**8. Adverbial Resumption and Scope: A Case Study of Norwegian**

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1.      Introduction

Haegeman and Greco (2018, this volume) show that there are interpretational effects associated with Verb Second (V2) vs. non-V2 structures, viz. V3 structures. Among others, they illustrate that word order has a scopal effect. Compare (1a) and (1b) from West Flemish (Haegeman and Greco 2018: 21, this volume).

(1)     a.      Vele zondagen en- is ze  der   niet.                          (West Flemish)

        *many Sundays    NEG-is she there not*

        'Many Sundays, she's not there.'

        b.      Vele zondagen,z' en   is      ter    niet.

        many Sundays  she NEG is      there   not

        'Many Sundays, she's not there.'

They point out that in regular V2 structures such as (1a), the initial adjunct *vele zondagen* 'many Sundays' can either have wide (preferred) or narrow scope with respect to negation. The wide scope reading means that 'often on Sundays, she is absent' whereas the narrow scope reading is that she is there on some Sundays, but that these are rare. The narrow scope reading depends on appropriate stress assignment on the adjunct. V3 forces the adjunct to take wide scope, narrow scope is not available regardless of stress assignment.

Haegeman and Greco (2018, this volume) also show that similar facts apply in the case of embedded clauses and reconstruction: Non-V2 prohibits reconstruction of the initial adjunct. Haegeman and Greco argue that these facts can be explained by considering the syntactic position of the antecedent: When there is no ambiguity, the initial element has been merged in a clause external position and has not been moved. This prevents any kind of reconstruction, including narrow scope.

In this chapter, we will compare the findings from Haegeman and Greco (2018, this volume) to Norwegian. In particular, focusing on instances of adverbial resumption in Norwegian, we will demonstrate that there are interpretational differences that relate to the presence or absence of a resumptive element. These effects, we argue, arise in complex structures that are interpretationally ambiguous when a resumptive is omitted.

The outline is as follows. Section 2 provides an outline of verb second and adverbial resumption in Norwegian, including addressing whether or not the generalized resumptive marker is a clitic. Section 3 discusses previous accounts of the resumptive structure. Section 4 is concerned with adverbial resumption and scope, discussing and analyzing the generalization that adverbial resumption restricts scope. Section 5 concludes the paper.

1    Adverbial Resumption in Norwegian

In this section, we first present some basic properties of verb movement in Norwegian (section 2.1). Then we turn to the interplay between verb movement and resumption in section 2.2. Whether or not the generalized resumptive marker should be considered a clitic or not is the topic of section 2.3.

2.1    Verb movement in Norwegian

Norwegian is a typical V2 language where the finite verb occupies second position in root clauses (see den Besten 1983, Holmberg and Platzack 1995, among many others). The finite verb may be preceded by the subject (2a, d), an adverbial (2b) or a predicative element like an adjective (2c). Other arguments may be fronted (2e–f), but full nominal DPs are more easily fronted if they are contrasted or negated (2e). Light pronominal arguments do not require contrast (2f).

(2)  a.  Bestefar gikk alene på ski hele dagen.
         *grandpa went alone on ski whole day.DEF*
         'Grandpa went skiing by himself all day.'

     b.  Hele dagen gikk bestefar alene på ski
         *whole day.DEF went grandpa alone on ski*
         'All day grandpa went skiing by himself.'

     c.  *Alene gikk bestefar på ski hele dagen.*
         *alone went grandpa on ski whole day.DEF*
         'All by himself grandpa went skiing all day.'

     d.  Han så tre harer og en elg.
         *he saw three hares and one elk*
         'He saw three hares and one elk.'

     e.  Elgen så han ikke.
         *elk.DEF saw he not*
         'He did not see the elk.'

     f.  Den så han med en gang.
         *it saw he with one time*
         'He saw it immediatly.'

In embedded clauses, the default word order is S–V, but the language also permits embedded V2 under bridge verbs (3) (see Vikner 1995 and much subsequent research, notably Julien 2007).

(3)    a.    Han fortalte oss at hele dagen gikk bestefaren på ski.

              *he told us that whole day.DEF went grandfather.DEF on ski*

              'He told us that his grandfather went skiing all day.'

        b.    *Han beklaget at hele dagen gikk bestefaren på ski.

              *he regretted that whole day.DEF went grandfather.DEF on ski*

              'He regretted that his grandfather went skiing all day.'

The existence of adverbs such as the negation is commonly used as a test for V-to-I movement. If the finite verb occurs to the left of the negation, and we assume that negation occurs at the left edge of the argument domain, this suggests that the finite verb has moved across negation and into the inflectional domain. The contrast between the two clauses in (3) sharpens when negation is added, as illustrated in (3').

(3')    a.    Han fortalte at hele dagen gikk ikke bestefaren på ski.

              *he told.us that whole day.DEF went not grandfather.DEF on ski*

              'He told us that his grandfather did not go skiing all day.'

        b.    *Han beklaget at hele dagen gikk ikke bestefaren på ski.

              *he regretted that whole day.DEF went not grandfather.DEF on ski*

              'He regretted that his grandfather did not go skiing all day.'

Norwegian is typically considered to be a strict V2 language, a language that does not exhibit many regular violations of the V2 rule. A few adverbs display an exceptional behavior. In initial position, the adverb *kanskje* 'maybe' can occur with either V2 or V3, and focus-sensitive adverbs such as *bare* 'only' display variable word order (Egerland 1998; Nilsen 2003; Westergaard 2009; Bentzen 2014).

(4)  a.  Han   kommer   kanskje   snart.

*he    comes    maybe    soon*

'Maybe he'll be here soon.'

   b.  Kanskje kommer han snart.

*maybe   comes   he   soon*

'Maybe he'll be here soon.'

   c.  Kanskje  han   kommer   snart.

*maybe     he    comes     soon*

'Maybe he'll be here soon.'

(5)  a.  Han   sto       der.

*he    stood     there*

'He stood there.'

   b.  Han   bare   sto       der.

*he    just    stood     there*

'He just stood there.'

## 2.2   Verb movement and resumption

Unlike the written language, V3 structures are very common in the spoken language. These structures fall into two different categories: Pronominal and adverbial resumption. Pronominal resumption takes place with fronted arguments where the fronted element is immediately followed by a weak pronominal resumptive. This pronoun may be a personal pronoun (6a) or a demonstrative (6b). In some dialects the difference is related to the animacy of the fronted element; in others no such distinction is observed.

(6)    a.    Jon,   han   visste   ingenting.

*Jon   he    knew    nothing*

'Jon didn't know anything.'

b.    Brevet,   det   har   han ikke fått ennå.

*letter.DEF it    has    he   not   got  yet*

'He has not received the letter yet.'

Adverbial resumption typically follows adverbial clauses (7a), PPs (7b), and adverbs (7c) (see already Holmberg 1986: 109-118). Furthermore, thematic dative arguments in the form of a PP may be followed by an adverbial resumptive (Helland, Meklenborg Nilsen, and Lohndal 2020; Meklenborg, Helland, and Lohndal 2021).

(7)    a.    Da   han   kom hjem  om    kvelden,     **så** var   han sliten.

*when he    came home  in    evening.DEF,   *så *was  he   tired*

'When he came home in the evening, he was tired.'

b.    i   debatten    om   matvarekjedene sin    prising **så** ser man at

*in debate.DEF about food.chain    their prizing  *så *sees one  that*

det   aller  meste her     er  langt      billigere.

*the   all   most   here        is   much   cheaper*

'in the debate about the food chains' prizes, one can see that most of the things here are much cheaper'

c. Inne **så** er det rikt vareutvalg på oljer, hermetikk og syltet på glass

*inside* så *is it  rich  selection   on oils, cans    and pickled  on glass*

'Inside, there is a rich selection of oils, cans and pickled on glas'

d. Ellers  så  er det rikt  utvalg  av mel, ris, pasta,nøtter og   juice.

*otherwise* så  *is it   rich  selection  of flour rice pasta,  nuts and   juice*

'In addition to that, there is a rich selection of flour, rice, pasta, nuts, and juice.

e. Til  meg **så**  har han  ikke  fortalt  noe som helst.

*to  me  så  has he   not   told   anything*

'He has not told me anything.'


In the above examples, the adverbial resumptive is *så*. However, Norwegian may also use resumptive elements such as *da* 'then' and *der* 'there'. We will follow Meklenborg (2020a) in assuming that *så* is a generalized resumptive, while *da* and *der* are specialized resumptives (see also the introduction to the volume). While *så* may follow any kind of adverbial antecedent regardless of their semantic value, *da* and *der* must match the antecedent. Consequently, *så* is a non-referential resumptive (Ekerot 1988).


(8)  a. Da  han kom  hjem, **da/ *der/så** var han  sliten.

*when he  came home*  then there så *was he  tired*

'When he came home, he was tired.'

b.  Bak     huset,      **\*da/   der/    så** bor   det en      grevling.

*behind house.DEF* then    there   så *lives   it   a       badger*

'Behind the house there lives a badger.'

c.  Etterpå,    **da/   \*der/   *så*** skal   vi  ta  oss   en kaffedoktor.

*afterwards* then  there   så   *shall   we  take us    a  coffe.doctor*

'Afterwards, we shall have a Karsk.'

Neither *da* nor *der* may follow an initial adverb that is neither locative or temporal.

(9)     a.    Heldigvis **\*da/   \*der / så** oppdaget   ikke elgen    ham.

*fortunately* then    there   så *discovered  not   elk.DEF  him*

'Fortunately, the elk did not see him.'

b.    Derfor     **\*da/ \*der / så** var  det aldri     noen   fare.

*therefor*   then   there   så *was it    never    any     danger*

'Therefore there was never any danger.'

Adverbs that refer to here-and-now may only be followed by *så*.

(10)        Nå  **\*da/   \*der /så** skal  vi kose  oss.

*now*  then    there så    *shall we enjoy us*

'Now, we shall have a good time.'

These tests clearly show that *da* and *der* are special resumptives that are linked to the semantic contents of their antecedent. There is no such requirement in the case of *så*.

2.3　　The general resumptive as a clitic

In their analysis of Swedish, Egerland and Falk (2010) argue that *så* is a clitic, while *då* 'then'
is a phrase. Kayne's (1975) tests for clitichood show that there is a clear difference between
the specialized and the generalized resumptives. In what follows, we will show how Egerland
and Falk's analysis can be extended to Norwegian.

　　*Så* may not be separated from the verb. This resumptive occurs exclusively in second
position, unlike *da* and *der*, which may also be used as regular adverbs in the lower parts of
the clause.


(11)　　a.　　Han　sa　ingenting　　**da** / *\***så**.

　　　　　　*he　　said nothing　　*then　så

　　　　　　'He didn't say anything then.'

　　　　b.　　Han　satt **der** /　**så**　en god　　stund.

　　　　　　*he　　sat* there　så　*a　good　while*

　　　　　　'He sat there for a while.'


*Da* and *der* may be the initial constituents of a regular declarative clause. *Så* may occur in this
position, but with a temporal-sequential reading that does not match its bleached semantics in
second position. Thus, we will assume that it is a different lexical item than the resumptive *så*.


(12)　　a.　　Da　　drakk　　vi　　kaffedoktor.

　　　　　　*then　　drank　　we　　coffee.doctor*

　　　　　　'Then we had Karsk.'

　　　　b.　　Så　　　　　　drakk　vi　kaffedoktor

*subsequently   drank   we   coffee.doctor*

'Then we had Karsk.'

b.　　Der   er   det   bade   elg   og   harer.

*there are   it   both   elk   and hares*

'There are both elk and hares there'

*Da* and *der*, but not *så*, may be right dislocated.

(13)　a.　　Da   drakk   vi   kaffedoktor,   **da**.

*then   drank   we   coffee.doctor*   then

'Then we had Karsk.'

b.　　Der   er det   bade   elg og   harer, **der**.

*there is   it   both   elk and   hares*   there

'There are both elk and hares there.'

c.　　*Vi   drakk   kaffedoktor,   **så**.

*we   drank   coffee.doctor,*   så

As pointed out by Eide (2011) and Holmberg (2020), *så* may not occur after a hanging topic. The particle *ja* 'yes' is in these clauses inserted between the hanging topic and the rest of the clause. With *da* or *der*, this structure is fine.

(14)　a.　　Etterpå,   ja, **da** / *så skal vi ta   oss   en   kaffedoktor.

*afterwards yes* then   så *shall we take us   a   coffee.doctor*

'Afterwards then we'll have a Karsk.'

b.　　Der, ja, **der**/ ***så**   er   det bade elg   og   harer.

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| *there* | *yes* | there | så | *is* | *it* | *both* | *elk* | *and hares* | | |

'There are both elk and hares there.'

*Så* may not be stressed, unlike *da* and *der*.

(15)    a.    \*Etterpå **SÅ** skal vi ha oss en kaffedoktor.

            *afterwards* SÅ *shall we have us a coffee.doctor*

            'Afterwards, we shall have a Karsk.'

     b.    Etterpå **DA** skal vi ha oss en kaffedoktor.

            *afterwards* then *shall we have us a coffee.doctor*

            'Afterwards, we shall have a Karsk.'

*Så* may not be modified. Again, this is possible with *da* and *der*.

(16)    a.    \*Da han kom hjem, akkurat **så** var han sliten.

            *when he came home right* så *was he tired*

     b.    Da han kom hjem, akkurat **da** var han sliten.

            *when he came home right* then *was he tired*

            'Right when he came home, he was tired.'

*Så* may not be coordinated, while this is in principle possible with *da* and *der*. The insertion of an intonational break makes the clause more acceptable.

(17)    a.    \*Da han kom hjem, **der** og **så** var han sliten.

            *when he came home* there *and* så *was he tired*

b. Da han kom hjem, #**der** og **da** var han sliten.

*when he came home* there *and* then *was he tired*

'When he came home, at that moment he was tired.'

Based on these tests, we conclude that *så* is a generalized resumptive that is a clitic. The specialized resumptives *der* and *da* are not clitics, but phrases. It should be noted that in spoken language speakers generally prefer to use *så* as opposed to *da* and *der*. In the rest of this paper, we will limit our discussion to resumptive structures with *så*.

From a structural point of view, we may observe that there is an internal order between *da* and *der* on the one side, and *så* on the other. *Da* and *der* may occur in clause-initial position as the first element of a V2 structure, unlike *så*, (18a-b). They may also be followed by the resumptive *så*, (18c) The inverse word order is not acceptable, (18d).

(18) a. Da **så** visste de ikke helt hva de skulle si.

*then* så *knew they not whole what they should say*

'Then they did not quite know what to say.'

b. ***Så** da visste de …

c. Der **så** har de ikke nåla i veggen.

*there* så *have they not needle.*DEF *in wall.*DEF

'There, they are very poor.'

d. *Så der har de ikke …

Further, a fronted adverbial may be followed by *der/da*, which in turn may be followed by *så*, as pointed out by Østbø (2007). This is illustrated in (19).

(19)  a.  [I forgårs] $_i$,  **da**$_i$  **så** fikk Per en megabot

in day.before.yesterday  then  så *got Per a  mega.penalty*

'The day before yesterday, Per got a large penalty.'

b.  *[I forgårs] $_i$,  **så**  **da**$_i$  fikk Per en megabot

in day.before.yesterday *så  then*  got Per a  mega.penalty (Østbø 2006)


The resumptive structure is essentially a feature of the spoken language (Sollid and Eide 2007).[1] Eide and Sollid (2011) and Sollid and Eide (2007) investigate word order in written and spoken Norwegian, and they find that 6.4% of main declarative clauses have the structure topic + particle + verb, whereas only 1.1% of the clauses in a written (albeit informal) corpus display the same structure. Norwegians are explicitly advised to avoid the resumptive *så* in writing (Simonsen 1999), and automatic proof-reading systems for newspapers systematically remove this element. Consequently, Norwegians tend to consider this structure as bad or childish language (cf. remarks in Eide 2011). In a survey conducted in 2017, several of the respondents commented that the use of *så* was childish or redundant (Meklenborg Salvesen 2017). The notion of redundancy will be challenged in this paper. Despite the heavy normative pressure against this structure, it is pervasive in the spoken language and in informal written registers (see e.g. examples 2a–d).


3.  Previous accounts


In order to account for resumptive structures, we need a model for V2. Numerous analyses have been proposed for V2, diverging both with respect to the locus of V2 (see, e.g., Wolfe 2018b, 2019), and whether or not subject and non-subject initial elements occupy the same position (see Travis 1984; Zwart 1997; and Westergaard, Lohndal and Alexiadou 2019 for

discussion). We will not go into detail here, but simply base our analysis on Holmberg's definition given in (20) (Holmberg 2015: 375; see Lohndal, Westergaard and Vangsnes 2020 for critical discussion and also Holmberg 2020).

(20)     The V2 property:

    a.     A functional head in the left-periphery attracts the verbal head;

    b.     This functional head wants a constituent moved to its specifier position.

In addition to these two criteria, we will assume that there is a visibility criterion in Norwegian: The preverbal element must have phonetic content and be visible to the verbal V2 head (Meklenborg 2020b, see also Ledgeway 2008 for a similar account for old Neapolitan). In other words: covert movement to the specifier of the V2 head will not be able to satisfy the V2 criterion.[2] Consequently, there is a fundamental difference between Norwegian and languages such as old Sardinian, that are analyzed as some kind of V2 language but which typically display V1 structures (Wolfe 2015b, 2016b, 2018b, 2019). We also note that unlike Norwegian, German and Icelandic permit V1 structures with narrative inversion, indicating that the languages have a sub-grammar where the visibility requirement is not present. As a main rule, however, there is a visibility criterion also in these languages.

The resumptive structures systematically generate surface V3 structures in a V2 language. The question is how these structures are derived. Here we will briefly review some previous research (see also Meklenborg 2020a for discussion).

Several analyses argue that *så* realizes the Force head (Østbø 2007; Sollid and Eide 2007). Eide (2011) revisits this analysis, claiming that *så* is the head of ShiftP, a projection to the left of ForceP. A simplified representation is shown in (21).

(21)     [$_{ShiftP}$ $XP_i$ [$_{Shift}$ så [$_{ForceP}$ $t_i$ [$_{Force}$ $V_{fin}$ ... ]]]]

An argument in favor of this representation is that *så* also can occur in imperatives, suggesting that *så* may take a 'fully-fledged ForceP as its complement' (Eide 2011: 202). However, as Meklenborg (2020a) points out, a difficulty for Eide's analysis is that even though resumption typically is a root phenomenon, it occurs in embedded clauses under certain verbs (classes A, B, and E in the Hooper and Thompson 1973 typology).

(22)   Han   sa   at   etterpå   så   skulle   de   hjem.
       *he*    *said that   afterward* så   *should   they   home*
       'He said that they would go home afterward.'

Given the standard assumption that Force is the locus of the higher complementizer, there is no space for the resumptive structure given (21).

The resemblance between left dislocation and resumption is striking, as has been pointed out by numerous scholars (Nordström 2010; Eide 2011; Holmberg this volume). Both involve a surface V3-structure where the two initial elements are co-referent or where the second element is semantically bleached.

In the case of left dislocation structures, there seems to be an agreement in the literature that the left dislocated topic in Germanic has reached its surface position by movement (Grewendorf 2002a; Grohmann 2000; Boeckx and Grohmann 2005; Frascarelli and Hinterhölzl 2007).[3] There are two different accounts of the derivation of the structure, which both assume an initial movement into the specifier of the V2 head – assumed to be Fin. For Grewendorf (2002a), what moves to SpecFinP is a big XP that contains the DP in its specifier and the resumptive pronoun in its head. In the next step, the DP is extracted from the

big XP and moved into SpecCLDP (Grewendorf 2002a). This derivation is presented in (23a). Under Grohmann's (2003) account, what moves into SpecFinP is the DP, which then is attracted to SpecCLDP (Grohmann 2000). When the DP moves up, the visibility requirement of V2 is not met. The last-resort process is to spell out the trace of the moved DP in the form of a resumptive pronoun. This derivation is presented in (23b).

(23)    a.    [$_{ForceP}$ [$_{CLDP}$ DP$_i$ [$_{CLD0}$] [$_{FinP}$ [$_{DP}$ ~~DP~~$_i$ [$_{D0}$ pronoun ]] [$_{Fin0}$ V$_{fin}$] …]]]

        b.    [$_{ForceP}$ [$_{CLDP}$ DP$_i$ [$_{CLD0}$] [$_{FinP}$ ~~DP~~$_i$ $\longrightarrow$   pronoun   [$_{Fin0}$ V$_{fin}$] …]]]

In both cases, there is only one element that moves across the V2 head, checking its EPP feature. This explains the strict adjacency between the two initial elements. The fact that only one element may move across the V2 head is known as the bottleneck effect in the literature on V2 (Haegeman 1996; Roberts 2004; Holmberg 2020).

Holmberg's account of Swedish is in the same spirit as Grohman's analysis of CLD structures (Holmberg 2020). He suggests that elements that precede *så* in Swedish have reached their surface position by movement. First, a finite verb moves to Fin, which is the V2 locus in Holmberg's model. In order to check the EPP feature of Fin, the adverbial XP moves to SpecFinP. In the next step, this XP is attracted to the specifier of a position above FinP, and *så* lexicalizes the head of this position (see also Meklenborg 2020a, who independently arrived at a similar analysis). In the present volume, Holmberg elaborates this model, by ascribing the presence of the *så*-structure to the featural composition of Force. He assumes that a declarative clause has a split left periphery consisting of Force, Focus and Finiteness, where the finite verb is first attracted to the Fin head. A general representation is provided in (24).

(24)     (Frame) [_ForceP_ Force [_FocP_ (Focus) [_FinP_ Fin IP]]]

Force may have different features. Based on Eide (2011), Holmberg argues that the head of a left dislocation realizes Force-Top, a head that combines the properties of Force head (as conceived of in Haegeman 2004, 2010, 2012) with those of a Topic head. A declarative Force-Top head contains a feature D-Force, which sets it apart from Q-Force in direct questions (per Holmberg 2016: 17-22). Holmberg (2020) argues that *så* can be viewed as a different exponent of D-Force. If it is marked for [-Topic] and [-Focus] and also has an EPP feature, an adverbial may be attracted to its specifier and the head consequently spelled out as *så*.

We see that resumptive *så* in many analyses of Scandinavian languages is linked to movement of an adverbial constituent into the left periphery. Whether or not such an analysis can be extended to other languages remain to be investigated, though Haegeman and Greco's (2018, this volume) analysis of West Flemish data shows that resumption may not be linked to movement. We leave the cross-linguistic exploration of this issue to future research.

With these previous analyses of adverbial resumption in Norwegian and beyond, in the next section, we turn to a puzzle concerning adverbial resumption and scope.

4.      Adverbial Resumption and Scope

In this section, we will first look at how the *så*-resumptive restricts the scope of the adverbial adjunct (section 4.1). Then we will consider some of the restrictions on resumption in section 4.2 before turning to an apparent counterexample in section 4.3. We propose a new phasal approach in section 4.4.

4.1    Adverbial resumption as restricting scope

As mentioned at the beginning of section 1, Haegeman and Greco (2018, this volume) show that there are interpretational effects associated with verbal word order. The example in (1) from West Flemish, repeated here as (25) for expository convenience, illustrates a scopal effect related to verb movement in monoclausal domains (Haegeman and Greco 2018: 21).

(25)    a.    Vele zondagen en- is ze der niet.                    (West Flemish)

*many Sundays    NEG-is she there not*

'Many Sundays, she's not there.'

b.    Vele zondagen, z' en    is    ter    niet.

many Sundays    she.NEG is    there    not

'Many Sundays, she's not there.'

In (25a), the initial adjunct *vele zondagen* 'many Sundays' can either have wide (preferred) or narrow scope with respect to negation. The wide scope reading means that 'often on Sundays, she is absent' whereas the narrow scope reading is that she is there on some Sundays, but that these are rare. The narrow scope reading depends on appropriate stress assignment on the adjunct. V3 forces the adjunct to take wide scope, narrow scope is not available regardless of stress assignment.

For Scandinavian languages, scopal effects have also been noted. Limiting our scope to adverbial resumption, Ekerot (1988) has observed that in a Swedish example such as (26), the fronted adverbial *tre veckor senare* 'three weeks later' may refer to both the moment of decision and the moment when the plans were to be executed.

(26)    Tre veckor senare hade    man    bestämt att sätta planerna i verket.            [Swedish]

*three weeks later had one decided to set plans in action*

'Three weeks later one decided to execute the plans.' (Ekerot 1988: 205)

The insertion of the resumptive *så* after the initial adverbial requires the interpretation that *three weeks later* only modifies the main clause verb.

Similar observations have been made for Norwegian (Østbø 2007; Eide 2011). Like the clause in (25), the clause in (27) is ambiguous. The fronted temporal element *på lørdag* 'on Saturday', may have been extracted from the main clause or the embedded clause, as indicated in (27).

(27)    [På lørdag]   sa   John _  at   Martin ikke   kunne    komme _.
        *On Saturday said John _ that Martin not     could     come _*
        'On Saturday he said that he could not come.'

However, once the resumptive element is inserted, only one interpretation is accessible, namely that *på lørdag* modifies the higher verb, *sa* 'said' (28).

(28)    [På lørdag]   **så** sa   John _  at   Martin  ikke  kunne  komme.
        *on  Saturday  så said John   that Martin  not    could  come*
        'On Saturday he said that he could not come.'

Haegeman and Greco (2018) discuss V3 structures in West Flemish and assume that the initial adjunct in such cases has been base-generated in a structurally high position, external to the main clause. Following Haegeman (2003, 2006b, 2012), they argue that we have the following representation in (29) (Haegeman and Greco 2018: 28).

(29)    [Peripheral adjunct [CP … [TP]]]

The fact that the peripheral adjunct is merged outside the clause proper makes a range of predictions. For example, we expect that the structure following the initial element will be an independent V2 structure. We also expect that there will be no binding effects that obtain between the peripheral adjunct and the main clause. As we saw in section 2.3, semantically bleached resumptive *så* may not introduce a V2 clause on its own. The latter can only happen with the temporal-sequential *så*, of which an example is provided in (30) where the interpretation is that 'the next thing that happened was that he said …'.[4]

(30)    **Så**  sa   han _ at   han ikke    kunne  komme.

        så   *said he _  that he   not      could   come*

        'Subsequently he said that he could not come.'

In section 2.3, we argued that resumptive *så* is a clitic. As such it may not occur in clause-initial position. Furthermore, this suggests that the fronted temporal adjunct is clause-internal since that would entail that *så* does not appear in clause-initial position. Further evidence can be found with respect to binding effects, to which we turn to next.

Norwegian has two kinds of possessive determiners (see, among many, Hellan 1988): One reflexive and one non-reflexive. In (31a) Martin loves his own wife, whereas in (32b) he loves somebody else's wife.

(31)    a.    Martin elsker  kona       si.

              *Martin loves    wife.DEF   his.REFL*

'Martin loves his wife.'

b. Martin elsker  kona       hans.

*Martin loves   wife.DEF   his*

'Martin loves his wife.'

The direct object may be fronted, as seen in (32).

(32)    Kona        si        elsker    Martin.

*wife.DEF    his.REFL loves       Martin*

'Martin loves his wife.'

The reflexive possessive determiner has to be c-commanded by the subject at some point in the derivation. In (31a), this is unproblematic as the subject *Martin* c-commands *kona si* 'his wife'. However, in (32), the object precedes the subject, and there is no c-command at this point. This is a strong indication that the object has undergone movement from a *v*P position, which would ensure that c-command obtained at some point in the derivation.

Similar binding effects arise when the temporal adjunct *på lørdag* 'Saturday' in (33) is replaced by 'på bursdagen sin' *on his birthday*. Without *så*, there is an ambiguity concerning whether or not the adjunct is interpreted in the main clause or in the embedded clause. If *så* appears, the ambiguity disappears and the initial adjunct can only scope over the main verb.

(33)    a.    [På bursdagen    sin]      sa John _at     Martin  ikke kunne komme _.

*on  birthday.DEF his.REFL said John _ that Martin   not    could   come _*

'On his birthday he said that he could not come.'

b.    [På  bursdagen    sin]        **så**  sa    John _ at   Martin ikke kunne komme.

*on birthday.DEF his.REFL* så *said John _ that Martin not could come _*

'On his birthday he said that he could not come.'

If the fronted adjunct were in fact clause external in (33), the use of the reflexive possessive would be left unexplained.

 Note that as signaled in De Clercq and Haegeman (this volume), with respect to V3 resumption, the same kind of contradictory effects are found in relation to dislocation patterns in Dutch. Hoekstra (1999: 64) presents (34a), his (15b), in support of the hypothesis that the initial constituent in the dislocation structure with resumptive d-word (here *dat* 'that') has been merged in a clause external position. This is so because (34b) (his 15a) is ungrammatical. However, binding into the initial constituent is possible in (34c) (modelled on Hoekstra 1999: (19a)):

(34) a. Boeken lezen, dat doe ik niet.

    *books read, that do  I  not*

    'I don't read books.'

  b. *Ik doe niet boeken lezen.

     *I do not books  read*

  c. Elkaars  boeken lezen, dat doen ze  niet.

    *each other's books  read,* that *do*  *they not*

    'Read each other's books, they don't do that.'

Tentatively, De Clercq and Haegeman (this volume) adopt Hoekstra´s (1999: 65) position which is that the 'assumption that binding requires reconstruction to a simple c-command configuration might be mistaken'. We refer to his work for discussion.

In sum, we are forced to conclude that the initial element of the structure is clause-internal both when *så* is present and when it is absent. We further conclude that the initial element has been moved, regardless of whether or not *så* is present. In the next subsection, we consider why *så* has this effect on scope.

## 4.2    Restrictions on resumption

We have seen that fronted adverbial adjuncts without *så* have a broader interpretational scope than the clauses with *så* in second position. Why, then, does *så* ensure that scope is limited? Our observations above have led us to conclude that the basic derivational processes are the same in both cases. The source of the interpretational effect must be sought elsewhere.

Before we continue the discussion of scope, let us have a look at general restrictions on *så*-resumption. We have already seen that *så* may not follow arguments (unlike Fenno-Swedish, see Holmberg this volume, Meklenborg 2020a)

(35)    a.    *Hestene    **så** fikk ikke  drikke.

*horses.DEF* så *got  not    drink*

'The horses didn't get anything to drink.'

   b.    *Kattungene  **så** ga    de    bort.

 *kittens.DEF*   så *gave  they  away*

'They gave away the kittens.'

The only argument that may be followed by *så* is the indirect PP object (36a). However, if the indirect object is a pronoun, *så* resumption is ruled out (36b). It should be noted that the word order in (36b) would be ungrammatical also without the resumptive.

(36)　　a.　　*Til* meg **så** sa han at alt var i orden.

　　　　　　　*to me så said he that all was in order*

　　　　　　　'He told me that everything was ok.'

　　　　b.　　\*Meg **så** sa han at alt var i orden.

　　　　　　　*me så said he that all was in order*

　　　　　　　'He told me that everything was ok.'

However, the verb *give* would allow the indirect object to be fronted (37b), but still not allow the resumptive *så* (37c).

(37)　　a.　　*Han ga meg en bok.*

　　　　　　　He gave me a book

　　　　　　　'He gave me a book.'

　　　　b.　　*Meg ga han en bok.*

　　　　　　　me gave he a book

　　　　　　　'He gave me a book.'

　　　　c.　　\*Meg **så** ga han en bok.

　　　　　　　*me så gave he a book*

The difference between (36b) and (37b) follows from independent properties of the verbs *si* 'say' and *gi* 'give'.

　　　Furthermore, *så* may not follow *wh*-constituents, neither arguments nor adjuncts (38b).

(38)　　a.　　\*Hvem så kommer der?

*who* så *comes there*

'Who is coming?'

b.     \*Hvorfor så  sier du  ingenting?

*why*       så  *say you  nothing*

'Why don't you say anything?'

As a general rule, resumption with *så* takes place after adverbial antecedents, but only after free adverbials, (Faarlund 1992: 123; Faarlund, Lie, and Vannebo 1997: 817). Crucially, resumption is not available with adverbials required by the verb's argument structure.

(39)     a.     \*Fort **så** kjørte     han.

             *fast*  så  *drove*     *he*

        b.     \*Hjem **så**    gikk  de.

             *home så*   *went*  *they*

        c.     \*Godt **så** hørte    de.

             *well* så *heard*   *they*

It might be objected that the fronting of obligatory adverbials is difficult, even without the resumptive and that fronting requires special prosodic environments or syntactic structures. However, adding material will in most cases make the fronting of such adverbials acceptable. Nonetheless, adding the resumptive is not an option, as shown in (40b).

(40)     a.     ?*Fort  kjørte  han.*

             fast     drove  he

'He drove fast.'

b.    Fort    (\***så**) kjørte han, og    fortere (\***så**) snakket han.

*Fast*    så    *drove he,    and faster*    så    *spoke    he*

'He drove fast, and he spoke even faster.'

Summing up, we see that the ban on resumption in Norwegian falls into two categories (41).

(41)    a.    Fronting of *v*P elements (arguments, obligatory adverbials)

b.    Fronting of *wh*-constituents

However, the second ban may possibly be an epi-phenomenon. *Wh*-operators are arguments and they have been merged in the *v*P. As such, they are automatically ruled out following principle 1. In the case of *wh*-constituents that are not operators, we assume that they are base-generated in a left-peripheral position. Since we have argued that *så*-resumption is linked to movement, this derives the absence of *så* with base-generated elements. Put differently, we are left with the following, fundamental generalization: *Så*-resumption is not possible when *v*P elements are fronted. In what remains of this chapter, we will consider some of the implications of this generalization.

4.3    An apparent counterexample: Contrastive topics

There is, however, one apparent counterexample. The fronting of vP-elements followed by *så* is permitted if contrastive stress is added. While (42a) is impossible, (42b) is acceptable**.**

(42)    a.    \*Til skolen    **så** sykler jeg _.

<div align="center">

*to*    *school.DEF* så    *bike*    *I*

'I bike to school.'

</div>

     b.    Til   skolen     **så** sykler jeg _, men til butikken    tar jeg     buss _.

           *to*   *school.DEF* så *bike*    *I*     *but*   *to*   *store.DEF*   *take I*      *bus*

           'I bike to school, but I take the bus to the store.'

The fact that indirect object PPs may be fronted may possibly also have to do with the inherent contrastive reading of the structure. We leave this for future research (though see Helland et al. 2020; Meklenborg et al. 2021).

## 4.4 A phasal approach

In this sub-section, we will attempt to account for why *så* affects scopal interpretation as described above. Reframing the generalizations above, we have seen that *så* may not follow an element that has moved from the *v*P to the CP, and it may not follow an element that has been extracted from the embedded clause. We will explore an analysis related to phases and advance the proposal that *så*-resumption is bound by phases.

Phases are syntactic units of computation (Chomsky 2000, 2001, 2004, 2008, 2013; see Gallego 2012 for a comprehensive presentation and discussion). Syntactic structures are built phase-by-phase, whereby at the end of a phase, parts of the syntactic structure undergo spell-out to the phonological and semantic components, thereby becoming inaccessible to further syntactic operations. The typical phase heads are assumed to be C and *v*, and the literature diverges on the timing of spell-out – whether it is as soon as possible or whether it is delayed until the merger of the next phase head (cp. Chomsky 2000 vs. 2001). There is a lot of discussion concerning the technical aspects of phase-based structure building (see the papers in Gallego 2012); we set these aside for present purposes as the important factor for us is the

phase-based nature of the computation. Exactly how that works is less crucial, arguably different implementations can be applied to the data discussed in this paper.

Returning to our proposal, that *så*-resumption is phase-bound, this implies that while an element is free to move from one phase into the left periphery of a higher phase, *så*-resumption may only take place when the moved element has been base-generated in the same phase. This is why the presence of *så* induces a reduction of scope in the clauses we have investigated as *så* can only scope over the verb within the same phase. Let us consider how this would work. We assume that PPs are adjoined to the *v*P, which is to say that they are adjoined to the phase head. In (43a), the fronted PP may have been base-generated in the embedded CP and moves out of the *v*P and CP phases and into the matrix clause. Since this movement dependency spans multiple phases, it is not possible for *så* to be inserted, which means that either the lower or higher copy of the PP can be interpreted. In (43b), the insertion of *så* implies that the fronted element is clause-internal, which is to say that it may only modify the matrix clause verb.

(43)   a.   [CP [PP På bursdagen sin]  sa   John _ [CP at Martin ikke kunne komme _.]]
            *on birthday.DEF his.REFL   said John _    that Martin not could come _*
            'On his birthday he said that he could not come.'
       b.   [CP [PP På bursdagen sin] **så** sa John _ [CP at Martin ikke kunne komme. ]]
            *on birthday.DEF his.REFL* så *said John _ that Martin not could come*
            'On his birthday he said that he could not come.'

Next, we turn to obligatory adverbials, and here we find the same pattern. In (44), the fronted obligatory adverbial has moved from inside the *v*P, through the *v*P phase edge and into the CP. While this is possible given the appropriate prosody, *så*-resumption is impossible.

(44)   a.   *[<sub>CP</sub> Fort **så** kjørte   han [<sub>vP</sub> ~~fort~~ ]]

     *fast*   så *drove   he*

  b.   *[<sub>CP</sub> Hjem **så**   gikk   de [<sub>vP</sub> ~~hjem~~ ]].

     *home*   så   *went   they*


The reason why *så*-resumption is impossible here is that the movement dependency crosses

two phases, making it impossible for *så* to occur. We can state the following generalization as

in (45).


(45)   *Så*-resumption is only possible with movement within the same phase.


This generalization rules out resumption after arguments, *wh*-constituents, and it also

accounts for scope effects that occur when the resumptive is present.

An unresolved question relates to why certain contrastive topics also allow for *så*-

resumption. As we have seen, these are the only instances where *så* may occur after

obligatory adverbials and indirect PP objects. See Helland et al. (2020) and Meklenborg et al.

(2021) for further discussion of this issue.


## 5.   Conclusion


In this paper, we have discussed adverbial resumption in Norwegian, primarily focusing on

the generalized resumptive marker *så*. We have documented its distribution and also noted its

restrictions. In simple clauses, *så* may only occur after elements that have not been merged in

the vP. It is also excluded from occurring after hanging topics. Furthermore, we have been

concerned with the observation that if *så* is present, the fronted adverbial can only scope over

the main clause verb. We have expanded on this observation and provided a new analysis of why the adverbial resumptive marker has this effect. Our analysis suggests that *så*-resumption is restricted to movement within the same phase. Future crosslinguistic work will hopefully shed light on whether this is a fruitful way of analyzing adverbial resumption in other languages.

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[1] Diachronically the resumptive structure may be traced back to old Norse (Meklenborg 2020a).

[2] We set aside topic drop here; see Nygård (2018) for extensive discussion.

[3] For more general discussion of left dislocation across languages, see van Riemsdijk (1997), Alexiadou (2017), Ott (2014, 2015) and López (2016).

[4] An anonymous reviewer asks how we would treat imperatives like (i), where the clause-initial *så* seems to be semantically bleached.

(i)     **Så** bare ta den da!

        *så just take it then*

        'Just take it!'

Based on the account in the main text, this *så* in imperatives would also have to be argued to the clause-initial. We leave further exploration of this for future research.