

Topics in Comparative Scandinavian and Germanic Syntax

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3a. IP, I°, and V°-to-I° movement

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1. The functional category I° and the lexical category V°

We distinguish between two types of X°-elements:

- **Lexical** elements are N°, V°, P°, Adj°, and Adv°
(nouns, verbs, prepositions, adjectives, and adverbs, i.e. open classes)
- **Functional** elements are e.g. inflectional endings or articles, demonstratives, conjunctions,
(i.e. closed classes)

The constituent that we call e.g. a main verb often contains two parts, a stem and an ending:

(1) a. **Modern English**

STEM	SUFFIXES
hear-	-s
	-d
	-ing

b. **Middle English (14th & 15th cent.)**

STEM	SUFFIXES
her-	-est 2 SG PRESENT
	-eth 3 SG PRESENT
	-en PLURAL PRESENT
	-de 1/3 SG PAST
	-dest 2 SG PAST
	-den PLURAL PAST
	-d PAST PARTICIPLE
	-ing PRESENT PARTICIPLE

c. **French**

STEM	SUFFIXES
entend-	-(s) SG PRESENT
	-ons 1 PL PRESENT
	-ez 2 PL PRESENT
	-ent 3 PL PRESENT
	-ait 2/3 SG PAST
	-ions 1 PL PAST
	-iez 2 PL PAST
	-rai 1 SG FUTURE
	-ra 2/3 SG FUTURE
	-rons 1/3 PL FUTURE
	-rez 2 PL FUTURE
	-ant PRESENT PARTICIPLE
	-u PAST PARTICIPLE
	-re INFINITIVE
	...

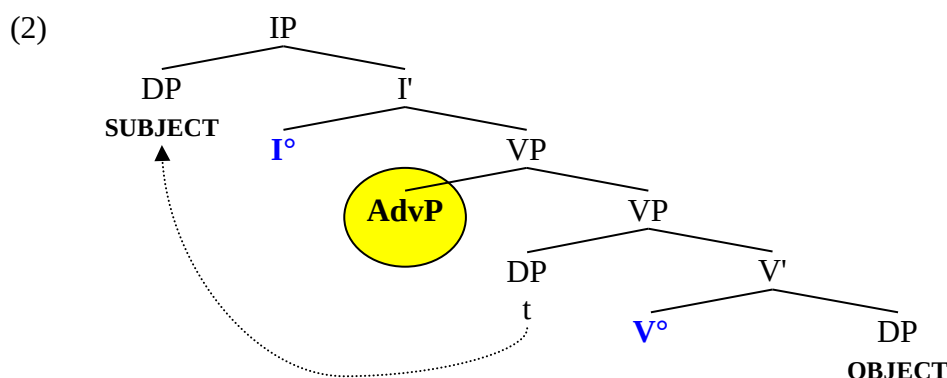
You may also want to consider more complete table of verbal inflection in three different stages of English in French, in Scandinavian and in Yiddish in (47) below.

In the verb form *hears*, *hear-* is a verb stem, which denotes an activity or a state (in *hears*: the activity of auditory perception), whereas *-s* is an inflectional ending, which conveys only grammatical information such as [TENSE], [PERSON], [NUMBER] etc. (in *hears*: [PRESENT], [3rd PERSON], [SINGULAR]).

Let us assume that it is not the form *hears* but only the verb stem *hear-* which is **base-generated** ("born") under V°. The inflectional morpheme *-s* is then base-generated under a different node, namely, I° (for inflection). By **movement** of either V° (*hear-*) or I° (*-s*), I° and V° are able to "meet" and merge into one word (but see the very end of § 2 for a revised view).

(D° is a functional element, like I°, and N° is a lexical element, like V°. It could even be argued that just like I° and V° merge into one word in English, e.g. *hears*, D° and N° may sometimes merge into one word in Danish, e.g. *lampen* 'lamp-the').

The question now is exactly where V° and I° meet, i.e. is the finite verb in I° or in V°? In order to determine this, we have to consider structures where we can tell the difference between the two positions, i.e. structures where there is an element adjoined to the left of VP, in order to see if the finite verb precedes or follows such an element:



Comparing English and French, as it was done originally in e.g. Emonds (1978) and Pollock (1989), the differences in the position of the finite verb can be described as follows: In Middle English (and in French and Icelandic), the finite verb is in I°, whereas in modern English (and in Danish and Faroese), it is in V°. This will be shown in detail below, in § 2 - § 6.

2. V°-to-I° in Middle English

Let us begin with Middle English, even though it has a serious problem compared to all the other languages discussed here: There are no longer any native speakers, and so we can neither ask anyone if they can say such and such in Middle English, nor can we observe how children acquire the language. We still have a fairly good idea about what was possible in Middle English, because a large number of texts from the Middle English period still exist, but it has to be admitted that for any given phenomenon which we do not find in those texts (including words beginning with [xrp-] or clauses containing 9 non-finite verbs), we can never be completely sure whether it is not found because it really was not possible, or just because, by accident, all texts that contained it have not survived.

Consider first an example with a finite main verb, then one with a finite temporal auxiliary and finally one with a finite modal auxiliary:

- (3) ME. a. I **receyvyd** a lettyr frome yow on Sondag ...
I received a letter from you on Sunday ...
 (1460, Margaret Paston, *Letter to John Paston I*, 29.10.1460, Davis 1971, 261)
- b. ... and they seydyn they **had** payed you ...
 ... *and they said they had paid you ...*
 (1463, Margaret Paston, *Letter to John Paston I*, before 10.04.1463, Davis 1971, 285)
- c. ... and euery thing **must** haue an ende.
 ... *and every thing must have an end*
 (1454, John Paston I, *Letter to the Earl of Oxford*, 31.03.1454, Davis 1971, 81)

To discover the exact position of the finite verb, examples like (3)a,b,c are not sufficiently informative, as a further element is needed, cf. (2) above.

The Middle English negation, *not*, is one such element, as it has to follow the finite verb, but precede non-finite verb forms:

- (4) ME. a. ... wheche previth welle at that tyme she **louyd not** Lancasterother ...
 ... *which proves well (that) at that time she loved not L* ...
 (1452, John Paston I, *Letter to Richard Southwell*, draft, 20.07.1452, Davis 1971, 70)
- b. ... and at Mydsomer i vndrestonde he **had not** payed Townesende, ...
 ... *and at Midsummer I understood he had not paid T* ...
 (1471, John Paston II, *Letter to John Paston III*, 15.09.1471, Davis 1971, 440)
- c. ... but he **myght not** speke wyth hym.
 ... *but he could not speak to him*
 (1465, Margaret Paston, *Letter to John Paston I*, 27.09.1465, Davis 1971, 321)

The Middle English quantifier *all* has to follow the finite verb, but precede non-finite verb forms when it refers to the subject:

- (5) ME. a. ... and soo they **swore all** sauf John Paston and John Damme.
 ... *and so they swore all except JP and JD*
 (1466, Agnes Paston, *Part of draft will 1466 (?)*, Davis 1971, 48)
- b. Sethyn whan they **haue all** consaillet ...
 Then *when they have all deliberated ...*
 (1422, James Yonge (trsl.), *The Gouvernance of Prynces*, Steele 1898, 209)
- c. They seyde they **shuld all** a be þe meryere if ye hadde ben there.
 They *said they should all have been the merrier if you had been there*
 (1451, Margaret Paston, *Letter to John Paston I*, 01.07.1451, Davis 1971, 243)

Finally, also the Middle English adverbial *neuer* 'never' (which may not occur to the right of VP) has to follow the finite verb, but precede non-finite verb forms:

- (6) ME. a. ... and he swore that he **talkyd neuer** wyth no man.
 ... *and he swore that he talked never with no man*
 (1460 William Paston I, *Letter to John Paston I*, 02.05.1460, Davis 1971, 164)

- b. ... he **had neuere** takke þat offyce vpon hym ...
 ... *he had never taken that office upon him* ...
 (1471, Margaret Paston, *Letter to John Paston III*, 29.11.1471, Davis 1971, 360)
- c. He ferythe lesse that he **schall neuer** come home; but ...
He fears less that he shall never come home; but ...
 (1488, William Paston III, *Letter to John Paston III*, 13.05.1488, Davis 1971, 656)

The following generalisations can be made concerning the above examples:

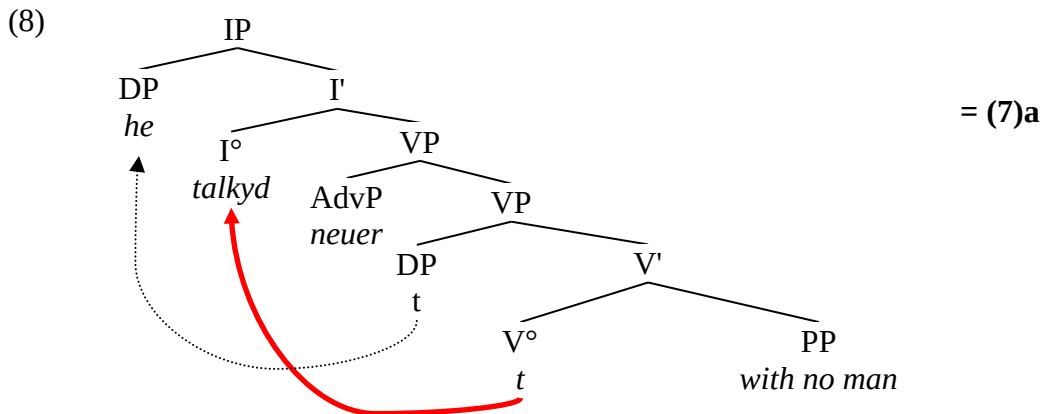
- (7) i. The finite verb immediately follows the subject.
 ii. The complement immediately follows the non-finite verb form.

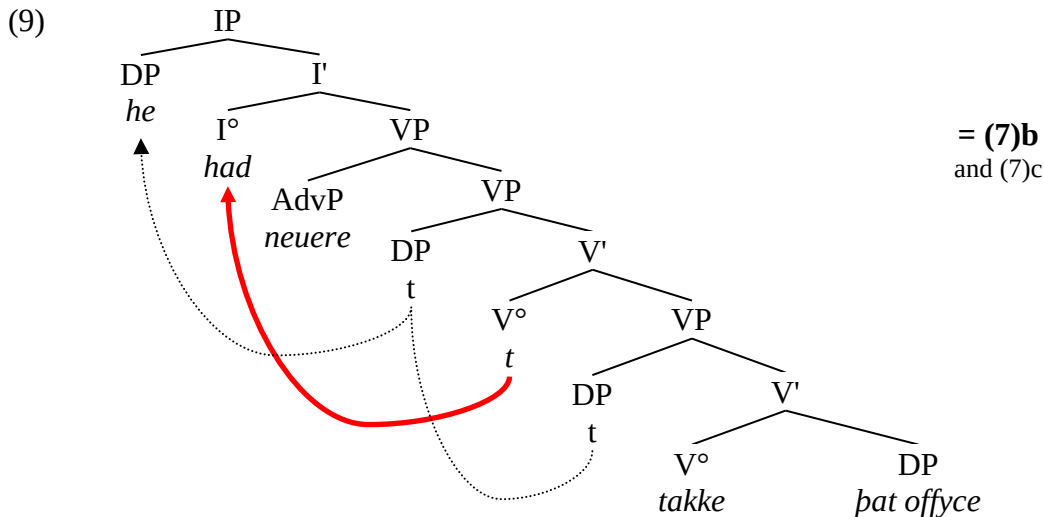
(7)ii is something you would expect from an SVO-language like Middle English, namely that the complement of the main verb immediately follows the main verb itself, (4)b,c, (5)b,c and (6)b,c. The question then is why this is not the case in (4)a, (5)a and (6)a, where the elements *not*, *all* and *neuer* occur between the main verb and its complement. Why do *not*, *all* and *neuer* intervene between the main verb and its complement precisely when the main verb (*louyd* / *swore* / *talkyd*) is also the finite verb of the clause?

The finite verb thus actually occurs in **one** position (immediately following the subject), even though when the finite verb is the main verb, i.e. in (4)a, (5)a and (6)a, we would expect it to also occur in a **different** position (immediately before its complement).

There is a way to have the structure comply with **both** of these two requirements, namely to assume that the verb undergoes movement from V° to I° and thereby leaves a trace (*t*) in V°.

If we assume that *not*, *all* and *neuer* are left-adjoined modifiers of VP, then (6)a,b may be analysed as follows:





In Middle English, it would thus seem that **the finite verb moves from V° to I°**, whereas the non-finite verb remains in V° (i.e. in its own V°-position).

What exactly moves from V° to I°, the finite verb or just its stem? It might seem unproblematic to say for a regular/weak verb that the verb stem *talk-* is generated in V° and the ending *-yd* in I°, and the finite verb *talkyd* is the result of the movement of *talk-* from V° to I°, as in (8). But then consider:

- (10) ME. ... and ther-for I **spak** **not** to hym ther-of.
 ... *and therefore I spoke not to him about it*
 (1460, Margaret Paston, *Letter to John Paston I*, 21.10.1460, Davis 1971, 259)

This is an example of a very common phenomena in the verbal inflectional system of the Germanic languages: **strong verbs ≈ irregular verbs** (e.g. modern English *I speak ~ I spoke* or Middle English *I speke ~ I spak(e)*). Given that we cannot split *spak/spoke* up into a stem and an ending, we have to say that the whole verb form (both *spak/spoke* or *talkyd/talked*) is **generated in V°** (where it may be checked e.g. that the complement is of the right kind) and then it **moves to I°** (where it may be checked that it has the right specifications for e.g. [$\pm$ past], [α person], [$\pm$ plural]).

3. V°-to-I° in French

This § will show that as far as V°-to-I°-movement is concerned, French is parallel to Middle English (and French has the advantage of having many native speakers, and of allowing us to observe how children acquire the language).

As in § 2, each set of examples contains first an example with a finite main verb, then one with a finite temporal auxiliary and finally one with a finite modal auxiliary.

To find out the exact position of the finite verb, each of these examples will also contain another element between the subject and the object: the negation *pas*, the quantifier (*tous* 'all') which refers to the subject, or the adverbial *à peine* 'hardly'.

- (11) Fr. a. Frédéric ne **parle** **pas** français.
 Frédéric not speaks not French
- b. Frédéric n'a **pas** parlé français.
 Frédéric not has not spoken French

- c. Frédéric ne **veut pas** parler français.
Frédéric not wants not to speak French

(12) Fr. a. Les étudiants **parlent tous** français.
The students speak all French

- b. Les étudiants **ont tous** parlé français.
The students have all spoken French

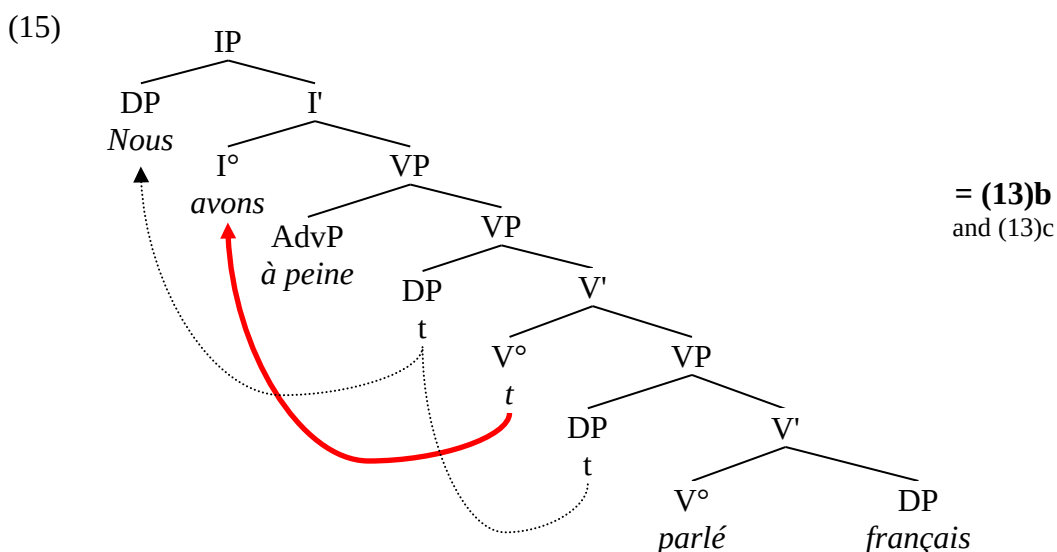
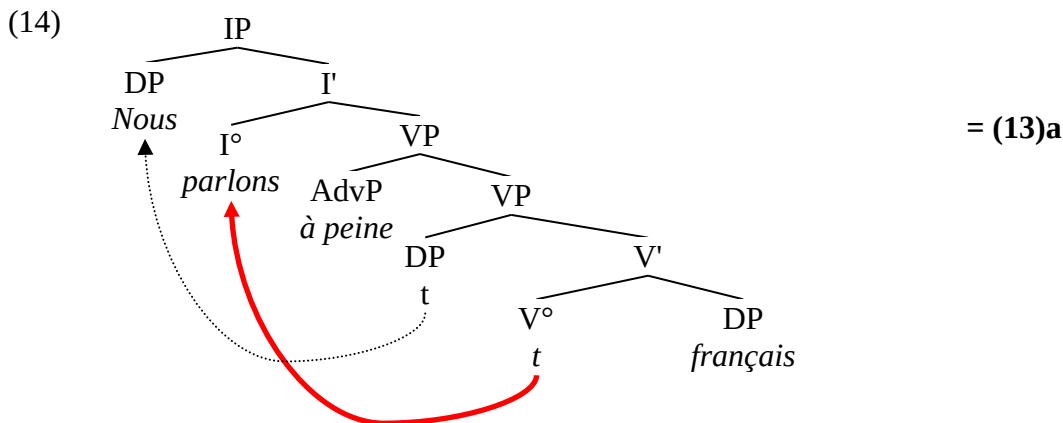
- c. Les étudiants **veulent tous** parler français.
The students want all to speak French

(13) Fr. a. Nous **parlons à peine** français.
We speak hardly French

- b. Nous **avons à peine** parlé français.
We have hardly spoken French

- c. Nous **voulons à peine** parler français.
We want hardly to speak French

These data show that the analysis of Middle English in (7) above is also valid for French, assuming that *pas*, *tous* and *à peine* are left-adjoined modifiers of VP. (13)a,b may thus be analysed as follows:



It is thus only (the stem of) **the finite verb that moves from V° to I°**, whereas (the stem of) the non-finite verb remains in V° (i.e. in its own V°-position).

4. Is there V°-to-I° in modern English?

Examples like the ones in French and Middle English also occur in modern English but with certain important differences. In modern English, not all finite verbs occur in I°, but only the modal verbs, the auxiliaries *be*, *have*, *do*, and the main verb *be*, cf. § 5 below. This is clear from a comparison of the word order in sentences with simple tenses and the word order in sentences with compound tenses. What is important is the placement of the finite verb relative to various adverbial expressions:

- (16) En. a. Fred **does** not **speak** English anymore.
 b. Fred **has** not spoken English since last summer.
 c. Fred **is** not speaking English right now.
 d. Fred **will** not speak English when he goes to France.
- (17) En. a. The students all **speak** English.
 b. The students **have** all spoken English all afternoon.
 c. The students **are** all speaking English right now.
 d. The students **will** all speak English tomorrow.
- (18) En. a. We hardly **speak** English anymore.
 b. We **have** hardly spoken English since we left Dover.
 c. We **are** hardly speaking English anymore.
 d. We **will** hardly speak English when we go to Calais.

(16)b,c,d, (17)b,c,d, and (18)b,c,d exactly follow the pattern from the corresponding French and Middle English examples. The elements *not*, *all* and *hardly* immediately follow the finite verb. The non-finite forms *spoken*, *speaking* and *speak* seem to occur in their base positions, and form a VP together with their complement, *English*.

As opposed to Middle English and French, however, this (being in V°) would also seem to be the case for the finite verbs in (17)a and (18)a: Although the finite auxiliaries move from their base positions in V° across *not*, *all* and *hardly* to I°, modern English finite main verbs would appear to remain in VP.

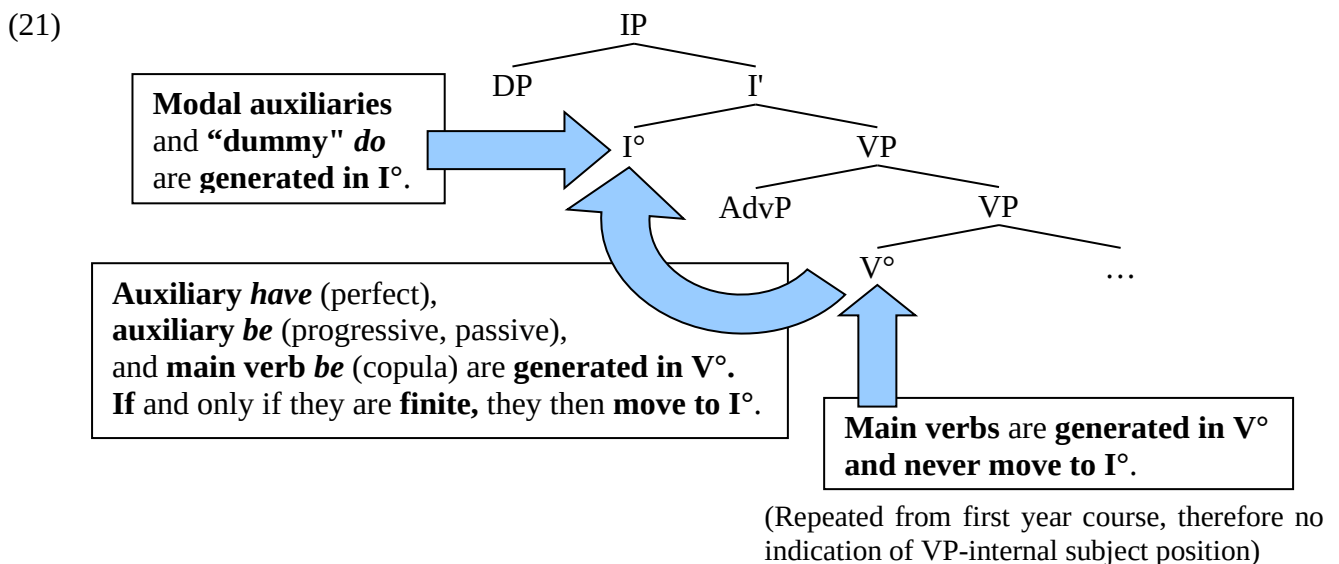
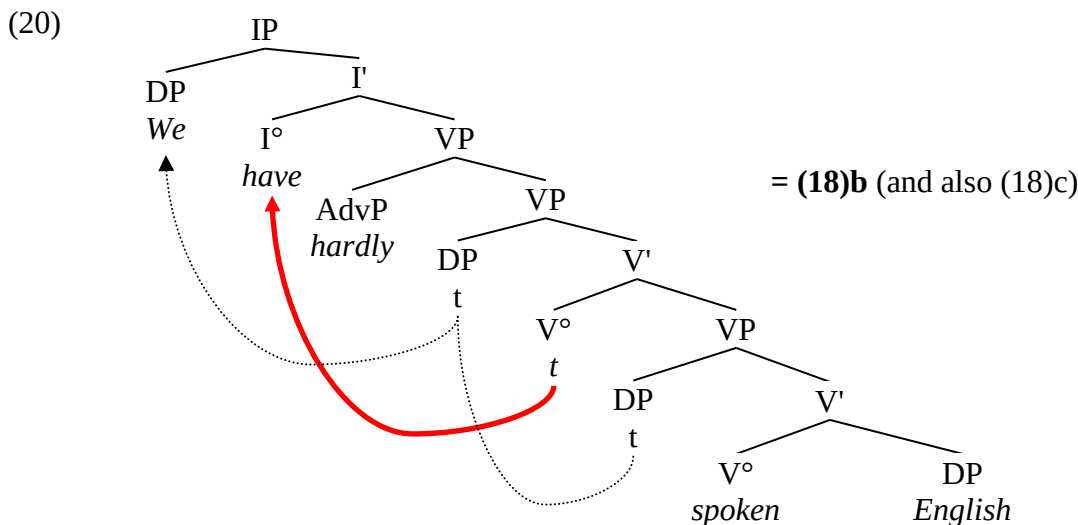
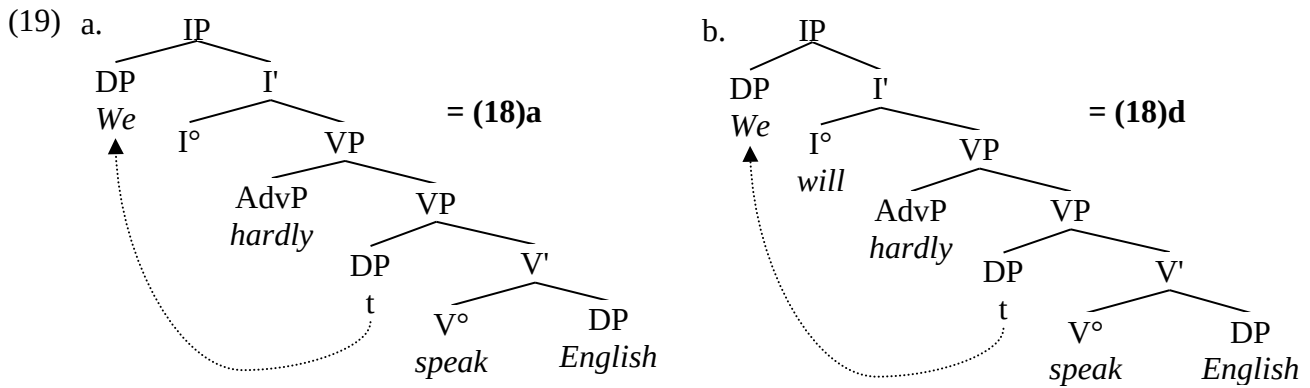
If there is no auxiliary, the presence of *not* triggers the insertion of a 'periphrastic' finite version of *do*, and the main verb in such cases remains in the VP, and occurs in the infinitive, (16)a.

As is clear from (1) above and also (47) below, the inflectional endings in modern English are fewer and less varied than in Middle English (and in French). The most extreme case of this are the modal verbs (*will*, *would*, *must*, *can*, *could*, *should*, *shall*, *may*, *might*), which never inflect for number or person at all, and also never occur in any non-finite form.

(Sometimes, it is even claimed that they do not have actual tense forms either, cf. that the difference between *Fred may speak English* and *Fred might speak English* is very different from the one between *Fred speaks English* and *Fred spoke English* or the one between *Fred has spoken English* and *Fred had spoken English*.)

It is assumed here that the modern English modal verbs do not project a VP but instead, they are inserted directly under I°. This is why there are no non-finite forms (**I have could*), and also why there is no room for any morphosyntactic features in I° with modal verbs (**He wills*). A similar analysis is assumed for auxiliary *do* ("dummy" *do*), even if only one of the above holds, i.e. this is why auxiliary *do* is always finite (*she did not leave*, *she had not left*, but **she had not done leave*).

The modern English examples above may be analysed as follows:



We have yet to find an explanation of how the verb stem in V° and the morphosyntactic features in I° in (17)a and (18)a may merge into one word if the verb never leaves VP. Various possibilities are considered in the literature:

ONE option is that the finite ending which is base-generated in I° moves down into V° (see Haegeman and Guéron 1999, 87). A problem with this is that almost all other cases of syntactic movement are upwards in the tree, not downwards, in such a way that the landing position c-commands the base position, not vice versa (as would be the case here).

ANOTHER option is that the modern English finite main verb does not need to move to I°, because the inflectional morphology is so "weak". This would require the view that the verb is inserted under V° fully inflected (cf. the end of § 2 above), and then verbal features are checked in V° (e.g. is the object DP of the right semantic and syntactic type?) and inflectional features are checked in I° if possible (e.g. is the ending the right person and number given the subject of the clause?). This checking of the inflectional features would then not be "necessary" for finite main verbs, maybe because they carry so little inflectional information (Haegeman and Guéron 1999, 560–66).

A special version of this view is that the movement from V° to I° that we posited for French and Middle English does take place in Modern English, but on a more abstract syntactic level (LF = logical form) which has no direct consequences for the word order (Haegeman and Guéron 1999, 560–66). This might account for the fact that even those finite English verbs that stay in V° show agreement with the subject.

5. V°-to-I° with modern English auxiliaries (*have*, *be* and *do*)

The auxiliaries *have* and *be* clearly occur in I° when they are finite:

- | | | I° | | V° | |
|------|--------|--------------|-------------|-----------------|----------|
| (22) | En. a. | Fred | has | hardly spoken | English. |
| | b. | The students | have | all spoken | English. |
| | c. | Fred | has | not spoken | English. |
| (23) | En. a. | Fred | is | hardly speaking | English. |
| | b. | The students | are | all speaking | English. |
| | c. | Fred | is | not speaking | English. |

Notice that when the auxiliaries *have* and *be* are **not** finite, they clearly occur in V°:

- | | | I° | | V° | | V° |
|------|--------|------|-------------------------|----------|----------|----|
| (24) | En. a. | Fred | will hardly have | spoken | English. | |
| | b. | Fred | will hardly be | speaking | English. | |

The main verb *be* also occurs in I°:

- | | | I° | | V° | |
|------|--------|----------------|-------------|---|------------------|
| (25) | En. a. | Fred | is | hardly aware of the audience when he | plays the piano. |
| | b. | The students | are | all aware of the audience when they play | the piano. |
| | c. | Fred | is | not aware of the audience when he | plays the piano. |
| | d. | * Fred | | hardly is aware of the audience when he | plays the piano. |
| | e. | * The students | | all are aware of the audience when they play | the piano. |
| | f. | * Fred | does | not be aware of the audience when he | plays the piano. |

This is not the case with the main verbs *do* and *have*, they simply have to be in V°:

- | | | I° | | V° | |
|------|--------|----------------|------------|--|--|
| (26) | En. a. | * Fred | did | hardly well in his exams when he was at school. | |
| | b. | * The students | did | all well in their exams last year. | |
| | c. | * Fred | did | not well in his exams last year. | |
| | d. | Fred | | hardly did well in his exams when he was at school. | |
| | e. | The students | | all did well in their exams last year. | |
| | f. | Fred | did | not do well in his exams last year. | |

- | | | | | |
|------|--------|----------------|----------------------------|--|
| | | I° | V° | |
| (27) | En. a. | * Fred | had hardly | any problems with his computer last week. |
| | b. | * The students | had all | a few problems with their computers last week. |
| | c. | * Fred | had not | any problems with his computer last week. |
| | d. | Fred | hardly had | any problems with his computer last week. |
| | e. | The students | all had | a few problems with their computers last week. |
| | f. | Fred | did not have | any problems with his computer last week. |

That the finite main verb *have* has to be in V° is a relatively recent innovation, cf. the following two examples from Sherlock Holmes (written around 1900 by Arthur Conan Doyle):

- | | | | |
|------|--------|----------------------|--|
| | | I° | V° |
| (28) | En. a. | These clever fellows | have always a touch of madness. |
| | b. | You | have not a pistol, have you? |

The full picture in modern English is as follows:

- (29) "Auxiliary" syntax (finite verb occurs in I°)
 Auxiliaries: ***be, have, do***, and modals
 Main verbs: ***be***
- (30) "Main verb" syntax (finite verb occurs in V° only, never in I°)
 Auxiliaries: -
 Main verbs: ***have, do***, and all other main verbs
- Auxiliary *be* is found with progressive and passive, whereas main verb *be* is found e.g. in *John is never ill*.
 - Auxiliary *do* is found e.g. with negated main verbs or in questions, whereas main verb *do* is found e.g. in *John never does his homework*.

The main verb *be*, which behaves unlike other main verbs but like the auxiliaries (it always precedes sentence adverbials, precedes *not*, and does not allow *do*-insertion) shows that the relevant difference is actually **NOT** one of auxiliaries versus main verbs.

Bybee (2003, 620–21) suggests that the difference is between high frequency verbs and low frequency verbs. However, although some of the verbs with "auxiliary" syntax (e.g. main and aux *be* or aux *have*) are likely to have a very high frequency, it is difficult to believe that even relatively rarely used modal verbs, e.g. *ought*, should have a higher frequency than even the most commonly used verbs with "main verb" syntax (e.g. main *have* or *say, know, believe*). Here are the number of occurrences (of all forms of the verb in question) in the British National Corpus (which is from around 1990):

- | | | | | | | | | |
|------|-----|--------------------|-------------------|--------------------|--------------------|--------------------|-----------------------|---------------------|
| (31) | En. | VERBS | <u><i>say</i></u> | <u><i>will</i></u> | <u><i>know</i></u> | <u><i>must</i></u> | <u><i>believe</i></u> | <u><i>ought</i></u> |
| | | OCCURRENCES IN BNC | 317,530 | 260,108 | 178,508 | 69,930 | 33,674 | 5,838 |
| | | | (MAIN) | (AUX) | (MAIN) | (AUX) | (MAIN) | (AUX) |

Roberts (1985, 30), Scholten (1988, 160), and Pollock (1989, 385) suggest that **in English, only verbs that do NOT assign thematic roles may occur in I°**. This gives the right prediction for main verb *be*, which never assigns a thematic role, like auxiliary *have, be* and *do*, but unlike main verb *have* and *do*.

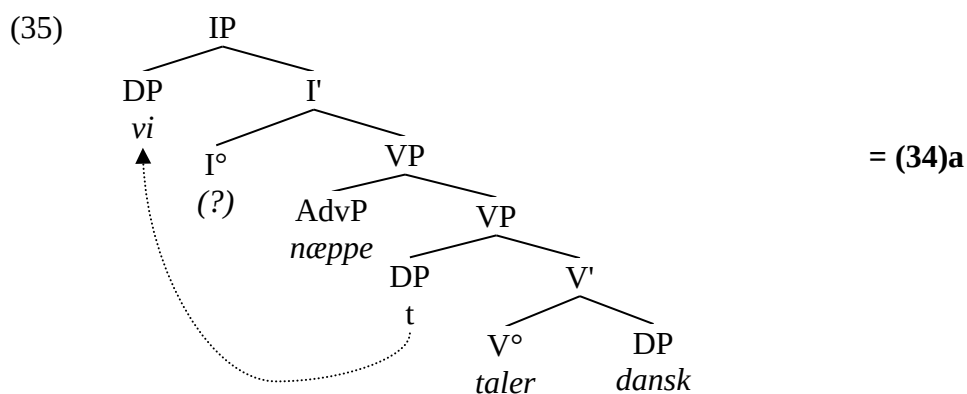
6. No V°-to-I° in Danish

Consider now the Danish versions of the examples we have examined in Middle English, French, and modern English.

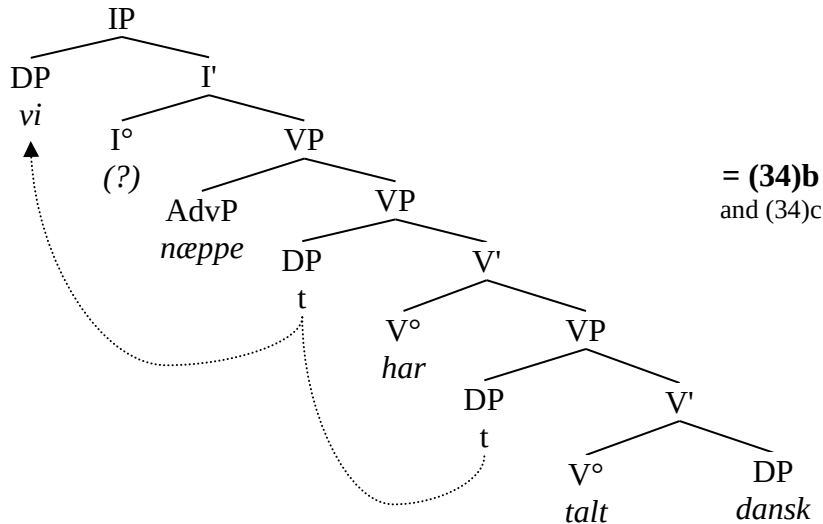
All the Danish examples here are embedded clauses. Main clauses will be discussed on the following hand-out, 3b.

	C°	DP	I°	AdvP	(V°)	V°	DP
(32) Da. a.		Idet Frederik As <i>Frederik</i>	ikke not			taler <i>speaks</i>	dansk , ... <i>Danish, ...</i>
b.		Idet Frederik As <i>Frederik</i>	ikke not	har <i>has</i>	talt <i>spoken</i>		dansk , ... <i>Danish, ...</i>
c.		Idet Frederik As <i>Frederik</i>	ikke not	vil <i>will</i>	tale <i>speak</i>		dansk , ... <i>Danish, ...</i>
(33) Da. a.		Idet de studerende As <i>the students</i>	alle all			taler <i>speak</i>	dansk , ... <i>Danish, ...</i>
b.		Idet de studerende	alle	har	talt		dansk , ...
c.		Idet de studerende	alle	vil	tale		dansk , ...
(34) Da. a.		Idet vi As <i>we</i>	næppe hardly			taler <i>speak</i>	dansk , ... <i>Danish, ...</i>
b.		Idet vi	næppe	har	talt		dansk , ...
c.		Idet vi	næppe	vil	tale		dansk , ...

The above examples show that no Danish finite verbs undergo V°-to-I° movement (at least not in embedded clauses):



(36)



As argued in Vikner (1997, 1999, 2005a), V°-to-I° movement was lost around 1500-1550; and therefore the finite verb is placed differently in embedded clauses before and after this period:

(37) Da. Æn berær man threl for bondæns øghæn, tha bōtæ han bondæn ...
 But hits a man a slave for peasant-the's eyes, then pays he peasant-the ...

... tolf øræ foræ um thrællæn **takær** ey atær gen.
... *twelve øre therefore if slave-the attacks not back again*

(same tree as (8) on p. 5 above)

(ca. 1300, *Valdemars sjællandske lov, yngre red.*, chap. 86, Uldaler and Wellejus 1968, 54, l. 21-22)

"Men slår en mand en træll for øjenene af bonden, da skal han bøde tolv øre derfor til bonden, hvis trællen ikke sætter sig til modværge"

"But if a man beats a slave in front of the peasant, then he should pay a fine of twelve *øre* for this to the peasant, if the slave did not fight back"

(38) Da. Æn sittær han hemmæ vtæn laghæ forfall æth orlof. gialdæ kunung ...
 But sits he home without legal reason or excuse, pay king ...

... af hwar garth thær han hauær een thrithings hafnæ, æth wæræ innæ bondæ. ...
 ... *for each farm that he owns one soldier's fee or be villein* ...

of han **wil æi** gialdæ sum sauth ær.
if he will not pay as said is

(same tree as (9))

(ca. 1325, *Jyske lov*, 3rd book, chap. 7, Uldaler and Wellejus 1968, 92, l. 17-19)

"Men sidder han hjemme uden lovligt forfald eller orlov, da skal han betale kongen tredingshavne (ledingsafgift) af hver gård han har eller være innebonde (hoveribonde) hvis han ikke vil betale som det er sagt"

"But if he sits at home without legal reason or excuse, then he should pay the king one soldier's fee for each farm that he owns or he should be indentured if he will not pay as required"

- (39) Da. Som en Spyflue **icke springer** vdi den gryde som er hed, men flyer derfra, ...
As a blowfly not jumps into the pot which is hot, but flees therefrom, ...
- ... saa flyer oc Dieffuelen fra de hierter som **daglige brende**, ...
... thus flees also devil-the from the hearts that daily burn ...
- ... ved en Christelig Bøn og tacksigelse. (same tree as (35))
... in a Christian prayer and thanksgiving
 (1572, Niels Hemmingsen, *Om Ecteskab*, Ruus et al. 2001, *ecteskab.sgm*, p. 215)
- (40) Da. Seer til at i **icke forskyde** Gud\$ stemme og Sententz men at ...
See to that you not disown God's voice and wisdom but that ...
- ... i **vdi alle maade skicke** eder dereffter, saa fremt som ...
... you in all ways behave yourselves thereafter, so far as ...
- ... i **icke ville** falde under Gud\$ heffn og straff. (same tree as (36))
... you not will fall under God's revenge and punishment
 (1572, Niels Hemmingsen, *Om Ecteskab*, Ruus et al. 2001, *ecteskab.sgm*, p. 393)

The difference between (37)/(38) and (39)/(40) shows that the finite verb in embedded clauses occurred in I° before 1500-1550, but in V° after 1500-1550:

(41)

	C°	IP-spec	I°	Neg	V°	...		
Da. a.	...	um thrællæn	takar	ey	<i>t</i>	atær gen	= (37)	1300
b.	...	of han	wil	æi	<i>t</i>	giældæ sum sauth ær	= (38)	1325
c.	...	Som en spyflue		icke	springer	vdi den gryde...	= (39)	1572
d.	...	som i		icke	ville	falde under ...	= (40)	1572

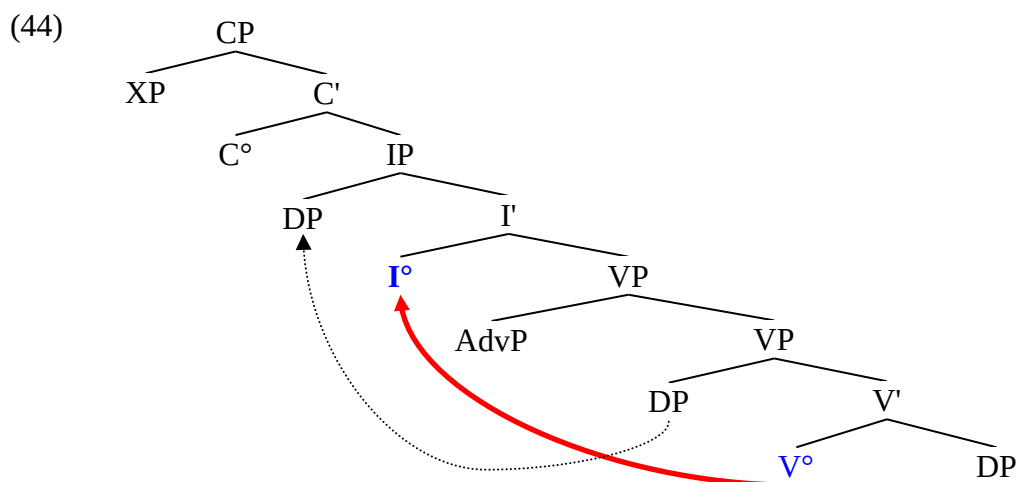
7. Overview: V°-to-I° in the Germanic SVO-languages

To give a complete overview, let's look at the Germanic SVO-languages in general (see also e.g. Vikner 2020).

V°-to-I° movement moves the finite verb to a position immediately after the subject, preceding any adverbials. Purely descriptively, the question is whether the finite verb precedes or follows any sentence medial adverbials or negation.

		C°	IP-spec	I°	AdvP	V°	DP	
(42) a.	En.	*	That John	eats	often		tomatoes	(surprises everybody.)
b.	Da.	*	At Johan	spiser	ofte		tomater	(overrasker alle mennesker.)
c.	Fa.	*	At Jón	etur	ofta		tomatir	(kemur óvart á øll.)
d.	Ic.	Að	Jón	borðar	oft		tómata	(kemur öllum á óvart.)
e.	Yi.	Az	Jonas	est	oft		pomidorn	(iz a khidesh far alemen.)
f.	Fr.	Que	Jean	mange	souvent		des tomates	(surprend tout le monde.)

		C°	IP-spec	I°	AdvP	V°	DP	
(43) a.	En.		That John		often	eats	tomatoes	(surprises everybody.)
b.	Da.		At Johan		ofte	spiser	tomater	(overrasker alle mennesker.)
c.	Fa.		At Jón		ofta	etur	tomatir	(kemur óvart á øll.)
d.	Ic.	*	Að Jón		oft	borðar	tómata	(kemur öllum á óvart.)
e.	Yi.	*	Az Jonas		oft	est	pomidorn	(iz a khidesh far alemen.)
f.	Fr.	*	Que Jean		souvent	mange	des tomates	(surprend tout le monde.)



The following examples from two conservative Mainland Scandinavian dialects display the same difference. In embedded clauses, the finite verb always precedes the medial adverbial or negation in the Swedish dialect from Älvdalen (Övdalian, see e.g. Levander 1909, 123 Anm. 1), whereas the finite verb always follows the medial adverbial or negation in the Norwegian dialect from Hallingdalen

					T°	AdvP	V°	
(45) a.	Äd.	Ba	fo dye	at ig	<u>u</u> ild	int	fy	om
		<i>Just</i>	<i>because</i>	<i>that I</i>	<i>would not</i>		<i>follow</i>	<i>him</i>
b.	Hd.	... fisk,	jammvært om	støræls'n på o	ikki	<u>va</u>	myky	skrytæ tå
		<i>... fish,</i>	<i>although</i>	<i>size-the of them</i>	<i>not</i>	<i>was much</i>	<i>brag</i>	<i>about</i>

(45)a is from Levander (1909, 123), see also Platzack & Holmberg (1989, 70)
 ((45)b is from Venås (1977, 243), see also Trosterud (1989, 91) and Platzack & Holmberg (1989, 70)

Chomsky (1995, 222) says about the ability of constituents to move in the syntax: "*Minimalist assumptions suggest that this property should be reduced to morphology-driven movement.*" This was the objective of Vikner (1997, 1999), where finite verb movement is linked to verbal inflectional morphology:

- (46) An SVO-language has V°-to-I° movement if and only if person morphology is found in all tenses. (Vikner 1997, 207, (23))

Among all the Romance and Germanic VO-languages, the only languages where inflectional differences for person are not found in every tense are modern **English** (including early modern English) and four modern Scandinavian languages: **Danish, Faroese, Norwegian, and Swedish**, cf. (47) below. (The Norwegian and Swedish paradigms are identical to the Danish one in (47).)

(47)	English (20th C.)	Early Modern English (16th C.)	Middle English (14/15th C.)	French (20th C.)
Infinitive	<i>hear</i>	<i>hear(en)</i>	<i>here(n)</i>	<i>entendre</i>
Imperative				
Singular	<i>hear</i>	<i>hear</i>	<i>her(e)</i>	<i>entends</i>
Plural	<i>hear</i>	<i>hear</i>	<i>hereth</i>	<i>entendez</i>
Participles				
Present	<i>hearing</i>	<i>hearing</i>	<i>hering</i>	<i>entendant</i>
Past	<i>heard</i>	<i>heard</i>	<i>herd</i>	<i>entendu</i>
Present				
1st singular	<i>I hear</i>	<i>I hear</i>	<i>I here</i>	<i>j' entends</i>
2nd singular	<i>you hear</i>	<i>thou hearst</i>	<i>thou herest</i>	<i>tu entends</i>
3rd singular	<i>he hears</i>	<i>he heareth</i>	<i>he hereth</i>	<i>il entend</i>
1st plural	<i>we hear</i>	<i>we hear(en)</i>	<i>we here(n)</i>	<i>nous entendons</i>
2nd plural	<i>you hear</i>	<i>you hear(en)</i>	<i>ye here(n)</i>	<i>vous entendez</i>
3rd plural	<i>they hear</i>	<i>they hear(en)</i>	<i>þei here(n)</i>	<i>ils entendent</i>
Different forms	2	3	3	4 (1s=2s=3s)
Past				
1st singular	<i>hear-d</i>	<i>hear-d</i>	<i>her-d-e</i>	<i>entend-ais</i>
2nd singular	<i>hear-d</i>	<i>hear-d-(st)</i>	<i>her-d-est</i>	<i>entend-ais</i>
3rd singular	<i>hear-d</i>	<i>hear-d</i>	<i>her-d-e</i>	<i>entend-ait</i>
1st plural	<i>hear-d</i>	<i>hear-d-(en)</i>	<i>her-d-e(n)</i>	<i>entend-i-ons</i>
2nd plural	<i>hear-d</i>	<i>hear-d-(en)</i>	<i>her-d-e(n)</i>	<i>entend-i-ez</i>
3rd plural	<i>hear-d</i>	<i>hear-d-(en)</i>	<i>her-d-e(n)</i>	<i>entend-aient</i>
Different forms	1	1 (3)	2 (3)	3 (1/2s=3s=3p)

(48)	Danish	Hallingdalen	Faroese	Älvdalen	Icelandic	Yiddish
Infinitive	<i>høre</i>	<i>høyra</i>	<i>hoyra</i>	<i>höra</i>	<i>heyra</i>	<i>hern</i>
Imperative						
Singular	<i>hør</i>	<i>høyr</i>	<i>hoyr</i>	<i>höre</i>	<i>heyr</i>	<i>her</i>
Plural	<i>hør</i>	<i>høyr</i>	<i>hoyr(ið)</i>	<i>hörir</i>	<i>heyrið</i>	<i>hert</i>

Participles						
Present	<i>hørende</i>	<i>høyran</i>	<i>hoyrandi</i>	<i>hörend</i>	<i>heyrandi</i>	<i>herndik</i>
Past	<i>hørt</i>	<i>høyrt</i>	<i>hoyrt</i>	<i>hört</i>	<i>heyrt</i>	<i>gehert</i>
Present						
1st singular	<i>jeg hører</i>	<i>e høyre</i>	<i>eg hoyri</i>	<i>ig hörer</i>	<i>ég heyri</i>	<i>ikh her</i>
2nd singular	<i>du hører</i>	<i>du høyre</i>	<i>tú hoyrir</i>	<i>du hörer</i>	<i>þú heyrir</i>	<i>du herst</i>
3rd singular	<i>han hører</i>	<i>hann høyre</i>	<i>hann hoyrir</i>	<i>an hörer</i>	<i>hann heyrir</i>	<i>er hert</i>
1st plural	<i>vi hører</i>	<i>me høyræ</i>	<i>vit hoyra</i>	<i>uir hörum</i>	<i>við heyrum</i>	<i>mir hern</i>
2nd plural	<i>I hører</i>	<i>de høyræ</i>	<i>tit hoyra</i>	<i>ir hörir</i>	<i>þið heyrið</i>	<i>ir hert</i>
3rd plural	<i>de hører</i>	<i>dæi høyræ</i>	<i>tey hoyra</i>	<i>dier höra</i>	<i>þeir heyra</i>	<i>zey hern</i>
Different forms	1	2	3	4	5	4
Past						
1st singular	<i>hør-te</i>	<i>høyr-dæ</i>	<i>hoyr-d-i</i>	<i>hör-d-e</i>	<i>heyrd-ð-i</i>	---
2nd singular	<i>hør-te</i>	<i>høyr-dæ</i>	<i>hoyr-d-i</i>	<i>hör-d-e</i>	<i>heyrd-ð-ir</i>	---
3rd singular	<i>hør-te</i>	<i>høyr-dæ</i>	<i>hoyr-d-i</i>	<i>hör-d-e</i>	<i>heyrd-ð-i</i>	---
1st plural	<i>hør-te</i>	<i>høyr-dæ</i>	<i>hoyr-d-u</i>	<i>hör-d-um</i>	<i>heyrd-ð-um</i>	---
2nd plural	<i>hør-te</i>	<i>høyr-dæ</i>	<i>hoyr-d-u</i>	<i>hör-d-ir</i>	<i>heyrd-ð-uð</i>	---
3rd plural	<i>hør-te</i>	<i>høyr-dæ</i>	<i>hoyr-d-u</i>	<i>hör-d-e</i>	<i>heyrd-ð-u</i>	---
Different forms	1	1	2	3	5	0

 = no V°-to-I° movement (person morphology is **not** found in all tenses)
 = V°-to-I° movement (person morphology **is** found in all tenses)

Danish, English, Faroese, (Hallingdalen Norwegian), Norwegian, and Swedish are also the only VO-languages without V°-to-I° movement, cf. (42) and (43) above. Furthermore, these five languages have in common that they only lost V°-to-I° movement within the last 600 years, i.e. they have all undergone the change from *talkyd neuer* to *never talked*. Both in English and in Danish, this change took place between 1450 and 1600.

Consider finally also the following examples from the languages with V°-to-I° movement, i.e. Middle English, Icelandic, Yiddish, and French:

- (49) ME a. * ... he neuere **had** **takke** þat offyce vpon him ...
 b. ... he neuere **takke** þat offyce vpon him ...
 c. * ... he **had** **takke** neuere þat offyce vpon him ...
 d. * ... he **takke** neuere **had** þat offyce vpon him ...
 ... he (*had*) (*taken*) never (*had*) (*taken*) that office upon him ...

((49)b is from
 (1471, Margaret Paston, *Letter to John Paston III*, 29.11.1471, Davis 1971, 360)

		C°	IP _{sp}	I°	AdvP	V°	V°	DP	
(50)	Ic.	a.	* Að	Jón		oft	hafi	borðað	tómata ...
		b.	Að	Jón	hafi	oft		borðað	tómata ...
		c.	* Að	Jón	hafi	borðað	oft		tómata ...
		d.	* Að	Jón		borðað	oft	hafi	tómata ...
(51)	Yi.	a.	* Az	Jonas		oft	hot	gegesn	pomidorn ...
		b.	Az	Jonas	hot	oft		gegesn	pomidorn ...
		c.	?? Az	Jonas	hot	gegesn	oft		pomidorn ...
		d.	* Az	Jonas		gegesn	oft	hot	pomidorn ...
(52)	Fr.	a.	* Que	Jean		souvent	ait	mangé	des tomates ...
		b.	Que	Jean	ait	souvent		mangé	des tomates ...
		c.	* Que	Jean	ait	mangé	souvent		des tomates ...
		d.	* Que	Jean		mangé	souvent	ait	des tomates ...
			<i>That John (has) (eaten) often (has) (eaten) tomatoes</i>						...

- (49)a,b, (50)a,b, (51)a,b, and (52)a,b show that Middle English, Icelandic, Yiddish, and French have V°-to-I° movement, so that the finite verb cannot be left in V°.
- (49)c, (50)c, (51)c, and (52)c show that only **one** verb may take part in V°-to-I° movement.
- (49)d, (50)d, (51)d, and (52)d show that only a **finite** verb may take part in V°-to-I° movement.

8. An alternative suggestion concerning V°-to-I° movement

Koenenman & Zeijlstra (2014, 572) point out that

"under lexicalist approaches (cf. Chomsky 1995), the tight connection between rich agreement and V-to-I movement has been taken as a strong argument for the idea that morphology drives syntax".

"However, in more current generative models of grammar, morphological insertion is assumed to take place after the syntactic computation [...], suggesting that morphology can have no direct influence on the syntactic derivation."

They therefore conclude that what is often called the Rich Agreement Hypothesis (RAH), is in grave need of support, i.e. the type of analyses which includes the one I suggested in (46) above.

(53) The Rich Agreement Hypothesis

A language exhibits V-to-I movement iff the regular paradigm manifests featural distinctions that are at least as rich as those featural distinctions manifested in the smallest pronoun inventories universally possible.

(Koenenman and Zeijlstra 2014, 576 (8))

The relevant minimal featural distinctions are [$\pm$ speaker], [$\pm$ plural], [$\pm$ participant]:

(54) Personal pronouns in Kuman (Papuan New Guinea)

	Singular	Plural	Features	
1st person	<i>na</i>	<i>no</i>	[+speaker] [−plural]	[+speaker] [+plural]
2nd person	<i>ene</i>		[−speaker] [+participant]	
3rd person	<i>ye</i>		[−speaker] [−participant]	

(Adapted from
Koenenman and Zeijlstra
2014, 574)

Koenenman & Zeijlstra (2014, 572) claim to

"demonstrate that all the empirical arguments hitherto purported to show that the RAH is (at least partially) incorrect are at best incomplete and often simply wrong. "

On pp. 578-594, they (convincingly) show why the following languages, which have at some point been argued to be problematic for the RAH, actually do not pose any problems: Icelandic, Älvdalen Swedish, Russian, Northern Norwegian, Kronoby Swedish, Faroese, Colloquial French, and Brazilian Portuguese.

Koenenman & Zeijlstra (2014, 572) further

"argue with Bobaljik and Thráinsson (1998) that morphological richness reflects a rich(er) functional structure. Contrary to Bobaljik and Thráinsson, though, we argue that rich morphology does not merely reflect but also determines functional structure: rich morphology provides **the only possible cue** for language learners **to postulate those formal features that can project this richer functional structure** in the first place. In this way, even though morphology does not drive syntax in the linguistic model, morphology does determine syntax through acquisition, causing a tight connection between the two.

Arg° and ArgP are projected iff finite verbs give acquirers evidence for [±speaker], [±plural], [±participant], as this combination is easily identifiable as the minimum required to be (or identify) an argument.

Arg° and ArgP are projected higher than TP/VP, as otherwise the derivation would crash, as nothing could check the features [±speaker], [±plural], [±participant] in ArgP-spec, because nothing could move there.

Arg° attracts the finite verb, but I° does not. This means that the subject is in ArgP-spec for languages with V°-to-Arg° movement but in TP spec for languages which do not have V°-to-Arg° movement.

Koenenman & Zeijlstra (2014, 594) correctly point out that analyses such as my (46) above

"require reference to the paradigm as a whole, since a verb with a particular affix on it can only be identified as rich, and therefore require V-to-I movement, if the grammar has access to the whole paradigm."

The problem is thus that such analyses require the acquirer to know (almost?) all tenses.

Finally, something that I disagree with: In order to explain why e.g. German does not have leftward movement of all finite verbs (i.e. why German neither requires nor allows the word order in (61)a or

(61)b below), Koenenman & Zeijlstra (2014, 604) assume ArgP to be head-final, so that Arg° occurs to the right of the VP:

(55) [ArgP [vP [VP *subject object* V°] v°] *affix* Arg°].

(Koenenman and Zeijlstra 2014, 604 (60))

They go on to say that their analysis is both compatible with a rightwards V°-to-Arg° movement and with an analysis where no such movement is necessary, as the verb is already string-adjacent to Arg°. I strongly suspect that this is not compatible with the data concerning immobile finite verbs in German and Dutch discussed in Vikner (2005b) and to be discussed on hand-out 3d later in this course.

9. V°-to-I° movement and the OV-languages

The generalisation in (46) was explicitly said only to cover the VO-languages, (56), as opposed to the OV-languages in (57), cf. that non-finite verbs must occur after their objects in (57):

			Verb	Object		
(56)	a.	En.	John	has	<u>eaten</u>	an apple.
	b.	Da.	Johan	har	<u>spist</u>	et æble.
	c.	Fa.	Jón	hefur	<u>etið</u>	eitt súrepli.
	d.	Ic.	Jón	hefur	<u>borðað</u>	epli.
	e.	Fr.	Jean	a	<u>mangé</u>	une pomme.
	f.	Yi.	Jonas	hot	<u>gegesn</u>	an epl.

				Object	Verb
(57)	a.	Du.	Johan	heeft	een appel <u>gegeten</u> .
	b.	Af.	Johan	het	'n appel <u>geëet</u> .
	c.	WF.	Johan	ee	nen appel <u>gheten</u> .
	d.	Fs.	Johan	hat	in apel <u>iten</u> .
	e.	Ge.	Johann	hat	einen Apfel <u>gegessen</u> .
	f.	St.	Dr Johann	hod	an Abfl <u>gessa</u> .
	g.	SG.	De Johann	hät	än Öpfel <u>gässe</u> .
	h.	Zü.	De Johann	hät	en Öpfel <u>ggässe</u> .
	i.	Be.	Dr Johann	het	en Öpfu <u>ggässe</u> .
			<i>John</i>	<i>has</i>	<i>an apple eaten</i>

The tables in (58) and (59) below give the parts of the verbal inflectional paradigms from the OV-languages that are relevant for generalization in (46), i.e. that an (SVO-) language has V°-to-I° movement if and only if person morphology is found in all tenses:^{1 2}

hear, infinitive, imperatives, participles, present and past indicative:

(58)	Dutch	Afrikaans	West Flemish	Frisian
Infinitive	<i>horen</i>	<i>hoor</i>	<i>uoren</i>	<i>hearre(n)</i>

¹ The -n in the plural of West Flemish, which makes up the difference between 1st and 3rd plural vs. 2nd plural is not elided as is the case in many (other) variants of Dutch. The difference is thus a robust one (Liliane Haegeman, p.c.)

² The imperatives of *hear* in Swabian, Sankt Gallen, Zürich, and Bern are very rare, and most often replaced by the imperative of *listen*, Swabian *horch/horched*, Sankt Gallen *los/loset*, Zürich *los/losed*, Bern *los/loset*.

Imperative				
Singular	<i>hoor</i>	<i>hoor</i>	<i>eurt</i>	<i>hear</i>
Plural	<i>horen</i>	<i>hoor</i>	<i>eurt</i>	<i>hear</i>
Participles				
Present	<i>horend</i>	<i>horend</i>	---	<i>hearrend</i>
Past	<i>gehoord</i>	<i>gehoor</i>	<i>ghuort</i>	<i>heard</i>
Present				
1st singular	<i>ik hoor</i>	<i>ek hoor</i>	<i>ik uoren</i>	<i>ik hear</i>
2nd singular	<i>je hoort</i>	<i>jy hoor</i>	<i>gie uort</i>	<i>dû hearst</i>
3rd singular	<i>hij hoort</i>	<i>hy hoor</i>	<i>ie uort</i>	<i>hy heart</i>
1st plural	<i>we horen</i>	<i>ons hoor</i>	<i>wunder uoren</i>	<i>wy hearre</i>
2nd plural	<i>jullie horen</i>	<i>julle hoor</i>	<i>gunder uort</i>	<i>jimme hearre</i>
3rd plural	<i>ze horen</i>	<i>hulle hoor</i>	<i>zunder uoren</i>	<i>hja hearre</i>
Different forms	3	1	2	4
Past				
1st singular	<i>hoor-d-e</i>	---	<i>uor-d-e(ge)</i>	<i>hear-d-e</i>
2nd singular	<i>hoor-d-e</i>	---	<i>uor-d-e(ge)</i>	<i>hear-d-est</i>
3rd singular	<i>hoor-d-e</i>	---	<i>uor-d-e(ge)</i>	<i>hear-d-e</i>
1st plural	<i>hoor-d-en</i>	---	<i>uor-d-e(ge)n</i>	<i>hear-d-en</i>
2nd plural	<i>hoor-d-en</i>	---	<i>uor-d-e(ge)</i>	<i>hear-d-en</i>
3rd plural	<i>hoor-d-en</i>	---	<i>uor-d-e(ge)n</i>	<i>hear-d-en</i>
Different forms	2	0	2	3

(59)	German		Swabian		Sankt Gallen		Zürich		Bern	
Infinitive	<i>hören</i>		<i>hera</i>		<i>ghöre</i>		<i>ghööre</i>		<i>ghööre</i>	
Imperative										
Singular	<i>hör</i>		<i>(her)</i>		<i>(hör)</i>		<i>(ghöör)</i>		<i>(ghöör)</i>	
Plural	<i>hört</i>		<i>(hered)</i>		<i>(höret)</i>		<i>(ghööred)</i>		<i>(ghööret)</i>	
Participles										
Present	<i>hörend</i>		---		---		<i>ghöörend</i>		---	
Past	<i>gehört</i>		<i>gherd</i>		<i>ghört</i>		<i>ghöört</i>		<i>ghöört</i>	
Present										
1st singular	<i>ich</i>	<i>höre</i>	<i>i</i>	<i>her</i>	<i>ich</i>	<i>ghöre</i>	<i>ich</i>	<i>ghööre</i>	<i>i</i>	<i>ghööre</i>
2nd singular	<i>du</i>	<i>hörst</i>	<i>du</i>	<i>hersch</i>	<i>du</i>	<i>ghörsch</i>	<i>du</i>	<i>ghöörsch</i>	<i>du</i>	<i>ghöörsch</i>
3rd singular	<i>er</i>	<i>hört</i>	<i>r</i>	<i>herd</i>	<i>er</i>	<i>ghört</i>	<i>er</i>	<i>ghöört</i>	<i>er</i>	<i>ghöört</i>
1st plural	<i>wir</i>	<i>hören</i>	<i>mr</i>	<i>hered</i>	<i>mer</i>	<i>ghöret</i>	<i>mir</i>	<i>ghööred</i>	<i>mir</i>	<i>ghööre</i>
2nd plural	<i>ihr</i>	<i>hört</i>	<i>r</i>	<i>hered</i>	<i>eer</i>	<i>ghöret</i>	<i>ir</i>	<i>ghööred</i>	<i>dir</i>	<i>ghööret</i>
3rd plural	<i>sie</i>	<i>hören</i>	<i>se</i>	<i>hered</i>	<i>si</i>	<i>ghöret</i>	<i>si</i>	<i>ghööred</i>	<i>si</i>	<i>ghööre</i>
Different forms	4		4		4		4		4	

Past					
1st singular	<i>hör-t-e</i>	---	---	---	---
2nd singular	<i>hör-t-est</i>	---	---	---	---
3rd singular	<i>hör-t-e</i>	---	---	---	---
1st plural	<i>hör-t-en</i>	---	---	---	---
2nd plural	<i>hör-t-et</i>	---	---	---	---
3rd plural	<i>hör-t-en</i>	---	---	---	---
Different forms	4	0	0	0	0

If the generalisation in (46) (i.e. an SVO-language has V°-to-I° movement if and only if person morphology is found in all tenses) was applied to the SOV-languages in (58) and (59), Dutch and Afrikaans should not have V°-to-I° movement, as they both have at least one tense with no person morphology, whereas West Flemish, Frisian, German, Swabian and the Swiss German variants from Sankt Gallen, Zürich, and Bern should all have V°-to-T° movement, as they have person morphology in all tenses).

However, in the languages predicted to have V°-to-T° movement, the finite verb does not precede the sentential adverb in those embedded clauses where main clause word order is not possible. In fact, the finite verb does not even precede its own object in any of these cases, (60)c-i:

			Adv	Object	Verb	
(60) a.	Du.	Dat Johan	vaak	tomaten	eet	(verrast de meeste mensen.)
b.	Af.	Dat Johan	gereeld	tamaties	eet	(verras die meeste mense.)
c.	WF.	Da Johan	dikkerst	tematen	eet	(verwondert de meeste mensen.)
d.	Fs.	Dat Johan	faak	tomaten	yt	(die de measte minsken nij.)
e.	Ge.	Dass Johann	oft	Tomaten	isst	(überrascht die meisten Leute.)
f.	St.	Dass dr Johann	oft	Tomada	isst	(ieberrascht der maschde Leid.)
g.	SG.	Dass de Johann	öpedie	Tomaate	äst	(überascht di meischte Lüt.)
h.	Zü.	Dass de Johann	hüüfig	Tomaten	isst	(überrascht di mäischte Lüüt.)
i.	Be.	Dass dr Johann	hüüfig	Tomaten	isst	(überrascht di meischte Lüt.)
		<i>That John</i>	<i>often</i>	<i>tomatoes</i>	<i>eats</i>	<i>(surprises most people)</i>

Let us consider the different options, referring to German version(s) of (42)/(43)/(60):

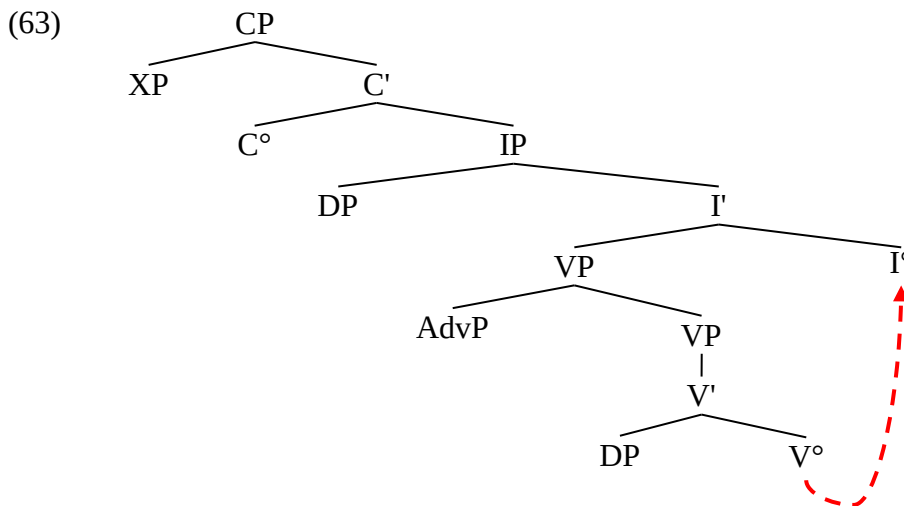
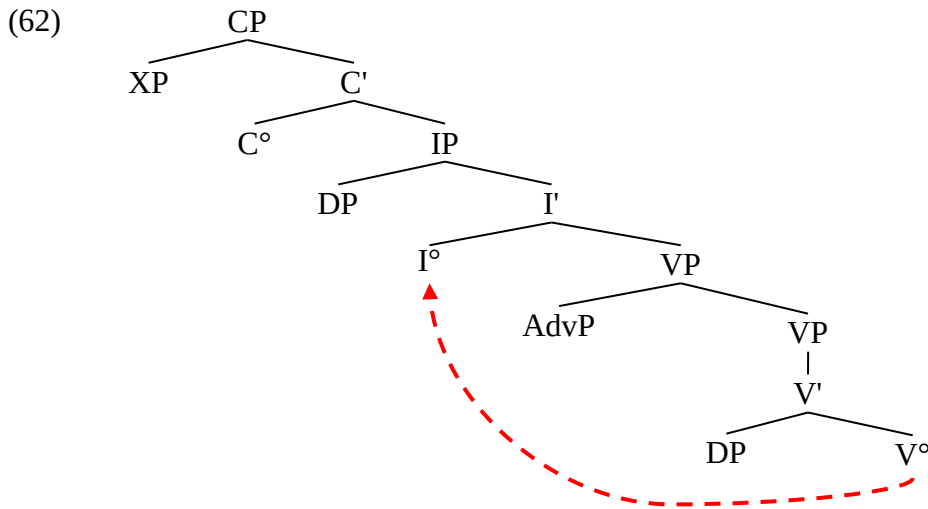
(61) Ge. a.	* Dass Johann	<u>isst</u>	oft	Tomaten	(überrascht die meisten Leute.)
b.	* Dass Johann		oft	<u>isst</u>	Tomaten (überrascht die meisten Leute.)
c.	Dass Johann		oft	Tomaten	<u>isst</u> (überrascht die meisten Leute.)
	<i>That John</i>		<i>(eats) often</i>	<i>(eats) tomatoes</i>	<i>(eats) (surprises most people)</i>

The ill-formedness of (61)a, which would have to have the structure (62) with the broken **red** arrow (as this is a context where embedded V2 is excluded), could be due to I° being final and/or to be due to German not having V°-to-I° movement.

The ill-formedness of (61)b is caused by German being an OV-rather than a VO-language, i.e. the order inside the German VP is DP-V° (and not V°-DP as in e.g. Danish or English).

The well-formedness of (61)c may either be the result of V°-to-I° movement if I° is final, as in (63) with the broken **red** arrow, or the result of lack of V°-to-I° movement, as in either of (62) and (63) but WITHOUT the broken **red** arrows.

In other words, if German lacks V°-to-I° movement, we have no evidence of the position of I° in German. This again makes it a distinct possibility that the only difference between the clause structure of Germanic OV-languages like German and that of Germanic VO-languages like English or Danish is the position of V°, as in (63) vs. (44).



In my view, there are at least two independent phenomena that indicate that German (etc.) does not have V°-to-I° movement:

1. Vikner (2005b) (the essence of hand-out 3d later in this course): A number of complex verbs in German and Dutch have a strange distribution. They occur as non-finite verbs in both main and embedded clauses, (64)a,b, but as finite verbs, they only occur in embedded clauses, (64)c, **NOT** in main clauses, (64)d,e:

- (64) Ge. a. Sie will bauparen.
She wants (to) building-save
 ('She wants to save with a building society')
- b. ... weil sie bauparen will.
 ... *because she building-save wants*
 ('... because she wants to save with a building society')

- c. ... weil sie baupart.
 ... *because she building-saves*
 ('... because she saves with a building society')
 (a,c adapted from Eisenberg 1998, 226, 324, (16a))
- d. * Spart sie bau ?
 e. * Bauspart sie ?
 (*Building-saves she (building) ?*)
 (Intended: 'Does she save with a building society')

I think that this is best explained if we assume that what (64)a-c have in common is that the verbs here all are in V°, i.e. what these verbs are unable to do is to leave V°. The reason is that they then would have to be treated either as separable ("trennbar") or as non-separable ("nicht trennbar") verbs, and this special property of these verbs is that they have to fulfill the conditions on verbs of **both** types.

2. Vikner (2001, 66–99) (the essence of hand-out 3e later in this course): There is a lot of variation in the sequence of verbs in embedded clauses like

- (65) a. Du. ... dat hij haar hoort roepen
 b. Ge. ... dass er sie rufen hört
 ... *that he her (shout) hears (shout)*

both across nine different Germanic languages/dialects (Dutch, Afrikaans, West Flemish, Frisian, Standard German, Swabian German from Stuttgart, Swiss German from Sankt Gallen, Swiss German from Zürich, and Swiss German from Bern) and across six different constructions (perfect, passive, durative, causative, perception verbs, and modal verbs).

This variation in embedded clauses where one of the two verbs is finite, as in (65)a,b, is almost identical to the variation in the sequence of the verbs in main clauses where none of the two verbs in question are finite, (66)a,b:

- (66) a. Du. Hij zal haar horen roepen
 b. Ge. Er wird sie rufen hören
He will her (shout) hear (shout)

This shows that it makes no significant difference whether the higher of the two verbs concerned is finite, as *hoort/hört* in (65)a,b, or non-finite, as *horen/hören* in (66)a,b. This again means that in embedded clauses in the nine SOV-Germanic languages, there can be no obligatory movement that involves only finite verbs. This amounts to saying that there is no V°-to-I° movement in the Germanic SOV-languages.

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