

Core cases of head movement 1: V-to-T(-to-C)

21st September

1. Why verb movement?

- 1) a. ✓ John **often** kisses Mary
b. * John kisses **often** Mary
- 2) a. * Jean **souvent** embrasse Marie
J often kisses M
b. ✓ Jean embrasse **souvent** Marie
J kisses often M

This is the original evidence from Emonds's work. Pollock (1989) gives more:

- 3) a. * John **likes** not Mary. (negation)
b. ✓ Jean (n) **aime** pas Marie.

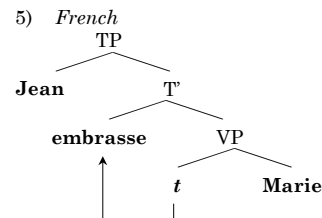
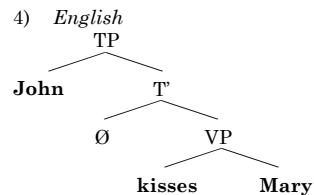
c. * **Likes** he Mary? (interrogatives)
d. ✓ **Aime**-t-il Marie?

e. My friends (all) **love** (*all) Mary. (floating quantifiers)
f. Mes amis (*tous) **aiment** tous Marie.

g. He **has** not enough money. (British possessive have)
h. **Have** you any wool?
i. John **has** seldom enough money.
j. They **have** all nice homes.

k. Pierre **a** (beaucoup) **lu** (beaucoup) de livres. (LD quantification)
Pierre has many read many of books
l. Pierre (*beaucoup) **lit** (beaucoup) de livres.
Pierre many reads many of books.

This can all be explained if French verbs move from V to T, but English verbs don't



[see Williams 1994, Bouchard 1995 for a dissenting view, though]

2. A more refined perspective

This view has the advantage that we can link verb movement to the presence of inflectional morphology:

- 5) a. *Modern Swedish* b. *13th cent. Swedish*

	SG	PL		SG	PL
1 st	bit- er	bit- er		1 st	alsk- ar alsk- um
2 nd	bit- er	bit- er		2 nd	alsk- ar alsk- in
3 rd	bit- er	bit- er		3 rd	alsk- ar alsk- a
- 6) a. ...att Johan into **köpte** boken [Modern Swedish]
 that J not bought the book
 b. ...aen han **sivngaer** aegh thigianda messu [13th cent. Swedish]
 if he sings not silent mass

However, consider the situation in Faroese dialects (Bobaljik & Thráinsson 1998, citing Jonas 1996), which shows we are dealing with a one-way implicature:

- 7) a. *Faroese 1* b. *Faroese 2*

	SG	PL		SG	PL
1 st	kast- i	kast- a		1 st	kast- i kast- a
2 nd	kast- ar	kast- a		2 nd	kast- ar kast- a
3 rd	kast- ar	kast- a		3 rd	kast- ar kast- a
- 8) a. Tað kom óvart, at Maria ikki **lesur** bøkur [Faroese 1 & 2]
 it was unexpected that M not reads books
 b. Tað kom óvart, at Maria **lesur** ikki bøkur [Faroese 1 only]
 it was unexpected that M reads not books

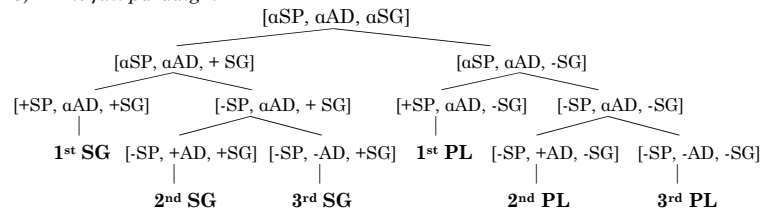
Correlation between verb movement and morphology: if a language has rich inflectional morphology, it also has V-to-T movement. If the morphology is not rich enough, it may or may not have V-to-T movement (Bobaljik & Thráinsson 1998, Koenenman 2000).

[see Alexiadou & Fanselow 2002 for a critique]

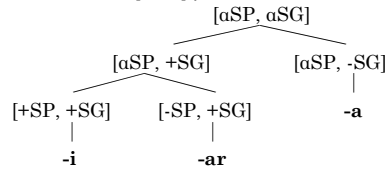
What counts as “rich” inflectional morphology?

“All forms [of a paradigm, LV] together make a hierarchical representation of which the top node is characterized as (minimally) including the features [aspeaker], [addressee] and [singular]” [Koenenman 2000:72]

9) *The full paradigm*

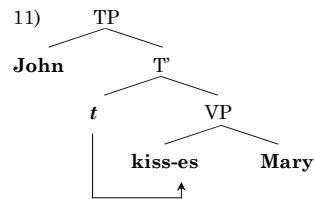


10) *Faroese lacks [αAD] feature*



3. Technical implementation

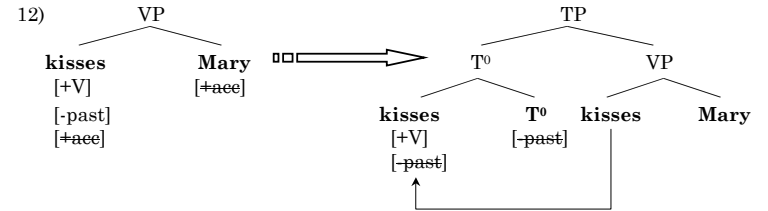
In the early days of generative grammar, English *-(e)s* simply lowered down to the verbal stem in V.



However, in later (GB) versions of the model, the ECP bans downward movement, since it leaves ungoverned traces. In minimalism, where there is no ECP, downward movement is ruled out through the various versions of the Extension Condition (Chomsky 1995).

3.1 Lexicalism meets feature checking (Chomsky 1995)

Assume that verbs enter the derivation fully inflected, and with a complete set of features. They always raise to T to check their uninterpretable [Tense] feature. So, ignoring subjects:



The difference between English and French then reduces to which copy of the verb is pronounced:

- 13) a. John **kisses** often **kisses** Mary
- b. Jean **embrasse** souvent **embrasse** Marie

Baker (2002) and Bury (2003, ch.1) summarise problems with this analysis. One further problem may come from ellipsis:

- 14) a. ✓ I don't know [**who** bought **what**]
- b. * I don't know [**who what** bought]
- c. ✓ I know that someone bought something, but...
... I don't know [**who what** _[TP-bought]]

Ellipsis allows covert movement to be overt. However...

- 15) a. ✓ Peter read a book, and Billy did _[VP read a book] too
- b. * Peter read a book, and Billy read _[VP read a book] too

3.2 PF merger under linear adjacency (Bobaljik 1995)

The verbal stem and the tense affix may be joined at PF provided they are linearly adjacent:

- 16) John -s kiss Mary → John **kisses** Mary

Intervening material (e.g., negation) blocks PF merger. This is not the case with unpronounced elements (traces of VP internal subjects)

- 17) John -s **not** kiss Mary → ✓ John **does** not kiss Mary
- * John **not kisses** Mary

However, there is a problem with adverbs:

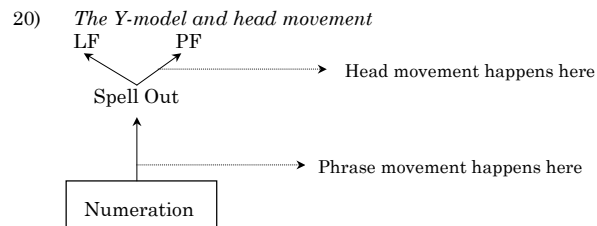
- 18) John -s often kiss Mary → ✓ John often **kisses** Mary
- * John **does** often kiss Mary

Note that these adverbs have grammatical effects, so an late insertion analysis (à la Lebeaux 1988) is not straightforward:

- 19) a. ✓ John never kisses anybody
 b. * John kisses anybody

3.3 Head movement at PF (Chomsky 2001)

In “Derivation by phase”, Chomsky hints that head movement may happen at PF:



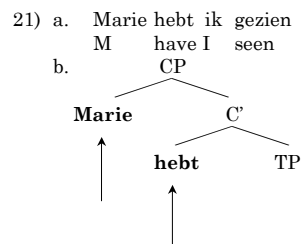
However, if head movement happens in a part of the derivation that only deals with phonological features, why do we observe syntactic effects? (Zwart 2001, Matushansky 2004).

The only empirical argument in favour of this model is Boeckx & Stjepanovic (1999), but see Baltin (2002) for refutation.

4. Movement to C? Germanic V2 and English interrogatives

4.1 Germanic V2

Traditionally, V2 effects have been treated as T-to-C movement plus topicalisation.



This is an analysis based in German and Dutch, where V2 is blocked in embedded clauses (because the complementiser and the verb compete for the same position). These are *asymmetric* V2 languages

- 22) a. ✓ Ik denk [dat Jan het boek gelezen heeft]
 I think that J the book read has
 b. * Ik denk [dat Jan heeft het boek gelezen]
 I think that J has the book read

However, this analysis is not universally valid. For one, Dutch has the following contrast (from Zwart 1993):

- 23) a. ✓ Ik hebt hem gezien
 I have him seen
 b. * Hem hebt ik gezien
 him have I seen

Moreover, there are *symmetric* V2 languages, namely, Icelandic and Yiddish (data from Biberauer 2003, ch. 2)

- 24) a. Eg veit ekki [af hverju kyrin **hefur** staðið i herberginu]
 I know not why cow has stood in room
 b. Ikh veys nit [far vos di ku **iz** geshtanen in tsimer]
 I know not why the cow is stood in room

Note also that some speakers allow violations of V2, which may call for an entirely different analysis (data from Nilsen 2003):

- 25) % Hij meer dan **verdubbele** zijn score totaal vorig jaar
he more than doubled his aggregate last year
- ↓ ↓ ↓
- 1 2 3

4.2 English interrogatives

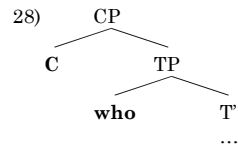
In English, the main evidence in favour of T-to-C movement comes from subject-auxiliary inversion in interrogatives:

- 26) a. What **will** you eat for dinner?
 b. Where **have** you been for holiday?

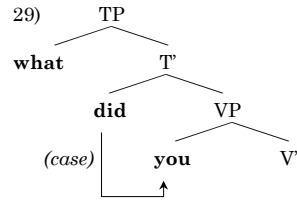
The problematic cases involve subject questions and *do* support

- 27) a. ✓ What did you read?
 b. * What you read?
 c. ✓ Who read the book?
 d. * Who did read the book?

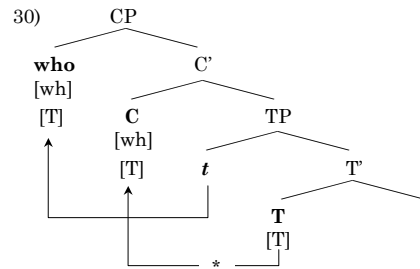
Agbayani (2002) argues that subject wh- words don't move. They can check the [+wh-] feature of C through linear adjacency (similar to V-to-T cases: see Radford 1997 for a similar suggestion)



Pesetsky (1989) also argues that the subject doesn't move: English SpecTP is a possible position for wh- phrases. If a non-subject wh- word appears there, the subject is forced to stay inside VP. *Do* support appears as a last resort strategy to case-mark (ECM) the subject



Finally, Pesetsky & Torrego (2001) argue that, in addition to [+wh], C has a [T] feature that attracts the closest element. Apart from T⁰, nominative subjects also carry a [T] feature. Thus, a nominative wh- word pre-empts T-to-C movement.



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Williams, Edwin (1994), "A reinterpretation of the evidence for verb movement in French", in Hornstein & Lightfoot (eds.), *Verb movement*, Cambridge University Press

Zwart, Jan-Wouter (1993), *Dutch syntax: a minimalist approach*, PhD dissertation, University of Groningen

Reading for next week: Baker, Mark (1988), *Incorporation: a theory of grammatical function changing*, University of Chicago Press.
 I've left a copy of the first two chapters in the course folder. Chapter 1 is required for everybody, chapter 2 advised for those interested in the technical details.