEF did he
 ‘And drive the car he did’

Even though tense morphology is present, other tense-related indicators are illicit in

²⁶In a system where one morpheme can spell out many features, all morphemes that spell out more than one feature should be considered a portmanteau morpheme. For example, if present tense spells out both T and Event (and possible Fin), it is technically speaking a portmanteau morpheme.

the topicalized verb phrase, such as negation (50-a), sentence adverbials (50-b) and auxiliaries (all examples from Platzack To appear):

- (50) a. *Läste inte boken gjorde han.
 read.PAST not book.DEF did he
 int. 'Read the book, he did not'
- b. *Läste troligen boken gjorde han.
 read.PAST probably book.DEF did he
 int. 'Read the book, he probably did'
- c. *Hade läst boken hade/gjorde han
 have.PAST read book.DEF had/did he
 int. 'Read the book, he had'

Danish has been claimed to accept both tensed and non-tensed topicalized VP. However, native speakers have a strong preference for the infinitive:

- (51) Bestille/??bestilte noget gjorde han aldrig (Sten Vikner, p.c.)
 order/ordered something did he never
 'Order a table, he never did'

The Norwegian data are less clear: some speakers tend to accept both finite and non-finite forms, while other speakers accept none of them.

The fronted verb phrases are presumably PredP's or EventP's,²⁷ where the Event node in Swedish gets its value from the superordinate Tense node via agreement or copying. In Danish and Norwegian, this agreement operation is presumably absent or highly restricted.

2. Tense/Modal/Aspect (TMA) copying from aspectual/phasal verbs to main verbs (see Wiklund (2007)):

In Swedish, Tense copying from a finite or supine aspectual or phasal verb to a main verb is possible, as exemplified in (52):

- (52) a. Han började å skrev ett brev.
 he start.PAST COMP write.PAST a letter
 'He started to write a letter.'
- b. Han slutade å sjöng.
 he stop.PAST COMP sing.PAST
 'He stopped singing.'

According to Wiklund (p.c.), no Danish dialect allows Tense-copying in context like (52), and Norwegians tend to dislike them more than Swedes. The main verbs in these contexts are presumably PredP's or EventP's. Again, the tense morphology on the main verb presumably is possible due to an agreement operation with the superordinate tense verb.

²⁷Platzack (To appear) gives examples of fronted verbs carrying the passive -s, suggesting that a PredP is fronted.

Let's assume that whatever operation that makes it possible for tense morphology to appear in Event in the context of VP-topicalization and TMA-copying, also is responsible for tense marking to appear inside the passive -s. The structure of a tensed

- (53) Structure of a Swedish tensed -s(t)-passive: [Tense [Pred -s(t) [Event +agr T [Verb]]]]

In Danish and Norwegian, the agreement between T and Event across Pred is simply not possible, just like agreement between a superordinate T and Event is not possible in VP-topicalization and in the context of phasal/aspectual verbs.²⁸ I will suggest that the only true difference between Swedish and the other MLS languages is this Tense-agreement on Pred. The Tense-agreement in Swedish makes the -s-passive felicitous in truly tensed environments as well. This has the consequence that Swedish is never forced to use the periphrastic passive in tensed contexts.

5 Swedish and the semantic constraints

As was shown in the introduction, Swedish has full tense paradigms for both synthetic and analytic passives for all declension classes. One of the main points of this article is that simple forms are always preferred over complex form, or more generally: if there are two different ways of lexicalizing a syntactic structure, the strategy that makes use of the fewest morphemes should be used (or more concisely: do not insert dummy morphology unless necessary). A periphrastic passive will always make use of three elements: a verbal stem, a participial ending and a copula (plus tense/aspect on the copula). The synthetic passive on the other hand only makes use of a verbal stem (plus tense/aspect) and the suffix -s to lexicalize the structure Pred_j [Event [Proc_i [Res_j]]]. This predicts that analytic passives never should be used in Swedish. As was shown in table 2 (repeated below), the analytic passive, especially in the written language, is hardly used at all.

TABLE 2 However, as seen in the numbers for spoken language, the periphrastic passive is still used. Further, Swedish speakers can give relatively clear judgements about the two passives, and can confirm that the periphrastic passive at least in certain contexts is productively used. Moreover, in certain contexts, the periphrastic passive *has* to be used.

When we talk about periphrastic passives, it is important to first isolate the clearly adjectival passives. As was discussed in section 3, adjectival passives are structurally different from eventive passives (i.e., they lack a Process projection), and do not “compete” for insertion with synthetic passives (i.e., there are no adjectival -s-passives, just as there are no adjectival active verbs.) Adjectival passives with *vara* (54) and *bli* (55) are given below, with contrasting -s-passives:

- (54) a. Dörren är fortfarande stängd. (Only state-denoting)
 door.DEF is still close.PART
 ‘The door is still closed’

²⁸Everyone who believes that finite verbs in non-V2-position remain in the VP has to accept something like tense agreement/dopying, tense lowering, or low base-generating of tense morphology for all MLS varieties. The difference between Swedish and the other MLS varieties should then be stated differently: Swedish allow T-Event agreement over longer distances, and over interveners (like the passive -s), while Danish and Norwegian require adjacency (T, Pred and Event being adjacent).

- b. Dörren stängs fortfarande. (Only habitual or episodic)
 door.DEF close.PRES.PASS still
 'The door is still (being) closed.' / 'People still close the door'
- (55) a. Han blev **jävligt** imponerad av den senaste Tarantino-filmen
 he was damned.ADV impressed by the latest Tarantino-movie.DEF
 'He was/got really impressed by the latest Tarantino-movie'
- b. Han imponerades (***jävligt**) av den senaste Tarantino-filmen.DEF.
 he impressed (damned.ADV) by the latest Tarantino-movie
 'He was impressed by the latest Tarantino-movie'

As seen in (55-b), the bare modifier *jävligt* can not be used in verbal context, which indicates that the participle in (55-a) is adjectival.²⁹ However, not all periphrastic passives are adjectival passives:

- (56) Han blev (**??jävligt**) misshandlad av två män klockan åtta
 he was damnedADV manhandle.PART.SG.CG. by two men clock.DEF eight
 igår.
 yesterday
 'He was manhandled by two men at eight o'clock yesterday'

In (56), we see that the adjectival modifier *jävligt* is infelicitous, which indicates that we are dealing with a verbal passive. In section 5.2 I will suggest a more finely decomposed clause structure in which event-denoting passives like (56) will come out as "thematically" different from their active counterparts and their *-s(t)*-passive counterpart.

A couple of words need to be said about adjectival participles in the complement of *bli*. One could in principle argue that the change of state reading that is triggered by *bli* when followed by either a regular adjective or an adjectival participle that has its source in a process and result projection in the verb phrase. That is, the difference between a clause with a stative copula (*vara*) (57-a) and a clause with the change of state copula *bli* (57-b) could be represented as in (58):

- (57) a. Jag var trött
 I VARA.PAST tired
 'I was tired'
- b. Jag blev trött
 I BLI.PAST tired
 'I got/became tired'
- (58) a. VARA + adj: Pred_i, Event, Res/Adj_i
 b. BLI + adj: Pred_i, Event, Proc_i Res/Adj_i

If (58-b) were the correct analysis, *bli* would lexicalize both Proc and Pred, making a copulative construction with *bli* event-structurally equally complex as a full verb. In principle, one could argue that *bli* is able to lexicalize a full verb phrase, plus Pred, and the only restriction on *bli* is that it cannot host two disjoint argument indices, i.e., it has to be monotransitive.

²⁹The presence of a *by*-phrase is often seen as an indicator of a participial construction being "verbal". However, for many object oriented psych-verbs (and probably for other verb classes as well), *by*-phrases are licit, especially when they introduce non-agentive arguments. See Pesetsky (1995) for discussion.

For the purpose of this article, I will however maintain the idea that both *vara* and *bli* are auxiliaries, that are not able to lexicalize any projections below EventP. I will tentatively propose that the difference between *vara* and *bli* rather is aspectual, with *bli* being a perfective copula, and *vara* an imperfective copula. The change of state semantics associated with *bli* then should be treated as similar to e.g. inchoative readings of stative predicates triggered by perfective morphology in Spanish.³⁰

- (59) a. *sabía* = know, 3rd, sg imperfective = Stative
 b. *supo* = know, 3rd, sg, perfective = “get to know”

For the purpose of this article, I will assume that *vara* and *bli* differ in aspect rather than event structure. My overall analysis is however compatible with the event structure analysis as well.

Distribution and interpretation of the two passives in Swedish

It has been noticed that in eventive contexts, there are semantic differences between the *s*-passive and the periphrastic passive, that are related to the notion of “control” (see Sundman 1987 and Engdahl 2006). Three contexts where the difference is seen are given below:

1. Complements of ‘manage’ and ‘try’: The derived subject is interpreted as subject of ‘try’ and ‘manage’ in periphrastic passives (60):

- (60) a. *Han lyckades/försökte bli omvald.*
 he managed/trying BLI re-elect.PART
 ‘He managed/trying to be/get re-elected’
 b. ??*Han lyckades/försökte omväljas.*
 he managed/trying re-elect.INF.PASS
 int. ‘He managed/trying to be/get re-elected.’

In the *-s*-passive, the demoted agent is interpreted as the subject of ‘try’ and ‘manage’ as in (61), though this seems to only be felicitous when the derived subject is inanimate, i.e., when the derived subject cannot be interpreted as the try-er or manage-er:

- (61) a. *Målen lyckades/försökte uppnås under första månaden.*
 goal.PLUR.DEF managed/trying up.reachPASS during first month.DEF
 ‘they managed/trying to reach the goals during the first month’
 b. **Målen lyckades/försökte bli uppnådda under första månaden.*
 goal.PLUR.DEF managed/trying BLI up.reach.PART during first month.DEF
 int. ‘ they managed/trying to reach the goals during the first month’

³⁰Describing the difference between *bli* and *vara* in terms of aspect has some positive consequences. First, it can explain cases where *bli* does not entail a change of state, which happens in some cases where *bli* takes a locative or present participle complement, as in *han blev borta i flera år* (“he was/stayed/remaining away/missing for several years”). Constructions like this one cannot be said to denote a change of state, but with respect to most tests they show typical perfective traits (e.g. not compatible with an adverb like *fortfarande* (“still”). Further, by not locating *bli* in the vP, you can explain why *bli* cannot be replaced by *göra* (“do”) in an ellipsis, as opposed to all other main verbs: *han blev trött, och det blev/gjorde jag också* (“he got tired, and so did I”). (Danish *bli* apparently behave different from Swedish *bli* with respect to this test, but I have nothing to say about this.)

2. Control into purpose-clauses: The derived subject can control a PRO in purpose clause only in the periphrastic passive (slightly marked), in sharp contrast with the -s-passive:

- (62) a. (?)Han_i blev skadad för att PRO_i slippa spela i andra halvlek.
 he BLI.PAST injure.PART for to PRO avoid play in second half
 'He was/got injured to avoid play the second half. '
 b. *Han_i skadades för att PRO_i slippa spela i andra halvlek.
 he injure.PAST.PASS for to PRO avoid play in second half
 int. 'He was/got injured to avoid play the second half. '

3. Imperatives: Only periphrastic passives are allowed in imperatives.

- (63) a. Bli inte arresterad!
 BLI not arrested
 'Don't get arrested'
 b. *Arresteras inte!
 arrest.PASS not
 int. 'Don't get arrested'

There are some exceptions to this rule, which will be discussed below.

Further, it seems like Mental affectedness, and "Source of Desire" are factors that are involved, as can be seen in two contexts:

1. Subject oriented psych-verbs: only the PRO of a periphrastic passive can be co-indexed with a subject of a subject oriented experiencer verb:

- (64) Han hatar att bli uppringd/??ringas upp av telefonförsäljare
 he hate to BLI up.call.PART/call.-S up by telemarketers
 'She hates getting called by telemarketers'

2. Complements of deontic modals:

- (65) a. Context 1: A murderer is on the loose, and the police fear that he might strike again soon. They therefore express the following wish:
 b. Mördaren måste arresteras/??bli arresterad så fort som möjligt.
 murderer.DEF must arrest.PASS/BLI arrested as soon as possible.
 'The murderer must be arrested as soon as possible.'

Here, the source of the desire is not the derived subject, but the implicit agent. The -s-passive is by far the most normal choice in this context.

- (66) a. Context 2: The underworld is after me, and I realize that I am actually safer in prison than out in the street. I express the following wish:

- b. Jag måste bli arresterad/??arresteras innan midnatt, annars är det kört för mig.
 I must BLI arrested/arrest.PASS before midnight, or is it over for me.
 I must be arrested by midnight, or I am done for.

Here, the source of desire is the derived subject, and not the implicit agent. The periphrastic passive has to be used in this context. (This context is very similar to the three points discussed under Control above.)³¹

I will propose that the periphrastic passive in Swedish is used in contexts where the demoted agent is not the mental center of the clause. The periphrastic passive is most naturally used when the promoted internal argument is the mental center, but also marginally in contexts where neither the demoted agent, nor the promoted internal argument is the mental center. The mental center is the referent that either instigates the event, or is mentally affected by the event. Since only animate (or possibly human) referents can function as mental centers, we predict that periphrastic passives predominantly will take animate subject. Laanemets (2009) reports that 72.5 % of the subject in periphrastic passives are animate in spoken language, while only 13.7 % of the subjects are animate in the *-s*-passive. In written language, the percentage of animate subjects in periphrastic passives seems to be even higher. In investigating 1258 instances of the string “blev” + “participle”, I found only 71 inanimate subjects (5.5 %) (the sentences were excerpted from the PAROLE-corpus). Still, periphrastic passives can have inanimate subject, but I will show below that this only happens when the speaker wants to mark that the agent of the clause did not intentionally instigate the event.³² I will return to the inanimate subjects in section 6. First I will lay out how the +Mental properties can be captured in a structural way.

How to capture +Mental

In section 3 I proposed a tripartite verb-phrase (following Ramchand (2008b):

- (67) [MentalP [ProcP [ResP]]]

The different projections carry indices that are bound by referents in the clause, and the value of the indices is determined by the lexical verb.³³ The verb spells out the sequence of head Men, Proc and Res. I will propose that the participle in periphrastic passives always lack MentalP, i.e., that the participial ending cuts the verbal sequence above ProcP, in a parallel fashion to the adjectival/stative passives, where the participial ending cuts the verbal sequence just above Res. In the *-s*-passive, the whole verb-phrase has to be present (just like in active sentences).³⁴

The Men(tal) head also carries an index, and if one and the same argument binds both the Mental index and the Process index, this argument will be interpreted as a volitional

³¹It should be noted that many Danish speakers, but not all, prefer the *-s*-passive in both contexts 1 and 2 above.

³²The *bli*-passive shares many properties with the English *get*-passive, but there are some differences between them. It lies outside the scope of this paper to compare Swedish *bli*-passives and English *get*-passives.

³³Or rather, a certain lexical verb can only be inserted if the indices of the verb matches the indices in the syntactic structure.

³⁴For now I will have nothing to say about why you need a participial ending to cut verbal sequence.

causer. (If this index is bound by another DP, this argument will presumably be interpreted as a benefactive or indirect causer, see Pylkkänen 2002). Most verbal entries in Swedish carry the feature Men in addition to Proc and Res, and in that case, Men is always co-indexed with Proc (68-a). Other verbs, e.g. object oriented psych-verbs, lack the Men feature, and the carrier of the mental properties will be contextually specified (68-b):

- (68) a. *arrestera* ('arrest'): Men_i, Proc_i, Res_j
 b. *fascinera* ('fascinate'): Proc_i, Res_j

As was argued above, *-s(t)* attaches outside a full vP. Given that the verb itself often carries information about the Mental center, whatever is the Mental center in the active clause will also be the mental center in the passive clause. In the *-s*-passive of *arrestera*, the Mental center will be located at the demoted agent, and not with the derived subject. The *-s*-passive hence will not be appropriate in contexts that forces the derived subject to be interpreted as the mental center, as in the contexts we have seen above (imperatives, complement of subject experiencer verbs etc.). The structure of an *-s*-passive formed from a verb that has a value for Men will thus always be:

- (69) Pred_j [Men_i [Proc_i [Res_j]]]

When the Men-feature is not present in the lexical entry of the verb, the structure of the *-s*-passive will be the following:³⁵

- (70) Pred_j [Proc_i [Res_j]]

Given the low salience of demoted agents in passives, *-s*-passives might even be interpreted as having no mental center at all, which is presumably what lead Heltoft and Jakobsen (1996) to the conclusion that *-s*-passives carry “non-subjective mood”.

It is not obvious if MenP is at all present in periphrastic passives. In principle, a periphrastic passive could have either of the following two structures:

- (71) a. Pred_j [Men_j -de [Proc_i [Res_j]]]
 b. Pred_j -de [Proc_i [Res_j]]

In none of the alternatives is the lexical verb lexicalizing Men, with the effect that the value of the verbs Men-index is irrelevant for the semantic interpretation. In the a-example, the copula is presumably lexicalizing Men. In the b-example, the mental center is simply unspecified. In this case, we have to assume that animate subjects by default can be interpreted as the mental center. The structures in (71-a) and (71-b) would however give rise to different restrictions on the use of periphrastic passives. If we assume (71-b), the main function of the periphrastic passive would be to remove the mental implications from the underlying

³⁵This article does not cover what looks like inchoative *-s*-forms in Swedish, like

- (i) Dörren öppnades av sig själv
 door.DEF open.PAST.S by REFL self
 'The door opened by itself'

Given that these forms seem to be unavailable in the past tense and the perfect in Norwegian, it seems like they should be treated as regular passives. True passives however do not allow reflexive *by*-phrases, which makes it hard to treat (i) as a regular passive. I leave this problem for further research.

external argument. If we assume (71-a) however, the periphrastic passive would have two functions: (1) to remove the mental implications from the external argument, and to (2) add mental implications to the derived subject (i.e., the underlying internal argument).³⁶ In all the Swedish examples we have seen so far, the derived subject of the periphrastic passive has been the +Mental participant, but we have not yet seen if this is a necessary condition for the periphrastic passive. First, It is important to point out that when the agent has a goal or purpose with the event, only the morphological passive is suitable, i.e., the periphrastic passive cannot be used when the mental center is located at the demoted agent. This is shown in the following examples:

- (72) a. Eftersom de inte ville att någon skulle få reda på deras
 since they not wanted that someone would get knowledge on their
 planer, slängdes alla dokument efter mötet.
 plans, threw.PASS all documents after meeting.DEF
 'Since they didn't want anyone to find out about their plans, all documents
 were thrown away after the meeting'
- b. #Eftersom de inte ville att någon skulle få reda på deras
 since they not wanted that someone would get knowledge on their
 planer, blev alla dokument slängda efter mötet.
 plans, BLI all documents throw.PASS.PART after meeting.DEF
 'Since they didn't want anyone to find out about their plans, all documents
 were thrown away after the meeting'

From this pair of examples we can at least conclude that the periphrastic passive simply cannot spell out the following structure:

- (73) $\text{Pred}_j [\text{Men}_i [\text{Proc}_i [\text{Res}_j]]]$

The reason why it cannot spell out this structure is either that the morphological passive can spell this structure, and will always “win” over the periphrastic passive, or possibly that the participial ending never attaches on top of MenP. I will leave this question open for now.³⁷

The above example does not tell us anything about the presence of Men in the periphrastic passive. It only shows that Men cannot be located at the demoted agent in the periphrastic

³⁶Note the parallelism between this issue and the general description of the passive. Åfarli (1992) argues that the only function of the passive is to demote the agent, and that the promotion of the direct object follows from more general syntactic principles. Previous descriptions of the passives have claimed that the function of the passive is both to demote the external argument, and to promote the internal argument. If we choose the analysis in (71-b), we end up with a story for the *bli*-passive that is in all respect parallel to Åfarli (1992): the main function of the *bli*-passive is to demote the mental center, and the assigning of a new mental center follows from general syntactic principles.

³⁷You cannot really be sure which is the best option in the analysis for Swedish. Data from Norwegian suggests that the former option is correct. In Norwegian, the periphrastic passive is possible in contexts like (73) above (example from Øystein Vangsnes, p.c.):

- (i) Siden de ikke ville at noen skulle oppdage planene deres, ble alle dokumentene
 since they not wanted that someone would discover plans theirs, BLI all documents
 brent etter møtet.
 burn.PASS.PART after meeting.DEF
 'Since they didn't want anyone to find out about their plans, all documents were burned after the
 meeting'

passive. We need to see what happens in a periphrastic passive, when the derived subject is inanimate. As mentioned above, inanimate subjects of periphrastic passives are rare, though speakers rarely find them ungrammatical. In the ScanDiaSyn-survey (Johannessen et al. 2009), the following sentence was tested in the Swedish speaking area, and it was fully accepted by most informers (on a five graded scale, 127 of 154 informers gave it 4 or 5, and 28 informers gave it 3 or below, mean value 4.3):

- (74) Äpplet blev kastat i papperskorgen av misstag
 apple.DEF BLI.PAST throw.PASS.PART in trash.can.DEF by mistake
 'The apple was thrown in the trash can by mistake'

Given the high acceptability of (74), we must conclude that most speakers can use the periphrastic passive not only when the Mental focus is relocated to the internal argument, but also in contexts when the Mental projections is absent, as in (74). The periphrastic passive can thus be argued to be an "out of control"-passive (see Davis et al. 2009 and Taraldsen 2009 for discussion on "Out of Control"-constructions). We can ask though why periphrastic passives with inanimate subjects, like (74), are so rare and why some speakers find them marked or ungrammatical (it should be remembered that 28 of 154 informants (almost 20 %) gave the sentences 1–3 on a five graded scale). It could be the case that the "out of control"-passive simply is pragmatically weird in many cases, or that there is a true split in grammars between the speakers who accept (74) and the speakers who don't. The latter group of speakers could always assign the structure in (71-a) to periphrastic passives (unless we are talking about an adjectival passive, where neither Men nor Proc is present), while the Men-projection is always absent, or at least optional for the speakers of the former group. For the purpose of this article, I will assume that the following: (1) Men projection is simply absent in periphrastic passives; (2) inanimate subjects will by default get interpreted as mental centers; and (3) inanimate subjects in event-denoting passives (i.e., non-adjectival passives) are often pragmatically odd, probably because speakers want to interpret some referent as the mentally active causer/experiencer of an event.

As was mentioned above, I take object oriented psych-verbs to lack the Men-projection. They will in that sense be like periphrastic passives, with the exception that the highest argument get selected as subject. This will first of all capture the general ambiguity in their meaning between object oriented psych verbs (as in "the situation really frightens me") and agentive verbs (as in "he deliberately frightened me"). But it also captures the fact that object oriented psych-verbs in the -s-passive can have a subject that can pick up the +Mental implications. This can be seen in the fact that -s-passive of object psych verbs can appear in the imperative (75), and also be the complement of *vilja* ("want") (at least some of them) (76):

The morphological passive is not possible here, due to the past tense of the passive. However, if you use an infinitive instead of a past tense passive, the -s-passive has to be used (Øystein Vangsnes, p.c.):

- (ii) For at ingen hemmeligheter skal komme ut, br alle dokumenter brennes/*?bli brent
 so that no secrets shall come out, should all documents burn.PASS/BLI.INF burned
 etter hvert mte.
 after each meeting.
 'All documents should be burned after each meeting so that no secrets get out.'

This clearly suggests that both passives in Norwegian can spell out the structure $\text{Pred}_j [\text{Men}_i [\text{Proc}_i [\text{Res}_j]]]$, but that the -s-passive *has* to be used when applicable (i.e., when Tense is not realized on the verb stem).

- (75) a. Kom hit och fascineras av den vackra naturen!
 come here and fascinate.PASS by the beautiful nature
 'Come here and be fascinated by the beautiful nature'
 b. Njut och inspireras av den vackra trädgården!
 enjoy and inspirePASS by the beautiful garden
 'Enjoy and be inspired by the beautiful garden.'
- (76) Han ville inspireras.
 he wanted inspire.PASS
 'He wanted to be inspired'

Note that the analysis given by Julien (2007), where the *-s* is an impersonal pronoun, cannot explain the *-s*-passive in imperatives and in the complement of *vilja*. The passives in (76) and (75) presumably have the following structure:

- (77) $\text{Pred}_j [\text{Proc}_i [\text{Res}_j]]$

Note that the *-s*-passive will always win over the periphrastic passive for verbs lacking a Men-projection (unless we are dealing with adjectival passives), since the *-s*-passive in this context spell out exactly the same structure as the periphrastic passive.

For the verb *arrestera* (and other agentive verbs), the *-s*-passive is not appropriate in imperatives and under *vilja*, while the periphrastic passive is. The *-s* passive is ruled out in these cases by the fact that the index of Men is not co-referent with the syntactic subject.

My account predicts that the *bli*-passive should be preferred in Danish and Norwegian too when the mental center is shifted to the derived subject. Most of my Norwegian informants do prefer *bli*-passives in over *-s*-passives when the mental center is shifted. My Danish informants (with some exceptions) are very strict on using *-s*-passives under deontic modals (including *vilja* ("want"), no matter where the mental center is located. I do not know why this is, but one possibility is that infinitives in Danish are able to spell out shrunk/small vP's to a higher degree than in Swedish. I leave this issue for further research.

Periphrastic passives with inanimate subjects

As has already been mentioned, it is hard to tell apart verbal passives from adjectival participles in the complement of *bli*. I will therefore here say a few words about periphrastic passives with inanimate subjects, and investigate if they all can be seen as adjective passives. First, I will look at two contexts where we find unambiguously verbal passives, and where "non-mental" subjects are excluded. As argued by Levin and Rappaport (1986), adjectival passive participles can be formed from verbs that select for an internal DP argument. A verb without an internal DP argument hence does not form an adjectival passive. We look at two examples below:

1. **Impersonal passives from unergative verbs:** My proposal predicts that the periphrastic passive should be highly marked in impersonal passives, given that the subject is non-referential, and hence cannot be seen as the mental center of the clause. As has been pointed out by Engdahl (2006), periphrastic passives are not productively used in impersonal passives in Swedish. You can find some impersonal periphrastic passives in

Swedish, but only in some very special cases where the internal argument is quantified or negated (examples from Engdahl (2006)):

- (78) a. Det blev ingenting gjort.
 it became nothing done
 ‘We got nothing done.’
 b. Det blev inte mycket sagt.
 it became not much said
 ‘Not much was said.’

I have nothing to say about the categorial status of participles in the examples above. Crucially though, as soon as you make an impersonal passive from an unergative verb, the periphrastic passive gets highly marked:

- (79) Det arbetades/??blev arbetat hårt igår.
 It worked.PASS/was worked hard yesterday
 ‘Hard work was done yesterday.’

Given the absence of an internal argument, we know that no adjectival passive could be formed from *arbeta*. It would also be very weird to leave out the mental projection for a verb like *arbeta*: working is something you do with some intention, or at least with some mental commitment.

2. **Passives of ECM-verbs:** as has been noted by Teleman et al. (1999)[4] and Lundin (2003), the periphrastic passive cannot be used with ECM-complements:

- (80) ??De blev sedda gräla på bussen.
 they BLI.PAST seen argue on bus.DEF
 ‘They were seen quarreling on the bus’

The -s-passive can however be used (note that this is not true for the other mainland Scandinavian languages, where the periphrastic passive is used instead, at least in the past tense):

- (81) De sågs gräla på bussen.
 they see.PAST.PASS argue on bus.DEF
 ‘They were seen quarreling on the bus’

The ECM-verb takes a clausal complement, and can therefore not form an adjectival passive. The derived subject in the passive ECM-construction is presumably not thematically related to the ECM-verb, and can presumably not pick up +Mental feature from it. Given that *se* (“see”) is a perception verb, and that perception verbs presumably presuppose that some mental activity is taking place, it would be infelicitous to report on a seeing-event without including the mental information.³⁸

³⁸It is possible that perception verbs, and stative experiencer verbs lack the Proc projection all together. They would in that case only have the structure Men [Res], making eventive, and thereby unable to feed into out of control passives.

We also predict that verbs that lack a mental projection (like the object oriented psych-verbs), and that further fail to form adjectival passives should not be available at all in the periphrastic passive. Verbs like *cause* seem to fall in to this category. They often take inanimate subjects, and could hence be argued to lack a Men-feature in their lexical entries. Further, it seems impossible to form true adjectival passives from these verbs, i.e., these verbs have to realize their Proc-feature (probably due to their strong cause-meaning). In Swedish, cause-verbs like *orsaka* ('cause'), *vålla* ('cause', 'bring about') and *framkalla* ('cause', 'provoke') are not available in the periphrastic passive:

- (82) Svälten orsakades/??blev orsakad av potatispesten.
 famine.DEF cause.PAST.PASS/BLI.PAST caused by potato-plague.DEF.
 'The famine was caused by the potato plague.'

The verbs of this class do form passive participles though, but these participles do not show up in the complement of *bli* (most often you see them used adnominally).

Let us now briefly look at the 71 cases of inanimate subjects of BLEV + PARTICIPLE found in the PAROLE/SUC-corpus. 21 of these contain one of the following clearly adjectival participle: *berömd* ("famous"), *lyckad* ('successful'), *inställd* ("cancelled") and *försenad* ("delayed").

One interesting group that also might fall under adjectival passives is passive object control verbs like *förbjuda* ("forbid") and *tillåta* ("allow"). It is possible that the participles formed from these verbs can be analyzed as adjectival, but it is worth saying few words about them.³⁹ As has been suggested in the previous sections, the mental center of the clause can control a PRO in e.g. a purpose clause.⁴⁰ In an object control construction, the object controls into a the control infinitive, while the subject still can control into a purpose clause. In Swedish, the object has to overtly expressed (see Rizzi 1986 for discussion on cross-linguistic variation with respect to this issue):

- (83) Vi_i förbjöd *(dem_j) att PRO_j använda våra produkter för att visa dem
 we forbidPAST them to PRO use our products for to PRO show
 att vi menade allvar.
 them that we meant serious.
 'We forbade them to use our products to show them that we were serious.'

You can passivize the matrix predicate (83) using either the periphrastic or the -s-passive.⁴¹ The -s-passive is preferred, and the periphrastic passive seem to add extra affectedness im-

³⁹In some examples, the participles behave like *tough*-adjectives:

- (i) Denna film blev förbjuden att visa
 this movie BLI.PAST forbidden to show
 'It became forbidden to show this movie.'

In this use, the participle is probably adjectival. The -s-passive is highly marked when tough-movement takes place.

⁴⁰Control into a purpose clause by a demoted agent in -s-passives is highly marked in Swedish for many speakers. The instances of control by demoted agents that you find can almost always be analyzed as event control, as in Williams (1985). This is the reason why I have not used implicit control as a diagnostics for the verbal – adjectival passive distinction.

⁴¹The purpose clause is slightly marked in the -s-passive (see last footnote), and completely out in the periphrastic passive.

plications for the derived subject. This shows that the control properties of objects in object control sentences is not directly related to the Men-projection. Had it been related to MenP, control into a purpose clause by the matrix subject would not have been possible, and only the periphrastic passive had been appropriate. Giving an account of object control lies outside the scope of this paper (a movement account of object control might be suitable here), but what needs to be accounted for is periphrastic passives of the following kind:

- (84) Denna film blev förbjuden 1987
 this movie BLI.PAST forbid.PART 1987
 'This movie was banned/forbidden in 1987'

Here, the verb *förbjuda* is not used as an object control verb, and the verb takes DP internal argument. This could be an instance of an adjectival passive (possibly a tough-construction with an elided infinitival complement). I will however propose that the periphrastic passive is used here to mark that the demoted agent is not prime mental center of the clause. Rather, an implicit experiencer (the persons for whom the movie is forbidden) is highlighted.

Almost all periphrastic passives with inanimate subjects that I found in the corpus can be argued to either be adjectival participles in the complement of *bli*, or event-denoting passives where the mental implications have been removed from the underlying agent. Still, it can not be denied that some speakers actually allow periphrastic passives with inanimate subjects to a higher degree than other speakers. This is the topic for the next section.

Variation between speakers

Throughout this article, I have crucially assumed that the periphrastic passive and the -s-passive never are truly synonymous, even though they in principle can spell out the same structures. By assuming post-syntactic lexical insertion and certain rules for insertion (given in section 1 and 3), one underlying structure can only be lexicalized in one way (i.e., the most economical way). Hence, two different surface forms can not map to the same underlying structure.⁴²

In a pre-study to this paper I sent out a questionnaire to ten Swedish speakers covering the choice of passive in the complement of a modal. I was mainly covering the influence of aktionsart (state, process and event), modality (deontic vs. epistemic) and location of mental center (demoted agent vs. derived subject) in the choice of passive. I will not discuss the results of this study in this paper, though the results are all in accordance with the patterns reported here.⁴³ There is however a lot of variation between speakers. None of the informants found both passives equally acceptable in all contexts, which shows that the two passives are not truly synonymous for any of the speakers. Most informants had clear preferences for the choice of passive in all context given. However, two of the informants found the two passives equally acceptable in contexts where the other informants had a strong preference

⁴²Though, given under-attachment/under-association, one surface form can map to several underlying structures, as seen in examples like *the window was broken*, which is at least two way ambiguous (i.e., it can either be interpreted as a verbal passive or an adjectival passive).

⁴³It was clear from this study that location of mental center is a stronger predictor than both aktionsart and type of modality. It should be noted though that *bli*-passives are unavailable for many stative verbs. For stative verbs, the copula *vara* ("be") is used instead, or the morphological passive. In many cases, it is hard to tell stative verbal passives (i.e., verbal passives formed from lexically stative verbs) from adjectival passives. It therefore hard to model the difference between stative passives with *vara* and -s-passives formed from stative verbs.

for the *-s*-passive (i.e. contexts where the derived subject did not carry the +Mental implications). This seem to indicate that for a small percentage of the speakers, the two passives partly overlap in meaning. My account however predicts that the simpler form (i.e., the morphological passive) should always be used over a more complex form (i.e., the periphrastic passive), given that both forms can lexicalize the structure given.

Given the variation between the Mainland Scandinavian languages, one expects some variation within the languages as well. There might be some dialects (or sociolects) that use the periphrastic passive more in a Danish-like way (or some other way). In situations where speakers have direct contact with many different dialects or sociolects, obviously there will be speakers who accept overlap in meaning and function between two syntactic constructions.

Event-denoting participles in contexts lacking overt Pred

The +Men properties on the derived subject in *bli*-passive clearly does not have its origin in the participle itself. In contexts where the periphrastic form does not compete with the morphological form, there is no requirement that the subject of predication is the mental center. One context where you find participles without an overt Pred⁰ is headlines, as exemplified for an adjective below:

- (85) Volvo-anställda trötta på låga löner
 Volvo-employees tired on low wages
 Volvo-employees tired of low wages.

Event-denoting participles are extremely frequent in Pred-less headlines. Two examples are given below:

- (86) a. Kvarlevor av president hittade
 remains of president found
 b. Mördad av facebook-dejt
 Murdered by facebook-date

In a mini-survey that I did in connection with this article, I examined the first 20 pred-less headline participles I found, in order to see which passive form was used in the main text, i.e., where Pred is assumed to be present. In 19 of the 20 cases, the *-s*-passive was used in the text (in the simple past or present perfect). Only in one case was the periphrastic passive used (in the past tense). What is more interesting is that in many of these cases, the periphrastic passive could not have been used. For example, the headline given in (86-a) can not be fleshed out to a full periphrastic passive (87-a), but an *-s*-passive must be used (87-b).

- (87) a. ??Kvarlevor av Polens ex-president har blivit/blev/är hittade.
 remains of Poland's ex-president have BLI.SUP/BLI.PAST/are found...
 int. 'Remains of Poland's ex-president have been found'
 b. Kvarlevor av Polens ex-president har hittats.
 remains of Poland's ex-president have found.SUP.PASS
 'Remains of Poland's ex-president have been found.'

Further, it is clearly not the case that *bli* selects a +Mental/affected subject. Looking through 150 random hits of past tense of *bli* in the PAROLE/SUC-corpus, shows that around 65 % of them have animate subjects. This clearly shows that there is no direct preference for animate subjects of *bli* in general.

In short, the +Men properties of passive participles (and/or *bli*) only arise in contexts where it competes with the *-s(t)*-passive, i.e. in contexts where Pred has to be overtly expressed. We cannot however be absolutely sure that adnominal participles contain a Men⁰ that is co-indexed with the Proc⁰ (as in *-s*-passives). These participles may just be unspecified for Men.

6 Some final remarks

In this article I have argued that the differences in choice of passive between the Mainland Scandinavian languages are triggered by the morphological properties of the *-s*-passive. I have taken the periphrastic passive to be more or less identical throughout Mainland Scandinavia, and argued that the restrictions on the periphrastic passive in Swedish come out as a result of the competition between the periphrastic passive and the *-s*-passive. I have thus said fairly little about the differences in the syntax and morphology of past (passive) participle throughout Scandinavia. For example, I have not taken into account the fact that passive participles in Swedish always show number and gender agreement, while participles in Danish never do (and in Norwegian there is more variation). I take this difference to not be directly related to choice of passive. Rather, this is probably related to the fact that Swedish shows more agreement on predicative/post-copular elements in general. Neither have I mentioned that Norwegian and Danish have at least two constructions with past (passive?) participles that are absent in Swedish:

1. Long passives, with second second predicate realized as a participle (see Engh 1994 for discussion):

- (88) a. Bilen ble forsøkt reparert. (NORWEGIAN)
 car.DEF COP try.PART repair.PART
 ‘They tried to repair the car’
 b. *Bilen blev försökt reparerad. (SWEDISH)
 car.DEF COP try.PART repair.PART
 ‘They tried to repair the car’

2. Agentive *get*-passives (see Taraldsen 2009):

- (89) a. Jeg fikk sovet ut (NORWEGIAN)
 I got slept out
 ‘I managed to sleep my fill.’
 b. %Jeg fikk sovet ut. (SWEDISH)
 I got slept out
 ‘I managed to sleep my fill.’

The absence of the type of long passive illustrated above follows from my account (the derived subject can crucially not be “try-er” of the clause in the long passive). The agentive *get* passive is marked or ungrammatical for most Swedish speakers. The difference with respect to *get*-passives might be related to *have/be*-alternations, and the use of *pred-less* active participles (as was discussed in section (44)), and it is not obvious that this would influence the clearly passive uses of the past participle. You could however argue that the participles in the examples above, necessarily imply that the agent intentionally carries out the event (or at least tries to carry out the event). This would mean that the participles above all include mental projections, where the Men^0 is co-indexed with the $Proc^0$. The Swedish language learner will get no clear input that the participle ending can ever attach outside of $MenP$, as opposed to the Norwegian and Danish language learner. That is, whenever $MenP$ is present in passive contexts, the structure will be spelled out as an *-s*-passive. The Swedish language learner will only have clear evidence that a passive participle can spell out any of the following two structures:

- (90) a. *-de* [$Proc$ [Res]]
 b. *-de* [Res]

If there are no clear instances of + Men -participles, constructions like long passives and agentive *get*-passives might just not arise in the language. I leave this question for further research.

7 Summary

I have argued that the *-s*-passive in all Mainland Scandinavian languages spells out the following structure:

- (91) $Pred_j$ [$Event$ [Men_i [$Proc_i$ [Res_j]]]]

The morphemes are associated with the syntactic projections in the following way (a Swedish infinitival is used as example):

- (92) a. bränn-a-s (burn.INF.PASS)
 b. $Pred_j$ < *-s* > [$Event$ < *-a* > [(Men_i <*bränn*->) [$Proc_i$ <*bränn*-> [Res_j <*bränn*->]]]]]

The Men projection can crucially only be absent if the feature Men is absent in the lexical entry of the verb.

A copula followed by a participle (i.e., a periphrastic passive) can spell out any of the following structures, where the copula realizes $Event$ and $Pred$:

- (93) a. $Pred_j$ [$Event$ [Men_i [$Proc_i$ [Res_j]]]] = regular passive
 b. $Pred_j$ [$Event$ [$Proc_i$ [Res_j]]] = Swedish passive/out of control passive
 c. $Pred_j$ [$Event$ [Res_j]] = adjectival passive

The periphrastic passive will never be used in context like (93-a) in Swedish, since the morphological passive always will be inserted in this context (ruling out the periphrastic passive). In Danish and Norwegian, the periphrastic passive will however be used in contexts

like (93-a), provided that Pred is dominated by a T-node (that is not spelled out by e.g. a modal verb). Otherwise, the -s-passive has to be used. The periphrastic passive will be used in all Mainland Scandinavian languages in the context (93-b), and it will be used to express that the demoted agent is not the intentional force behind the event, most often with the effect that the promoted internal argument gets interpreted as the intentional force, or the mentally affected participant. (93-c) will be used in all Mainland Scandinavian languages when the participle is clearly adjectival/stative (i.e., when it lacks event implications).

Overall, the main difference in Voice across the Mainland Scandinavian passives is the absence of Tense in -s-passives in all Danish, Bokmål and Nynorsk. I have argued that the absence of Tense in -s-passives follows from the mirror principle, and that Swedish can violate the mirror principle due to tense agreement. In cases where Tense is not present, the morphological passive will be chosen, due to reasons of economy, unless the verb phrase has been modified so that it only can be spelled out by a participle (i.e., if it has been shrunk).

The main points of the paper are summarized in the following three points:

1. The -s(t)-passive is the default passive in MLS. However, given that Tense is above -s(t), only non-tensed predicates can occur in the -s passive, unless Tense copying/agreement is used.
2. The non-tensed status of -s passives in Danish (and presumably Bokmål and Nynorsk as well) explains their restricted interpretations.
3. -s(t)-passives are tensed in Swedish. *Bli*-passives are only used when the argument structure or event structure is affected.

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