

Invited tutorial on Norwegian grammar: Challenges for HPSG

Lars Hellan and Torbjørn Nordgård

Norwegian University of Science and Technology, Trondheim

Three areas of Norwegian grammar will here be presented^{1,2}: in section 1, diathesis, represented by the passive and the presentational constructions, in section 2 anaphora, represented by reflexives, and in section 3 certain phenomena related to the V2 pattern.

The discussion in sections 1 and 2 will be related to the construct *Argument Structure* (ARG-ST), as it is formulated, e.g., in Manning and Sag (1998), and there applied to phenomena of diathesis and anaphora across a number of languages. ARG-ST on this conception is a list of arguments of a given verb, ordered according to an 'obliqueness' hierarchy, where the position in the list determines the syntactic realization of the argument in question, and their relative positions in the list constrain the possibilities for two arguments to stand in an anaphoric binding relation.

The discussion in section 3 will address the question whether the analysis of root clauses in Norwegian should include a node 'C' hosting the finite verb, as advocated in many current analyses; we will propose that it should not, opening for a more 'construction'-based view of clause types.

This presentation being essentially a 'guided tour of interesting sites' of the language, our aim is not to provide conclusive argumentations or worked-out formalizations of the views presented. Moreover, the data presented are not new.³ What we hope to convey is still a perception of some areas of Norwegian grammar as constituting possible challenges to interesting proposals made in the HPSG literature, and at the same time, being amenable to interesting analyses within the HPSG framework.

I. Diathesis (passives and presentationals)

The shape of a Norwegian main, declarative clause (without particular permutations for topicalization purposes) is essentially as follows, with *tense* sitting on the first verb, and *adverbials* having the option of occurring right after the finite verb; the constituent order is rigid:

- (1)
- | | | | | | | | | | |
|---------|----------|---------------|----------|-------------------|-----------------------------------|-------------------|-----------------|-------|---------------|
| Subject | (Modal)* | (<i>ha</i>) | (Modal)* | (<i>bli</i>) | [_{VP} V _{main} | (Indirect object) | (Direct object) | (PP)* | (Adverbials)* |
| | | 'have' | | 'become' | | | | | |
| NP | | (V)* | | [_{VP} V | (NP) | (NP) | (PP)* | | (PP/AdvP)* |

¹ The authors wish to express their gratitude to the organizers of HPSG 2000 for the invitation to give this presentation. We are grateful to Dorothee Beermann for valuable discussion of many of the points presented.

² In most respects, Norwegian syntax is quite similar to that of the other Mainland Scandinavian languages. Our focus in the following will nevertheless be exclusively on Norwegian.

³ They are both very old, in having received scholars' attention for many, many years, and have in part received very detailed and in depth analyses, also in the generative tradition, although not much in HPSG. In referencing earlier work, we choose the highly unscholarly approach of not at all attempting to do justice to all the work that has been done, and not even to give a representative selection of titles, but simply mention a few works that can be consulted for further reference.

The possibility of multiple verb sequences is illustrated in (2):

- (2) Jon ville ikke ha kunnet bli sett på den tiden⁴
Jon would not have could be seen at that time

Case is marked only on personal pronouns, with a subject – non-subject distinction.

I.a. Passive⁵

In Norwegian, the passive verb morphology takes either of the forms in (3); the accompanying syntactic patterns are the same (*V* is the main verb):⁶

- (3) ... bli *V*-tt ...
... *V*-s ...

For the choice of subject in a passive construction, no less than four possibilities obtain:

- an expletive (in a presentational construction);
- an NP that in a corresponding active construction – whether mono-transitive or ditransitive - would be a direct object (DO);
- an NP that in a corresponding active construction would be an indirect object (IO);
- an NP that in a corresponding active construction would be a prepositional object.

To exemplify, corresponding to the active di-transitive clause (4), there are three possible passive counterparts, illustrating the first three options mentioned; these are given in (5); the fourth option is illustrated in (6) through (8):

- (4) Jon overlot Marit et stort ansvar
Jon 'gave' Marit a big responsibility

- (5) a. Det ble overlatt Marit et stort ansvar (presentational)
there was given Marit a big responsibility
b. Marit ble overlatt et stort ansvar ('promotion' of IO)
Mary was given a big responsibility
c. Et stort ansvar ble overlatt Marit ('promotion' of DO)
a big responsibility was given Marit

'Promotion' of a prepositional object ((6)-(8)):

- (6) a. Jon snakket om Marit
Jon talked about Marit

⁴ An idiomatic English translation of this sentence would run something like:
'It would not have been the case that Jon could have been seen at that time'.

⁵ This construction has received extensive treatment over the years. A possible point of reference is Åfarli (1992), in the GB framework.

⁶ The fact that a single inflection (-s) suffices to mark the construction as passive, counts against one of the approaches to passives, in particular German passives, that construes the generative mechanism as residing in selection by the auxiliary verb (cf., e.g., Pollard (1994)).

- b. Marit ble snakket om
Marit was talked about
- (7) a. Vi skiftet bleier på barna
we changed napkins on the children
b. Barna ble skiftet bleier på
the children were changed napkins on
- (8) a. Vi snakket med Marit om Jon
we talked with Marit about Jon
b. ?? Jon ble snakket med Marit om
Jon was talked with Marit about
c. Vi snakket om Jon med Marit
we talked about Jon with Marit
d. * Marit ble snakket om Jon med
Jon was talked with Marit about

(7b) shows that 'promotion' of a prepositional object is possible also if the PP occurs after a direct object, and (8) that it is possible also if the PP occurs after a PP, as long as the NP in the preceding PP is 'higher' on a thematic role hierarchy than that of the promotee. From (5b,c) it is clear that direct arguments (IO and DO) promote equally well from first and second position, thus instantiating the pattern of 'symmetric passive'.

These patterns are summarized in Fig 1, where the ordering in the ARG-ST list reflects obliqueness command,⁷ and the 'active subject' argument has been omitted: either *i* or *j* can be realized as SUBJECT, no matter whether they are NPs or PPs:⁸

(Fig 1) Partial template for verbs with passive morphology:

$$\left[\begin{array}{l} \text{VALENCE} [\text{SUBJECT} : x] \\ \text{ARG-ST} : \langle i, j, k, \dots \rangle \end{array} \right] \quad (x = i \text{ or } j)$$

⁷ The notion used in Manning and Sag (op.cit.) is 'a-command', an extension of 'o-command' from Pollard and Sag (1994) to include thematic hierarchical relations. Since 'o-command' is the more used label, we employ it here, but with the 'a-command' definition, which is roughly as follows:

X o-commands Y (i) if X is an NP and Y is a PP; (ii) if they are both PPs, and X has a theta-role higher on a (theta-role) hierarchy than Y. The latter presumably holds also if they are both NPs, although the relative ordering of indirect and direct object is an issue to be discussed later.

⁸ Corresponding to the 'or', there would be two distinct schemata. We will not question here the assumption in Manning and Sag (1998) that the passive construction is formed by a lexical rule; fig.1 may be thought of as standing for what is *produced* by such a rule. (Our formulation differs from certain aspects of the formulation in Manning and Sag (op. cit.) in ways which have no bearing on the present discussion.)

I.b. Presentationals⁹

(5a) is an instance of the *Presentational construction*. Formally speaking, this construction has the following properties:

- i) the subject is the expletive *det* (alternatively *der*, as in Danish)
- ii) if an NP occurs in the DO slot (cf. (1)), it must be *indefinite*.

The whole array of constituents represented in (1) can otherwise occur, giving the schema (9) for the presentational construction:

(9) Informal template for the Presentational construction:

Subject (Modal)* (*ha*) (Modal)* (*bl*) [_{VP} V_{main}] (Indirect object) (Direct object) (PP)* (Adverbials)*
det NP
[-def]

The choice of NP in the DO slot is governed by the following principle: *an NP which could occur as subject, has an alternative realization in the direct object position, with det as subject. A crucial condition is that no other argument in the construction has a claim on the DO position.*

(10) illustrates these principles with an intransitive verb:

- (10) a. En katt sitter i trappen
a cat sits in the stairs
- b. Det sitter en katt i trappen
there sits a cat in the stairs
- c. * Det sitter katten i trappen
there sits the cat in the stairs

(11) illustrates with a transitive construction, however one with a clearly 'unaccusative' flavor, in that the subject is highly non-agentive, and the object patterns up as an IO in the presentational version (b):

- (11) a. Dårlige nyheter ventet Ola
bad news awaited Ola
- b. Det ventet Ola dårlige nyheter
there awaited Ola bad news
- c. * Det ventet Ola de dårlige nyhetene
there awaited Ola the bad news

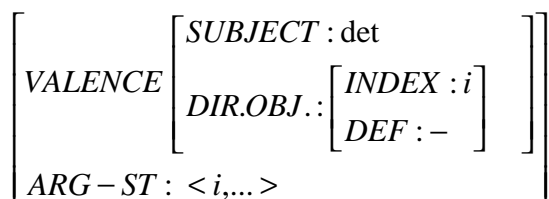
(12) and (13) further illustrate with passive patterns, the ditransitive verb in (13) inducing distributions parallel to those in (11):

⁹ As in the case of passives, this construction has a very long tradition of analysis, and has been extensively treated also in generative frameworks. A recent discussion is Lødrup (1999).

- (12) a. Flere fisker ble fortært
many fishes were devored
b. Det ble fortært flere fisker
There were devored many fishes
c. * Det ble fortært fisken
there was devored the fish
- (13) a. Et stort ansvar ble overlatt Marit
a large responsibility was given Marit
b. Det ble overlatt Marit et stort ansvar (= (5a))
there was given Marit a large responsibility
c. * Det ble overlatt Marit det største ansvaret
there was given Marit the largest responsibility

A first approximation to a template for the construction might go as follows (the VALENCE attribute represents concrete syntactic positions, not the functions more abstractly; in its coverage of the passive constructions, we again presuppose that the 'agent' argument is not on the ARG-ST list of a passive verb form):

Fig. 2



In contrast to the constructions in (11) and (13), a plain transitive construction like (14a) has no presentational counterpart ((14b,c)):

- (14) a. En mann sparket ballen
a man kicked the ball
b. *Det sparket en mann ballen
there kicked a man the ball
c. *Det sparket ballen en mann
there kicked the ball a man

Although (14c) here looks superficially similar to the patterns in (11b) and (13b), the difference is that *ballen* in (14) is in a clear sense earmarked for the DO position, whereas *Jon* in (11b) and *Marit* in (13b) are not, and in effect are seen to occur in the canonical IO position. An amendment of Fig. 2 is clearly needed to prevent (14b,c), but it is not obvious what this amendment should be. Simply stating that *i* be the sole argument on the list, would rule out (14b,c), but would also rule out (11b) and (13b). A distinction will thus have to be made between arguments getting realized as DOs and arguments getting realized as IOs. However, since ARG-ST articulates only in terms of *position* in the list, and both *ballen* in (14b,c) and *Jon/Marit* in (11b)/(13b) are presumably number two in their respective lists, some extra representational machinery will seem needed.

One possibility might be to break the ARG-ST list into a list of *two* lists, the first consisting only of subject and direct object arguments (they might be called the *core arguments*, and the list the 'core list'), and the second would start with indirect objects, if any, and further

include oblique arguments (and be called the 'non-core list'); see illustration in (16b) below. The template for presentationals would then require that *the core list consists of only one member*.

Another possibility might be to highlight DO arguments in of the ARG-ST list by, under an additional attribute, representing them as *designated DO-arguments*, a move modelled on the suggestion in Davis and Koenig (1998) and Koenig (1999) of representing certain first-members, and thus subjects, as 'Designated argument'. This is a label marking those subjects in active-verb ARG-STs which can be 'demoted' in passive, clearly a subset of all possible subjects.

The case for earmarking subjects as to whether they are passive-demotable or not (i.e., whether the verb passivizes or not), can be made also in Norwegian. Thus, the use of *vente* ('await') instantiated in (11) does not allow passive, so that its subject *dårlige nyheter* would not qualify as 'designated argument'. This, however, does not mean that subjects in presentationals are generally not 'designated', since, e.g., *sitte* in (10) does allow passive, as in (15a) ((15b) is here included to show that in a passive presentational, the 'active' subject has no possibility of appearing in the DO position):

- (15) a. Det ble sittet i trappen
 There was sat in the stairs
 b. * Det ble sittet en katt i trappen
 There was sat a cat in the stairs

The strategy of augmenting ARG-ST with 'designated arguments' would thus, in our present setting, involve both certain subject arguments and all direct object arguments, so that the ARG-ST of a normal (passivizable) transitive verb would look schematically like (16a) below. The formal condition on presentationals, on this approach, will be that *no argument in the ARG-ST list can be identical to the DESIG-OBJ*.

- (16) Possible amendments of ARG-ST, illustrated for ditransitive constructions (in both (a) and (b), we include the accompanying VALENCE specification, which bears on the actual syntactic positions).

- a. Through designated arguments:

$$\begin{array}{l}
 \text{ARG-ST : } \left[\begin{array}{l} \text{DESIG-SUBJ : } i \\ \text{DESIG-OBJ : } j \\ \text{ARG-list : } \langle i, \dots, j \dots \rangle \end{array} \right] \\
 \\
 \text{VALENCE : } \left[\begin{array}{l} \text{SUBJ : } i \\ \text{DO : } j \\ \text{IO : } k \end{array} \right]
 \end{array}$$

b. Through a 'double list':

$$\begin{array}{l}
 \text{ARG-ST} : \llangle \langle i, j \rangle, \langle k, \dots \rangle \rrangle \\
 \text{VALENCE} : \left[\begin{array}{l} \text{SUBJ} : i \\ \text{DO} : j \\ \text{IO} : k \end{array} \right]
 \end{array}$$

The double-list alternative would retain the obliqueness hierarchy, in that all items on the core list rank higher than items on the non-core list, and each list is obliqueness-ordered intrinsically. This has as a consequence that DO arguments now precede IO arguments on the 'total' list. This again conflicts with standard proposals based on English, which however are partly based on the circumstance that in ditransitive constructions in English, only IO can be 'promoted' in a passive version; as we have seen, there is no such requirement in Norwegian.

These are only loose sketches of two alternative ways of representing the presentational construction, each with some innovative features in the general design of ARG-ST. The next section will provide a possible reason for preferring among them (II.a).

Before ending the section, let us note another desideratum for the analysis of both passives and presentationals, namely that as construction types, they should be represented as compatible, with a 'join', i.e., combination, instantiated in those constructions which are both passives and presentationals, like (12), (13) and (15a). A minimal amendment of the Passive template Fig. 1 to this effect will be to allow for lack of promotion, as in Fig. 1' below, where the consequences of the discussion of the form of ARG-ST are otherwise ignored for the moment; clearly, this structure can combine (unify) with Fig. 2, the rudiment of a template for presentationals, and this compatibility would need to be preserved in whatever amendments of the templates are eventually chosen.

(Fig 1') Partial template for verbs with passive morphology, revised:

$$\left[\begin{array}{l} \text{VALENCE} [\text{SUBJECT} : x] \\ \text{ARG-ST} : \langle i, j, k, \dots \rangle \end{array} \right] \quad (x = i \text{ or } j \text{ or } \emptyset)$$

An interesting case of the interaction between passives and presentationals is still not accounted for. (7b), repeated as (17a), does not have a wellformed counterpart with a definite DO, cf. (17b):

- (17) a. Barna ble skiftet bleier på
 the children were changed napkins on
 b. * Barna ble skiftet bleiene på
 the children were changed the napkins on

The regularity here is that when a prepositional object is 'promoted' across a DO, then this DO has to be indefinite, *as if* this were a presentational construction. That is, it is 'as if', in (17a), an

expletive is covertly holding the subject position, and *barna* has some formal role distinct from subject. However, by all other subject criteria of the language, *barna* is a subject in (17). This problem we leave unsolved.

II. Reflexives¹⁰

Norwegian has two monomorphemic words that are inherently reflexive, namely *selv* 'self', and *seg*, with the genitival form *sin*. *Seg* and *sin* are 3rd person forms, functioning like personal pronouns and possessive adjectives, and in 1st and 2nd person coinciding in form with their non-reflexive counterparts. In our analysis, they may be assigned a feature '[+Refl-I]'. *Selv* is a constant form in person and number, and may correspondingly be associated with a feature '[+Refl-II]'. These words may occur by themselves, but may also combine, in 3rd person as the anaphor *seg selv*.

The items listed in Fig 3 below may be called *anaphors*, with a feature composition reflecting the presence or absence of the word forms mentioned; the word forms may be referred to as *anaphoric elements*.

(Fig 3)

NP	NP	NP	NP	NP
+Refl-I	+Refl-I	+Refl-I	-Refl-I	-Refl-I
-Refl-II	-Refl-II	+Refl-II	+Refl-II	-Refl-II
	+Poss			
<i>seg</i>	<i>sin</i>	<i>seg selv</i>	<i>ham selv</i>	<i>ham</i>
'him/herself'	'his/her own'	'him/herself'	'himself'	'him'

These reflexive elements are associated with different conditions for wellformedness, as will now be shown. The licensing conditions on the *anaphors* are, in each case, the union of the conditions associated with the presence or absence of *seg* and *selv*.¹¹

II.a. Selv

The conditions associated with *selv* are fairly similar to those holding for English *self*, illustrated in (18) (with antecedent and anaphor in boldface):

- (18) a. **Jon** fortalte oss om **seg selv**
 Jon told us about himself

¹⁰ These phenomena have a long tradition of analysis, and have also been extensively treated in generative frameworks, thereunder Hellan (1988, 1991) in a GB-oriented analysis, and Dalrymple (1993) from an LFG viewpoint.

¹¹ So-called disjointness effects, represented by the '-'-features in Fig. 3, are treated extensively in Hellan (1988), and will not be addressed here.

- b. Vi fortalte **Jon** om **ham selv**
 we told Jon about himself
- c. **Jon** ba oss snakke om **seg/ham (*selv)**
 Jon asked us to talk about himself

The licensing constellation for the *selv* anaphor is one where the antecedent and the anaphor are *co-arguments*. On the standard assumptions mentioned earlier, this aspect of their behavior can be encoded through a template where they occur in the *same* ARG-ST list. A further condition is that the antecedent *o*-commands the anaphor; the validity of this condition is illustrated in (19), assuming that the interlocutor role ranges higher on the obliqueness hierarchy than the item talked about, and the condition is formally stated through ordering the anaphor later in the ARG-ST list than the antecedent, cf. the template Fig 4, where the feature '[bound by: i]' identifies the antecedent by its token-index *i*.

- (19) a. Vi snakket med **Jon** om **ham selv**
 we talked with Jon about himself
- b. *Vi snakket om **Jon** med **ham selv**
 we talked about Jon about himself

Fig 4 < ..., [i]NP, ..., NP [+Refl-II, bound by: [i]], ...>

What rules out the version with *selv* in (18c) under this analysis is that the item *seg selv/ham selv* is not visible in the list where *Jon* appears, this list consisting of the subcategorized-for list of arguments '<Jon, oss, VP>', where the VP 'non-transparently' contains *seg selv/ham selv*.

This treatment of *selv* conforms with the treatment of English *self* proposed in Manning and Sag (op.cit.), and provides a case where the assumptions governing the construct ARG-ST yield a straightforward account of the phenomena.

With the assumption that the antecedent precedes the anaphor in the ARG-ST list, we can now determine the relative order of IO and DO on this list, a matter we have so far left open. The examples in (20) show that *IO must precede DO*, according to this criterion:

- (20) a. Djevelen ga **Ola ham selv** tilbake
 the devil gave Ola himself (Ola) back
- b. *Djevelen ga **ham selv Ola** tilbake

This ordering, however, conflicts with the ordering posited in the 'double list' approach of the preceding section, illustrated in (16b): that ordering crucially places DO before IO in the hierarchy. To the extent that the analysis of presentationals is to be consistent with what is assumed concerning anaphors, it is therefore only the approach illustrated in (16a), involving multiple designated arguments in ARG-ST, which can be maintained.

II.b. Seg

We now turn to *seg*-reflexives. We first consider the data in (21) (with partial repetitions from (18)), some showing the complex anaphor *seg selv*, some the simple form *seg*¹² and its possessive variant *sin*:

- (21) a. **Jon** fortalte oss om **seg selv**
Jon told us about himself
- b. *Vi fortalte **Jon** om **seg selv** (ok: ham selv)
we told Jon about himself
- c. *Vi fortalte **Jon** om landsbyen **sin** (ok: hans)
we told Jon about his village
- d. **Jon** ba oss snakke om **seg**
Jon asked us to talk about himself
- e. **Jon** hørte oss snakke om noen venner av **seg**
Jon heard us to talk about some friends of him
- f. **Jon** hørte oss snakke om noen venner av **sine** foreldre
Jon heard us to talk about some friends of his parents

(21d) shows that the co-argument requirement operative for *selv* does not apply to *seg*; in the formal analysis, this means that the binder-bindee relationship in (21d) does not fall under the scope of an ARG-ST list as in Fig 4, since, in the ARG-ST list where *Jon* occurs, *seg* is non-transparently contained in the VP *snakke om seg*; *seg* itself is on the ARG-ST list only of *snakke*. In (e) the reflexive is one step further embedded, namely on the ARG-ST list of *venner* ('friends'), and in (f) even one step further embedded, now on the ARG-ST list of *foreldre* ('parents'). The relation is still not unrestricted – (22), where a tensed clause boundary intervenes, is impossible:

- (22) * **Jon** ba om at vi snakket om **seg**
Jon asked that we talked about him

This raises the question whether ARG-ST is the appropriate place for stating conditions for *seg*-reflexives.

A further feature apparently indicated by (21) is that *seg*-reflexives can only be bound by subjects. At the outset, this might seem straightforwardly representable in terms of ARG-ST. It is to be noted, however, that what is required of the binder is only that it somehow functions as a 'logical subject', while its formal function may well be that of direct object; (23) illustrates this possibility (and contrasts otherwise minimally with (21b,c)):

- (23) a. Vi gjorde **Jon** stolt av **seg selv**
We made Jon proud of himself
- b. Vi skremte **Jon** bort fra landsbyen **sin**
We scared Jon away from his village

Stated more succinctly, the apparent 'subject' condition on *seg/sin* is as follows:

¹² As a simple form, *seg* has two radically different uses: one 'long distance', to be discussed here, and one 'short distance' where its argument status is arguably deficient to a greater or lesser extent; one example of the latter type is the expression *skamme seg* 'be ashamed'. We will not discuss this type here.

- (24) Predication condition on *seg*:
A +Refl-I-anaphor must be contained in a syntactic constituent C such that C is understood as predicated of the binder.

It is not likely that ARG-ST will be the optimal locus for a template stating such a relationship. For instance, in the ARG-ST list of *skremme* in (23b), which might be the three-membered list (25),

- (25) <vi, Jon, [bort ...]>

the part '[bort...]' now in addition would have to be represented as *predicated* of the binder 'Jon'. Obviously, the comma between 'Jon' and '[bort...]' does not carry such an interpretation.

Since the predication condition (24) cannot, at least straightforwardly, be stated in terms of ARG-ST, and binder and bindee may generally be too far apart to fit into the same ARG-ST list, our tentative conclusion will be that *seg*-reflexives are not licensed on ARG-ST.

What, then, will the locus for representing *seg*-reflexives be? In view of the tensed S condition illustrated in (22), a conceivable mechanism would be percolation of a feature like (26) in the syntactic structure (i.e., the structure constructible from the 'daughters' attribute in current HPSG formalizations), a percolation that would not be allowed to pass through a tensed S node:

- (26) 'bindable: NP_i[+Refl-I]'

Such a strategy may be supported by the fact that the binding mechanism will have to interact with the mechanism accounting for topicalization (i.e., the 'slash' feature), in view of constructions like (27a), where the reflexive sits in a topicalized VP, but is bound by an NP inside the clause, and is licensed by the circumstance that its 'in situ' location (indicated in (27b)) satisfies the normal requirements on *seg* as a 'long distance' anaphor vis à vis the binder *Jon*:

- (27) a. Sett meg sikte på **seg** vet jeg at **Jon** ikke har
 Seen me aim at REFL know I that Jon not has
 'seen me aiming at him, I know that Jon hasn't'
 b. Jeg vet at **Jon** ikke har sett meg sikte på **seg**
 I know that Jon not has seen me aim at REFL
 'I know that Jon has not seen me aiming at him'

Without trying to detail the situation for *seg*-binding any further, we maintain that the envisaged role of ARG-ST as a *sole* level of representation relevant to the licensing of anaphors cannot be sustained. The word 'sole' may here be stressed, since the results concerning *seg* need not entail that the locus of the template for licensing of *selv*-reflexives has to be changed. Since a *seg*-reflexive and a *selv*-reflexive may be instantiated in one and the same anaphor, however, so that the conditions on this complex anaphor is the combination of the conditions on *seg* and *selv* separately, this means that different aspects of an anaphor may have to be licensed by reference to different parts of the over-all representation.

With this as a tentative conclusion concerning the principles and mechanisms relevant to the licensing of anaphors, we make a final remark concerning ARG-ST. To the extent that the articulation of ARG-ST as a *list* is motivated to a significant extent by the assumptions that (i) it

is the sole level of representation relevant to the licensing of anaphors, and (ii) anaphora is significantly governed by o-command, the above conclusion may seem to possibly weaken the motivation for this articulation of ARG-ST as a list. Our observation at the end of the section on *selv*, moreover, goes in the same direction, since even to fulfill its intended roles in the diathesis domain, ARG-ST needs to have its list part supplemented by the more direct function-identifying attributes 'designated (subject) argument' and 'designated direct object', as illustrated in (16a).¹³ A more careful assessment and formalization of these consequences, however, will have to wait for another occasion.

III. V2 and 'Object shift'

The clause pattern stated in (1), repeated below, may be referred to as the *Core Root Clause*¹⁴ in Norwegian:

(1) The *Core Root Clause* in Norwegian:

Subject	(Modal)*	<i>(ha)</i>	(Modal)*	<i>(bli)</i>	[_{VP} V _{main}	(Indirect object)	(Direct object)	(PP)*]	(Adverbials)*
NP	(V)*		[_{VP}	V	(NP)	(NP)	(PP)*]	(PP/AdvP)*	

Conditions:

- Finiteness (= Tense) sits on the **first verb**
- Sentence adverbs, as well as heavier adverbials, occur right **after** the finite verb

An *Embedded* clause differs from the Core Root Clause in two respects:

- Sentence adverbs, as well as heavier adverbials, occur right **before** the finite verb, rather than after the finite verb.
- A complementizer precedes the subject.

The italicized part of (28) exemplifies an Embedded clause (differing minimally from (2) above), with the items just mentioned given in boldface:

(28) De sa **at** Jon **ikke** ville ha kunnet bli sett på den tiden
 They said that Jon not would have could be seen at that time

While there is essentially just one pattern for Embedded clauses, root clauses have other patterns beside the Core root clause. Among these are (what we will call):

- the *Inverted Root Clause* (cf. (29a)), obtained from (1) by inverting the order between subject and the finite verb, and used in 'yes-no'-questions;
- the *Extended Root Clause*, obtained from the Inverted Root Clause by preposing a topicalized element ((29b)) or a *wh*-item ((29c))

(29) a. Sover Jon?

¹³ In this version, ARG-ST may seem to acquire some similarity with the LFG f-structure representation of arguments, although only partially.

¹⁴ The use of capital initials here and below is a way of marking that what is referred to are construction types as formal/theoretical entities.

- sleeps Jon
- b. Nå sover Jon
now sleeps Jon
- a. Hva leser du?
what read you

Norwegian is generally conceived as being among the languages that exhibit the so-called 'V2' ('Verb second') pattern. Among the clause types now mentioned, this pattern is instantiated only in the Core Root clause ((1)) and in the Extended Root clause. A quite widespread view, especially in the GB literature, is that the latter realize the same abstract structure, and that all of the types are interlinked through a simple mechanism: The 'basic' structure is reflected in the Embedded clause, with the complementizer holding a functional position in principle open to heads with designated functions, viz. complementizers and exponents of tense. This position is commonly labelled 'C', originally for 'complementizer', but one may think of it rather as 'cameleon', since both complementizers and verbs can fill it. The Inverted Root Clause is derived from this base by moving the finite verb to the C position. The remaining two types are derived by in turn moving any XP constituent, be it the subject or some other XP, to the left of C (occupied by V_{fin}).¹⁵

A prediction concerning the placement of adverbials on this account is that in Inverted Root Clause, they must succeed the subject, and likewise in Extended Root Clauses. In effect, however, light adverbials, like the negation adverb *ikke* 'not', will precede a subject NP, unless this NP is itself a pronominal with particular light stress (or the adverb receives particular stress). This is demonstrated in (30) for Inverted Root Clause and (31) for Extended Root Clause (of the topicalized type – the same grammaticality patterns obtain with wh-items fronted). If both the NP and the adverbial are of the 'heavy' type, both orders seem possible. In the examples, 'a' is a particular light form of *henne* 'her'.

- (30) a. Sover ikke Jon?
sleep not Jon
- b. *Sover Jon ikke?
sleep Jon not
- c. *Sover ikke 'a?
sleep not she
- d. Sover 'a ikke?
sleep she not
- e. Sover Jon ofte?
sleep Jon often
- f. Sover ofte Jon?
sleep often Jon
- (31) a. Om kvelden sover ikke Jon
in the evening sleep not Jon
- b. *Om kvelden sover Jon ikke
in the evening sleep Jon not
- c. *Om kvelden sover ikke 'a
in the evening sleep not she
- d. Om kvelden sover 'a ikke

¹⁵ A similar mechanism is proposed also in the pre-generativist work of Diderichsen, cf. Diderichsen (1962).

- e. in the evening sleep she not
 Om kvelden sover Jon ofte
 in the evening sleep Jon often
- f. Om kvelden sover ofte Jon
 in the evening sleep often Jon

Thus, while in an Embedded clause the order between subject and adverbial is strict and unaffected by the parameters of lightness now mentioned, a totally different situation of flexibility and ranked options arise when the verb is allegedly 'moved'. This detracts from the plausibility of a movement analysis, whose virtue would be that everything except the particular item moved should remain constant. These data thus question the adequacy of a movement-to-C analysis of the finite verb, or more generally, an analysis which posits occurrence in C vs. 'inside' the clause as an exhaustive parameter for distinguishing embedded clauses from root clauses.

A fortiori, this point detracts from the plausibility of viewing the *Core* Root Clause as an instance of verb placement in C, since in this case there is no factor of topicalization or other 'marking' that aligns the construction with the Extended Root Clause of the topicalization type.

An alternative approach may be as follows. The Embedded Clause, the Core Root Clause and the Inverted Root Clause are counted as distinct types,¹⁶ with the Extended Root Clause as a subtype of the Inverted Root Clause. The *Inversion* is seen relative to the Core Root Clause, as an instance where the subject has to find its place to the right of the finite verb, thereby entering into a competition situation with the adverbial, whose standard location is also next to the finite verb. As illustrated in (30/31e,f), this situation may result in free ordering when the constituents are both of 'normal weight', but otherwise light adverbs take precedence (linearly) over full NPs, and light pronominals in turn take precedence over adverbs (of any weight). A reason for the latter is that light pronominals in general prosodically encliticize to the immediately preceding constituent, whatever its category, except to adverbials. With this exception as the only stipulation of analysis, one predicts that whenever the available (immediately preceding) host for the pronominal is a finite verb, the pronominal will occur attached to the verb, and hence precede the adverb. This analysis is confirmed by the circumstance that light pronominals can appear not only as subjects, but also as indirect and direct objects, and when the main verb to which they are complements is also the finite verb, they follow exactly the same pattern of preceding the adverb, as shown in (32a,b) (where 'a' is the same feminine light pronoun as above, and 'n' is its masculine counterpart); (32c,d) shows the behavior of cliticization to the immediate left also when the host is not the finite verb:

- (32) a. Jeg ga'a'n ikke
 I gave her it not
- b. *Jeg ga-ikke-a'n
 I gave not her it
- c. Jeg hadde gitt'a'n
 I had given her it
- d. Han satt under'n
 he sat under it

¹⁶ We here follow the approach of Construction Grammar, as formulated, e.g., in Fillmore (1998).

If the subject is inverted relative to a pattern like (32a), it precedes the object pronouns; in case it is itself 'weak' it forms a cluster with them ((33a)), and otherwise the same weight principles apply as above:

- (33) a. Ga'n'a'n (ikke)?
Gave he her it (not)
- b. Ga (ikke) Jon'a'n (*ikke/^{OK}ofte)?
Gave (not) Jon her it (not/often)
- c. Ga (ikke) Jon Marit boken (*ikke)?
Gave (not) Jon Marit the book (not)

The phenomena illustrated in (32)/(33) have, in the GB literature, received extensive analysis in terms of movement of the pronouns, on a basic assumption that finite verbs always move to a C position; the accompanying movement of pronouns has been referred to as 'Object shift'.¹⁷ The present proposal amounts to having no relocation of the pronominal elements at all, but just a constraint on adverbs to the effect that they may not intervene in a cliticization cluster.

A crucial assumption of this analysis is, thus, that there is no pivotal position C in root clauses; subject-verb-inversion is a matter of simply that, with a situation of competition arising between adverbs and the subject for the position immediately next to the finite verb.

Corroborative evidence for the elimination of C as a pivot for root clause construction formation, in favor of recognizing the patterns surveyed as somehow basic by themselves, comes from a number of Norwegian dialects spoken along the West coast and from the Trondheim area and north (cf. Nordgård (1986)). In these dialects, the formation of constituent questions follows a 'V3' pattern rather than V2, coinciding with the Embedded clause type used for embedded questions (both in these dialects and in the standard language). In the western dialects, this pattern obtains with non-subject wh-constituents of any complexity, while in northern dialects, it obtains only when the fronted wh-constituent is *unisyllabic*, as shown in (33a) vs. (33b,c).¹⁸ Moreover, in northern dialects, a subject wh-item is followed by the item *som*, again like in embedded clauses.

- (33) a. Kor du bor?
where you live
'Where do you live?'
- b. *Korfra du kommer?
from where you come
'Where do you come from?'
- c. Korfra kommer du?
from where come you
'Where do you come from?'
- d. Kæm som kom?
who that came
'who came?'
- e. Kæm (*som) du så?
who that you saw
'who that you saw?'

¹⁷ See particularly Holmberg (1986) and later works. Hellan and Platzack (1995/2000) gives an overview of the phenomenon in Scandinavian.

¹⁸ This phonological dependency will thus be part of the constructional template representing the construction type.

More precisely speaking, what these examples indicate is that there is no particular syntactic pattern earmarked for conveying the illocutionary force of constituent questions – from a small number of clausal patterns, some dialects may choose one pattern, others another. To the extent that the motivation for a C-node might reside in part in its association with a particular function such as carrying a specific illocutionary force, the lack of such a correlation then correspondingly detracts from that motivation.

These remarks are still purely programmatic as far as the details of the suggested analysis are concerned. However, it may seem that notions like free ordering in limited domains, with restricted linear precedence relations between certain categories inside the domain, can receive articulated formulations within the framework developed in works such as Kathol (2000) and Reape (1993); HPSG therefore offers a promising frame for the development also of this approach.

Short bibliography

Dalrymple, Mary (1993) *The Syntax of Anaphoric Binding*, Stanford: CSLI Publications

Davis, Anthony and Jean-Pierre Koenig (1998) *Lexical Semantics and Linking Constraints in the Hierarchical Lexicon*. Ms.

Diderichsen, Paul (1962) *Elementær Dansk Grammatik*. Copenhagen: Gyldendal.

Fillmore, Charles J. (1998) Inversion and Constructional Inheritance, in Webelhuth, Gert, & al. (eds).

Hellan, Lars (1988) *Anaphora in Norwegian and the Theory of Grammar*. Dordrecht: Foris Publications.

Hellan, Lars (1991) Containment and connectedness anaphors, in Koster, Jan and Eric Reuland *Long-distance anaphora*. Cambridge: Cambridge University Press.

Hellan, Lars and Christer Platzack (1995/2000) Pronouns in Scandinavian Languages: An Overview, in *Working Papers in Scandinavian Syntax*. Volume 56, and in Riemsdijk, Henk van (ed) *Clitics in the Languages of Europe*, Berlin: Mouton de Gruyter, 123-44.

Holmberg, Anders (1986) *Word Order and Syntactic Features in the Scandinavian Languages and English*. Unpublished doctoral dissertation, University of Uppsala.

Kathol, Andreas (1995) *Linearization-Based German Syntax*. Doctoral Dissertation, Ohio State University.

Koenig, Jean-Pierre (1999) *Lexical Relations*, Stanford: CSLI Publications.

- Lødrup, Helge (1999) Linking and Optimality in the Norwegian Presentational Construction, ms., Stanford.
- Manning, Christopher D. and Ivan A. Sag (1998) Argument Structure, Valence and Binding. In *Nordic Journal of Linguistics*, 21, 107-144.
- Nordgård (1986) COMP-features and Word Order, 1986. *Proceedings of the Ninth Scandinavian Conference of Linguistics*, Stockholms Universitet.
- Pollard, Carl J. and Ivan A. Sag. (1987) *Information –Based Syntax and Semantics*. Stanford: CSLI Publications.
- Pollard, Carl J. and Ivan A. Sag. (1994) *Head-Driven Phrase Structure Grammar*. Chicago, IL: University of Chicago Press.
- Pollard, Carl J. (1994) Towards a unified account of passive in German. In *German in Head-Driven Phrase Structure Grammar*, ed. by John Nerbonne, Klaus Netter & Carl Pollard, 273-296. Stanford: CSLI Publications.
- Reape, Mike (1993) A Formal Theory of Word Order: A Case Study in West Germanic. Doctoral Dissertation, University of Edinburgh.
- Webelhuth, Gert, Jean-Pierre Koenig & Andreas Kathol (eds) (1998) *Lexical and Constructional Aspects of Linguistic Explanation*, Stanford: CSLI Publications.
- Åfarli, Tor A. (1992) *The Syntax of Norwegian Passive Constructions*. Amsterdam/Philadelphia: John Benjamins Publishing Company.