

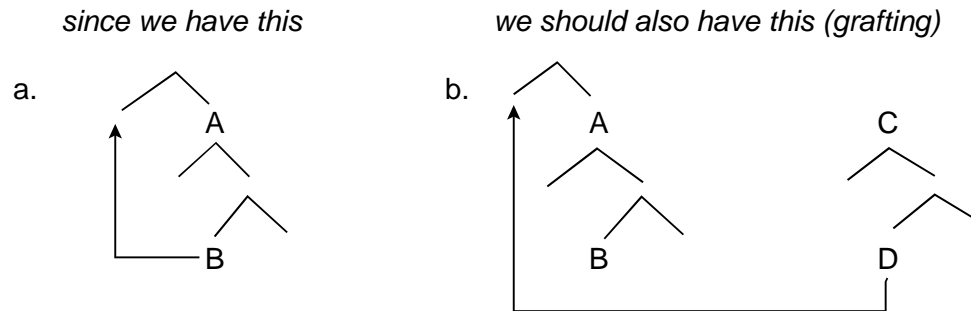
On the 'graft' analysis of interpolations

Jan-Wouter Zwart
ATW/Groningen

TIN-dag, Utrecht, Febr. 4 2006

1. Grafting

(1) 'Grafting' as the logically missing case of Merge (Van Riemsdijk 2004).



- (2) a. a [far from *simple*] *matter*
b. *they served* [what was euphemistically referred to as *a steak*] (transparent free relative)
c. *Hij is naar* [ik meen dat 't *Budapest* was] *vertrokken*
he left for I believe it was Budapest

- (3) 1. we don't have (1a) [no extraction]
2. we don't have (1b) [no interarboreal operations]

2. Simplest merge

(4) *What we need for a (bottom-up) derivation*

- a. a numeration of elements to be merged (RESOURCE)
b. a process of merger (MERGE)
c. a WORK SPACE containing the output of MERGE (a subset of the RESOURCE)

(5) Bobaljik 1995: merger = establishment of a link between two members of the numeration

(6) *Proposed mechanism* (MERGE): assign one element from the RESOURCE to the WORK SPACE

(7) a. John loves Mary

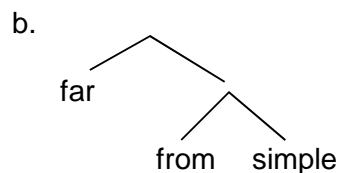
- b. 1. NUMERATION: *John, loves, TENSE, Mary*, {WORK SPACE: \emptyset }
assign Mary to the WORK SPACE
2. NUMERATION: *John, loves, TENSE, Mary*, {WORK SPACE: *Mary* }
assign loves to the WORK SPACE
3. NUMERATION: *John, love, TENSE, Mary*, {WORK SPACE: *Mary, loves+Mary* }
assign TENSE to the WORK SPACE
4. NUMERATION: *John, love, TENSE, Mary*, {WORK SPACE: *Mary, loves+Mary, TENSE+loves+Mary* }
assign John to the WORK SPACE
5. NUMERATION: *John, love, TENSE, Mary*, {WORK SPACE: *Mary, loves+Mary, TENSE+loves+Mary, John+TENSE+loves+Mary* }

- (8) a. Mary, John loves
 b. 1-5 as in (9b)
assign Mary to the WORK SPACE
 6. NUMERATION: *John, love, TENSE, Mary*, {WORK SPACE: *Mary, loves+Mary, TENSE+loves+Mary, John+TENSE+loves+Mary, Mary+John+tense+loves+Mary*}
- (9) Movement (remerge) can only involve elements in the NUMERATION (incl. WORK SPACE)
- (10) The NUMERATION may include phrases = output of previous AUXILIARY DERIVATION
- (11) a. Pictures of John please Mary
 b. 1. NUMERATION: [*pictures of John*], *TENSE, please, Mary*, {WORK SPACE: \emptyset }
 5. NUMERATION: [*pictures of John*], *TENSE, please, Mary*, {WORK SPACE: *Mary, please+Mary, TENSE+please+Mary, pictures=of=John+TENSE+please+Mary* }
 c. *John, [pictures of —] please Mary
 d. explanation: *John* is not in the NUMERATION, therefore cannot be (re)merged
- (12) Predictions: - extraction from complement position always possible (modulo idioms)
 - extraction from specifier/adjunct position never possible
 = Condition on Extraction Domains (CED, Huang 1982, Toyoshima 1997)
- (13) a. * It's the CAR that [the driver of —] caused a scandal (merged as specifier)
 b. It's the CAR that [the driver of —] was arrested (merged as complement)
 (Chomsky 2005)
- (14) Movement is a second merge: there is no extraction
- (15) Terms of the output of an auxiliary derivation (like C in (1b)) cannot be merged: there are no interarboreal operations

3. a far from simple matter

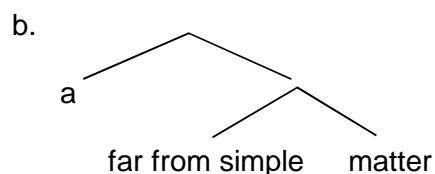
- (16) auxiliary derivation yields (b) from numeration (a)

a. NUMERATION: *far, from, simple*



- (17) (16b) included in new numeration (a), yielding (b), merged at attribute to *matter*:

a. NUMERATION: *a, far-from-simple, matter*



[ASIDE: *far from X* may be viewed as a ‘construction’, i.e. construed via Merge but used in a petrified way, perhaps involving reanalysis of *far from* as a degree modifier to *simple*]

4. *ik meen (dat 't) Budapest (was)*

(18) *auxiliary derivation yields constructions of the ‘hedging’ type*

- a. *ik meen Budapest* = Budapest (I think)
- b. *ik meen dat 't Budapest was* = Budapest (I think)

(19) embedded material carries the weight of the assertion

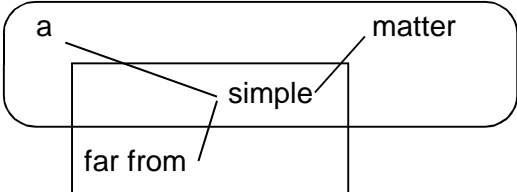
- (20) A. Denk je dat ik dat niet wist? B. Nee! (≠ I don't think / = You didn't know)
do you think I did not know that No

(21) [*ik meen Budapest*] can be merged functioning as [*Budapest*]

[ASIDE: *ik meen Budapest* and *ik meen dat 't Budapest was* differ in that the latter can only be used in upward monotonic environments]

4.1 further arguments

1. *spelling out graft structures*

- (22)  Upon hitting a graft (i.e. a *callus*), proceed to spell out the grafted structure (the *scion*) first; then continue with the matrix structure (the *stock*).

- (23) Hij is naar ik meen Budapest vertrokken of Helsinki
he left for I think Budapest or Helsinki

(24) *Two interpretations*

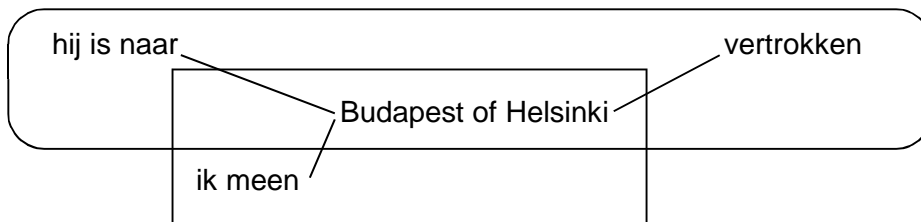
- a. He left for one of two cities, the identity of the first being *possibly* Budapest, and the identity of the second being (certainly) Helsinki: **narrow scope** of *ik meen*
- b. He left for some city, *possibly* Budapest or Helsinki (but could be neither): **wide scope** of *ik meen*

(25) *In the wide scope reading:*

- Stock: Hij is naar Budapest vertrokken of Helsinki
- Callus: Budapest of Helsinki
- Scion: Ik meen Budapest of Helsinki

(26) *Spell-out procedure yields*

Hij is naar ik meen Budapest of Helsinki vertrokken

- (27) 

- (28) Hij heeft zelfs Kayne ontmoet en Chomsky (narrow/wide scope)
he even met Kayne and Chomsky

2. Opacity

- (29) a. Hij is dol op (ik meen) bananen
he loves (I believe) bananas
- b. Bananen is hij dol op (*ik meen) ___
bananas he loves (I believe)

In the graft analysis, it is not clear why a callus could not be displaced.

In the auxiliary derivation analysis, merger is restricted to members of the numeration (excluding terms of auxiliary derivations).

[ASIDE: There is a parallel here with other hedges, suggesting that hesitation particles are likewise part of auxiliary derivations and form a constituent with the hedged material:

- (30) a. Hij is naar [eh, Budapest] vertrokken
he left for er, Budapest
- b. *Waar is hij naar [eh, ___] vertrokken ?
what place did he leave for er

Cf. DeSmedt & Kempen 1987.]

3. Limited types

- (31) a. Hij is naar { ik meen / ?jij zei / *ik noem / *ik ken } Budapest vertrokken
he left for { I believe / you said / I mention / I know } Budapest
- b. Hij is naar { ik meen dat 't Budapest was /
?ik meen dat hij Budapest zei dat 't was /
*ik meen dat hij in Budapest woont } vertrokken
he left for { I believe it was Budapest / I believe he said it was Budapest / I believe he lives
in Budapest }
- c. *Hij is naar Budapest is de hoofdstad van Hongarije vertrokken
he left for Budapest is the capital of Hungary

Restriction: the callus can be substituted by the stock 'salva veritate', i.e. the remainder of the stock merely adds information of an evidential kind.

- (32) Explanation within graft analysis: pragmatics ?

- (33) Explanation within auxiliary derivation analysis: selection restriction (*ik meen Budapest* stands for *Budapest* [cf. (18)] and can be meaningfully combined with *naar*).

4. Interpretation

- (34) Hij is naar hij zei dat 't Budapest of Helsinki was vertrokken
he left for he said that it Budapest or Helsinki was
a. 'He left for some place, possibly B or H, based on what he said.'
b. 'He left for some place which he said was either B or H.' (improbable reading)
- (35) Hij zei dat 't Budapest of Helsinki was
he said it was Budapest or Helsinki
a. He said it was either B or H
b. He said it was some city, possibly B or H (improbable reading)

Explanation: in (34) we are not conveying that 'he said something' but merely adding evidentiality information.

5. Transparent free relatives

- (36) *These are invariably evidential too* (exx. from Van Riemsdijk 2001)
- a. The man entered the cockpit carrying a gun, a razor, and a can of **what the crew took to be** gasoline
 - b. **What seem to be** several meteorites were lying on the lawn
 - c. She invited **what I took to be** a policeman
 - d. The verb is **what Stowell calls** adjacent to the noun phrase
 - e. Nick lost **what seems to be called** his marbles
 - f. They live in **what is often referred to as** each other's backyard
 - g. The auk is **what biologists term** a pterorhine
 - h. In this example, the variable is **what most linguists would characterize as** improperly bound
 - i. Bill owns three **what some people would consider to be** extravagant cars
etc.
- (37) what I took to be a policeman = a policeman (according to me at the time)
- (38) *She invited (what) Bill served as a naval officer
- (39) She invited what I took to be a policeman
- a. Derivation 1: NUMERATION: *what, I, took, to, be, a, policeman*
OUTPUT: [what I took to be a policeman] (= a policeman, cf. (37))
 - b. Derivation 2: NUMERATION: *she, invited, [what I took to be a policeman]*
OUTPUT: [she invited what-I-took-to-be-a-policeman]

6. Conclusion

- (40)
1. Simplest merge allows no extraction or interarboreal operations.
 2. A numeration may include outputs of auxiliary derivations, the terms of which may not be merged separately (= opacity)
 3. Phenomena giving rise to a grafting analysis invariably involve hedging (cf. McCawley 1988:732) or, more specifically, evidentiality marking
 4. This entails that what seems to be embedded under the hedging/evidential material is actually the core information, so that the graft may be merged wherever the callus might.

References

- Bobaljik, Jonathan David. 1995. In terms of merge. *MIT Working Papers in Linguistics* 27, 41-64.
- Chomsky, Noam. 2005. On phases. Ms., MIT.
- DeSmedt, K. and Gerard Kempen. 1987. Incremental sentence production, self-correction and coordination. In *Natural Language Generation*, Gerard Kempen, ed., 365-376. Dordrecht: Martinus Nijhoff.
- Huang, C.T. James. 1982. *Logical relations in Chinese and the theory of grammar*. Dissertation, MIT.
- McCawley, James D. 1988. *The major syntactic phenomena of English*. Chicago: The University of Chicago Press.
- Van Riemsdijk, Henk. 2001. A far from simple matter: syntactic reflexes of syntax-pragmatics misalignments. In *Perspectives on semantics, pragmatics and discourse: a Festschrift for Ferenc Kiefer*, István Kenesei and Robert Harnish, eds., 21-41. Amsterdam: John Benjamins.
- Van Riemsdijk, Henk. 2004. Graft is the logically missing case of Merge. *Visnyk of the Kiev National Linguistic University* 7.2, 5-13.
- Toyoshima, Takashi. 1997. Derivational CED. *Proceedings of WCCFL 15*, 505-519.
- Wilder, Chris. 1999. Transparent free relatives. *Proceedings of WCCFL 17*, 685-699.

Faculty of Arts, P.O. Box 716, NL-9700 AS Groningen
www.let.rug.nl/~zwart ! c.j.w.zwart@rug.nl