The morphosyntax of verb movement revisited

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1. Background

(1) Minimalist starting points

a. structure is the result of bottom-up (binary) Merge

sisterhood hypothesis: grammatical relations are sisterhood relations
(Zwart 1993, Epstein et al. 1998)

dynamic hypothesis: structure is flexible (no absolute 'positions')

b. elements merged are meaningful

exclusiveness hypothesis: 'uninterpretable' features are acquired features
(Zwart 2003a)

modularity hypothesis: (inflectional) morphology after syntax
(Halle and Marantz 1993)

c. merge is unconstrained (merge \( \alpha \))

cyclic hypothesis: element merged may be output of auxiliary derivation

no-movement hypothesis: a displaced element is a 'remerged' element
(Bobaljik 1995)

opacity corollary: output of auxiliary derivation can only be merged as a whole
(Toyoshima 1997)

d. merge is uniform

simplicity hypothesis: merge affects one element at a time

asymmetry corollary: output of merge is an ordered pair
(Jaspers 1998, Zwart 2005)

dependency hypothesis: dependency is a function of merge

linearization hypothesis: linear order is a function of merge
(Zwart 2003b)

(2) Sources of variation:

a. Size of element remerged
(Koster 1999, Koopman & Szabolcsi 2000)

b. Dependency realization
(Zwart 2004)

c. Selective expression of thematic/grammatical/discourse information

d. Lexical/morphological inventory

e. Other factors (probably needed for describing VERB MOVEMENT)

2. Brief history of verb movement

(3) Stages:

a. affix hopping

(Chomsky 1957 up to 1989)

b. feature checking/matching

(around since 1980, Chomsky 1993, Zwart 1993)

c. feature movement + lexicalization

(Chomsky 1995, Zwart 1997/2001)

d. 'phonology'

(Chomsky 1998)

(4) Variables:

minimalist?

a. affixes merged in syntax

NO: Chomsky 1957 up to 1993

YES: Chomsky from 1993 on

b. functional heads involved unclear

NO: Chomsky before 1981, Zwart 2005

YES: Chomsky from 1981 on

c. lexical integrity (no feature movement)

YES (1b)

NO: Chomsky 1995, Zwart 1997

YES: elsewhere

d. morphology after syntax

YES (1b)

YES: Zwart from 1997 on

NO: Chomsky throughout (modulo readjustment)

e. double representation of features

NO (1b)

YES: Chomsky from 1993 on, Zwart up to 1997

NO: Chomsky before 1993, Zwart 2005

f. verb movement triggered by features unclear

YES: Chomsky before 1998, Zwart up to 2001

NO: Chomsky from 1998 on, Zwart 2005

3. Double representation of features

(5) Agreement

a. John love-s Mary

[3SG][ 3SG]

+inherent

b. [AGRSPJohnAGRS

E

[VPlove-s Mary ] ]

(Chomsky 1993, Zwart 1993)

N-feature N-feature

V-feature V-feature

c. [TP

E

[vPJohn

[VPlove-s Mary ] ] ]

(Chomsky 2001)

probe goal

u

nn

(\( u = \) uninterpretable)

Case

u

Case

(6) Simplification

a. + John, love, Mary,

, + John, love, Mary,

, +

John, love, Mary,

, +

John, love, Mary,

, +
b. a constituent realizes its features on (one or more of) its terms

(7) variation:

a. main verb

..dat hij in het bos wandel-t

(Dutch)

..that he in the forest walk-3SG

'..that he is walking in the forest.' (Carstens 2003:395)

b. various verbal and adverbial elements

Juma

a

-li-kuwa

a

-ngali

a

-ki-fanya kazi (Swahili)

Juma11-PAST-be 1-still 1-PROG-do work

'Juma was still working.' (Carstens 2003:395)

c. pronoun

u bru p

§

n-yap ps

cñ

u

(Nongtung Khasi)

the man cause-die snake 3SG

'The man killed the snake.' (Nagaraja 1997:355)

d. object

dios tupo.

§

n

nxo-xt'e.wal wako.(Coahuilteco)

god the-1PLwe-annoy cause

'We annoyed God.' (Troike 1981:663)

If correct...

a. there is no subject-verb agreement, just subject-predicate agreement

b. no functional heads are involved in agreement

c. the verb has no unvalued/uninterpretable n-features

d. all features are (morphologically) interpretable

(9) Tense

a. JohnTENSEloves Mary

[ PRES][ PRES]

b. ..and [love Mary], he does

[ TPJohn T E [ VP loves Mary ] ]

Zwart 1997

[TENSE: -- ]

[TENSE: PRES]

Overt/covert movement

d. 

[ TPJohn T E [ VP loves Mary ] ]

Adger 2003

[T: PRES][ T]

Probe/goal agreement

(11) simplification

+ John + TENSE

PRES

+ love, Mary,

PRES

, +

John + TENSE

PRES

+ love, Mary

PRES

, PRES

, ,

(12) tense realized on the object

a. p-aškala

§

t-ís= na

...amálo (Chamicuro)

2-kill-2:PL=THE bat

'You (plural) are killing the bat' (Parker 1999:553)

b. p-aškala

§

t-ís= ka

...amálo

2-kill-2:PL=THE:PAST bat

'You (plural) killed the bat' (Parker 1999:553)

4. Verb placement

(12) Dutch: tense/agreement realized on the verb, regardless its position

(13) +

we + TENSE

in the forest, walked

, , ,

PL PAST

(14) Mirror principle: timing of feature sharing operations reflected in the order of inflectional morphemes.

(15) In order to realize tense/agreement, a verb does not need to move to T/Agr.

(16) Kayne/Hallman analysis of verb final clauses

Hallman 2000, Kayne 1994:52:

[ subject [XP... object ... ] verb-AgrS/T

E [VP__ __ ] ]

(17) A negative-marked verb need not be in Neg (contra Haegeman 2000):

a. ...da Valère dienen boek nie en-kent (West Flemish)

that Valery that book notNEG-know:3SG
5. What remains of the morphosyntax of verb movement?

b. VERB movement and VERB movement

+ NEG ...

... kent ...

, ... negative concord: multiple realization of [negative] ...

das Valère van

nie

ketent

en

-was (West Flemish)

that Valery of noone not contentNEG-was

'.that Valery was not pleased with anyone.'

d. Jespersen cycle (Jespersen 1917): changes in [negative] realization

ne > ne oenum > non > ne > pas

e. There is no spec-head agreement for [NEG], i.e. no Neg-Criterion > no NegP

(18) Adverbial notions (Cinque 1999)

a. evaluative > modal > aspectual > temporal > manner

b. ADV1ADV2ADV3V-adv3-adv2-adv1

c. ex. modal > temporal

i. He probably did not goADV1ADV2

ii. anti-ci re'an-

aha-kon

V-adv2-adv1 (Garo)

'market-to go-PAST-PROB

'I think he went to the market.' (Bybee 1985:180)

d. [AdvPadverb Adv

E

[VPverb-

adv

]] ]

e. There is no spec-head agreement for [NEG], i.e. no NegP > no V-movement to Adv

(19) Dutch: modality expressed by modal verbs

a. Jan zal gisteren vertrokken zijn

John will yesterday leave:PART be:INF

'John probably left yesterday.'

b. ..dat Jan gisteren vertrokken zal zijn

TEMPORAL MODAL

c. Cinque order consistently violated in embedded clauses (IJbema 2002)

d. Possible solutions:

- AdvP is head-final, zal raised to Adv

E

; rest moves around it

- there is no AdvP, verbal morphology is morphological realization of the adverbial

feature acquired by the predicate through feature sharing

5. What remains of 'The morphosyntax of verb movement'?

(20) Verb movement asymmetry in Continental West-Germanic (and Mnl. Scandinavian)

a. embedded clause (EMB)

b. subject-initial main cl. (SIMC)

c. inversion main cl. (INV)

Dan kust Jan Marie

'And Jan kisses Mary.'


a. Dutch is head-initial (cf. position complementizer, determiner, etc.)

b. subject/object have designated derived positions (Spec,AgrSP / Spec, AgrOP)

c. verb movement is a secondary phenomenon, triggered by the need to license elements in the specifier (1993: subject, topic, wh-phrase) or head (1997: a stray feature) position of functional projections

(22) [CPspec C [AgrSPspec AgrS [TPT [AgrOPspec AgrO [VPV]]]]]

EMB

SIMC

INV

d. What is left of the crucial ingredients?

(23) What is left of the crucial ingredients?

a. Head-initial syntax.

i. internal argument is dependent of (selected by) verb

ii. dependency is a function of merge (1d): verb is merged to the internal argument

iii. linearization verb > internal argument (cf. complement clause)

Question: why is the internal argument noun phrase remerged in object position?

b. Subject/Object positions.

i. there are no absolute positions (1a)

ii. subject merged to a potential predicate

Question: why are argument noun phrases remerged in subject/object position?

c. Verb movement.

i. no positions (1a) > no rule V-to-C

ii. flexible structure: V2 = verb after whatever is first

iii. 'asymmetric' V2

iv. verb movement not for feature licensing purposes

Question: why is the verb remerged in second position?
6. \( V_2 \) as a function of merge

(24) Why is \( V_2 \) conditional on other fronting operations (i.e., on Merge) ?

a. merge yields +x,y, where \( y \) is a dependent of \( x \) (1d)

b. dependency may be marked (i) by form (inflection) (ii) by position (linker)

c. hypothesis: \( V_2 \) is positional marking of the dependency relation between a fronted element (subject, topic, wh-element) and its sister (Zwart 2005)

7. The Zita facts

(28) ..zet-te ik > zet-ik-te (Child Dutch)

(29) Restricted to: - inversion -1SG subject pronoun - past tense

(30) Barbiers & Van Koppen (2005) analysis:

a. -te is generated in T

b. TP is head initial (cf. (4a))

c. inversion: V-to-T-to-C, stranding -te in T

d. embedded clauses: Kayne/Hallman analysis (cf. (16))

*..dat ik-te het neer zet

..that I put it down.' (past)

(31) My observations (from Zita, consistent from age 2 up to age 5)

a. dat bedoel-te-ik-te also

b. restriction to 1SG suggests:

c. pattern follows if kid wants to explicitly mark the subject's sister for 1SG: with the verb gone, a dummy 1SG.PAST marker -te is inserted as a positional dependency marker for the subject's sister...