Subject positions and their interaction with verb movement *

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1   Introduction

It is well-known that many languages allow subjects to occur in several positions, and these positions are often correlated with different interpretations (cf. among others Diesing 1992, Kiss 1996; 1998, Cinque 1999, Cardinaletti 2004, Mohr 2005). In for example the Scandinavian languages, it has been observed that subjects receive different interpretations depending on their position with respect to adverbs (cf. Holmberg 1993, Bobaljik and Jonas 1996, Nilsen 1998, Svenonius 2002). In non-subject-initial V2 clauses, the postverbal subject may either precede or follow sentential adverbs. Nilsen (1997:23) points out that subjects preceding sentential adverbs get a strong reading, whereas subjects following such adverbs get a weak reading ('strong' and 'weak' in the sense of Milsark 1977). This is illustrated in (1) with an example from Nilsen (1997). In (1a), the subject precedes the adverb *sannsynligvis* 'probably' and gets a strong reading, that is, it is interpreted as *a specific student*. In (1b), on the other hand, the subject follows this adverb and gets a

weak reading, that is, it is interpreted as *one non-specific student or other*.[1]

(1)   a.   Røykeforbudet brøt   **en student** sannsynligvis allerede igår. (Nor.)
            smoking.ban.the broke a   student probably   already yesterday
            '**A (specific) student** probably violated the smoking ban as early as yesterday.'

        b.   Røykeforbudet brøt   sannsynligvis **en student** allerede igår.
            smoking.ban.the broke probably   a student already yesterday
            '**A student** probably violated the smoking ban as early as yesterday.'

A similar pattern of subject positions is found in embedded clauses. Norwegian in general does not have verb movement in embedded non-V2 contexts, which means that the verb follows all adverbs in such clauses. However, the subject precedes the verb and the distribution of preverbal subjects in embedded contexts corresponds to the pattern for subjects following the finite verb in non-subject-initial main clauses like those illustrated in (1). As illustrated in (2)-(3), subjects may either precede or follow adverbs, and in parallel with the pattern in main clauses, subjects preceding adverbs such as *sannsynligvis* 'probably' get a strong reading, (2), whereas subjects following such adverbs get a weak reading, (3).

(2)   ... ettersom **en student** sannsynligvis allerede brøt røykeforbudet   igår. (Nor.)
        as   a student probably   already broke smoking.ban.the yesterday

    '... as **a (specific) student** probably violated the smoking ban as early as yesterday.'

(3)   ... ettersom sannsynligvis **en student** allerede brøt røykeforbudet   igår.
        as   probably   a student already broke smoking.ban.the yesterday

    '... as **one student or other** probably violated the smoking ban as early as yesterday.'

However, certain dialects of Norwegian optionally allow verb movement across adverbs in embedded non-V2 contexts (cf. Bentzen 2005; 2007a;b). This type of verb movement influences the distribution of subjects both concerning the positions available, and the interpretation the subject can get. Whereas subjects may intervene between practically any pairs of adverbs in Norwegian embedded clauses without verb movement, in Regional Northern

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[1]According to Nilsen 1997, (1b) is ambiguous between a strong and a weak subject reading, but four of my five informants (including myself) in general find it very hard to get a strong reading of the subject when it follows adverbs.

Norwegian (henceforth ReNN) embedded non-V2 clauses with verb movement, the subject has to precede all adverbs. Furthermore, the subject obligatorily receives a strong reading. This is illustrated in (4)-(5).[2]

(4)   ... ettersom **en student** sannsynligvis **brøyt** allerede røykeforbudet   igår. (ReNN)
           as   a student probably   broke already smoking.ban.the yesterday

      '... as *a specific student* probably violated the smoking ban as early as yesterday.'

(5)   *... ettersom sannsynligvis **en student brøyt** allerede røykeforbudet   igår.
           as   probably   a student broke already smoking.ban.the yesterday

ReNN refers to several dialects spoken in Northern Norway, from the Salten region in the South to Alta in the North. These dialects behave similarly in the relevant respects, and are thus for the current purposes treated as one dialect. As ReNN allows both the patterns found in Norwegian in general, and the specific Northern Norwegian patterns, all Norwegian examples in the following are from this dialect, unless otherwise indicated.[3]

The aim of this paper is threefold. In section 2 I outline a cartography of available subject positions in Norwegian embedded clauses. I then illustrate how verb movement in ReNN non-V2 contexts constrains the distribution of subjects. Section 3 provides a unified account of the flexible subject placement in Norwegian in general and the flexible verb placement in ReNN. I will argue that both phenomena follow from predicate licensing. In section 4 I discuss Nominative Case licensing, and I propose an analysis of this which can account for the ways in which verb movement constrains the distribution of subjects in ReNN embedded clauses. Finally, section 5 contains a summary and concluding remarks.

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[2]Here and in the following, the ReNN examples are rendered in an approximation of a dialectal form.

[3]Note that the dialect spoken in the city of Tromsø is not included in ReNN. As is shown in Bentzen 2007a, Tromsø Northern Norwegian (TrNN) behaves slightly differently from ReNN with respect to verb movement in non-V2 contexts.

2 Subject positions in Northern Norwegian embedded clauses

As I use adverbs as a diagnostic for the positions of both subjects and verbs, a preliminary note on the position of these elements is in place here. Cinque (1999) studies the internal order of adverbs in a cross-linguistic perspective. His surveys reveal very similar patterns across languages, and he thus suggests that adverbs are strictly ordered in a universal hierarchy, as in (6) (from Cinque 1999:106).

(6)   [*frankly* Mood $_{speech\ act}$ [*fortunately* Mood$_{evaluative}$ [*allegedly* Mood$_{evidential}$ [*probably* Mod$_{epistemic}$ [*once* T(Past) [*then* T(Future) [*perhaps* Mood$_{irrealis}$ [*necessarily* Mod$_{necessity}$ [*possibly* Mod$_{possibility}$ [*usually* Asp$_{habitual}$ [*again* Asp$_{repetitive(I)}$ [*often* Asp$_{freq(I)}$ [*intentionally* Mod$_{volitional}$ [*quickly* Asp$_{celerative(I)}$ [*already* T(Anterior) [*no longer* Asp$_{terminative}$ [*still* Asp$_{continuative}$ [*always* Asp$_{perfect(?)}$ [*just* Asp$_{retrospective}$ [*soon* Asp$_{proximative}$ [*briefly* Asp$_{durative}$ [*characteristically(?)* Asp$_{generic/progressive}$ [*almost* Asp$_{prospective}$ [*completely* Asp$_{SgCompletive(I)}$ [*tutto* Asp$_{PlCompletive}$ [*well* Voice [*fast/early* Asp$_{celerative(II)}$ [*again* Asp$_{repetitive(II)}$ [*often* Asp$_{freq(II)}$ [*completely* Asp$_{completive(II)}$

This hierarchical order of adverbs is attested for several languages in Cinque (1999), both when adverbs are independent elements, as in Italian and English, and when adverbial modification is expressed through affixes, as in Korean and Turkish. Nilsen (1997) discusses Cinque's hierarchy with respect to Norwegian adverbs, and his study shows that this hierarchy also is present in Norwegian. Note however, that Østbø (2003) claims that the hierarchy is less strict in Norwegian that what Cinque proposes. She illustrates that although the internal order of the four highest adverbs in (6), as well as their relative order with respect to "lower" adverbs is fairly strict, the internal order of the other adverbs is in general more flexible than predicted by Cinque's hierarchy. See also Nilsen (2003) for some discussion of transitivity effects in Norwegian with respect to the adverb hierarchy.

An alternative to Cinque's hierarchy of adverbs is to assume that adverbs may be adjoined to various verbal projections, for example VP and TP, as suggested by Ernst (2002) and Svenonius (2002). Ernst (2002) proposes a hierarchy of Fact-Event objects (FEO) in which different types of adverbs may modify different types of objects (Events, Propositions, or Facts). According to this proposal adverbs may basically adjoin to any projection as long as they

obey the FEO hierarchy. Thus, in such an approach the internal order of adverbs is determined by semantic selection (s-selection), rather than c-selection as in Cinque (1999).

The approach to adverbs that I will assume here is compatible with both the above approaches. As the internal order of adverbs is not the main issue in the current paper, I here choose to use three types of adverbs that clearly are strictly ordered with respect to each other: high adverbs like *fortunately* and *probably*, mid-range adverbs like *usually*, *often*, *already*, and *still*, and low adverbs like *completely* and *again*. The relative order of these three adverb types is shown in (7).[4]

(7)   a.   Han misforstod   **sannsynligvis ofte helt**   oppgaven.
            he   misunderstood probably   often completely assignment.the

    b.   *Han misforstod   **sannsynligvis helt**   **ofte** oppgaven.
            he   misunderstood probably   completely often assignment.the

    c.   *Han misforstod   **ofte sannsynligvis helt**   oppgaven.
            he   misunderstood often probably   completely assignment.the

    d.   *Han misforstod   **ofte helt   sannsynligvis** oppgaven.
            he   misunderstood often completely probably   assignment.the

    e.   *Han misforstod   **helt   sannsynligvis ofte** oppgaven.
            he   misunderstood completely probably   often assignment.the

    f.   *Han misforstod   **helt   ofte sannsynligvis** oppgaven.
            he   misunderstood completely often probably   assignment.the

Concerning the structural positions of adverbs I will exploit insights both from Cinque (1999) and from Ernst (2002) and Svenonius (2002). Along with Cinque (1999) I take adverbs to be specifiers of their own functional projections, but in parallel with Ernst (2002) and Svenonius (2002) I will employ certain "domains" for adverb projections. Based on Cinque's hierarchy of functional projections I assume the following three major categories: MoodP (epistemic), TP, and AspP. [5] Adverbs that are taken to be low in the Cinque hierarchy (e.g. *completely*) are merged between vP and AspP, mid-range adverbs (e.g. *often*) are merged between AspP and TP, and high adverbs (e.g. *probably*) are merged between TP and MoodP. This is illlustrated in (8).

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[4]See Bentzen 2005 for a more detailed discussion of the position of adverbs.

[5]Both Åfarli 1995 and Eide 2006 argue that MoodP and AspP are present in Norwegian and that they are realized by modal and aspectual auxiliaries. See also Eide 2006 for a detailed discussion of the relative ordering of these categories in Norwegian.

(8)   The structural positions of adverbs:

[$_{FinP}$ [$_{MoodP}$ [$_{AdvP}$ **Adv**$_{High}$ [$_{TP}$ [$_{AdvP}$ **Adv**$_{Mid}$ [$_{AspP}$ [$_{AdvP}$ **Adv**$_{Low}$ [$_{vP}$...
                probably   *often*   *completely*

Of course this is a fairly coarse outline but it is sufficient to serve the current purposes, namely help us identify the various positions available for subjects and verbs in embedded clauses.

2.1   The distribution of subjects in clauses without verb movement

As mentioned in the introduction, subjects may either precede or follow sentential adverbs such as *sannsynligvis* 'probably' in ReNN (and Norwegian) embedded clauses without verb movement, see (9). Such adverbs are assumed to be positioned high in the clause structure. In addition, subjects may also either precede or follow the mid-range adverbs of the Cinque hierarchy in embedded contexts. This is illustrated with the continuative adverb *fremdeles* 'still' in (10). However, subjects obligatorily have to precede low adverbs such as *helt* 'completely,' (11).

(9)   ... ettersom **{en student}** sannsynligvis **{en student}** brøyt røykeforbudet.
          as   {a student} probably   {a   student} broke smoking.ban.the
        '... as a student probably violated the smoking ban.'

(10)   ... ettersom **{nån   gjesta}** fremdeles **{nån   gjesta}** spiste dessert.
          as   {some guests} still   {some guests} ate   dessert
        '... as some guests were still eating dessert.'

(11)   ... ettersom **{enkelte bila}** helt   **{*enkelte bila}** bryt   sammen på vinteren.
          as   {some   cars} compl { some   cars} break together on winter.the

        '... as some cars completely break down during the winter.'

Holmberg (1993) argues that there are two subject positions in Mainland Scandinavian, SpecTP below adverbs and SpecAgrP above adverbs. However, both Nilsen (1997) and Svenonius (2002) have shown that there appear to be more than just two positions for subjects in these languages. In ReNN (and Norwegian) clauses with multiple adverbs, the number of available subject positions increases with the number of adverbs. This is illustrated below with an embedded clause containing three adverbs. As the examples show, the

subject can precede or follow each of these adverbs, except *helt* 'completely,' which it obligatorily precedes.

(12)   ... ettersom **nån studenta** sannsynligvis ofte helt misforstod oppgaven.
         as   some students probably   often compl misunderst'd assign't.the

        i. '... as some (specific) students probably often completely misunderstood the assignment.'
        ii. '... as some students or other probably often completely misunderstood the assignment.'

(13)   ... ettersom sannsynligvis **nån studenta** ofte helt misforstod oppgaven.
         as   probably   some students often compl misunderst'd assign't.the

(14)   ... ettersom sannsynligvis ofte **nån studenta** helt misforstod oppgaven.
         as   probably   often some students compl misunderst'd assign't.the

        '... as some students or other probably often completely misunderstood the assignment.'

(15)   *... ettersom sannsynligvis ofte helt **nån studenta** misforstod oppgaven.
         as   probably   often compl some students misunderst'd assign't.the

    The position of the subject interacts with its interpretation. When the subject is in a position preceding all the adverbs in a clause, as in (12), it is ambiguous between a strong and a weak reading, that is, the sentence can either mean that there were *some specific students* who probably often completely misunderstood the assignment, or that there were *some students or other* who probably often completely misunderstood the assignment. This holds regardless of which type of adverbs are present in the clause. However, when the subject intervenes between the adverbs, or when it follows one or more of them, as in (13)-(14), only a weak reading, *some students or other*, is possible. This can be further illustrated by placing the examples in context. When an indefinite subject occurs in an embedded clause where it can be interpreted as either specific or non-specific, the subject may either precede or follow the adverb, as in (16). However, when the subject occurs in a context where it is most naturally interpreted with specific reference, only the position preceding the adverb is available, see (17).

(16) Skolebussen tok ofte lang tid   på mandaga ettersom **{en av elevan}**
      school.bus.the took often long time on Mondays as   {one of pupils.the}
      typisk   **{en av elevan}**   forsov   sæ   den dagen.
      typically {one of students.the} overslept REFL that day.the
      'The school bus often took a long time on Mondays, as one pupil or other
      typically overslept that day.'

(17) Læreren   måtte snakke med et foreldrepar ettersom **{en av elevan}**
      teacher.the must talk   with a parent.pair as   {one of pupils.the}
      typisk   **{*en av elevan}**   forsov   sæ   på mandaga.
      typically { one of students.the} overslept REFL on Mondays
      'The teacher had to talk to some parents as one (specific) pupil typically
      overslept on Mondays.'

Thus, there are several subject positions in ReNN (and Norwegian) embedded clauses, and the various positions and their associated subject interpretations can be summarized as follows:

(18) Subject positions in ReNN embedded clauses without verb movement:

✓**Subj**$_{Ambig}$ sannsynligvis ✓**Subj**$_{Weak}$ ofte ✓**Subj**$_{Weak}$ helt   *****Subj**
        probably   *often*   *completely*

The combination of the structural positions of adverbs in (8) and the placement of subjects relative to adverbs in (18) now provides a cartography of the available structural subject positions in Norwegian. Subjects that occur in a low position, preceding *helt* 'completely' but following *ofte* 'often,' are in SpecAspP. Subjects in a mid-range position, preceding *ofte* but following *sannsynligvis* 'probably' are in SpecTP. In both SpecAspP and SpecTP the subject is associated with a weak reading. Now recall from (12) that subjects preceding *all* the adverbs in a clause are ambiguous between a strong and a weak reading. I will assume that weak subjects preceding all adverbs occur in SpecMoodP. Strong subjects, on the other hand, I take to have moved to an even higher projection. In Adger (1993), strong subjects are located in AgrP, whereas Kiss (1996) argues that they raise to a projection that she locates between the IP and the CP domain, ReferentialP (RefP) (cf. also Mohr 2005). Cardinaletti (2004) also assumes a fairly high position for strong subjects. She employs the projection SubjP, which on her cartography is the highest projection in the inflectional domain. In the current approach I take the relevant projection for strong subjects to be FinP (cf. Rizzi's 1997 split-CP analysis

in which FinP is the lowest projection in his CP-domain).[6] The structural positions of subjects are illustrated in (19).

(19)   The structural positions of subjects:

$[_{FinP}$ **Subj**$_{Strong}$ $[_{MoodP}$ **Subj**$_{Weak}$ $[_{TP}$ **Subj**$_{Weak}$ $[_{AspP}$ **Subj**$_{Weak}$ $[_{vP}$ ***Subj**

2.2 The distribution of subjects in clauses with verb movement

As mentioned in the introduction, ReNN optionally allows verb movement in non-V2 contexts such as embedded clauses (cf. Bentzen 2005; 2007a;b). In clauses like those in (20)-(22), the finite verb may precede or follow any given adverb, and it may also intervene between various adverbs.

(20)   ... ettersom nån   studenta sannsynligvis ofte **misforstod** helt   oppgaven.
          as   some students probably   often misunderst'd compl assign't.the

(21)   ... ettersom nån   studenta sannsynligvis **misforstod** ofte helt   oppgaven.
          as   some students probably   misunderst'd often compl assign't.the

(22)   ... ettersom nån   studenta **misforstod** sannsynligvis ofte helt   oppgaven.
          as   some students misunderst'd probably   often compl assign't.the

        '... as ***some specific students*** probably often completely misunderstood the assignment.'

This gives us the following potential positions for verbs with respect to adverbs in embedded clauses:[7]

(23)   The possible positions for finite verbs in ReNN embedded clauses:

✓**Verb**$_{Fin}$ sannsynligvis ✓**Verb**$_{Fin}$ ofte ✓**Verb**$_{Fin}$ helt   ✓**Verb**$_{Fin}$
        probably   *often*   *completely*

   This type of verb movement affects the distribution of subjects in embedded clauses in three ways. First of all, the order S V is strict and cannot be reversed in ReNN embedded clauses with verb movement. This perhaps sounds obvious, given that ReNN (like Norwegian) is an SVO language, and

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[6]Whether one assumes AgrP, RefP, SubjP, FinP, or some other projection, the important point is that this is a projection high in the clausal structure.

[7]See Cinque 1999 for similar patterns of verbs and adverbs in Italian.

that the relevant embedded clauses are non-V2 contexts (i.e. contexts in which topicalization of a non-subject followed by subsequent subject-verb inversion is impossible). However, when taking a closer look at the potential subject positions outlined in (18) in the above section, and the potential verb positions given in (23), the strict S V order turns out to be somewhat surprising. (18) is repeated here as (24) for convenience.

(24)   Subject positions in ReNN embedded clauses without verb movement:

✓**Subj**$_{Ambig}$ sannsynligvis ✓**Subj**$_{Weak}$ ofte   ✓**Subj**$_{Weak}$ helt   ***Subj**
          probably   *often*   *completely*

As we have seen from (13) and (14), the subject may follow adverbs like *probably* or *often*, whereas in sentences like (21) and (22) the verb may precede these adverbs. Thus, one might expect to be able to find constructions in which these two possibilities cooccur, that is where the subject follows for example *sannsynligvis* 'probably,' whereas the verb precedes this adverb, as in (25). This is of course possible in non-subject-initial V2 clauses, as in (1b). However, as illustrated in the ReNN examples in (26)-(28), in non-V2 contexts all instances of such combinations are impossible.

(25)   ... **Verb**$_{Fin}$ sannsynligvis **Subject**$_{Weak}$ ofte   helt ...
                       probably   *often completely*

(26)   *... ettersom sannsynligvis **misforstod**   ofte **nån studenta** helt   oppgaven.
               as   *probably*   *misunderst'd often some students compl assign't.the*

(27)   *... ettersom **misforstod**   sannsynligvis ofte **nån studenta** helt   oppgaven.
               as   *misunderst'd probably   often some students compl assign't.the*

(28)   *... ettersom **misforstod**   sannsynligvis **nån studenta** ofte helt   oppgaven.
               as   *misunderst'd probably   some students   often compl assign't.the*

The order of the subject and the verb may not be reversed by this type of verb movement (cf. also Svenonius 2005). This is actually unexpected, given that both the subject and the verb in the examples in (26)-(28) occur in positions where they are allowed in similar embedded contexts. This strict linear ordering of the subject and the verb thus has to be accounted for.

   A second observation is that verb movement forces the subject to a very high position in the clause. Not only must the subject always precede the verb, but it turns out that the only available position for subjects in embedded clauses with verb movement is a very high position, preceding all adverbs. It

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is important to note that this holds regardless of how high the verb has moved; even if the verb only moves past a low or a mid adverb, the subject still has to precede *all* adverbs in the clause. This is illustrated in (29)-(31) below. In (29) and (30), the verb has moved past the low adverb *helt* 'completely,' and in (31) past both the mid adverb *ofte* 'often' and the low adverb *helt*. In all these examples, the subject always has to precede all adverbs, even those preceding the moved verb. Subjects occurring in any other positions yield ungrammatical results, and the only possible word orders in embedded clauses with verb movement that contain three adverbs are those shown in (20)-(22).

(29)　　*... ettersom sannsynligvis ofte **nån studenta misforstod** helt　oppgaven.
　　　　　as　　　*probably*　　　*often some students　misunderst'd compl assign't.the*

(30)　　*... ettersom sannsynligvis **nån studenta** ofte **misforstod** helt　oppgaven.
　　　　　as　　　*probably*　　　*some students　often misunderst'd compl assign't.the*

(31)　　*... ettersom sannsynligvis **nån studenta misforstod** ofte helt　oppgaven.
　　　　　as　　　*probably*　　　*some students　misunderst'd often compl assign't.the*

Finally, subjects in ReNN embedded non-V2 contexts with verb movement obligatorily receive a strong interpretation. This can been seen when applying verb movement to the examples in (16)-(17). The contexts in which the subject is most naturally interpreted with a weak reading resist verb movement. In (16), the subject had a non-specific reading, and as the parallel in (32) shows, verb movement is not possible with this reading of the subject. On the other hand, in (17) the subject received a strong reading. In such contexts, verb movement is allowed, as illustrated in (33).

(32)　　*Skolebussen tok　ofte　lang tid　på mandaga ettersom **en　av elevan**
　　　　　school.bus.the took often long time on Mondays as　　*one of pupils.the*
　　　　　forsov　sæ typisk　den dagen.
　　　　　overslept REFL typically that day.the
　　　　　'The school bus often took a long time on Mondays, as one pupil or other typically overslept that day.'

(33) Læreren   måtte snakke med et foreldrepar ettersom **en   av elevan**
      teacher.the must   talk   with a parent.pair as   one of pupils.the
      forsov   sæ   typisk   på mandaga.
      overslept REFL typically on Mondays
      'The teacher had to talk to some parents as one (specific) pupil typically
      overslept on Mondays.'

This yields the following positions available for subjects in ReNN embedded
clauses with verb movement:

(34) Subject positions in ReNN embedded clauses with verb movement:

✓**Subj**$_{Ambig}$ sannsynligvis *__Subj__ ofte   *__Subj__ helt   *__Subj__
          probably   *often*   *completely*

   In the next two sections I will propose an analysis of the various subject
and verb positions in ReNN embedded clauses (section 3), and of why verb
movement restricts the distribution of subjects (section 4).

3   EPP satisfaction and predication

There are strong indications that Norwegian has an EPP feature which re-
quires an overt subject or expletive somewhere in the clause. In non-presentational
constructions the subject meets this requirement, as in (35a). However, when
the thematic subject has remained in a low (postverbal) position, an overt ex-
pletive is needed, as shown in (35b)-(35c).

(35) a. **Noen katter** har   vært på kjøkkenet.   (Nor.)
          some cats   have been on kitchen.the
          'Some cats have been in the kitchen.'
      b. ***(Det)** har   vært noen katter på kjøkkenet.
            there have been some cats   on kitchen.the
          'There have been some cats in the kitchen.'
      c. Idag har   ***(det)** vært noen katter på kjøkkenet.
          today have   there been some cats   on kitchen.the
          'Today there have been some cats in the kitchen.'

Several people have tried to eliminate the EPP altogether. For example Boeckx
(2000), Grohmann et al. (2000), and Bošković (2002) all argue that the effects
generally attributed to the EPP can be explained through operations that take
place in the syntax independently. In particular, they all suggest that the EPP

is reducible to Nominative Case licensing and that it should thus be excluded as a separate principle. In clauses like (35b)-(35c), the expletive would then be required in order to "transfer" Nominative Case to the thematic subject. However, in Norwegian the requirement of an overt subject or expletive appears to be independent of Nominative Case licensing. In for example impersonal passive constructions there is no thematic subject. Still, an expletive is always required in such clauses, as illustrated in (36).

(36)   a.   ***(Det)** danses   på festen.   (Nor.)
             it   dance.PASS on party.the
             'There is dancing at the party.'
       b.   På festen   danses   ***(det)**.
             on party.the dance.PASS   it
             'At the party there is dancing.'

Furthermore, expletives are necessary in small clauses like (37a), where there is no Nominative Case to be licensed, and there is also no implied agent. Case-based approaches to the EPP treat such examples by suggesting that the verb *høre* 'hear' has Accusative Case that it needs to assign somewhere, and that this is why the expletive is needed in (37a). However, as we see in (37b), the complement of 'hear' may be a PP, in which case the verb does not license Accusative Case anywhere. Thus, attributing the presence of the expletive in (37a) to Case licensing (Nominative or Accusative) does not seem correct.[8]

(37)   a.   Jeg hørte ***(det)** rase fra   taket.   (Nor.)
             I   heard   it   fall from roof.the
             'I heard something coming down from the roof.'

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[8]Fretheim 1977 points out that referential pronoun *det* but not expletive *det* may be right-dislocated, as in (ia). If an extraposed pronoun is added in (37a), as in (ib), we would have to be referring to whatever it is that is coming down from the roof. Note that in (ib) what is referred to has to be a neuter noun, like *tårnet* 'the tower.' However, (37a) could also be uttered when for example talking about snow coming down from the roof. Then it is clear that *det* is used as an expletive. This is so because the Norwegian word for snow, *snø*, is a masculine noun, and then the appropriate referential pronoun would be *den*, not *det*, which is the neuter form of the pronoun. ((ia) is based on Fretheim 1977:126)

(i)   a.   Det er ei katt som vil   inn, *det$_{Expl}$.
             it   is a cat who wants in   it
       b.   Det raste fra   taket,   det.
             that fell from roof.the that
             'That (e.g. the tower) fell from the roof.'

b.   Jeg hørte på han.
       I   *heard on him*
       'I listened to him.'

From the above examples it is clear that Norwegian has an EPP require-ment independently of Nominative Case licensing. However, it is not obvious that this EPP feature is associated with a specific projection like for exam-ple TP. Recall from subsection 2.1 that subjects may appear in a fairly low position in the clause in Norwegian. In particular, they may follow adverbs that are merged below TP, such as *ofte* 'often,' as was illustrated in (14), here repeated as (39). Haeberli (1999) argues that in languages like German, Yid-dish, Dutch, and Frisian there is an empty expletive present when the subject occurs in a low position. Support for this comes from the fact that these lan-guages in general license null expletives, as in (38) (from Haeberli 1999:11).

(38)   ... dass *pro* überall   getanzt wurde.   (Germ.)
             that   *everywhere danced was*
            '... that people danced everywhere.'

However, as we saw in examples like (35c) and (36b), Norwegian does not li-cense null expletives, so Haeberli's (1999) analysis of languages like German does not seem to be compatible with Norwegian, as he also points out. Thus SpecTP remains empty in clauses like (39).

(39)   ... ettersom sannsynligvis ofte **nån studenta** helt   misforstod   oppgaven.
            as   *probably*   *often some students compl misunderst'd assign't.the*

           '... as some students or other probably often completely misunderstood the assignment.'

In this section I will argue that the EPP is linked to predicate licensing. The predicate is licensed by having its specifier position filled, and the ways in which this may be accomplished in ReNN will provide an account for the flexible positions of subjects and of verbs in embedded clauses.

3.1   The EPP as predicate licensing

Several people have linked the EPP to various types of licensing requirements. Heycock (1994) argues that certain projections need a subject or an expletive in their specifier for predicate licensing. In her approach there may be several layers of predication in the clause. At each layer, the predicate must predicate

over something in order to be licensed, and this is accomplished by providing the predicate with a subject. In particular, Heycock suggests that all [+V] maximal projections may be predicates. Thus both VP and IP are taken to be predicates, and consequently both these projections need a subject in this approach.[9]

Along similar lines, both Åfarli and Eide (2000) and Kiss (2002) connect the EPP and predication. Åfarli and Eide (2000) introduce a predication operator that turns syntactic elements into predicates. The specifier of this operator, SpecPredP, must be provided with a subject in order for the predicate to be saturated, or licensed. According to Kiss (2002), statements express predication and such statements must contain a subject or topic of predication. Kiss (2002) argues that the traditional EPP in fact corresponds to two requirements. In addition to the 'topic of predication' requirement, there is also a (separate) requirement for a grammatical subject. These two requirements are often subsumed under one requirement. In subject-prominent languages like English, the topic of predication is normally represented by the subject, thus the subject will satisfy both requirements. However, Kiss (2002) shows that for a topic-prominent language like Hungarian, the two do not necessarily coincide. In Hungarian, the topic of predication can be either the most prominent argument in the clause, which is not necessarily the subject, or a phonologically unexpressed event variable. Thus, the subject may satisfy the requirement for a grammatical subject, while another argument satisfies the 'topic of predication' requirement.

I here adopt the view that the EPP involves predicate licensing. Let us assume that a predicate is headed by a head X carrying the feature [Pred]. This predicate needs to predicate over something, and predication is licensed by providing a 'topic of predication' in the specifier of $X_{[Pred]}$. Furthermore, I suggest that the position of this [Pred] feature is flexible, and it may be associated with various projections in Norwegian, as illustrated in (40).

(40)   Potential positions for [Pred] in Norwegian:

$[_{MoodP}$ **Mood**$_{\{[Pred]\}}$ $[$ *sannsynligvis* $[_{TP}$ **T**$_{\{[Pred]\}}$ $[$ *ofte* $[_{AspP}$ **Asp**$_{\{[Pred]\}}$ $[$ *helt* $[_{vP}$...

The specifier of the head carrying [Pred] will be filled in order to license the predicate. However, there are various ways of accomplishing this. Alexiadou and Anagnostopoulou (1998) proposed that the EPP may either be satisfied

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[9]Potentially also CP is a predicate, which is relevant for V2 contexts involving V-to-C movement. The issue of CPs as predicates will not be discussed further in the current paper.

by an XP moving to SpecTP, or by an X° moving to T. Expanding on this proposal, Biberauer and Richards (2006) suggest a four-way typology of EPP satisfaction. Focussing on the Germanic languages, they argue that the constituent that values T's EPP feature may vary from language to language in terms of both its *source* and its *size*. With respect to the source, they follow Alexiadou and Anagnostopoulou (1998) in assuming that T may probe either the [D] feature on the subject in SpecvP, or the [D] feature expressed on the verb in languages with rich agreement morphology. In addition, they suggest that the element being probed in some languages may pied-pipe the whole vP to SpecTP. This gives them a four-way typology of EPP-satisfaction (from Biberauer and Richards 2006:42). I will adopt parts of this typology in accounting for the differences between Norwegian and ReNN verb placement.

(41)   Typology of EPP(T)-satisfaction:

	Probe [D]-on-Vf	**Probe [D] in outer SpecvP**
−**pied-pipe vP**	Head-raising (*Greek*)	Spec-raising (*English*, *MSc*)
+**pied-pipe vP**	Head-pied-piping (*German*, *Icelandic*)	Spec-pied-piping (*Afrikaans*, *Faroese*)

3.2   A unified account of flexible subjects and flexible verbs

Based on Biberauer and Richards (2006) I suggest that predication is licensed by $X_{[Pred]}$ attracting an element carrying the feature [D]. In Norwegian, this feature is present on the subject, and ReNN shows optionality with respect to whether the subject moves alone to the specifier of $X_{[Pred]}$, or whether it pied-pipes the whole vP to this position. Optionality with respect to pied-piping is not uncommon. In for example Norwegian *wh*-questions, the *wh*-element is attracted by a [Q] feature in a projection high in the clause. In cases of complex *wh*-constituents, the *wh*-element may either move on its own, as in (42a), or pied-pipe the whole projection it is part of, as in (42b).

(42)   a.   Hva$_i$ liker du [$_{DP}$ t$_i$ slags bøker]?   (Nor.)
              what like you   kind books

        b.   [$_{DP}$ Hva slags bøker]$_i$ liker du   t$_i$?
                    what kind books   like   you
              'What kind of books do you like?'

As we will see in this section, assuming that the subject optionally pied-pipes the vP when it moves to license predication can account for both the flexible

positions of subjects in clauses without verb movement and the flexible positions of verbs in clauses with verb movement. I argue here that the ways both subjects and verbs may intervene between various adverbs thus follow from the same basic operation of predicate licensing.

Let us first look at the cases without verb movement. Recall from section 2.1 that subjects may precede or follow almost any adverbs except the very low ones like *completely*, which they obligatorily precede. This was illustrated in (12)-(15), here repeated as (43)-(46).

(43)   ... ettersom **noen studenter** sannsynligvis ofte helt   misforstod   oppgaven.
        as   some students   probably   often compl misunderst'd assign't.the

   i. '... as some (specific) students probably often completely misunderstood the assignment.'
   ii. '... as some students or other probably often completely misunderstood the assignment.'

(44)   ... ettersom sannsynligvis **noen studenter** ofte helt   misforstod   oppgaven.
        as   probably   some students   often compl misunderst'd assign't.the

(45)   ... ettersom sannsynligvis ofte **noen studenter** helt   misforstod   oppgaven.
        as   probably   often some students   compl misunderst'd assign't.the

   '... as some students or other probably often completely misunderstood the assignment.'

(46)   *... ettersom sannsynligvis ofte helt   **noen studenter** misforstod   oppgaven.
        as   probably   often compl some students   misunderst'd assign't.the

In these clauses, predication is licensed through the *spec-raising* mode introduced in Biberauer and Richards (2006). The head carrying the [Pred] feature probes the categorial [D] feature on the subject in SpecvP. The subject then raises alone to the specifier of the relevant head. The various possibilities are illustrated in (47)-(49). In (47), predication is associated with a low projection, AspP. The subject then moves to SpecAspP to license the predicate. In this position it will precede adverbs like *helt* 'completely,' but follow *sannsynligvis* 'probably' and *ofte* 'often,' as in (45). In (48), predication is associated with TP, and the subject then moves to SpecTP to license the predicate. Here it will precede both *ofte* and *helt*, but follow *sannsynligvis*, as in (44). Finally, in (49) predication is associated with MoodP, and when the subject moves to SpecMoodP, it ends up in a position preceding all adverbs in the clause, as in (43).

(47)   **[Pred] in AspP:**
         [$_{MoodP}$ Mood [*sannsynligvis* [$_{TP}$ T [*ofte* [$_{AspP}$ **Subj**$_i$ **Asp**$_{[Pred]}$ [*helt* [$_{vP}$ t$_i$ ...

(48)   **[Pred] in TP:**
         [$_{MoodP}$ Mood [*sannsynligvis* [$_{TP}$ **Subj**$_i$ **T**$_{[Pred]}$ [*ofte* [$_{AspP}$ t$_i$ Asp [*helt* [$_{vP}$ t$_i$ ...

(49)   **[Pred] in MoodP:**
         [$_{MoodP}$ **Subj**$_i$ **Mood**$_{[Pred]}$ [*sannsynligvis* [$_{TP}$ t$_i$ T [*ofte* [$_{AspP}$ t$_i$ Asp [*helt* [$_{vP}$ t$_i$ ...

The tree in (50) illustrates the full derivation of predicate licensing through spec-raising when the [Pred] feature is associated with Mood, yielding the word order in (43).

(50)
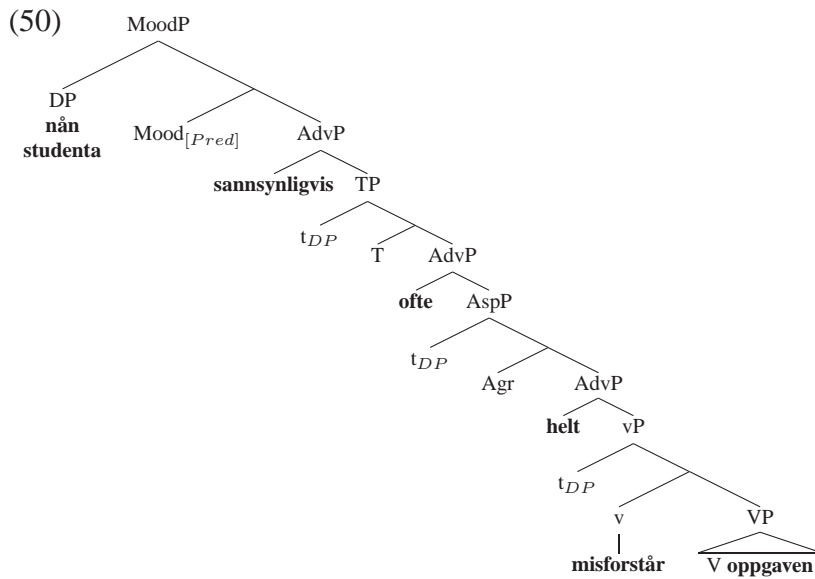
Recall that (43) was ambiguous between a strong and a weak reading. In section 3.1 I suggested that the weak reading occurs when the subject sits in SpecMoodP whereas the strong reading is licensed on the subject in a higher projection, FinP. Thus, specific subjects obligatorily move to SpecFinP to get their strong reading licensed. In clauses without verb movement it is therefore not entirely clear where the [Pred] feature in the IP domain is located; in any case predication will be licensed by the subject as this element moves through the various intermediate specifier positions on its way to SpecFinP. (51) illustrates the derivation of (43) on the strong subject reading.

(51)   **Strong subjects always move to FinP:**

[$_{FinP}$ **Subj**$_i$ **Fin** [$_{MoodP}$ t$_i$ Mood [*sannsynligvis* [$_{TP}$ t$_i$ T [*ofte* [$_{AspP}$ t$_i$ Asp [*helt* [$_{vP}$ t$_i$ ...

Now let us turn to clauses with verb movement. In section 2.2 we saw that the finite verb may precede or follow any adverb in ReNN embedded non-V2 contexts. This was illustrated in (20)-(22), here repeated as (52)-(54).

(52)   ... ettersom nån   studenta sannsynligvis ofte **misforstod**   helt   oppgaven.
         as   some students probably   often misunderst'd compl assign't.the

(53)   ... ettersom nån   studenta sannsynligvis **misforstod**   ofte helt   oppgaven.
         as   some students probably   misunderst'd often compl assign't.the

(54)   ... ettersom nån   studenta **misforstod**   sannsynligvis ofte helt   oppgaven.
         as   some students misunderst'd probably   often compl assign't.the

         '... as *some specific students* probably often completely misunderstood the assignment.'

I suggest here that these verb placement patterns are the result of the same operation as the subject placement patterns just discussed, namely predicate licensing. However, in these cases, predicate licensing is accomplished in an alternative way. In the spec-raising mode, the subject moves alone to the relevant specifier position to license the predicate. Optionally, predicate licensing in ReNN can occur through the *spec-pied-piping* mode introduced in Biberauer and Richards (2006). Then, the subject in SpecvP pied-pipes the whole vP when it moves to license [Pred], as illustrated in (55)-(57).

(55)   **[Pred] in AspP:**
         [$_{MoodP}$ Mood [*sannsynligvis* [$_{TP}$ T [*ofte* [$_{AspP}$ **[vP]**$_i$ **Asp**$_{[Pred]}$ [*helt* t$_i$ ...

(56)   **[Pred] in TP:**
         [$_{MoodP}$ Mood [*sannsynligvis* [$_{TP}$ **[vP]**$_i$ **T**$_{[Pred]}$ [*ofte* [$_{AspP}$ t$_i$ Asp [*helt* t$_i$ ...

(57)   **[Pred] in MoodP:**
         [$_{MoodP}$ **[vP]**$_i$ **Mood**$_{[Pred]}$ [*sannsynligvis* [$_{TP}$ t$_i$ T [*ofte* [$_{AspP}$ t$_i$ Asp [*helt* t$_i$ ...

When the whole vP is pied-piped along to SpecAspP to license [Pred] in AspP, as in (55), the verb will end up in a position preceding low adverbs like *helt* 'completely,' but following higher adverbs like *sannsynligvis* 'probably' and *ofte* 'often.' This yields the word order in (52). In (56) the whole vP has been pied-piped to SpecTP to license predication there. Now the verb will
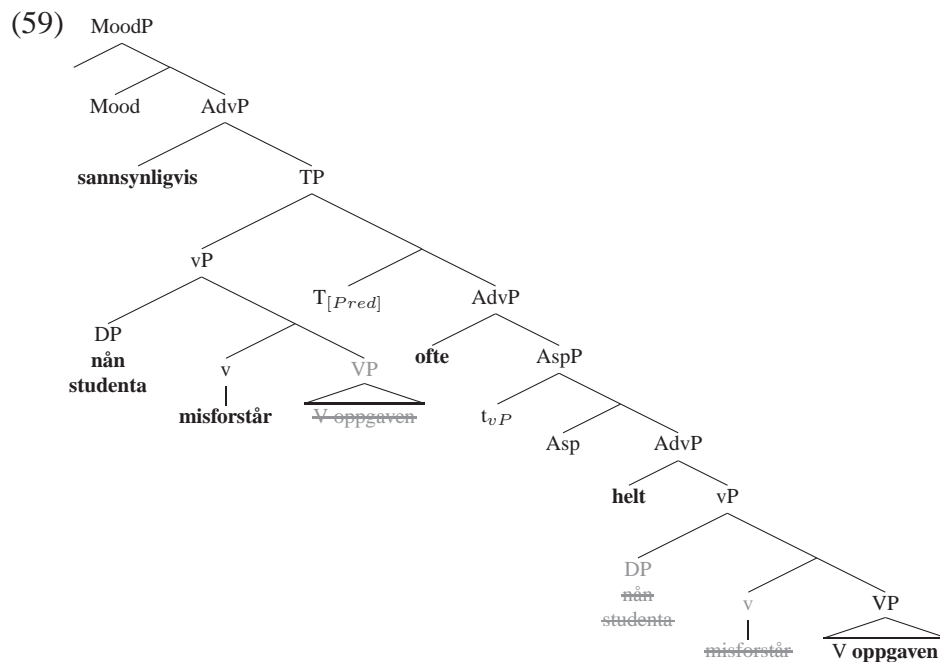
precede both *ofte* and *helt* but follow *sannsynligvis*, as in (53). Finally, when the [Pred] feature is associated with MoodP and the whole vP is pied-piped along to SpecMoodP, the verb will precede all adverbs in the clause, as in (54).

Note that although the whole vP is pied-piped to a higher specifier only the subject and the verb are visible in this higher position. For this type of phrasal movement I propose an operation of copying and partial deletion inspired by Fanselow and Ćavar (2002) and Hinterhölzl (2002). In this approach, the vP is copied in the specifier of a higher projection. Following Chomsky (2000; 2001) I take vP to constitute a phase, but following Legate (2003) I assume that all main verbs project a phase. In phase-based approaches only the *edge* of a phase is available to operations outside of this phase. This is stated in the *Phase Impenetrability Condition* (PIC) where the highest specifier and head constitute the edge of the phase (from Chomsky 2000:122):

(58)   **Phase Impenetrability Condition (PIC)**
        'In a phase α with head H, the domain of H is not accessible to operations outside α, but only H and its edge.'

The effects of the PIC are derived if as soon as the vP phase is completed, its non-edge material is sent off to spell-out. This material will therefore be pronounced in the base position, and at the point when vP is copied to the higher specifier position, only its edge is visible. In the above examples, this means that the object *oppgaven* 'the assignment' will be pronounced in the lower copy, whereas the subject and the verb are available for pronunciation in the higher copy (as we will see in the next section, the subject is actually forced to move to an even higher projection for Case licensing reasons; we will return to this shortly). This is illustrated in (59), where the [Pred] feature is associated with TP and the subject pied-pipes the whole vP to SpecTP.

(59)

```
MoodP
├── Mood
└── AdvP
    ├── sannsynligvis
    └── TP
        ├── vP
        │   ├── DP
        │   │   nån studenta
        │   ├── v
        │   │   └── misforstår
        │   └── VP
        │       └── V oppgaven
        └── T[Pred]
            └── AdvP
                ├── ofte
                └── AspP
                    ├── t_vP
                    └── Asp
                        └── AdvP
                            ├── helt
                            └── vP
                                ├── DP
                                │   nån studenta
                                ├── v
                                │   └── misforstår
                                └── VP
                                    └── V oppgaven
```

In this derivation the verb is thus pied-piped to SpecTP along with the subject, and will consequently precede adverbs like *often*, as in example (53) above. Thus verb movement effects in ReNN are explained as the result of the subject pied-piping the whole vP when moving to license the predicate. (See Bentzen 2007b for a more detailed discussion of this approach to phrasal movement.)[10]

As we have seen in this section, the flexibility with respect to subject placement in Norwegian embedded clauses in general as well as the flexibility of verb placement in ReNN embedded clauses can be accounted for by the same operation, namely predicate licensing. I have proposed that predication may be associated with various projections, and that predicate licensing can be accomplished in two ways in ReNN. The spec-raising option, where the subject moves alone to the specifier of the projection carrying [Pred], is responsible for the various positions of subjects found in Norwegian embed-

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[10]Note that the spelled-out material is not always left in situ. For example, it is possible to topicalize a DP containing a CP, bringing the CP along, as in (i). Thus, the partial deletion effect seen above might be a special property of movement from phase edges.

(i)   [$_{DP}$ Det [$_{CP}$ at   datamaskinen kræsjet]] hadde han ikke hørt.   (Nor.)
       that   that computer.the crashed had   he   not   heard
       'He hadn't heard about the fact that the computer crashed.'

ded clauses without verb movement. In the spec-pied-piping option the whole vP is pied-piped to the relevant specifier position, and this yields the various positions of the verb in ReNN clauses with verb movement.

Furthermore, this approach to predicate licensing provides an account for one of the three observations made in section 2.2, namely the fact that the subject always has to precede the verb when there is verb movement, even though independently it may occur in a position lower than the target position of this verb movement. This is now expected, as vP movement and DP movement never will take place as two separate operations. Rather vP movement is a variant of DP movement in which the DP pied-pipes the whole vP. Thus, when there is verb movement, the subject and the verb move together and consequently, their internal order will not be altered.

The two other observations made in section 2.2, namely that the subject obligatorily precedes all adverbs and that it is obligatorily strong when there is verb movement still need to be accounted for. This is the topic of the next section.

4 Nominative Case licensing

In this section I discuss how Nominative Case is licensed on subjects in Norwegian. I will argue that this can be accomplished in two ways, either through *Move* or through *Agree*, and that the latter operation is sensitive to certain locality conditions.

In Pesetsky and Torrego (2001), Nominative Case is taken to be an uninterpretable tense feature (uT) on the subject (from Pesetsky and Torrego 2001:361):
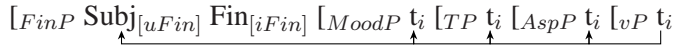
(60)   *The nature of nominative case*
        Nominative case is uT on D.

They furthermore suggest that in English the nominative DP is attracted to SpecTP by T's uninterpretable ϕ-features. In SpecTP the DP's uT may be deleted. However, C also has a uT feature, which needs to be deleted. This is accomplished either by moving T to C (head movement) or by moving the nominative DP to SpecCP. Pesetsky and Torrego (2001) argue that deleted features do not disappear until the end of a *cycle* (cf. a phase), and therefore a nominative DP that has already had its uT feature deleted in SpecTP is able to delete uT on C in SpecCP as well. Here, I will also relate nominative Case to
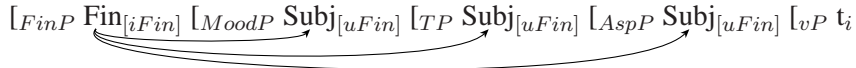
an uninterpretable "verbal" feature on the DP subject, but I will follow Holmberg and Platzack (1995) in assuming that the relevant feature is finiteness. Holmberg and Platzack (1995) argue that finiteness (their [+F] operator) is associated with C rather than with I in V2 languages. Adapting this view to the split CP approach assumed here, I propose that the relevant projection for finiteness is FinP. I thus take subjects to have an uninterpretable finiteness feature, which is licensed by the matching iFin in FinP, thereby providing the subject with Nominative Case.

As we saw in section 2.1, the subject may remain in a very low position in Norwegian. How is Nominative Case then licensed from FinP to the subject? I assume Chomsky's *Agree* Model (Chomsky 2000) and propose an approach to Case licensing based on Wurmbrand (2006). In this approach, Nominative Case licensing can be accomplished in two ways. One option is that the subject moves to SpecFinP, and thus Nominative Case is licensed directly through a spec-head relation in FinP, as illustrated in (61). Alternatively, the subject may enter into an Agree relation with $Fin_{[iFin]}$, and thus receives Nominative Case without moving to SpecFinP, as in (62).

(61)   **Move** of $Subj_{[uFin]}$ to $SpecFin_{[iFin]}P$:

$[_{FinP}$ $Subj_{[uFin]}$ $Fin_{[iFin]}$ $[_{MoodP}$ t_i $[_{TP}$ t_i $[_{AspP}$ t_i $[_{vP}$ t_i

(62)   **Agree** between $Fin_{[iFin]}$ and $Subj_{[uFin]}$:

$[_{FinP}$ $Fin_{[iFin]}$ $[_{MoodP}$ $Subj_{[uFin]}$ $[_{TP}$ $Subj_{[uFin]}$ $[_{AspP}$ $Subj_{[uFin]}$ $[_{vP}$ t_i
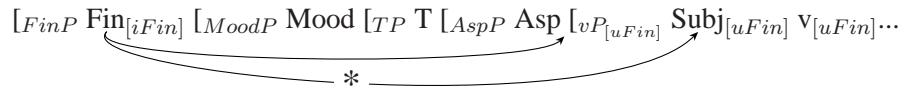
Agree is subject to certain locality conditions (Chomsky 2000, Chomsky 2001). First of all, the subject needs to be in an appropriate locality domain in order to receive Nominative Case from FinP. In Holmberg and Platzack (1995), the subject has to be in a position in which it is governed by C. In the more recent approaches, the locality domain is often defined in terms of phases (cf. Chomsky 2001). According to the PIC (cf. (58)), a probe cannot see across a phase boundary when searching for an appropriate goal; it can only probe a goal that is located within its own phase, or at the edge of the next phase down.[11] On the assumption that (at least) vP and CP are phases, the subject consequently has to be (at least) at the edge of the vP-phase to be able to enter into an Agree relation with $Fin_{[iFin]}$.

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[11]See however Bošković to appear for an argument that Agree is not constrained by the PIC.

Another locality condition for Agree concerns the effect of intervening elements (cf. Rizzi 1990). For an Agree relation to be established between $\text{Fin}_{[iFin]}$ and the subject, nothing else that potentially could enter into an Agree relation with $\text{Fin}_{[iFin]}$ may intervene between this projection and the subject. In cases of such intervention, Agree is blocked and then Nominative Case licensing through Move is the only option (cf. also Bobaljik and Wurmbrand 2005 and Lidz and Williams 2002; 2005).

According to Holmberg and Platzack (1995) [+F], uFin here, is both an abstract marker for Nominative Case and for finiteness. As suggested above, uFin on subjects expresses Nominative Case. However, I also assume uFin to be present on v. In Norwegian non-V2 contexts, where the verb does not move all the way to FinP, the uFin feature on v thus has to be licensed through Agree. Adger (2003) proposes an analysis of English tense marking along these lines. In his approach T has an interpretable tense feature iT, whereas v has an uninterpretable tense feature uT. In English, main verbs do not move, and Adger (2003) argues that uT on v is valued through agreement and feature-sharing with iT in TP. In Norwegian, verbs are not marked for agreement, but they are marked for finiteness, with either a present or a past tense morpheme.[12] In clauses without verb movement, the verb remains in a low position but enters into an agreement relation with iFin in FinP and thus has its features valued *in situ* in the same way that Adger (2003) outlines for English. The feature uFin on v is shared by v's projection, that is the vP (cf. among others Pesetsky and Torrego 2001). We then have uFin on both vP and on the subject in SpecvP. Thus, if the subject were to remain inside the vP, Agree between $\text{Fin}_{[iFin]}$ and the subject is arguably blocked. This is so because when $\text{Fin}_{[iFin]}$ probes down the structure for a potential goal, it will see [uFin] on vP first, and then $\text{Fin}_{[iFin]}$ and $\text{vP}_{[uFin]}$ will enter into Agree, leaving the subject without Case, as illustrated in (63).

(63)   **Agree** between $\text{Fin}_{[iFin]}$ and $\text{Subj}_{[uFin]}$ blocked by uFin on vP:

$[_{FinP}$ $\text{Fin}_{[iFin]}$ $[_{MoodP}$ Mood $[_{TP}$ T $[_{AspP}$ Asp $[_{vP_{[uFin]}}$ $\text{Subj}_{[uFin]}$ $\text{v}_{[uFin]}$...

*

The subject in SpecvP and v are of course in a spec-head relation, so one might think that once $\text{vP}_{[uFin]}$, and thus $\text{v}_{[uFin]}$, has entered into an Agree relation with $\text{Fin}_{[iFin]}$ to have finiteness licensed, the subject would have its uFin

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[12]Present tense is *-er* in Standard Norwegian and *-e* or *-∅* in ReNN; past tense for the major verb classes is *-et* and *-te/-de* in Standard Norwegian and *-a* and *-te/-de* in ReNN.

feature licensed through a spec-head relation with v. However, I here take spec-head relations to be relevant when the specifier is merged in the structure. At the point in the derivation when the subject and v form a spec-head relation, $\text{Fin}_{[iFin]}$ has not been merged yet, and when $\text{Fin}_{[iFin]}$ is merged and establishes Agree with $\text{vP}_{[uFin]}$, the subject and v presumably cannot create a new spec-head relation to have uFin on the subject licensed from $\text{Fin}_{[iFin]}$ via $\text{v}_{[uFin]}$. Thus, I propose that all nominative subjects have to move out of the vP in order to get their case licensed. With these background assumptions on Nominative Case licensing laid out, let us return to the Norwegian examples, starting with clauses without verb movement.

4.1   Spec-raising and Case licensing

As we saw in the previous section, the subject in clauses without verb movement goes through spec-raising to either SpecAspP, SpecTP, or SpecMoodP in order to license predication. In either of these specifier positions, the subject is able to enter into an Agree relation with $\text{Fin}_{[iFin]}$, and may thus receive Nominative Case without moving to SpecFinP, as illustrated in (64).

(64)
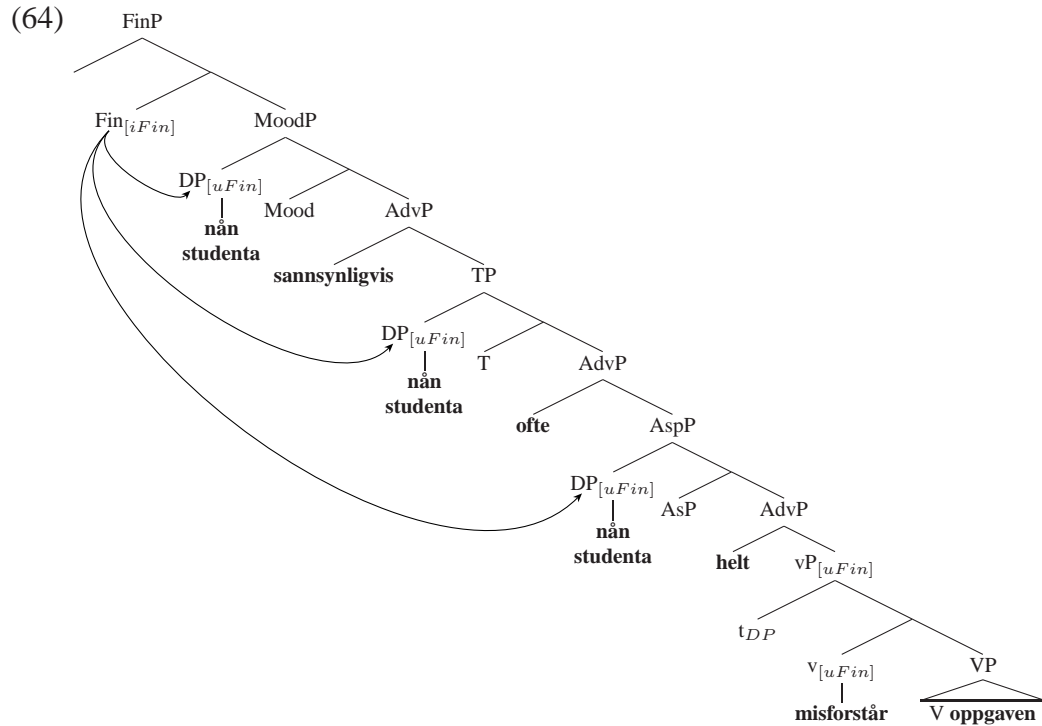
As discussed above, Nominative Case licensing through Move takes place (i) if the subject has independent reasons to move to SpecFinP, and/or (ii) if Agree fails. In clauses without verb movement, Case licensing through Agree is always available for weak subjects given that the subject has moved out of the vP for predicate licensing. Strong subjects, however, have an independent reason to move to SpecFinP. As mentioned above, I take the strong interpretation of subjects to be licensed by FinP, cf. (51). Let us assume that a strong reading is expressed by the feature *i*Top on the subject being licensed by the matching *u*Top on Fin. In clauses with strong subjects, Case licensing will therefore be accomplished through Move as a consequence of the subject moving to SpecFinP anyway, as shown in (65).

(65)
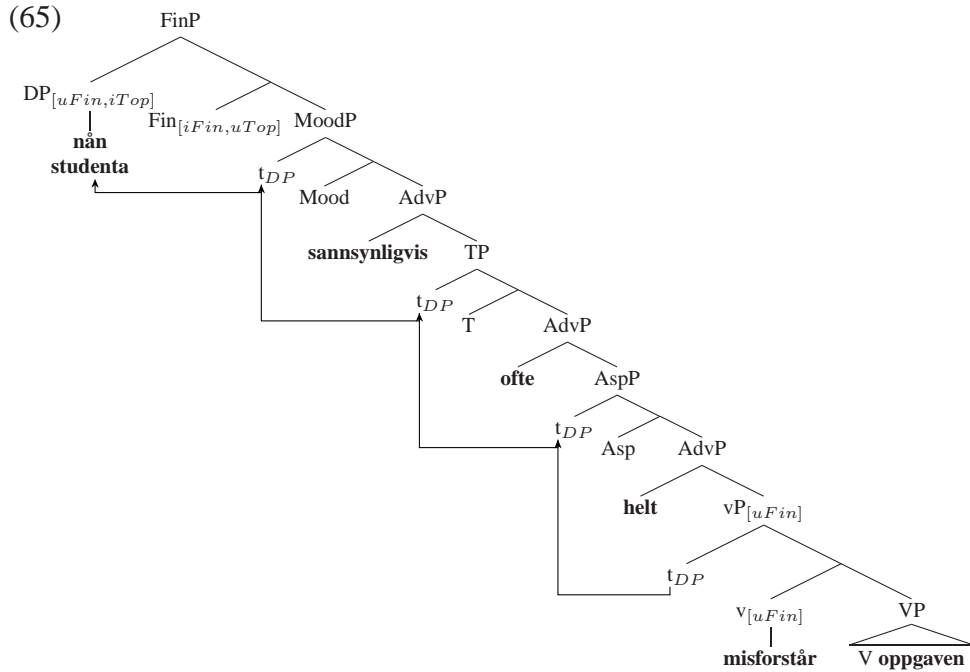
So, in clauses without verb movement, Nominative Case licensing through Agree is the default, and Move is only employed if the subject has independent reasons to move, such as interpretable features like *i*Top.

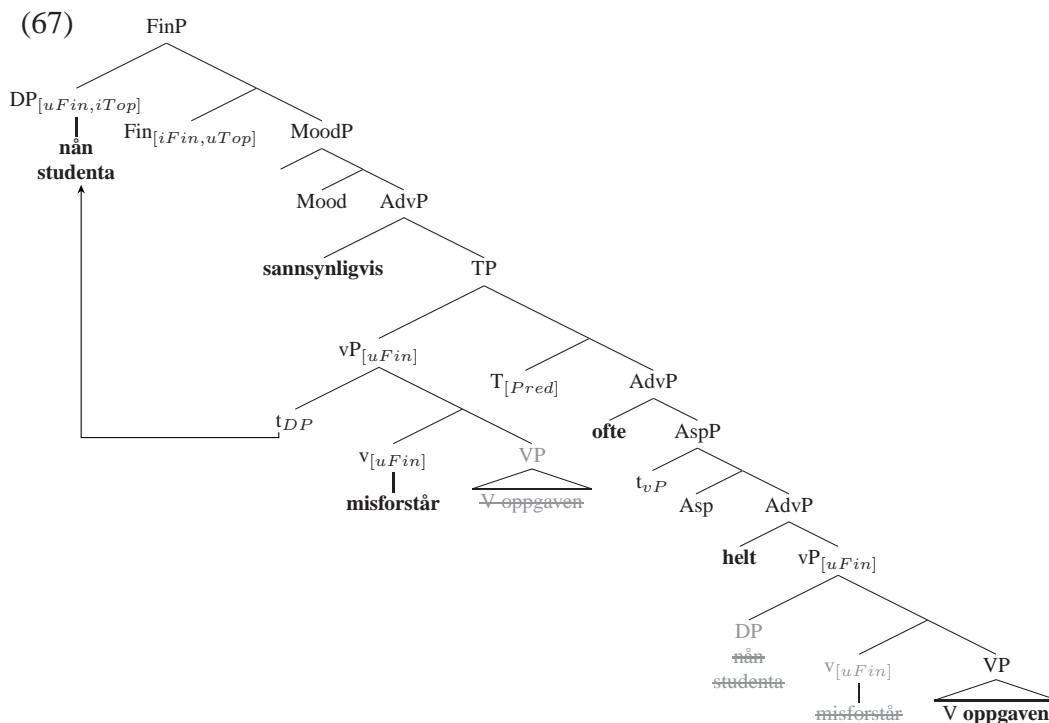## 4.2 Spec-pied-piping blocks Case licensing through Agree

In clauses with verb movement, on the other hand, Nominative Case licensing through Agree is arguably not available. As mentioned, I assume that the *u*Fin feature on the v head projects onto the phrasal level, vP. As was illus-

trated in (63), a subject that has remained inside vP cannot enter into Agree with $\text{Fin}_{[iFin]}$ because of this; the *u*Fin feature on vP will act as an intervener between $\text{Fin}_{[iFin]}$ and the subject in SpecvP. In subsection 3.2 I outlined an analysis of verb movement in terms of phrasal movement where the whole vP is copied into a higher specifier projection. In such cases, the subject is in the specifier of the moved vP, and again Agree between $\text{Fin}_{[iFin]}$ and the subject will be blocked by *u*Fin on vP, as indicated with a starred arrow in (66) below.

(66)
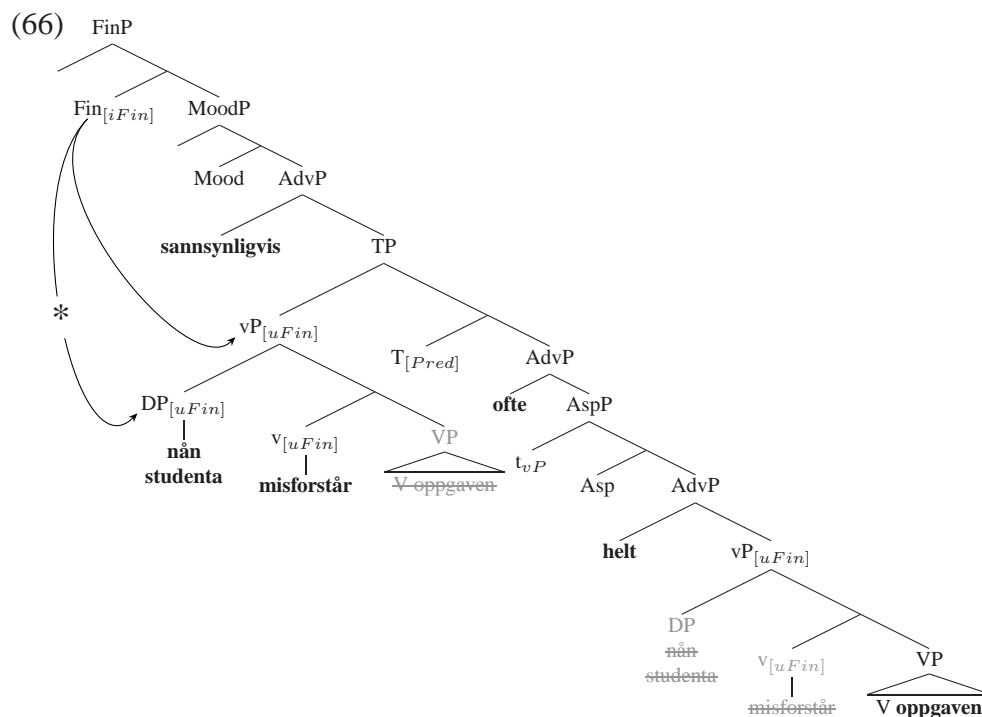
Thus, Nominative Case licensing through Agree is not an option in embedded clauses with verb movement, and a subject inside a moved vP will not be able to get Case. Above I argued that Case licensing through Move only occurs when the subject has independent reasons to move to SpecFinP. When the subject pied-pipes the whole vP to license the predicate it will be trapped inside this vP unless it has independent reasons to move on to some higher projection. In the position inside vP the subject will not get Case, and consquently, the derivation will crash, as in (66) above. However, if the subject has a feature like for example *i*Top, it will move to SpecFinP independently of Case licensing, as shown in (67).

(67)

FinP

DP$_{[uFin,iTop]}$ Fin$_{[iFin,uTop]}$ MoodP

nån
studenta

Mood   AdvP

sannsynligvis   TP

vP$_{[uFin]}$ T$_{[Pred]}$ AdvP

t$_{DP}$ **ofte**   AspP

v$_{[uFin]}$ VP   t$_{vP}$

misforstår   ~~V oppgaven~~   Asp   AdvP

helt   vP$_{[uFin]}$

DP
~~nån~~   v$_{[uFin]}$ VP
~~studenta~~   ~~misforstår~~   V **oppgaven**

Here again the subject has pied-piped the whole vP when it moves to SpecTP to license the predicate. As we saw in (66), when the subject remains inside the vP, the derivation crashes as the subject does not get Case. In (67), however, the subject has the feature *i*Top and therefore moves to SpecFinP anyway to license the strong interpretation. Thus Nominative Case is licensed for free, so to speak, because of the topic movement of the subject.

Assuming this analysis of Nominative Case licensing, we now have a way of accounting for the second and third observations concerning how verb movement constrains the distribution of subjects. The second observation was the fact that subjects have to precede *all* adverbs in the clause when there is verb movement, even if the verb only has moved across some of the adverbs in the clause. This now follows as Case licensing through Agree is blocked when the subject remains inside the moved vP. Instead, the subject has to move all the way to SpecFinP to get Nominative Case. In this position it will naturally precede all adverbs in the clause. The third observation concerned the interpretation of the subject. When there is verb movement in the clause, only the strong reading of a subject is available. This also follows from the Case licensing analysis outlined in this section. Given that only Case licensing through Move is available in clauses with verb movement, and that only

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subjects with independent reasons to move can perform this operation, only strong subject will be able to get Case in such clauses.

5   Concluding remarks

In this paper I have discussed the positions of subjects in non-V2 contexts in Norwegian. Using adverbs as a diagnostic, it was illustrated that subjects may occur in several different positions in such clauses, and that the various positions are linked to the interpretation of the subject. Weak subjects may precede or follow any adverb, whereas strong subjects have to precede all the adverbs in the clause. Regional Northern Norwegian (ReNN) allows verb movement in these non-V2 contexts, and this kind of verb movement was shown to affect the distribution of subjects in three different ways: (i) the subject has to precede the verb, although lower positions are available in the absence of verb movement, (ii) the subject is forced to precede any adverb in the clause, and (iii) the subject obligatorily receives a strong interpretation.

The flexible positioning of both subjects and verbs in ReNN was given a unified account in terms of predicate licensing. I have proposed that Norwegian has an EPP feature, [Pred], which may be associated with various heads in the structure. A predicate with the feature [Pred] is licensed by having its specifier filled by an element carrying the feature [D]. The subject carries this feature, and may thus be attracted through *Spec-raising* to the specifier position of $X_{[Pred]}$P. This is what happens in clauses without verb movement. Based on Biberauer and Richards (2006), I furthermore suggested that predicate licensing in ReNN optionally could be accomplished through *Spec-pied-piping*, where the subject would pied-pipe the whole vP to the specifier of $X_{[Pred]}$P. This yields the effect of verb movement. The fact that verb movement cannot cross the subject now follows because verb movement is analysed as pied-piping, where the subject pied-pipes the vP, containing the verb, when it moves for predicate licensing.

The other two ways in which verb movement influences subjects, forcing them to a high position, and forcing them to be strong, are also consequences of verb movement being analysed as vP pied-piping. I suggested that subjects in general cannot get Nominative Case from $Fin_{[iFin]}$ through Agree if they have remained inside the vP. The reason for this is that both the subject and the verb carry the feature [uFin]. As the features of the v head are shared by its projection, [uFin] on vP will block Agree between $Fin_{[iFin]}$ and a sub-

ject inside vP. When the subject has moved to some higher specifier position through Spec-raising, it may enter into Agree with $\text{Fin}_{[iFin]}$, and thus receive Nominative Case without moving all the way to SpecFinP. However, when the subject has pied-piped the whole vP to some higher specifier position, Agree between $\text{Fin}_{[iFin]}$ and the subject is again blocked by [uFin] on vP. Thus, the subject is forced to move out of the vP in order to get its Case licensed. This explains why the subject occurs in a very high position, preceding all adverbs, when there is verb movement: it has to move to get Case. However, only subjects that have some independent feature that needs to get licensed can perform this movement. Here it was shown that subjects with the feature [iTop] needed to move to SpecFinP to get a strong reading licensed. Consequently, these are the only types of subjects that are able to get Case in clauses with verb movement. Weak subjects will be stuck in the vP that has moved to some specifier position, and inside the vP they cannot get Nominative Case. Hence, the derivation will crash.

Thus, we have seen that predicate licensing provides a unified account for the flexibility of the position of subjects in Norwegian in general, and of the position of verbs in ReNN. Furthermore, the restrictions verb movement imposes on the distribution of subjects follow from the combination of verb movement analysed as vP Spec-pied-piping and the approach to Nominative Case licensing outlined here.

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