

V2

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This course should be easy to follow if you have some background in generative syntax – but I’ll try to introduce the key theoretical notions as I go along, so that beginners can get something out of it too. Stop me if you’re confused!

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1 The verb-second phenomenon

Aims of today's session:

- Introduce verb-second (V2): what is it and where is it found?
- Outline the basic empirical generalizations
- Sketch a basic syntactic analysis (to be challenged!)
- Give a taste of the general theoretical interest of V2

1.1 Nature and distribution of V2

This section (and much of today's session) is based on Holmberg (2015).

A verb-second (V2) language is one in which the finite verb is obligatorily the second constituent – either in main clauses (*asymmetric V2*), or more generally, in all finite clauses (*symmetric V2*).

- (1) a. Jag har ärligt talat aldrig sett huggormar i den här skogen.
I have honestly speaking never seen adders in this here forest
'To be honest I've never seen adders in this forest.' (Swedish)
- b. Huggormar har jag ärligt talat aldrig sett i den här skogen.
adders have I honestly speaking never seen in this here forest
- c. I den här skogen har jag ärligt talat aldrig sett huggormar.
in this here forest have I honestly speaking never seen adders
- d. Ärligt talat har jag aldrig sett huggormar i den här skogen.
honestly speaking have I never seen adders in this here forest
- e. *Huggormar jag har ärligt talat aldrig sett i den här skogen.
adders I have honestly speaking never seen in this here forest

Not a theory-neutral description!

- Presupposes constituency
- Presupposes ability to diagnose exactly one constituent
- Requires an understanding of what a main/finite clause is

...but this much is (mostly) uncontroversial.

Some (e.g. Poletto, 2002) have used the term in a more theory-loaded sense. The above is the standard (and most intuitive) definition, and we'll adopt it throughout this course.

The following are V2 languages:

- All the present-day Germanic standard languages (except English!)
- Some Rhaetoromance varieties
- Breton
- Estonian
- Sorbian
- Kashmiri and two dialects of Himachali
- Karitiana (Tupi, Brazil) – maybe
- Historical Germanic languages (to some extent)
- Historical Romance languages (to some extent)
- Historical Brythonic Celtic languages (to some extent)

Cross-linguistically, V2 appears to be extremely rare – and its distribution is heavily skewed towards Western Europe. In this course we'll focus on present-day Germanic.

Traditional division of V2 languages (we'll return to this on Wednesday):

- V2 in main clauses only (*asymmetric*): German, Dutch, Mainland Scandinavian...
- V2 in all finite clauses (*symmetric*): Icelandic, Yiddish...

Languages that are not V2 may have V2 constructions. For instance, English has “residual” V2 (Rizzi, 1990) in *wh*-questions, with certain initial negative constituents, and in a few other contexts.

- (2) a. Which battery type (would) you (*would) recommend?
- b. This battery type (*would) I (would) not recommend.
- c. None of them (would) I (*would) recommend.
- d. So good (was) his performance (*was) that he got a standing ovation.

Subject-verb inversion in English residual V2 is only possible with a limited class of verbs: modals, auxiliaries, *be*, *do* and (for some speakers) *have*. Spanish (for instance) also has residual V2.

Various V2 languages also allow *exceptions* to V2 in certain constructions – *all* V2 languages, according to Holmberg (2015). We’ll come back to some of these on Thursday. Interesting question: is ‘V2 language’ in the sense used above really a useful or coherent notion, descriptively or typologically?

1.2 Basic facts

The first constituent can be a variety of elements:

- (3) André het gister die storie geskryf.
André has yesterday the story written
‘André wrote the story yesterday.’ (subject; Afrikaans)
- (4) Tidningar läser barnen inte.
newspapers read the-children not
‘Newspapers, the children don’t read.’ (object; Swedish)
- (5) Heldigvis er den politiske kunst på vej tilbage.
luckily is the political art on way back
‘Luckily, political art is making a come-back.’ (adverb; Danish)
- (6) Wenn man keine Träume mehr hat ist man leer.
if one no dreams anymore has is one empty
‘If you have no dreams anymore, you’re empty.’ (adverbial clause; German)
- (7) Hvers vegna hefur kreditkortinu mínu verið hafnað?
why has credit-card my been rejected
‘Why has my credit card been rejected?’ (*wh*-element; Icelandic)
- (8) Sint er jeg ikke, bare veldig skuffet.
angry am I not only very disappointed
‘I’m not angry, just very disappointed.’ (predicative adjective; Norwegian)

Some variation with respect to other elements like negation, VPs, non-finite verbs, particles, certain expletives.

- (9) Komið hafa margir stúdentar.
come have many students
‘Many students have come.’ (participle; Icelandic)
- (10) Leyenen leyent er dos bukh yetst.
read-INF reads he the book now
‘As for reading, he’s reading the book now.’ (infinitive; Yiddish)
- (11) Ekki veit ég hvað ætlar úr þér að verða.
not know I what will of you to become
‘I don’t know what will become of you.’ (negation; Icelandic)
- (12) Doch haben wir gewonnen.
still have we won
‘Nevertheless, we won.’ (particle; German)

(Co-ordinating) conjunctions don’t trigger V2.

- (13) a. Und die Zeitung haben sie gelesen.
and the newspaper have they read
'And they read the newspaper.' (German)
b. *Und haben sie die Zeitung gelesen.

Only one constituent may ever be preverbal.

- (14) a. *Vandag die koerant lees hy. /*Die koerant vandag lees hy.
today the newspaper read he /the newspaper today read he
'Today he read the newspaper.' (Afrikaans)
b. *Varför ensam vill du inte vara? /*Ensam varför vill du inte vara?
why alone want you not be /alone why want you not be
'Why do you not want to be alone?' (Swedish)

V1 is found instead of V2:

- In yes/no-questions; see (15-a)
- In imperatives; (15-b)
- In marked declaratives: 'Narrative Inversion' (Sigurðsson, 1990); (15-c)
- When something is elided (topic drop/'pronoun zap'; Mörnjö, 2001); (15-d)

- (15) a. Lees hy vandaag die koerant?
read he today the newspaper
'Did he read the newspaper today?' (Afrikaans)
b. Var du tyst!
be you quiet
'You be quiet!' (Swedish)
c. Kom Ólafur seint heim.
came Ólafur late home
'Ólafur came home late.' (Icelandic)
d. Habe ich nicht.
have I not
'I don't have (it).' (German)

Other, V3+, exceptions to be discussed on Thursday.

1.3 Analysing V2: a starting point

Basic assumptions I'll be making today (and mostly throughout), as standard in much of the generative literature:

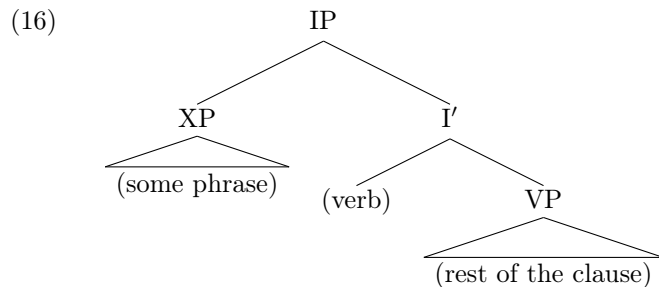
- X' theory: projections uniformly have a head, a complement, and a specifier.
- Clause structure: in V2 languages at least, CP (Clause/Complementizer Phrase) is above IP (Inflection Phrase) is above VP (Verb Phrase).
- Only one specifier per projection.
- Projections may vary in whether they are head-initial or head-final.

General statement of V2 structure:

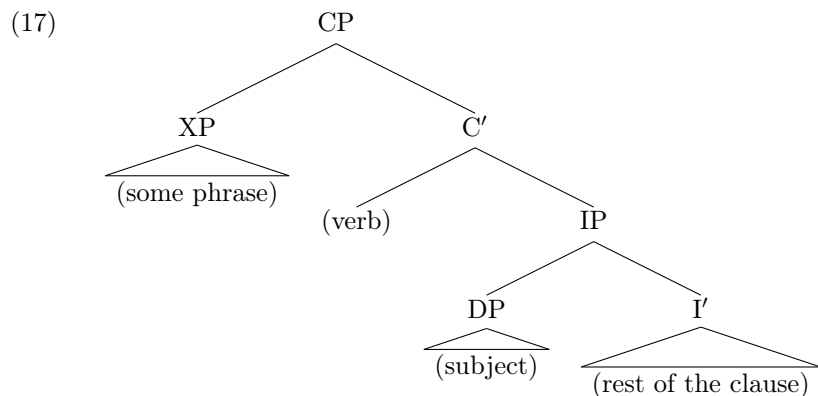
- There is a clausal projection (CP or IP) that is head-initial and specifier-initial.
- Nothing may be adjoined to that projection.
- The finite verb must occupy the head of that projection (if it is available).
- Some constituent must occupy the specifier of that projection.

It's assumed in the transformational-generative literature that the finite verb *moves* to C or I from V (the head of VP). A constituent is usually moved to (rather than base-generated in) SpecCP or SpecIP, too.

In languages in which V2 holds in all finite clauses (*symmetric V2*), the clausal projection involved is IP. SpecIP is often taken to be a subject position. However, because the preverbal position is not restricted to subjects or even arguments of the verb in symmetric V2 languages, SpecIP can't be an A(rgument) position, but must instead be an A' (non-argument) position. We'll come back to this type of analysis on Wednesday.



In languages in which V2 holds only in main clauses (*asymmetric V2*), the clausal projection involved is CP. SpecIP is then the position for the subject.



What drives the asymmetry? Complementizers are C heads, and they compete with the finite verb for this position. That is, *complementizers and finite verbs are in complementary distribution* in asymmetric V2 languages (den Besten, 1989, originally circulated in 1977). Striking support for this kind of analysis: alternations in verb position depending on presence or absence of complementizer.

- (18) a. Er sagte, dass er morgen komme.
 he said that he tomorrow comes-SBJV
 'He said he would come tomorrow.' (German: after den Besten, 1989, 82)

- b. Er sagte, er komme morgen.
 he said he comes-SBJV tomorrow

- c. *Er sagte, dass er komme morgen.
 he said that he comes-SBJV tomorrow

- (19) a. als ob er es nicht gesehen hätte
 as if he it not seen had-SBJV
 'as if he had not seen it' (German: after den Besten, 1989, 91)

- b. als hätte er es nicht gesehen
 as had-SBJV he it not seen

- c. *als ob hätte er es nicht gesehen
 as if had-SBJV he it not seen

Exercise: draw a tree for the subordinate clauses in (18-a) and (18-b)! (NB: German and Dutch are OV languages, with a head-final VP, and so the finite verb comes in last position when it is not moved to C.)

This analysis has been challenged, and the challenge will be the subject of tomorrow's class.

1.4 Theoretical interest: head-movement

V2 phenomena have contributed in important ways to the development of syntactic theory – and continue to provide challenges. We’ll focus on some major ones that arise in the context of the Minimalist Program (Chomsky, 1995, 2000, 2001, and subsequent work).

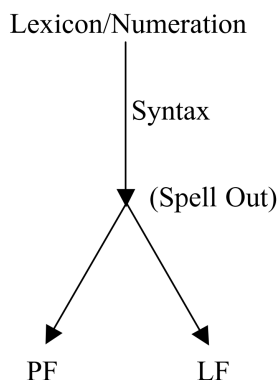


Figure 1: The Y-model of the architecture of the grammar (Chomsky, 1995)

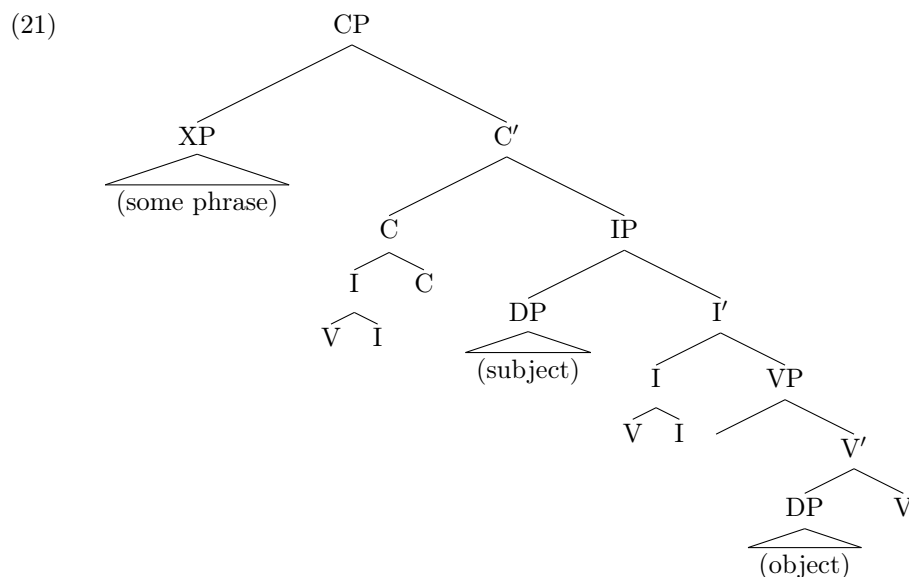
In this research programme, the architecture of the grammar is assumed to be as in 1. Phonological Form (PF) is the interface between language and the sensorimotor systems of the human mind. Logical Form (LF) is the interface between language and the conceptual-intentional systems of the human mind. Syntactic trees are built bottom-up, starting from lexical items. This process involves no more than a handful of basic operations, most uncontroversially:

- *Merge*, which puts syntactic objects together
- *Move*, which moves (or copies) a syntactic object to another position in the structure – according to Chomsky (2001), this is just a type of Merge
- *Agree*, which is responsible for relations between syntactic objects at a distance

What is the operation that causes the finite verb to move from V to C? This sort of *head movement* was widely assumed in Government & Binding theory, the precursor to Minimalism: see Haegeman (1994, chapter 11) for an overview, and Roberts (2011) for a Minimalist perspective.

- (20) *Head Movement Constraint* (Travis, 1984)
Head movement of X to Y cannot ‘skip’ an intervening head Z.

In our terms, this means that if V moves to C it must move via I. Representing it here in terms of head-adjunction in an OV language like German:



The Head Movement Constraint has been questioned for V2 (see Zwart, 1993, Roberts, 2010, section 4.1.3), but we'll assume it here. But what is head movement? It doesn't behave like other instances of the operation Move – it doesn't extend the top of the tree. It also doesn't look much like Merge or Agree.

Chomsky (2001, 37–38) suggests that head movement is not actually a syntactic operation at all, and doesn't reflect anything that happens in the narrow syntax. Instead, it's part of the phonological component of the grammar. If this is true, then – assuming the Y-model in 1 – it shouldn't have any effect on interpretation. Anderson (2000) develops a theory in which V2 is purely a matter of linearization. But V-in-C does seem to make a semantic difference – at least sometimes:

- (22) a. In no clothes would they look attractive.
 (interpretation/paraphrase: 'It is not possible for them to look attractive, regardless of what clothes they are wearing.')
- b. In no clothes they would look attractive.
 (interpretation/paraphrase: 'If they were not wearing clothes, they would look attractive.')

So the presence/absence of verb-movement (and hence V2) does correlate with a semantic effect – suggesting that V-in-C does reflect something that happens in the narrow syntax. We'll talk more about the interpretive effect of V-to-C on Wednesday.

Müller (2004) proposes a theory of V2 that doesn't involve head movement at all. We can return to this on Friday if people are interested.

1.5 Broader theoretical interest

Another question arises if we assume that the Head Movement Constraint holds: can V-to-C (via I) be learned as a single step, or does it consist of two separate steps? Both have been proposed.

- *Stepwise theory* (Platzack, 1986): V-to-C involves a process of V-to-I and a process of I-to-C, which can and must be learned separately.
- *Swooping theory* (Holmberg & Platzack, 1995; Vikner, 1995): V-to-C can be learned independently.

Both approaches are descriptively adequate (and equivalent) – but there is some evidence from learnability that the swooping theory is superior (Gould, 2016).

Another important question: if head movement is head-adjunction, as presented above, why can't the verb adjoin to the complementizer? That would predict structures like (23), which is completely impossible.

- (23) *Er sagte, komme-dass er morgen.
 he said comes-SBJV-that he tomorrow
 'He said he would come tomorrow.' (German)

So how can den Besten's intuition that the complementizer and the verb are in complementary distribution be captured? Perhaps, if head movement exists, the view that it involves adjunction is not correct – or at least not correct in the case of V-to-C movement in V2 languages.

While V2 languages are rare, 'inverse V2' languages seem to be nonexistent (Kayne, 1994). But inverse V2 can be derived easily in the sort of system we've been discussing. Why doesn't it exist? Should we be ruling it out?

What drives the requirement for a filled SpecCP? Does this just have to be stipulated, or can it be derived from something?

Final thought: it's a widely-accepted aphorism that 'grammars can't count'. So how does this square with V2, where the verb has to be second?

1.6 Summary and conclusion

- A V2 language is one in which the finite verb is obligatorily the second constituent.
- V2 is almost ubiquitous in Germanic, and common in Western Europe, but very rare elsewhere.
- Asymmetric V2 can be analysed as involving obligatory V-to-C movement (where possible) and an obligatorily filled SpecCP.

- Head movement (required for V-to-C) is controversial, and raises a lot of interesting questions.

Further reading:

- Holmberg (2015) is an indispensable overview article.
- Joutteau (2010) has good typological discussion, especially in relation to V1 languages and other second-position phenomena such as Wackernagel clitics.
- Roberts (2011) is a clear overview of the issues surrounding head movement.

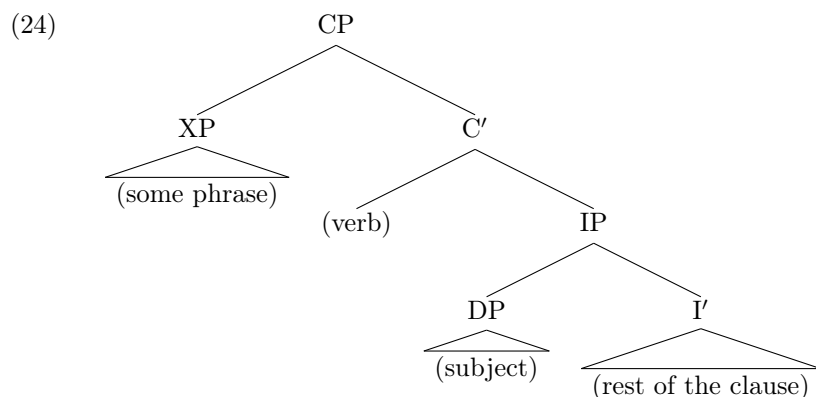
2 Traditional vs. two-structure analyses of V2

Aims of today's session:

- Introduce an alternative analysis and its motivation
- Discuss problems for the traditional analysis
- Discuss problems for the alternative analysis
- Present a few other analytical approaches to V2

2.1 The traditional analysis and an alternative

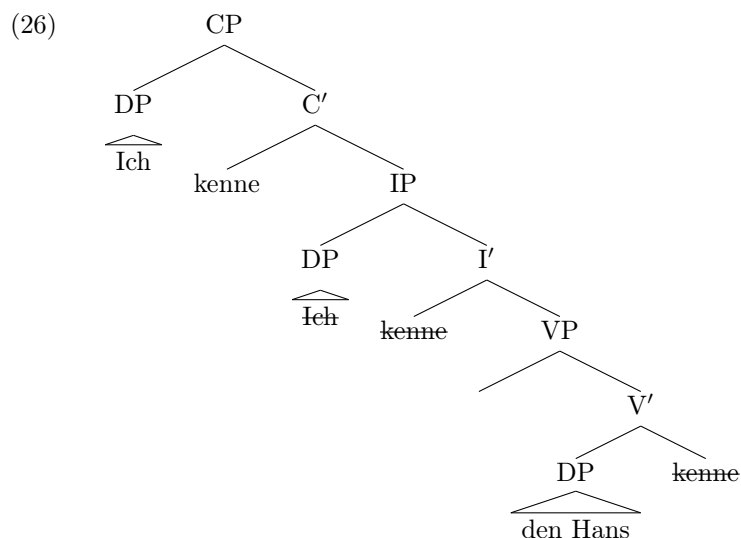
Recall the basic analysis that we presented to account for asymmetric V2: the verb moves to C, and some constituent must occupy SpecCP.



We'll refer to this as the *traditional* analysis. Assuming that SpecIP is the normal subject position, how does this analysis capture a subject-initial sentence like (25)?

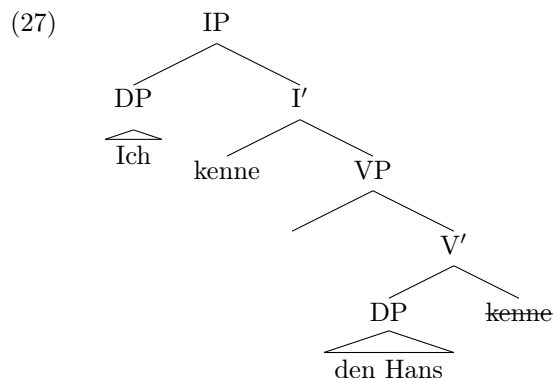
- (25) Ich kenne den Hans.
 I know the Hans
 'I know Hans.'(German)

(In the rest of the course, traces/unpronounced copies/whatever's left behind by moved items will be indicated using ~~strikethrough~~.)



Notice that the last two steps of building this tree – movement of the verb *kenne* in I to C, and movement of the subject *Ich* from SpecIP to SpecCP – are redundant in terms of linear order. So couldn't we have an analysis in which these last two movements simply don't happen?

Exactly this kind of analysis has been proposed by Travis (1984) and Zwart (1991, 1993, 1997, 2001). We'll refer to this alternative analysis as the *two-structure* analysis. According to these authors, the structure of non-subject-initial V2 clauses is just as it is in the traditional analysis, (24). But in subject-initial V2 clauses, we have a structure with no CP (or in which CP is empty), as in (27).



This sort of structure is particularly conceptually appealing if you work in a theory that builds in economy of structure or movement as a foundational principle, e.g. Lexical-Functional Grammar (Sells, 2001 for Swedish; though Berman, 2003 adopts the traditional analysis for German) or early Minimalism (Zwart, 1993, 1997 for Dutch). But the more interesting question, and the one we'll tackle today, is whether there are *empirical* arguments for or against the two-structure analysis, in terms of descriptive adequacy. We'll start with arguments in favour of the two-structure analysis.

2.2 In favour of the two-structure analysis

There is also an interesting argument from Mikkelsen (2015) based on VP anaphora in Danish, which we don't have time to do justice to today.

2.2.1 Weak pronouns

Travis (1984): weak pronouns may appear in first position of subject-initial V2 clauses, but not object-initial ones.

- (28)
- a. Es hat das Brot gegessen.
it has the bread eaten
'It (the child) has eaten the bread.' (German)
 - b. *Es hat das Kind gegessen.
it has the child eaten
'The child has eaten it (the bread).'

The same holds for Dutch (Zwart, 1991, 80):

- (29)
- a. 'k zag hem.
I saw him
'I saw him.' (Dutch)
 - b. Ik zag hem.
 - c. *'m zag ik.
him saw I
 - d. Hem zag ik.

The facts are accounted for if we assume that there is a difference between SpecCP and SpecIP such that the latter may host weak pronouns but the former may not.

- Travis (1984): only XPs bearing focal stress may be in SpecCP.
- Zwart (1991): weak pronouns must right-adjoin to a functional head to their left.

Bigger issue here: what interpretive properties are linked to syntactic positions such as SpecCP? Branigan (1996, 53–54): 'A-bar positions ... are typically associated with some semantic significance: focus, interrogative force, etc.' We'll come back to this on Thursday.

Ways round this argument: Rizzi (1991) suggests that SpecCP can be an A-position as long as what's in SpecCP agrees with the C head. Only subjects do this. See also Schwartz & Vikner (1996, 15–19) for discussion, including a version of this argument that is actually problematic for Zwart's analysis. (NB: it is not universally true that *es* in object function can't appear in the prefield: see Frey, 2006.)

2.2.2 Double agreement

Zwart (1993): in some varieties of Dutch, complementizers agree with the subject, and this agreement is distinct from that of the finite verb.

- (30) a. dad-de gullie kom-t.
that-2PL you come-2PL
'that you come' (Brabantish)
- b. datt-e wij speul-t.
that-1PL we play-1PL
'that we play' (East Netherlandic)

This *C-agreement* also appears on finite verbs in non-subject-initial V2 clauses (Zwart, 1993, 179–180).

- (31) a. Wanneer kom-de/*-t gullie?
when come-2PL you
'When are you coming?' (Brabantish)
- b. Waar speul-e/*-t wij?
where play-1PL we
'Where are we playing?' (East Netherlandic)

In subject-initial clauses, the facts are the opposite (Zwart, 1993, 179–180).

- (32) a. Gullie kom-t/*-de
you come-2PL
'You are coming' (Brabantish)
- b. Wij speul-t/*-e.
we play-1PL
'We are playing' (East Netherlandic)

Similar facts are found outside the Dutch-speaking area, for instance in Old English (Grohmann, 1995; examples taken from YCOE, Taylor et al., 2003).

- (33) a. Nu mot-e we habban maran rihtwisnysse
now must-1PL we have more righteousness
'Now we must have more righteousness' (coaelhom,+AHom_16:120.2310)
- b. We secg-að eow Godes riht
we say-1PL you.DAT God's law
'We tell you God's law' (cocathom1,+ACHom_I,_3:205.186.618)
- c. Hwæt secg-e ge hwæt ic si?
what say-2PL you what I be
'What do you say that I am?' (coaelhom,+AHom_9:69.1332)
- d. ge secg-að þæt ic eom
you say-2PL that I am
'You say that I am.' (cowsgosp,Lk_[WSCp]:22.70.5538)

Old English has no complementizer agreement, but strict V2 in *wh*-interrogatives and certain other constructions, without a V2 requirement in neutral main declaratives. We'll come back to it on Thursday.

In the two-structure analysis, these facts can be captured neatly under a simple generalization:

- When the verb is in C, it takes C agreement (which in Brabantish and East Netherlandic is the same as on the complementizer).
- Otherwise, it takes a different kind of agreement.

The traditional analysis doesn't immediately capture these facts.

2.2.3 Coordination

Zwart (1993): subjects can be omitted in second conjuncts when non-initial in the first conjunct.

- (34) ?Na Zwolle rijdt deze trein verder naar Groningen en zal alleen stoppen te Assen.
after Zwolle goes this train on to Groningen and will only stop at Assen
'After Zwolle, this train goes on to Groningen and will only stop at Assen.' (Dutch; Zwart, 1993, 250)

This is not possible with initial topics in the second conjunct.

- (35) *Na Zwolle zal deze trein alleen stoppen te Assen en kun je dus beter niet nemen.
after Zwolle will this train only stop at Assen and can you therefore better not take
'After Zwolle, this train will only stop at Assen, so you'd better not take it.' (Dutch; Zwart, 1993, 252)

Assuming that only like categories can conjoin, in the traditional analysis, both conjuncts in (34) must be *C'*. But that doesn't help explain why (34) is fine while (35) is ungrammatical. In the two-structure analysis, it is possible to make a distinction between the two. Zwart's account:

- Elements in the second clause of a coordinate structure can only delete under identity with an element in the first clause if it is in the same structural position.
- In (34), IPs are conjoined, and the subject is in SpecIP in both conjuncts. (Actually, SpecAgrSP)
- In (35), the deleted object in the second conjunct is a topic and so would need to be in SpecCP, while it is coreferential with a subject in SpecIP of the first conjunct.

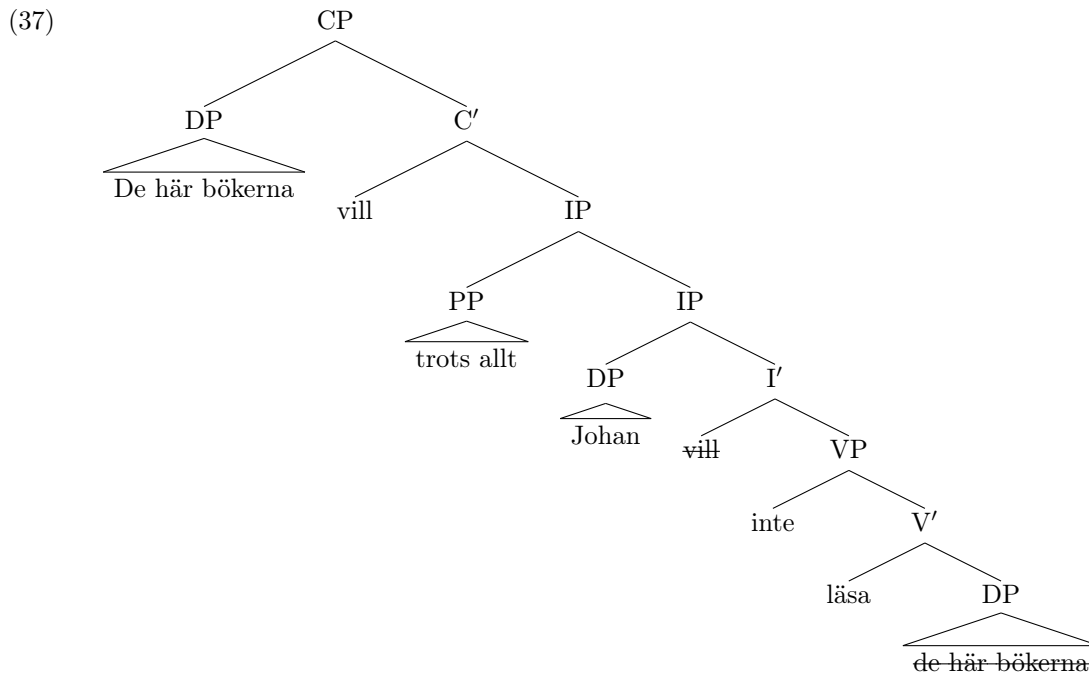
Heycock & Kroch (1993) present a very similar set of facts for German, and develop an account compatible with the traditional analysis. However, the machinery they use is not compatible with modern Minimalist theorizing, as it involves deletion of structure, contradicting the *no tampering condition* (Chomsky, 2008, 138).

2.3 In favour of the traditional analysis

2.3.1 Adjunction to IP

Schwartz & Vikner (1996, 12–13): adverbials like German *letzte Woche* 'last week' and Swedish *trots allt* 'despite everything' must be adjoined to IP.

- (36) a. Jag beklagar att trots allt Johan inte vill läsa de här böckerna.
I regret that despite all Johan not will read these here books
'I regret that despite everything Johan will not read these books.'
b. Vill trots allt Johan inte läsa de här böckerna?
will despite all Johan not read these here books
'Will Johan not read these books despite everything?'
c. De här böckerna vill trots allt Johan inte läsa.
these here books will despite all Johan not read



This predicts, under the two-structure analysis, that these adverbials should precede the subject, giving rise to V3. But this is false.

- (38) *Trots allt Johan vill inte läsa de här böckerna.
 despite all Johan not will read these here books

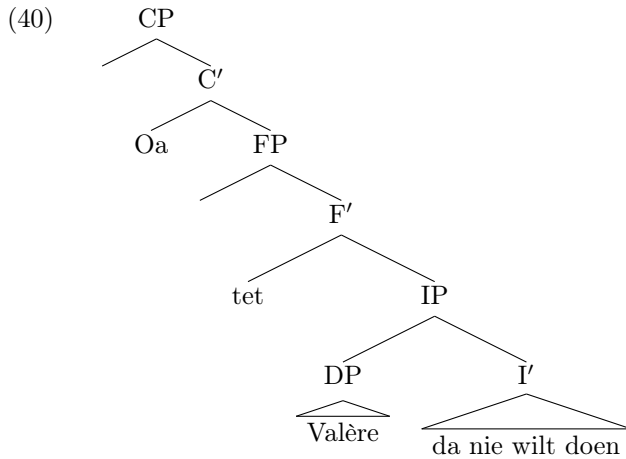
The traditional analysis correctly predicts this contrast.

2.3.2 Boundary of the IP layer

Can we find an item that reliably diagnoses the edge of the IP domain? van Craenenbroeck & Haegeman (2007): the object clitic *t* in the Wambreek dialect of Dutch, and the particle *tet* in West Flemish, are two such elements. Focusing now on *tet*:

- Underscores the polarity of the clause, and expresses either irritation or surprise.
- Fixed position in subordinate clauses: to the right of the complementizer, to the left of the DP in canonical subject position, as in (39).
- van Craenenbroeck & Haegeman (2007): head of a functional projection FP between IP and CP.

- (39) a. Kpeinzen dat tet Valère da nie goa willen doen.
 I.think that TET Valère that not go want do
 'I think that Valère won't want to do that.'
- b. Oa tet Valère da nie wilt doen, ...
 if TET Valère that not wants do
 'If Valère doesn't want to do that, ...' (van Craenenbroeck & Haegeman, 2007, 174)



In main clauses, *tet* always follows the finite verb.

- (41)
- a. Morgen goa tet Valère da niet willen doen.
tomorrow goes TET Valère that not want do
 - b. Valère goa tet da morgen nie willen doen.
Valère goes TET that tomorrow not want do
 - c. *Tet Valère goa da morgen nie willen doen.
TET Valère goes that tomorrow not want do
 - d. *Valère tet goa da morgen nie willen doen.
Valère TET goes that tomorrow not want do
'Valère won't want to do that tomorrow.' (van Craenenbroeck & Haegeman, 2007, 175)

If van Craenenbroeck & Haegeman's characterization of the structural position *tet* is correct, then the above facts mean that the two-structure analysis must be wrong. (This is, arguably, a variant on the previous argument.)

2.3.3 Extraction

Schwartz & Vikner (1989): embedded V2 clauses are generally islands for long A'-extraction (see the summary in Branigan, 1996, 57–59).

- (42)
- a. Wie_i hat sie gesagt dass die Kinder wie_t Geschichte gelernt haben?
how has she said that the children history learnt have
'How did she say that the children learnt history?'
 - b. *Wie_i hat sie gesagt in der Schule haben die Kinder wie_t Geschichte gelernt?
how has she said in the school have the children history learnt
'How did she say that the children learnt history in school?'

Structure of the argument:

- CP is an island.
- In order to escape from a CP, elements must move via the edge (SpecCP).
- *Wh*-items like German *wie* 'how', when interpreted as belonging to the lower clause, must move from the lower clause to the higher one.
- In embedded V2 clauses, the preverbal constituent is in SpecCP and blocks movement.

This predicts, under the two-structure analysis, that subject-initial clauses should not be islands, since there is no lower CP (or the lower SpecCP is not filled). But this is false.

- (43) *Wie_i hat sie gesagt die Kinder haben wie_t Geschichte gelernt?
how has she said the children have history learnt
'How did she say that the children learnt history?'

The traditional analysis predicts this, because the subject-initial embedded clause is still a CP.

2.3.4 Expletive *es*

Schwartz & Vikner (1996, 19–21): German, Yiddish and Icelandic have unstressed expletives which seem to occur only sentence-initially.

- (44) a. Es ist ein Junge gekommen.
it is a boy come
'There arrived a boy.'
- b. *Ist ein Junge gekommen.
is a boy come
- c. *Gestern ist es ein Junge gekommen.
yesterday is it a boy come
'Yesterday there arrived a boy.'

These facts fall out naturally if *es* is a SpecCP expletive. In the two-structure account, the contrast between (44-a) and (44-c) is not obviously predicted.

Travis (1984, 169) has a workaround for this problem, but it amounts to a stipulation, as argued by Schwartz & Vikner (1996). See also Tomaselli (1990) for discussion of the expletive facts.

2.3.5 Verb movement and the headedness of IP

So far, we've been assuming that IP is head-initial in Dutch and German. That's not the only possibility. Three spring to mind, all of which have been argued for:

- IP is head-initial (Vikner, 2001; Haider, 2010).
- IP is head-final (Grewendorf, 1993; Zepter, 2003).
- IP is absent entirely (Abraham, 1993; Haider, 1993).

We'll leave the last possibility aside for today. Under the head-final view, movement of the finite verb in subordinate clauses is string-vacuous. There are a variety of empirical arguments against this view (Vikner, 2001, 100–124, Haider, 2010, 54–67), which in any case is not compatible with the two-structure analysis. For instance, German *uraufführen* 'to put on a play for the very first time' is impossible in a finite form in a V1 or V2 context, regardless of whether or not it is separated.

- (45) a. *Ur-auf-führ-t-en sie das Stück?
original-on-put-PAST-3PL they the play
'Did they put on the play for the very first time?'
- b. *Aufführten sie das Stück ur?
- c. *Führten sie das Stück urauf?

This suggests that it cannot be moved. But it may occur in a finite form in a verb-final subordinate clause (Vikner, 2001, 100–101):

- (46) ob sie das Stück ur-auf-führ-t-en
whether they the play original-on-put-PAST-3PL
'whether they put on the play for the very first time'

This further suggests that in verb-final subordinate clauses the finite verb is not moved.

For the two-structure analysis, IP must be both present and head-initial. That means that there is V-to-I movement only in main clauses. Why? It can't be blocked by the complementizer in subordinate clauses (as in the traditional analysis, following the intuition of den Besten, 1989), because the complementizer is in C. Zwart (1993, chapter 4) proposes that a silent I (actually, AgrS) moves to C via head movement, but there is no independent evidence for this.

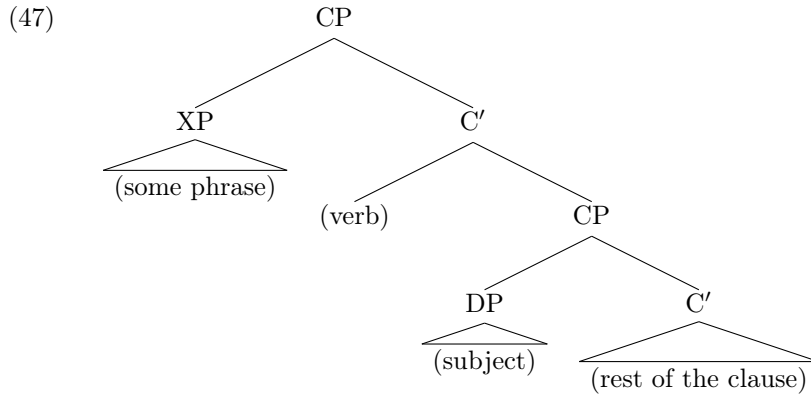
2.4 Other alternative analyses

Branigan (1996):

- There are two CPs.
- The subject always moves to the specifier of the lower one.

- Non-subject fronted XPs move to the specifier of the higher one.

This is reminiscent of, and anticipates, cartographic approaches to V2 (to be discussed).



Potential problems:

- More powerful than other approaches – multiplying entities beyond necessity?
- Must resort to some unintuitive wizardry to explain the adjunction facts (see Branigan, 1996, 64–65), including countercyclic movement
- Must explain why the subject moves to SpecCP – stipulation that this is associated with finiteness (Branigan, 1996, 68–69)

2.5 Summary and conclusion

- Both the traditional and the two-structure analysis assume V-to-C in non-subject-initial clauses. The two-structure analysis assumes that the verb moves only to I in subject-initial clauses, whereas the traditional analysis assumes that it moves to C here too.
- The traditional analysis faces challenges from asymmetries between subject and object weak pronouns, from double agreement varieties, and from coordination facts.
- The two-structure analysis faces challenges from the position of high adverbials and certain particles/clitics, from extraction facts, and from the distribution of expletives, and must make some dubious assumptions about the headedness of IP and the lack of verb movement.

Further reading:

- Schwartz & Vikner (1996) dig very deep into the different predictions made by the two (families of) analyses – though they come down firmly on the side of the traditional analysis.
- Branigan (1996) is a more even-handed treatment, which proposes a hybrid solution (see also the cartographic approaches discussed later in the course).

3 Embedded verb-second

Aims of today's session:

- Introduce the typology of embedded V2 and the IP analysis
- Problematize that typology and that analysis
- Discuss the relation of V2 to notions such as assertion

We won't be talking about embedded V2 interrogatives, though we can come back to these on the final day if people are interested.

3.1 The typology of embedded V2

Recall from day 1 that the definition in Holmberg (2015) allows for two kinds of V2: in main clauses only (*asymmetric* V2) or in all finite clauses (*symmetric* V2). Yesterday we focused exclusively on asymmetric V2. Today we'll broaden the picture.

Things are arguably more complex than a simple bipartite distinction. Vikner (1995, 65):

- *Residual* V2 languages: V2 is essentially construction-specific (or at least motivated by very specific semantics). Discussed briefly for English and Spanish on day 1. Won't feature further in this class.
- *Well-behaved* V2 languages: V2 occurs only in complementizerless clauses, as observed by den Besten (1989). Discussed on day 1 (asymmetric). German, Dutch and Afrikaans are supposed to be like this.
- *General embedded* V2 languages: V2 occurs freely in embedded contexts. Icelandic and Yiddish are the classic examples of this. Corresponds to what we've called symmetric V2. We'll come back to these languages.
- *Limited embedded* V2 languages: V2 occurs with complementizers, but in a definable subset of embedded contexts. Frisian and Mainland Scandinavian are supposed to be like this.

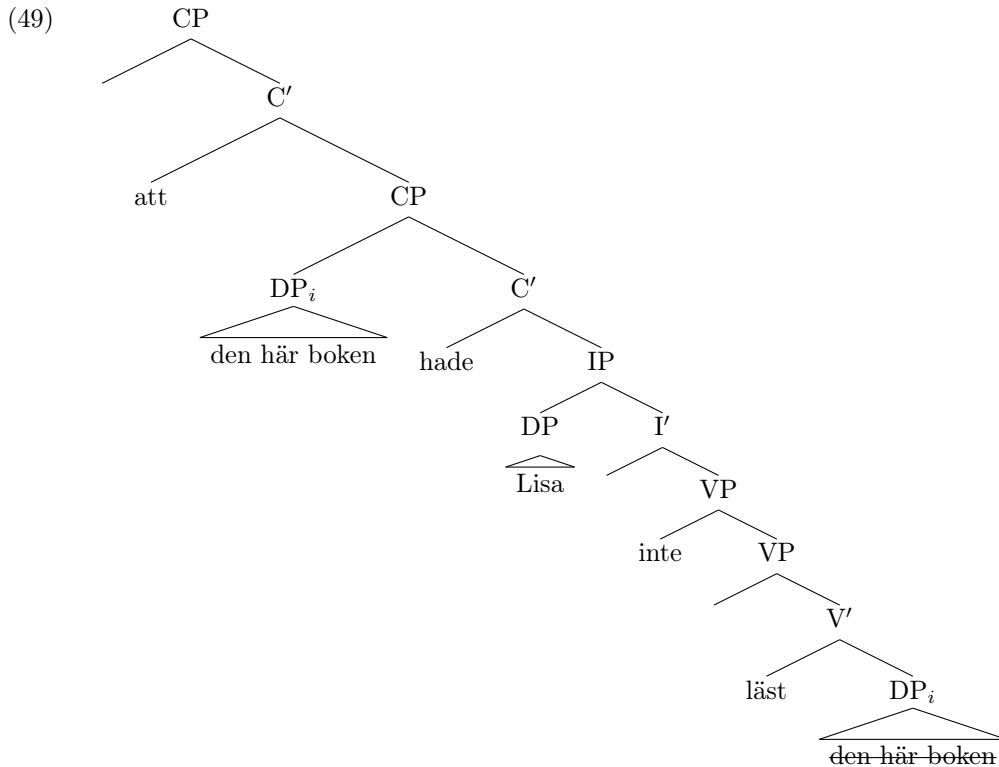
3.2 Embedded V2 and assertion

3.2.1 Limited embedded V2 and CP-recursion

The Mainland Scandinavian languages are not well behaved. V2 can co-occur with complementizers, as in (48-a). However, it's not always possible, as (48-b) shows.

- (48) a. Han sa att den här boken hade Lisa inte läst.
he said that this here book.DEF had Lisa not read
'He said that Lisa hadn't read this book.' (Swedish; Wiklund et al., 2009, 1915)
- b. *Han ångrade att den här boken hade Lisa inte läst.
he regretted that this here book.DEF had Lisa not read
'He regretted that Lisa hadn't read this book.'

Mainland Scandinavian does not have independent V-to-I movement, and *inte* 'not' serves as a diagnostic for the edge of the VP. Therefore, if the finite verb precedes *inte*, it is in C. Typical analysis of examples like (48-a): CP-recursion, i.e. a CP above another CP (de Haan & Weerman, 1986; Iatridou & Kroch, 1992; Vikner, 1995).



Interesting questions for CP-recursion: (why) can CP-recursion only happen once, and (why) can't CP-recursion occur an infinite number of times, if C is allowed to select for a CP complement? We can come back to suggested answers to this in the final session if people are interested.

Other contexts that don't allow embedded V2: *wh*-questions, relative clauses. But restricting attention to complements of verbs for now, what explains the contrast between (48-a) and (48-b)? Why is CP-recursion allowed with one but not the other?

Verbs that permit embedded V2 have been described as *bridge verbs*. This term was originally used for verbs that permit extraction from their complements (van Riemsdijk & Williams, 1986, 294), but this is not the same class of verbs that permit embedded V2 (Vikner, 1995, 70 fn. 7, Biberauer, 2002, 29, Wiklund et al., 2009, 1915 fn. 1), so I'll avoid the term in this course.

3.2.2 The assertion debate

Assertion and *presupposition* have been argued to be key notions in explaining the distribution of embedded V2 in complement clauses (Hooper & Thompson, 1976; Andersson, 1975 and much subsequent work).

- (50) The assertion hypothesis (Wiklund et al., 2009, 1915):
The more asserted (the less presupposed) the complement is, the more compatible it is with V2 (and other root phenomena).

However, '[i]t is a general problem for work in this area that definitions given are vague and independent evidence for the validity of the concepts used often weak' (Heycock, 2006, 190).

On assertion, see Stalnaker (1978) and Krifka (2014). On presupposition, see Sudo's class this week, Stalnaker (1974) (for the pragmatic notion), and Keenan (1971) and Karttunen (1974) (for comparison with the distinct semantic notion).

Broadly following Krifka (2014), and informally: if a speaker *asserts* a proposition, that speaker is committed to the truth of the proposition.

- (50) suggests that assertion and presupposition are two poles of a continuum.
- Julien (2007, 2009) suggests that some embedded clauses can be both presupposed (by the speaker) and asserted (treated as new information for the purposes of the hearer).
- Hooper & Thompson (1976) argue that it is possible for a clause to be neither presupposed nor asserted (see also Wiklund et al., 2009, 1919).

Wiklund et al. (2009) take a specific operationalization of assertion: *Main Point of Utterance* (Simons, 2007).

- (51) *Main Point of Utterance* (Simons, 2007, 1035)
The main point of an utterance U of a declarative sentence S is the proposition *p*, communicated by U, which renders U relevant.

Five classes of complement-taking verb (Hooper & Thompson, 1976):

- Class A ('strongly assertive'): verbs of reported assertion such as *say, claim*
- Class B ('weakly assertive'): *believe, think*
- Class C ('non-assertive'): *doubt, deny*
- Class D ('factive'): verbs of emotion or subjective attitude such as *regret, be sad about*
- Class E ('semi-factive'): verbs of perception and knowledge such as *discover, understand*

V2 is ruled out in complements of classes C and D. Examples from Norwegian (Wiklund et al., 2009, 1918–1921, who give parallel examples from Swedish):

- (52) a. *Han tvilte på at hun hadde ikke møtt denne mannen.
he doubted on that she had not met this man.DEF
'He doubts that she hasn't met this man.'
b. *Han tvilte på at denne mannen hadde hun ikke møtt.
he doubted on that this man.DEF had she not met
'He doubts that she hasn't met this man.'

For class D:

- (53) a. *Han angret på at han hadde ikke sunget.
he regretted on that he had not sung
'He regretted that he hadn't sung.'
b. *Han angret på at denne sangen hadde han ikke sunget.
he regretted on that this song.DEF had he not sung
'He regretted that he hadn't sung this song.'

V2 is fine in complements of classes A, B and E. For class A:

- (54) a. Han sa at han kunne ikke synge i bryllupet.
he said that he could not sing in wedding.DEF
'He said that he could not sing at the wedding.'
b. Han sa at denne sangen kunne han synge i bryllupet.
he said that this song.DEF could he sing in wedding.DEF
'He said that this song he could sing at the wedding.'

For class B:

- (55) a. Han trodde at vi hadde ikke sett denne filmen.
he believed that we had not seen this film.DEF
'He believed that we hadn't seen this film.'
b. Han trodde at denne filmen hadde vi ikke sett.
he believed that this film-DEF had we not seen
'He believed that this film we hadn't seen.'

For class E:

- (56) a. Jeg oppdaget at jeg hadde ikke lest den.
I discovered that I had not read it
'I discovered that I hadn't read it.'
b. Jeg oppdaget at denne boka hadde jeg ikke lest.
I discovered that this book.DEF had I not read
'I discovered that this book I hadn't read.'

Classes A, B and E allow their complement to express a proposition which is the main point of utterance. Classes C and D do not. HOWEVER, V2 word order is not a prerequisite for main point of utterance, and main point of utterance is not a prerequisite for V2 Wiklund et al., 2009, 1927–1930; examples from Swedish.

- (57) a. Q: Varför kom han inte på festen?
 why came he not on party.DEF
 ‘Why didn’t he come to the party?’
 b. A: Hon sa att han hade inte tid.
 she said that he had not time
 ‘She said that he didn’t have time.’ (V2)
 c. A: Hon sa att han inte hade tid.
 she said that he not had time
 ‘She said that he didn’t have time.’ (non-V2)

Some of the more subtle judgements are disputed: see the debate between Julien (2007, 2009) and Wiklund (2009a,b) for details. Julien (2009) argues that these facts only indicate that main point of utterance is not the right notion to account for embedded V2 – but that assertion still may be. (However, she doesn’t define assertion.)

Truckenbrodt (2006) is a detailed proposal for the relation between illocutionary force and V-to-C movement, specifically in German. The references and responses are illuminating.

3.2.3 Does well-behaved V2 exist?

Biberauer (2002) calls the distinction between well-behaved and limited embedded V2 languages into question. Colloquial Dutch permits embedded V2 under a complementizer (Zwart, 1997, 232), but only ‘in contexts where the speaker wishes to convey particularly emphatically the state of affairs expressed in the *dat*-clause’ (Biberauer, 2002, 52).

- (58) Jan zei dat hij kende dat boek niet.
 Jan said that he knew the book not
 ‘Jan said that he didn’t know the book.’

The same is true in spoken German, for asserted *dass*-clauses (Freywald, 2008).

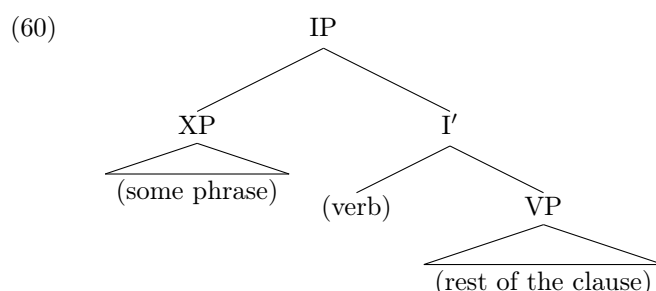
- (59) ich weiß, dass herr LAACK hat eine STIFTung gegründet
 I know that Mr Laack has a foundation founded
 ‘I know that Mr Laack has set up a foundation.’ (ARD, Talkshow *Sabine Christiansen*,
 06.08.2006; Freywald, 2008, 246)

At the same time, embedded object-fronting is not usually considered fully acceptable by speakers of Mainland Scandinavian languages (Biberauer, 2002, 47) – just as in Afrikaans, a ‘well-behaved’ language. So is there really a difference between well-behaved and limited embedded V2? Is well-behaved V2 a fiction (perhaps influenced by prescriptive norms)?

3.3 Symmetric V2 in detail

3.3.1 The IP-V2 analysis for Icelandic

Recall the basic analysis of symmetric V2 presented on day 1: the verb is in a head-initial IP, and SpecIP is an A’-position.



This analysis has been proposed and defended for Yiddish by Diesing (1990) and for Icelandic by Rögnvaldsson & Thráinsson (1990). Rests on the idea that everything that is possible in a matrix clause is also possible in an embedded clause. Examples (Icelandic, from Rögnvaldsson & Thráinsson, 1990, 23):

- (61) Jón efast um að á morgun fari María snemma á fætur.
 John doubts on that on tomorrow get Mary early to feet
 ‘John doubts that Mary will get up early tomorrow.’
- (62) Jón harmar að þessa bók skuli ég hafa lesið.
 John regrets that this book shall I have read
 ‘John regrets that I read this book.’

However, Jónsson (1996) takes issue with some of the judgements in Rögnvaldsson & Thráinsson (1990). He suggests a split between Icelandic A, which is roughly as described by these authors, and Icelandic B, which behaves more like Mainland Scandinavian and needs an asymmetric analysis.

Gärtner (2003), Wiklund et al. (2009) and Hrafnbjargarson & Wiklund (2009) go further: Icelandic A (as a symmetric variety warranting an IP-V2 analysis) may not exist at all.

- Embedded non-subject fronting is not possible in embedded wh-contexts, temporal or conditional clauses (63) (Hrafnbjargarson & Wiklund, 2009, 28).
 - The most commonly cited example is (61), but adjunct fronting seems to be more permissive – the same structure is degraded with object fronting, as in (64) (Hrafnbjargarson & Wiklund, 2009, 32).
 - *harma* ‘regret’, as in (62), has different presuppositional properties from verbs like Swedish *ångra* ‘regret’: its complement need not be presupposed (Wiklund et al., 2009, 1922).
 - Only 1/5 informants accept it under *sá eftir* ‘regret’ (65) (Hrafnbjargarson & Wiklund, 2009, 31).
- (63) *Hann spurði hvar í gær hefði hann hitt hana.
 he asked where yesterday had he met her
 ‘He asked where he had met her yesterday.’
- (64) %Jón efast um að þennan mann hafi María hitt.
 John doubts on that this man has Mary met
 ‘John doubts that Mary has met this man.’
- (65) %Hún sá eftir því að þessar bækur hefði hún lesið.
 she regretted it that these books had she read
 ‘She regretted it that she had read those books.’

- Even speakers who accept (64) and (65) reject object fronting in other contexts.
- Part of the argument for IP-V2 in Rögnvaldsson & Thráinsson (1990) involves taking Stylistic Fronting, which can apply in embedded clauses, to be a type of topicalization. But the two are crucially different: Stylistic Fronting is clause-bounded and restricted to clauses with subject gaps, and can apply to constituents that normally can’t be fronted easily, like participles (Maling, 1980, Ottósson, 1989, 95, Hrafnbjargarson & Wiklund, 2009, 27).
- There’s little if any good evidence for symmetric V2 in historical Icelandic either (Walkden, in progress).

3.3.2 Does general embedded V2 exist?

For which other languages has it been proposed that they are symmetric V2?

- Yiddish is the main one (Diesing, 1990), including its historical stages (Santorini, 1989, 1992, 1993). But there is variation with regard to embedded object fronting here too (den Besten & Moed-van Walraven, 1986; Diesing, 1990).
- Old English has been argued to be like this by Pintzuk (1991, 1999) – but this has been disputed due to lack of good evidence for embedded inversion in the relevant contexts (van Kemenade, 1997; Salvesen & Walkden, to appear). Salvesen & Walkden (to appear) show that only 455 of 13,862 complement clauses in the YCOE (Taylor et al., 2003) show non-subject XP-V word order, and of these only 29 involve unambiguous V-in-I (or higher) – of which only 2 are under class D predicates.

- Old French (Rinke & Meisel, 2009) – but this analysis is not widely accepted, and again see Salvesen & Walkden (to appear) on counter-evidence.
- Old Spanish (Fontana, 1993 and subsequent work) – but see Sitaridou (2011) for the proposal that Old Spanish is not V2 at all, and Wolfe (2015) for the proposal that at least Later Old Spanish is an asymmetric V2 language.

Considering this literature, it's fair to wonder whether the IP-V2 analysis should be rejected, and whether 'there are no pure GV2 [general embedded V2–GW] languages' (Hrafnbjargarson & Wiklund, 2009, 45) and 'the widely-assumed class of truly 'symmetrical' V2 languages may not exist at all' (Wolfe, 2015, 149).

If the same is true of the well-behaved V2 languages, then *there may really only be one type of embedded V2 language*. What little variation exists language-internally and cross-linguistically may be attributable to a) semantics/pragmatics and b) the lexical makeup of different verbs, complementizers and conjunctions. Scherf & Freitag (2016) and Walkden (in progress) develop this perspective further.

This isn't a bad thing. Lightfoot (1989, 1991) has proposed *degree-0 learnability*, the idea that children do not take into account information in embedded clauses (at least not below the head). If so, then any process that takes place only in subordinate clauses is unlearnable. Any typology that relates only to embedded clause word order is bound to involve processes of this kind.

3.4 Summary and conclusion

- Vikner (1995) proposed an influential typology of embedded V2 that has led to much subsequent research.
- There are empirical challenges to both well-behaved and general embedded V2, though – perhaps limited embedded V2 is the only genuine type found.
- In any case, the idea that there is such a thing as IP-V2 (that is, verb-second that takes place entirely within the IP) is controversial.
- V2 in embedded clauses seems to correlate with some semantic-pragmatic notion like assertion, but again it's surprisingly difficult to pin this down.

Further reading:

- Vikner (1995, chapter 4) is a seminal discussion of embedded V2 and proposes a typology.
- Heycock (2006) gives a great overview of embedded root phenomena, including embedded V2.
- Diesing (1990) is an early and accessible presentation of the IP-V2 analysis for Yiddish.

4 Verb-third and the left periphery

Aims of today's session:

- Introduce cartographic approaches to verb-second and the information-structural properties of preverbal elements
- Present so-called 'relaxed V2' varieties that permit V3 etc. in some contexts
- Discuss how these varieties can be accounted for in theoretical terms
- Touch on the distribution and diachrony of V2

4.1 Information structure and the first constituent

We suggested on Tuesday that only subjects could be informationally neutral in first position. But that is not the whole story: under certain conditions, dative objects in passives (66), non-nominative non-subject experiencers (67), and various adverbials (68) can be informationally neutral in first position.

- (66) *Einer alten Frau* wurde die Handtasche gestohlen.
an.DAT old.DAT woman.DAT was the handbag stolen
'Someone stole the handbag of an old lady.' (Mohr, 2009, 146)
- (67) *Mir* war gestern fürchterlich heiß.
me.DAT was yesterday terribly hot
'I felt terribly hot yesterday.' (Mohr, 2009, 146)
- (68) *Fast überall* ist Fußball sehr beliebt.
nearly everywhere is football very popular
'Football is very popular almost everywhere.' (Frey, 2004)

Object *es* can also appear in first position, *pace* Travis (1984).

- (69) Ihr Geld ist ja nicht weg, meine Damen und Herren. *Es* haben jetzt nur andere.
your money is yes not away my ladies and gentlemen it have.PL now only others
'Your money is not gone, ladies and gentlemen. It is just in the possession of others now.'
(Lenerz, 1994; Frey, 2006)

We'll come back to the generalization that unifies these XPs.

When the first constituent is *not* informationally neutral, it can have a variety of functions (Frey, 2004):

- (aboutness) topic
- (contrastive) focus
- *wh*-phrase
- discourse-connective (?)

4.2 Cartographic approaches to the left periphery

Rizzi (1997) changed the game as regards how the CP domain works. Rather than the simple hierarchy we've been assuming throughout (CP > IP > VP), Rizzi proposed that CP should be decomposed into at least five projections:

- (70) ForceP > TopP* > FocP > TopP* > FinP
- ForceP: projection encoding clausal type or force (interrogative, declarative, exclamative, etc.) (Rizzi, 1997, 283)
 - TopP: hosts *topics*, understood as 'normally expressing old information, somehow available and salient in previous discourse' (Rizzi, 1997, 285); there are two of these positions, and they can occur an indefinite number of times (can self-select), as indicated by the Kleene star

- FocP: hosts *foci*, expressing new information, in some languages restricted to contrastive focus (Rizzi, 1997, 285–286)
- FinP: projection that reflects *finiteness*, as evidenced by the fact that many languages have differences between finite and non-finite complementizers (Rizzi, 1997, 283–284)

There have been other attempts to refine this picture of the left periphery (Benincà & Poletto, 2004; Frascarelli & Hinterhölzl, 2007), but the general idea that CP needs to be broken down in this way has been widely accepted, and this paper is one of the cornerstones of the *cartographic* approach to syntactic structure (Cinque & Rizzi, 2010).

This approach brings opportunities for accounting for information-structural properties of preverbal elements in V2 languages – as we’ll see – but also challenges. In the traditional account of V2, there could be only one preverbal constituent because there was only one preverbal position. How does this work when the CP domain consists of at least 5 projections instead of one? We’ll look at two different approaches to this question.

4.2.1 High left periphery approaches to V2

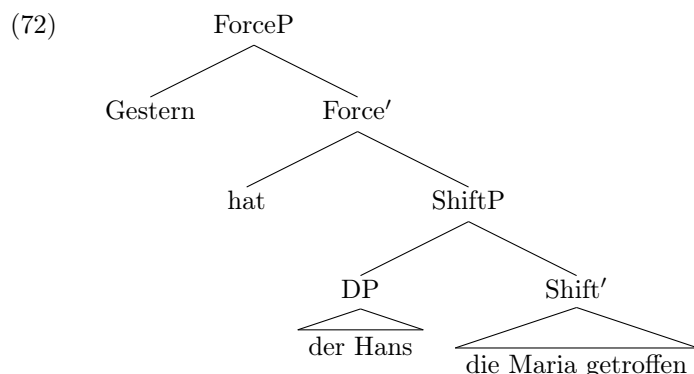
One way of retaining the intuition that V2 results from only one specifier being available in front of the finite verb is simply to move the locus of V2 higher: to ForceP. This is what is done by Frascarelli & Hinterhölzl (2007, section 5.4). The paper includes a corpus-based analysis of different topics and their phonological/intonational realizations in German and in Italian. Key elements of their analysis (which is sketched only briefly):

- The full Rizzian left periphery is available. (NB: these authors subdivide Rizzi’s higher TopP into a projection for shifting/aboutness topics, ShiftP, and a projection for contrastive topics, ContrP; the lower TopP becomes a recursive FamP for familiar topics.)
- The verb moves to Force.
- Force also bears a ‘phonological EPP’ feature requiring that its specifier be realized (cf. the traditional EPP feature for English subjects).
- The constituent that ends up in SpecForceP can be ‘any single constituent that can be extracted or fronted via A’-movement’.

This predicts that the discourse zone of the Rizzian left periphery should be available *after* the finite verb. Frascarelli & Hinterhölzl (2007) argue that this is correct, based on examples like (71).

- (71) Gestern hat der Hans die Maria getroffen.
 yesterday have.3SG the Hans the Maria met
 ‘Yesterday Hans met Maria.’

The postverbal subject *der Hans* bears a L+H* tone, which shows that it is an aboutness topic in SpecShiftP, according to Frascarelli & Hinterhölzl (2007). Structure:



Criticism: this story doesn’t account for why only certain constituents are allowed to be informationally neutral in the prefield.

4.2.2 Bottleneck approaches to V2

A different approach: the full split CP is always available in V2 languages, and the landing site of the verb is low in this structure, but there is a constraint that prevents more than one item from being moved there. This is the *bottleneck* approach to V2 (Haegeman, 1996; Roberts, 2004; Mohr, 2009). Summary of Mohr’s account:

- The full Rizzian left periphery is available.
- The verb moves to Fin.
- Fin also bears a ‘subject-of-predication’ feature requiring that its specifier be filled by some semantically appropriate element.
- If the numeration contains expletive *es* or certain types of adverbial, these must be Merged in SpecFinP.
- Otherwise, the XP that is structurally closest to Fin must be moved to SpecFinP (‘formal movement’). This is usually the subject, but not always (cf. Bhatt, 1999; Fanselow, 2002; Frey, 2004; Light, 2012).
- XPs that bear a discourse-related feature (topic, focus) are an exception to this – they can move directly to SpecFinP, and then move higher to the specifier of TopP or FocP.

Questions:

- What does ‘subject-of-predication’ mean? Mohr must stipulate that expletives, adverbs, and focused XPs are able to satisfy this feature’s requirements. So does subject of predication have any semantic content?
- Why doesn’t the complement of FinP – TP/IP – move to SpecFinP? Mohr (2009, 152, fn. 12): because it is not a subject-of-predication. But see above! However, movement of finite IP to the left periphery seems to be ruled out quite generally: see Abels (2003); Wurmbrand (2004).
- Why not assume a single unsplit CP? Mohr (2009, 154–156): because of i) weak object pronoun *es* being unable to move to SpecCP (see Tuesday’s discussion, and also Branigan, 1996, who Mohr doesn’t cite) and ii) constructions like (73), which can be analysed as movement of a complex DP through SpecFinP with stranding of *den* in this position.

(73) Diesen Satz, den mag ich einfach nicht.
this.ACC sentence, that.ACC like I simply not
‘This sentence, I simply don’t like it.’

4.3 Relaxed V2

Another argument in favour of a split CP comes from varieties that are almost, but not quite, V2 languages. This section is based on Walkden (to appear). For other ‘relaxed V2’ languages, some with different properties, see:

- Willis (1998) on Middle Welsh
- Eide & Sollid (2008) on contact varieties of Norwegian
- Cognola (2013) on Mòcheno, a northern Italian variety of German
- Bidese & Tomaselli (2007) and Grewendorf & Poletto (2011) on Cimbrian, another northern Italian variety of German
- Haegeman & Greco (2016) on West Flemish and French Flemish
- Wolfe (to appear) on early Romance varieties – this paper also develops a typology of strict vs. relaxed V2 with reference to the structure of the left periphery

4.3.1 Germanic urban vernaculars

Varieties in question: German, Danish, Norwegian and Swedish urban vernaculars. Sociolinguistic situations in common:

- Non-standard; stigmatized generally
- Typically spoken in areas with multiethnic populations – but *not* interlanguages, since they are also spoken by otherwise monolingual Germanic speakers
- Always used as part of a broader repertoire of varieties – often including languages such as Turkish, Arabic and Kurdish (depending on the community)

I will illustrate using Kiezdeutsch, the German urban vernacular variety spoken in areas of Berlin such as Neukölln, Kreuzberg and Wedding. Data comes from the KiDKo corpus (Rehbein et al., 2014) and from published work by Heike Wiese, Ulrike Freywald and colleagues (Wiese, 2006, 2009, 2012, 2013; Wiese & Rehbein, 2009; Freywald et al., 2011, 2015). The facts are the same for the Danish, Norwegian and Swedish varieties unless otherwise stated. I can provide references for these on request.

These varieties allow violations of V2 (henceforth ‘V3’) under certain conditions.

- (74) morgen ich geh arbeitsamt
tomorrow I go jobcentre
‘Tomorrow I will go to the job centre.’ (Kiezdeutsch; Wiese, 2009, 787)

Initial constituent in V3 is not categorially restricted. Provides ‘interpretational frame or anchor’ (Freywald et al., 2015).

- (75) a. JEdes jahr (.) ich=ch kauf mir bei DEICHmann
every year I buy me at D.
‘Every year I buy shoes at Deichmann’s.’ (KiDKo, transcript MuH9WT)
- b. ab JETZ ich krieg immer ZWANZig euro
from now I get always twenty euros
‘From now on, I always get twenty euros.’ (KiDKo, transcript MuH17MA)
- c. wenn der mann dis HÖRT er wird sagen ...
if the man this hears he will say
‘If the man hears this, he will say...’ (KiDKo, transcript MuH9WT)
- d. danach er sagt zu O., geh mal WEG
afterwards he says to O. go PTCL away
‘Afterwards, he says to O. [= name], go away.’ (KiDKo, transcript MuH9WT)

Most typical is a temporal adverb as in (75-d); 96 of 159 examples in KiDKo. Always an adjunct rather than an argument; initial objects with V3 are judged unacceptable (Wiese, p.c.).

Preverbal constituent is almost always the subject, as in those above, though need not be: see (76). It is usually pronominal, though need not be: see (77).

- (76) a. und dann hier ist auch noch ein Loch
and then here is also still a hole
‘And then here is another hole.’ (KiDKo, transcript MuH27WT_07)
- b. und dann da ist doch n die U-Bahn und so
and then there is though (*filler*) the U-Bahn and so
‘And then there is the subway and so on.’ (KiDKo, transcript MuH2WT_03)
- (77) a. heute der tag ist für mich so schnell vorbeigegangen
today the day is for me so fast past.gone
‘Today the day went by so quickly for me.’ (KiDKo, transcript MuH17MA_04-2-5)
- b. jetzt der Friesi kommt
now the F. comes
‘Now Friesi is coming.’ (KiDKo, transcript MuP1MK_08-1)

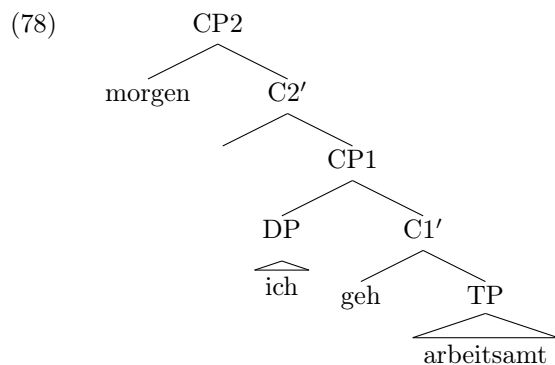
V3 is not possible at all in the following contexts:

- (Sociolinguistically) in more formal and directed situations – see Ganuza (2008, 109–130) for detailed discussion in the Swedish context

- With object fronting to first position
- In *wh*-interrogatives, except with *why*
- In subordinate clauses, except with *weil* – which is well known to be a context in which V2 may occur in colloquial German (see Antomo & Steinbach, 2010 and the many, many references cited there).

How to make sense of these patterns? te Velde (to appear) provides an account that is inspired by Zwart (1993, 1997, 2001), in which the verb only moves as far as I. Walkden (to appear) takes a different approach. Ingredients for an analysis:

- The full left periphery as in Frascarelli & Hinterhölzl (2007) is available cross-linguistically: ForceP > ShiftP > ContrP > FocP > FamP > FinP
- In strict V2 languages, all these projections are *conflated* into one, CP. (On conflation/syncretism/coalescence, see Giorgi & Pianesi, 1997 and for V2 Hsu, 2016.)
- In the Germanic urban vernaculars, FamP and FinP are conflated into a low CP – CP1 – and the higher projections are conflated into CP2. SpecCP1 is thus a position for familiar topics (since SpecFinP is not associated with any particular elements normally).



Further assumptions:

- (Some) adverbial elements may be first Merged in the C-domain; argumental elements may not be.
- Only one constituent may move to the left periphery.
- Verbs and low complementizers compete for C1.

These rule out V3 in cases of object fronting and *wh*-interrogatives. But why not *why*?

- (79)
- a. warum du machst DINGS
 why you do thing
 ‘Why are you doing that?’ (KiDKo, transcript MuH12MD_05)
- b. wieso er is nich gegangn
 why he is not gone
 ‘Why didn’t he go?’ (KiDKo, transcript MuP6MD_03)

Answer: because *why* may be first Merged in the C-domain (Ko, 2005 and much related work).

4.3.2 Old English

V2 (or lack thereof) in Old English has been the subject of substantial research for the last thirty years – see Taylor (2014, 396–420) and Walkden (2014, 67–89) for overviews. Examples are from the YCOE (Taylor et al., 2003). (80-a)–(80-b) are instances of V2. (81-a)–(81-c) are instances of V3.

- (80)
- a. þa genam hine se awyrgda gast
 then took him the accursed spirit
 ‘Then the accursed spirit took him.’ (coblick, HomS_10_[BlHom_3]:27.8.358)

- b. Pær heriaþ englas & heahenglas þone ecan Dryhten
 there worship angels and high-angels the eternal Lord
 ‘There angels and archangels worship the eternal Lord.’
 (coverhom,HomM_13_[ScraggVerc_21]:253.2801)
- (81) a. æfter his gebede *he* ahof þæt cild up
 after his prayer he lifted the child up
 ‘After his prayer he lifted the child up.’ (cocathom2,+ACHom_II,_2:14.70.320)
- b. Peah hwæðer *his hired men* ferdon ut
 though whether his household men went out
 ‘Nevertheless his retainers went out.’ (cochronE,ChronE_[Plummer]:1087.26.2994)
- c. Fela spella *him* sægdon þa Beormas
 many stories him told the Permians
 ‘The Permians told him many stories.’ (coorosiu,Or_1:1.14.27.243)

Properties:

- Initial constituent may take a variety of forms and serve a variety of functions.
- Immediately preverbal constituent is a familiar topic (see Walkden, 2014, to appear and references cited there).
- V2 and V3 are found in main clauses, but not subordinate clauses (van Kemenade, 1997; Salvesen & Walkden, to appear).
- *Wh*-interrogatives are always V2, never V3.

These are the same as the properties of the urban vernaculars given above, which suggests that the analysis is directly transferrable to Old English. Some wrinkles:

- Verb-late main clauses exist in Old English – though these are really a problem for everyone (Pintzuk & Haeberli, 2008).
 - Certain discourse-connective adverbs seem to trigger V2 invariably: this is true of *þa* ‘then’, as in (80-a), and mostly also *þonne* ‘then’. Still not well understood (van Kemenade & Los, 2006) – potentially a minor lexical difference.
 - Object fronting to initial position is fine in Old English, unlike in the urban vernaculars. This is the main thing standing in the way of a unified analysis.
- (82) *Þis ylce galdor* mæg mon singan wið smeogan wyrme
 this same charm may man sing against penetrating worm
 ‘One can sing this same charm against a penetrating worm.’
 (colacnu,Med_3_[Grattan-Singer]:27.1.132)

See Walkden (2014, chapter 3) for an alternative analysis.

4.3.3 Acquisition, contact, and diachrony

What’s weird about the urban vernaculars is that the same structure – V3 – has emerged under similar sociolinguistic conditions in four different and unconnected Germanic varieties. V3 can’t be transfer, since there is no plausible source structure. This suggests that there might be something to the idea that structural typology is not unconnected to sociolinguistic situation Trudgill (2011).

V2 is very hard for non-native (L2) learners to acquire. Håkansson et al. (2002) show that adult L1 speakers of German learning Swedish as an L2 fail to produce target-like V2. See also Ganuza (2008, 11–15) for an overview: all studies indicate that ‘the incidence of non-inversion in contexts for inversion is often long-lived in learner language’. BUT we’ve seen that the urban vernaculars are *not* interlanguages (Wiese, 2013; te Velde, to appear): for instance, the verbal bracket is intact in Kiezdeutsch. Still, the connection is tempting. Possible scenario:

- L2 learners of a Germanic variety fail to acquire V2/V-to-C. (Potentially likely in first-generation immigrant populations.)

- L1 learners are exposed to non-V2 interlanguage input.
- L1 learners reanalyse non-V2 structures as ‘relaxed V2’ involving a minimally split CP as discussed here.

What about Old English? Well, we don’t know whether V2 was inherited from Proto-Northwest Germanic or not (see Walkden, 2014, chapter 4 for discussion), but West Saxon Old English has more V3 than any other early Germanic variety. Could contact with Brythonic Celtic have played a role...? (Walkden, to appear)

4.4 Summary and conclusion

- It’s possible to maintain the insights behind traditional analyses of V2 in cartographic approaches – though there are multiple ways of implementing them.
- Such approaches can make predictions about what is likely to be a preverbal element. In particular, the distinction between *formal movement* and true A'-movement (Frey, 2004; Light, 2012) is a good way of capturing which elements can be information-structurally neutral in first position.
- Rich left periphery approaches are a good way of approaching ‘relaxed V2’ varieties that have been ignored or misanalysed until recently.
- Interesting generalizations can be made about how and when relaxed V2 can emerge historically.

Further reading:

- Frey (2004) is a clear and accessible account of preverbal elements in German.
- Mohr (2009) has a brief and fully explicit analysis of German V2 in the ‘bottleneck’ tradition.
- Walkden (to appear) might be of interest if you want to follow up the story about the urban vernaculars and Old English.

5 Issues in V2

Aims of today’s session:

- Introduce, and evaluate, the remnant-movement analysis of V2 in Müller (2004).
- Present the findings of Müller (2015) on elements in the German prefield.

5.1 Gereon Müller (2004)

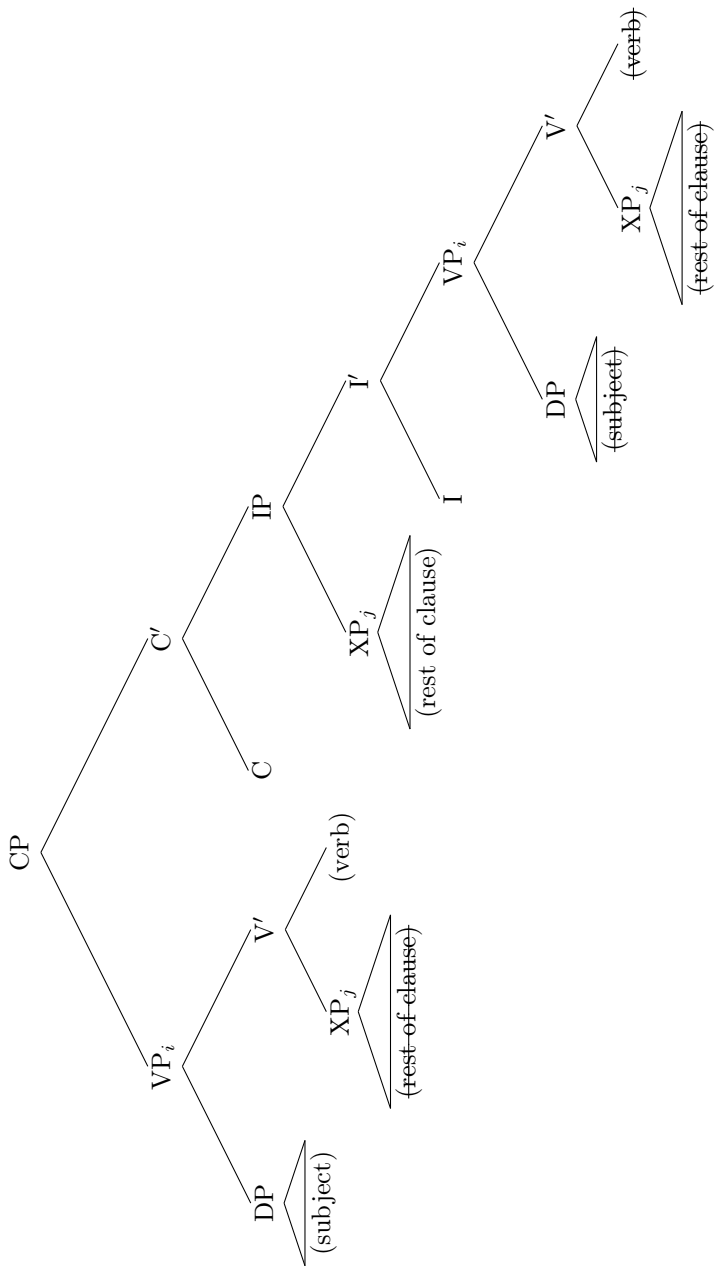
5.1.1 Analysis

Müller (2004) proposes a theory of V2 that doesn’t involve head movement at all. Instead, VP (actually, vP) is vacated of all but one constituent, and moved to SpecCP. Assumptions:

- Clause structure: CP > TP > vP > VP (the latter two head-final)
- Multiple specifiers (though not for CP)
- Optional movements: scrambling to outer specifier of vP; subject raising to SpecTP
- V2 is the result of attraction of v by an empty C, and obligatory pied-piping of vP.
- *Edge Domain Pied Piping Condition* (EPC): A moved vP contains only the edge domain of its head.
- Last Resort is violable if movement must take place to satisfy the EPC.

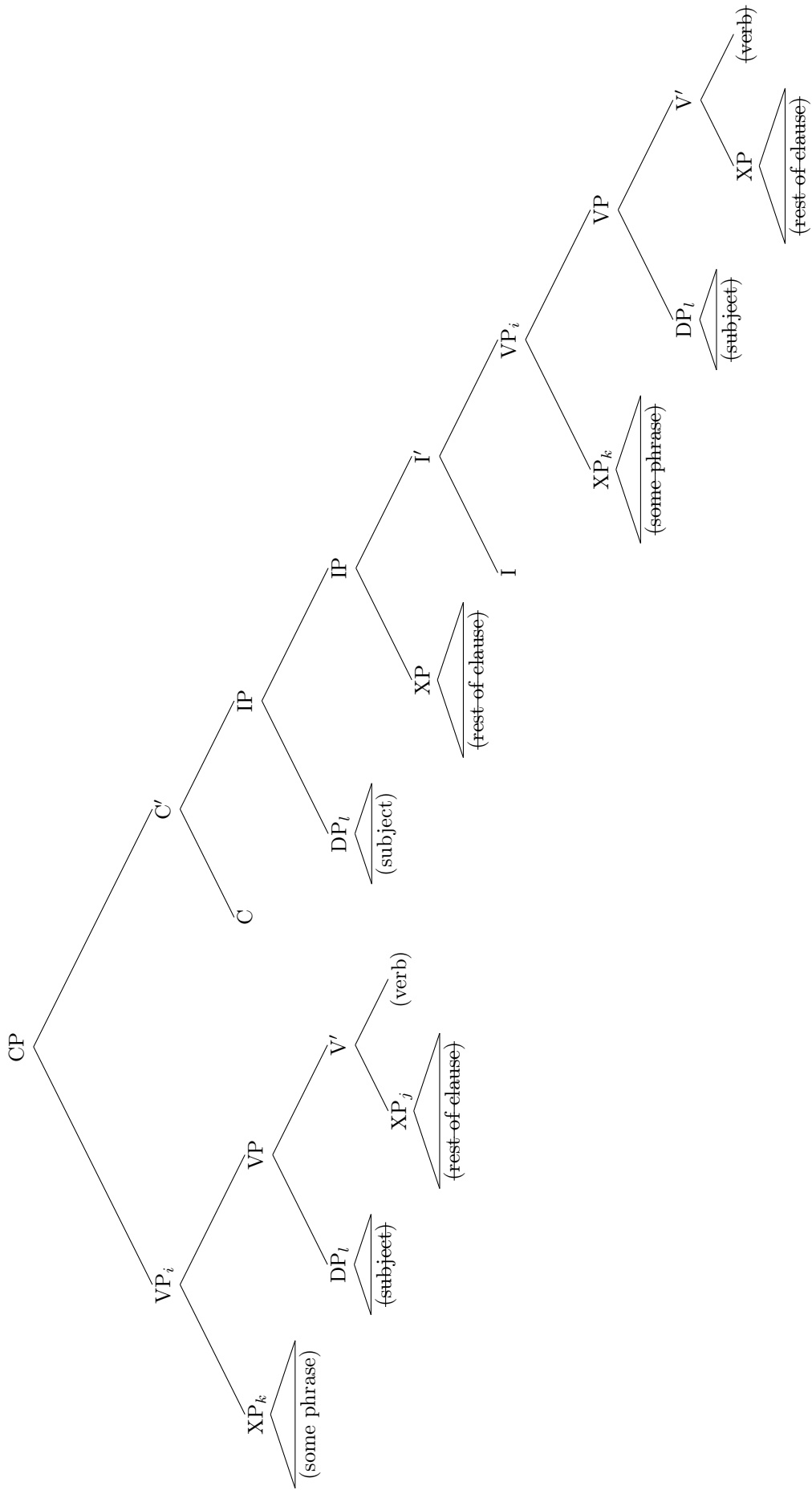
Illustrated below (in simplified form) for subject-initial V2:

(83)



And for non-subject-initial V2:

(84)



Other types of structure:

- Adverb-initial V2: involves merger of the relevant adverbs in SpecvP (like subjects – hence unmarked). More derivational effort = more marked.
- Otherwise, anything that can be scrambled can be moved to SpecvP and thence to SpecCP: extractees, (complete and incomplete) VPs, etc.

Edge domains are defined as including the highest *overt* head in the derivation. This derives movement of lexical verbs in clauses without an overt auxiliary (since head movement is not an option).

Predictions:

- Items that are obligatory vP edges are also obligatory SpecCP elements:
 - *Wh*-phrases: these move via the edge of the vP phase (Chomsky, 2000, 2001)
 - Expletive *es*, as discussed on Tuesday. (Some nasty stipulation necessary for this: C may optionally bear a special [**expl**] feature.)
- Items that are impossible vP edges are also impossible SpecCP elements:
 - Weak object pronouns (though see yesterday’s discussion and Gärtner & Steinbach, 2000) – because they can’t scramble
 - Object CPs
- Preverbal element forms a constituent with the verb.
 - Movement test? Can’t move, but this may be due to freezing.
 - Co-ordination test? May be able to co-ordinate, but the relevant examples are ambiguous with right node raising, so we can’t tell.

- (85) Das Buch kann und den Aufsatz muss Maria lesen.
the book can and the essay must Maria read
‘Maria can read the book and must read the essay.’

5.1.2 Criticisms

Biberauer & Roberts (2004): three areas where problems arise. We will discuss two.

Firstly, for some elements it is implausible that they originate as low as vP. No adverb hierarchy of the kind expressed in e.g. Cinque (1999) can be upheld, except as an order of merger of specifiers of vP. This also means that domain-based analyses of adverbs won’t work. For instance, Pittner (2003) argues that German *wieder* ‘again’ gets either a restitutive reading (if adjoined to VP) or a repetitive reading (if adjoined to vP). When fronted alone, it can only be interpreted as repetitive (86-a), but when fronted as part of a VP it can only be interpreted as restitutive (86-b).

- (86) a. WIEDER hat Hans das Auto repariert
again has Hans the car repaired
‘Hans has repaired the car again.’
b. Wieder repariert hat Hans das Auto
again repaired has Hans the car
‘Hans got the car back in working order.’

Other elements where it might cause a problem to assume low first Merge include:

- Afrikaans *al*
- Some *wh*-items, including *why*
- Existentially-interpreted subjects

Secondly, *ripple effects* are a problem. Henry (1995, 105ff): subject-verb inversion is found in embedded interrogatives in Belfast English.

- (87) a. The police found out had the goods been stolen.

- b. We couldn't establish did he meet them.

On standard assumptions, *wh*-items extracted long distance move through the embedded SpecCP(s). Subject-verb inversion is found in all these embedded CPs too (the ripple effect).

- (88) a. Who did John say did Mary claim had John feared would Bill attack?
 b. Who do you think did John convince that Mary went?

Müller can't derive these facts, since movement to C is always actually part of movement to SpecCP in his system. Similar facts are found in Afrikaans and Swiss German. In Müller's system, extraction from a moved vP is ruled out.

Frey (2004): In order to account for sentences like (89-a), Müller has to assume that a participial VP can scramble, as in (89-b). But this doesn't explain the ungrammaticality of (89-c).

- (89) a. Den Fritz geküsst hat die Maria gestern.
 the.ACC Fritz kissed has the Maria yesterday
 'Maria kissed Fritz yesterday.'
 b. dass den Fritz geküsst die Maria gestern sicher nicht hat
 that the.ACC Fritz kissed the Maria yesterday certainly not has
 'that Maria certainly did not kiss Fritz yesterday'
 c. *dass die Maria den Fritz geküsst gestern sicher nicht hat
 that the Maria the.ACC Fritz kissed yesterday certainly not has

Frey (2004, 35–37) has a few other criticisms.

Lechner (2009): structures like Müller's entail that the preverbal constituent does not c-command anything lower in the clause (because it is fronted as part of a larger vP). This seems to be false under basic assumptions about the mapping between word order and scope.

- (90) Jeder verlor einmal.
 everybody lost once
 'Everybody lost once.'

$\forall > \exists$

So there are a number of apparent problems that a one-step remnant movement account of V2 like Müller's would need to account for.

5.2 Stefan Müller (2015)

Empirical domain of Müller (2015, chapter 3) is 'multiple fronting' constructions like the following. Here, for instance, *trocken* 'dry' and *durch die Stadt* 'through the town' are not obviously a single constituent.¹

- (91) Trocken durch die Stadt kommt man auch am Wochenende mit der BVG.
 dry through the town comes one also at.the weekend with the BVG
 'With the BVG, you can be sure to get around town dry at the weekend.'

Different types, all illustrated using attested examples:

- (92) a. Alle Träume gleichzeitig lassen sich nur selten verwirklichen.
 all dreams simultaneously let REFL only rarely realize
 'All our dreams can only rarely be realized at the same time.' (subject and adverb)
 b. Zum zweiten Mal die Weltmeisterschaft errang Clark 1965 ...
 to.the second time the world.championship won Clark 1965
 'Clark won the world championship for the second time in 1965.' (PP and accusative object)
 c. Kurz die Bestzeit hatte der Berliner Andreas Klöden ... gehalten.
 briefly the best.time had the Berliner Andreas Klöden held
 'Andreas Klöden from Berlin had briefly held the best time.' (adverb and accusative object)
 d. Öl ins Feuer goß gestern das Rote-Khmer-Radio
 oil in.the fire poured yesterday the Khmer.Rouge.radio
 'Khmer Rouge Radio fanned the flames yesterday' (parts of an idiom/set phrase)

¹Müller (2015, 48) gives a number of references to other authors who have presented apparent cases of verb-third in German.

Also:

- Dative object and prepositional phrase (Müller, 2015, 53)
- Dative and accusative object (Müller, 2015, 53)
- Instrumental and temporal PPs (Müller, 2015, 53–54)

Not limited to two elements. But some combinations are impossible:

- Constituents from different clauses
- The combinations above in most other orders

- (93) ?*Gleichzeitig alle Träume lassen sich nur selten verwirklichen.
simultaneously all dreams let REFL only rarely realize
'All our dreams can only rarely be realized at the same time.'

This picture 'supports an analysis which assumes that multiple fronting involves a complex verbal projection' (Müller, 2015, 68), building on a possibility hinted at in Fanselow (1993). Silent head is present as part of the predicate complex. For details of the analysis, see Müller (2015, 78–88).

Importantly: the analysis is couched in the HPSG framework, proponents of which are often hostile to constituent structure in the German *Mittelfeld* and to phonologically null elements. Müller (2015, chapter 6) considers a variety of approaches that are more surface-true in that they assume flatter structures and/or no silent elements, and argues that they cannot capture the multiple fronting data.

5.3 Summary and conclusion

- The remnant movement analysis in Müller (2004) suffers from a few serious empirical problems.
- It is mainly an appealing approach if one is dead keen to remove head movement from the grammar (entirely).
- The data in Müller (2015, chapter 3) provide striking support for the validity of some form of V2 constraint, as well as for the reality of abstract constituent structure (including phonologically null heads) in the German *Mittelfeld*.

Further reading:

- Gereon Müller (2004) develops a technically ingenious remnant-movement analysis of V2.
- Biberauer & Roberts (2004) present a series of problems for this account.
- Stefan Müller (2015, chapter 3) considers a wide range of corpus data and develops an HPSG analysis. This is an unpublished book, of which drafts and parts have been circulating for some time now.

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