

## Comparative Deletion in Germanic

### 0. Introduction

Comparative Deletion:

- (1) a. Ralph is taller than Michael is **tall**.  
b. The table is longer than the office is **wide**.

traditional approach: obligatory elimination of a given quantified constituent

cf. Bresnan (1973); Kennedy and Merchant (2000); Kennedy (2002)

but: phenomenon not universal

Hungarian: overt operator + overt lexical AP:

- (2) a. Mari magasabb volt, mint **amilyen magas** Zsuzsa volt.  
Mary taller was.3SG than how tall Susan was.3SG  
'Mary was taller than Susan.'  
b. Az asztal hosszabb volt, mint **amilyen széles** az iroda volt.  
the table longer was.3SG than how wide the office was.3SG  
'The table was longer than the office was wide.'

→ question: Comparative Deletion and variation in Germanic?

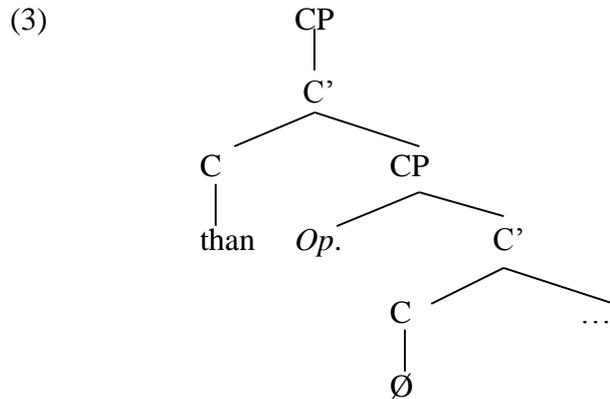
languages: English, German, Dutch

→ proposal: Comparative Deletion is an overtness requirement on left-peripheral elements

variation ← overt/covert, extractable/non-extractable operators

## 1. Operator movement in comparatives

left periphery (on multiple CPs, cf. Rizzi 1997, 1999, 2004):



operator movement (cf. Chomsky 1977, Kennedy and Merchant 2000)

comparative operator: relative operator

comparatives obey islands – irrespectively of whether NP is contrastive (cf. Kennedy 2002)

- *wh*-island:

- (4) a. \*Jason killed more dragons than  $OP_x$  Susan wondered [whether to kiss  $t_x$ ].  
 b. \*Jason killed more dragons than  $OP_x$  Susan wondered [whether to kiss  $t_x$  unicorns].

- complex NP islands:

- (5) a. \*Jason killed more dragons than  $OP_x$  he had outlined [a plan to kill  $t_x$ ].  
 b. \*Jason killed more dragons than  $OP_x$  he had outlined [a plan to kill  $t_x$  unicorns].

syntactic motivation: regular movement of a [+rel] operator

→ not specific to comparatives

overt operators – e.g. Hungarian, cf. (2)

overt operator + lexical AP: possible irrespectively of whether the AP is contrastive or not

operator has to move because of its [+rel] feature

AP: moves because of independent reasons (non-extractability)

## 2. The structure of degree expressions

two overt operators in Hungarian:

- operator *amilyen* ‘how’: not separable from the lexical AP

- (6) a. Mari magasabb, mint **amilyen** magas Péter volt.  
 Mary taller than how tall Peter was  
 ‘Mary is taller than Peter was.’
- b. \*Mari magasabb, mint **amilyen** Péter volt **magas**.  
 Mary taller than how Peter was tall  
 ‘Mary is taller than Peter was.’

- operator *amennyire* ‘how much’: separable from the lexical AP

- (7) a. Mari magasabb, mint **amennyire** magas Péter volt.  
 Mary taller than how.much tall Peter was  
 ‘Mary is taller than Peter was.’
- b. Mari magasabb, mint **amennyire** Péter volt **magas**.  
 Mary taller than how.much Peter was tall  
 ‘Mary is taller than Peter was.’

similar difference in interrogative operators:

- operator *milyen* ‘how’: not separable from the lexical AP

- (8) a. **Milyen** magas volt Péter?  
 how tall was Peter  
 ‘How tall was Peter?’
- b. \***Milyen** volt Péter **magas**?  
 how was Peter tall  
 ‘How tall was Peter?’

- operator *mennyire* ‘how much’: separable from the lexical AP

- (9) a. **Mennyire magas** volt Péter?  
 how.much tall was Peter  
 ‘How tall was Peter?’
- b. **Mennyire** volt Péter **magas**?  
 how.much was Peter tall  
 ‘How tall was Peter?’

separable operators: not VP-modifiers

AP may move together with them (one single constituent)

they do not require the presence of an overt copula in Hungarian (cf. 3Sg. present tense)

degree expressions: DegP – degree head

- takes two arguments (cf. Lechner 2004)

lexical AP

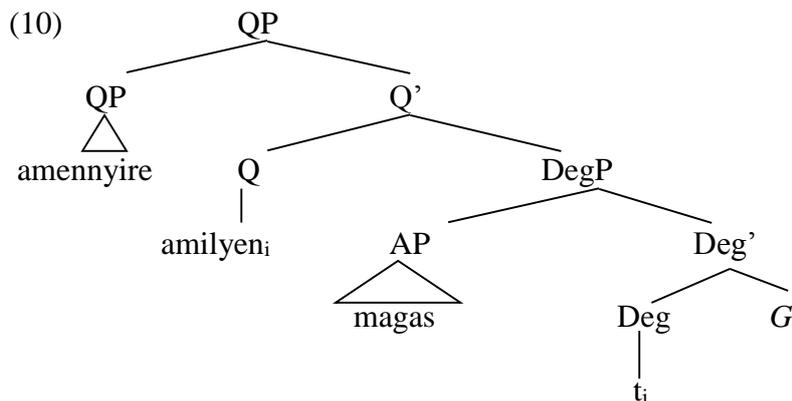
Grade argument – standard value

- projects a QP layer

Deg moves up to Q

specifier of QP may host other QP modifiers

degree expressions in the subclause (e.g. *amilyen/amennyire magas* ‘how/how much tall’):



economy → *amilyen* and *amennyire* cannot be co-present (~ Doubly Filled Comp Filter)

structural difference → *amennyire* may be extracted on its own (↔ *amilyen*)

operator has to undergo movement

stranding of the AP depends on the structural position of the operator within the QP

→ information structure not directly related to movement and stranding

Comparative Deletion ≠ obligatory deletion of a GIVEN or non-contrastive AP

### 3. English

- Standard English: zero operator

- (11) a. Ralph is taller than Michael is **tall**.  
 b. The table is longer than the office is **wide**.

movement → two copies

higher copy in [Spec,CP] and lower copy in base position

movement before spellout in both cases

↔ Kennedy (2002): only in (11a)

but: movement cannot be sensitive to the information structural properties of the AP

driven by the [+rel] feature of the operator

- (12) a. Ralph is taller than [**x-tall**] Michael is [**x-tall**].  
 b. The table is longer than [**x-wide**] the office is [**x-wide**].

overtiness requirement: a lexical AP (or NP) is licensed in an operator position such as [Spec,CP] if the operator itself is overt

→ higher copy of the degree expression in (12) deleted

lower copy: regularly eliminated, unless it is contrastive (cf. Bacskai-Atkari 2012):

- (13) a. Ralph is taller than ~~[x-tall]~~ Michael is ~~[x-tall]~~.  
 b. The table is longer than ~~[x-wide]~~ the office is ~~[x-wide]~~.

contrastiveness: AP can still be GIVEN: (Kennedy 2002, quoting Chomsky 1977)

- (14) A: This desk is **higher** than that one is **wide**.  
 B: What is more, this desk is **higher** than that one is **HIGH**.

zero operator: a Deg head – AP cannot be stranded

overt operators in certain varieties of English: *what* (cf. Chomsky 1977), *how*

no violation of the overt requirement → higher copy remains overt

- *what*: proform Deg head – takes no lexical AP

- (15) % Ralph is taller than [**what**] Michael is ~~[what]~~.

- *how*: Deg head

- (16) a. % Ralph is taller than [**how tall**] Michael is ~~[how tall]~~.  
 b. % The table is longer than [**how wide**] the office is ~~[how wide]~~.

no stranding:

- (17) a. \*Ralph is taller than **how** Michael is **tall**.  
 b. \*The table is longer than **how** the office is **wide**.

- compare interrogative *how*: also a Deg head:

- (18) a. **How tall** is Ralph?  
 b. \***How** is Ralph **tall**?

→ English shows Comparative Deletion when there is a zero operator

→ role of information structure: contrastive lower copies realised overtly

#### 4. Dutch

- interrogatives: *hoe* ‘how’: a Deg head

(19) a. **Hoe groot** is Jan?  
 how tall is John  
 ‘How tall is John?’

b. \***Hoe** is Jan **groot**?  
 how is John tall  
 ‘How tall is John?’

- comparative operator *hoe* ‘how’: a Deg head

(20) a. *???* Maria is groter dan **hoe groot** Jan is.  
 Mary is taller than how tall John is  
 ‘Mary is taller than John.’

b. *???* De tafel is langer dan **hoe breed** het kantoor is.  
 the table is longer than how wide the.NEUT office is  
 ‘The table is longer than the office is wide.’

- zero comparative operator: rather a QP modifier – stranding even if AP not contrastive

(21) a. *???* Maria is groter dan Jan **groot** is.  
 Mary is taller than John tall is  
 ‘Mary is taller than John.’

b. De tafel is langer dan het kantoor **breed** is  
 the table is longer than the.NEUT office wide is  
 ‘The table is longer than the office is wide.’

↔ English zero: non-contrastive lower copies severely degraded

considerable variation among Dutch speakers

(online) study with 70 speakers (September/August 2013):<sup>1</sup>

acceptability marked from 5 (best) to 1 (worst)

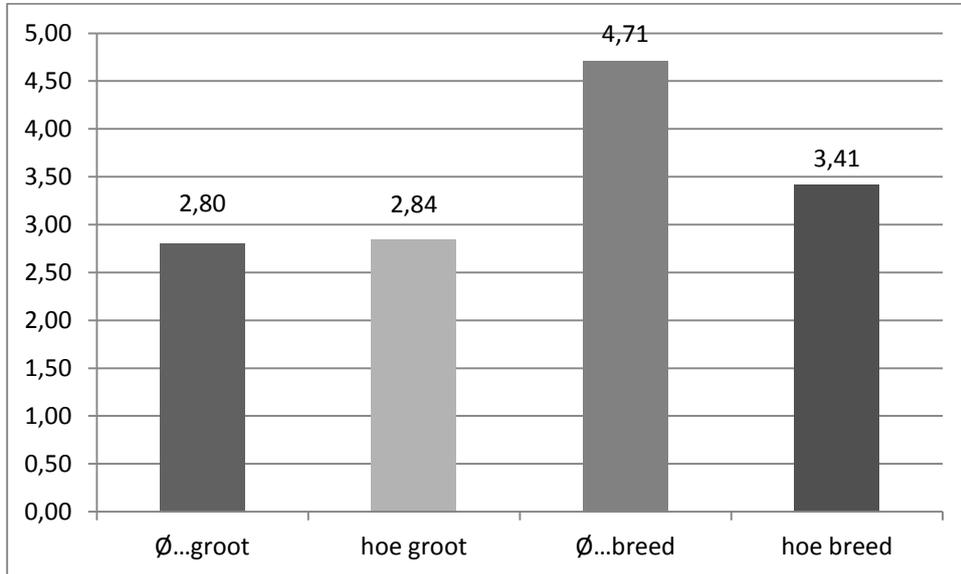
*hoe* + AP: (20a) fully acceptable for 16%, (20b) for 27%

zero – (21a) fully acceptable for 10%, (21b) for 81%

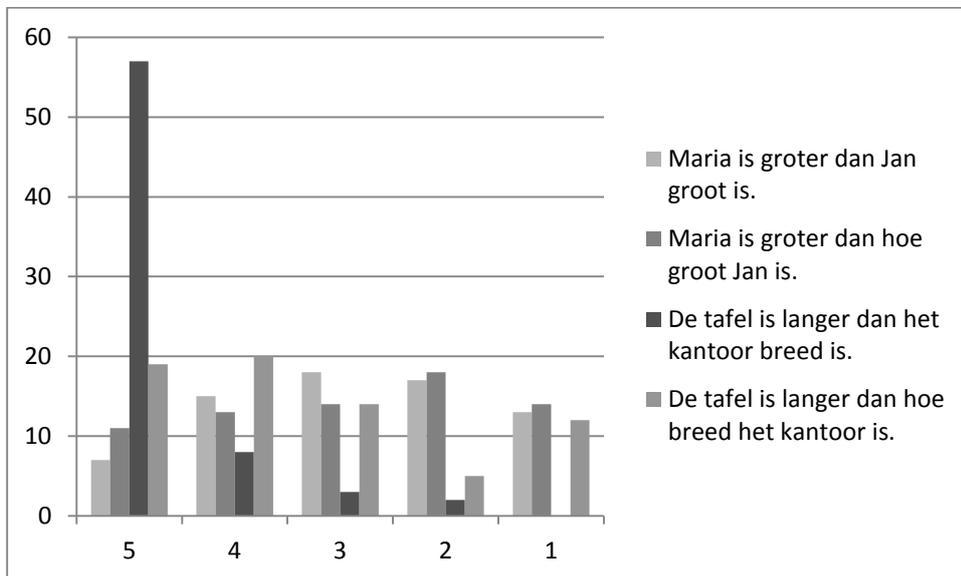
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<sup>1</sup> Many thanks go to Laura Bos and Marlies Kluck for helping me in collecting the data.

→ results (average ratings):



→ results (variation):



→ Dutch: Comparative Deletion only partially attested

only if the AP moves together with the zero operator

→ role of information structure: contrastive AP has to be preserved

with *hoe*: difference less significant than with the zero

deletion of the AP possible only if it moves up together with the zero

*hoe* + non-contrastive AP not preferred

## 5. German

- interrogative operator *wie* ‘how’: a Deg head:

(22) a. **Wie groß** ist Ralf?  
 how tall is Ralph  
 ‘How tall is Ralph?’

b. \***Wie** ist Ralf **groß**?  
 how is Ralph tall  
 ‘How tall is Ralph?’

- *wie* in comparative subclauses:

with a non-contrastive AP:

(23) a. \*Ralf ist größer als **wie groß** Michael ist.  
 Ralph is taller than how tall Michael is  
 ‘Ralph is taller than Michael.’

b. ??/\*Ralf ist größer als **wie** Michael **groß** ist.  
 Ralph is taller than how Michael tall is  
 ‘Ralph is taller than Michael.’

with a contrastive AP:

(24) a. \*Der Tisch ist länger als **wie breit** das Büro ist.  
 the.MASC desk is longer than how wide the.NEUT office is  
 ‘The desk is longer than the office is wide.’

b. ??? Der Tisch ist länger als **wie** das Büro **breit** ist.  
 the.MASC desk is longer than how the.NEUT office wide is  
 ‘The desk is longer than the office is wide.’

→ *wie* in comparatives cannot be an operator

Deg head – (23a) and (24a) should be acceptable, (23b) and (24b) ungrammatical

QP modifier – (23a) and (24a) should still be possible

but: *wie* still possible (dialectal variation):

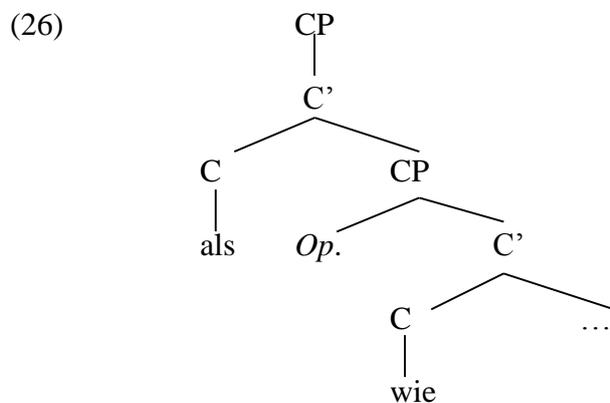
- (25) ??? Ralf ist größer als **wie** Michael.  
 Ralph is taller than how Michael  
 ‘Ralph is taller than Michael.’

→ *wie* in comparatives: not an operator but a grammaticalised C head (cf. Jäger 2012)

~ in comparatives expressing equality (*wie* ‘as’)

standard grammaticalisation process from operators into C heads

relative cycle – cf. Bacskai-Atkari (2013) for Hungarian comparatives



→ lexical AP cannot co-occur with *wie* in the CP domain

- zero operator: rather a QP modifier

- (27) a. ? Ralf ist größer als Michael **groß** ist.  
 Ralph is taller than Michael tall is  
 ‘Ralph is taller than John.’

- b. Der Tisch ist länger als das Büro **breit** ist.  
 the.MASC table is longer than the.NEUT office wide is  
 ‘The table is longer than the office is wide.’

→ German: Comparative Deletion not attested as in English

→ role of information structure: contrastive AP stranded or lower copy preserved

non-contrastive APs preferably move together with the operator and are hence deleted

## 6. Comparative operators in Germanic

two factors: extractability (Deg head or QP modifier) and overt/ness

→ interaction:

(28)

	<b>overt</b>	<b>covert</b>
<b>Deg head</b>	<i>how</i> (English) <i>what</i> (English) <i>hoe</i> (Dutch)	zero (English)
<b>QP modifier</b>	–	zero (Dutch) zero (German)

Comparative Deletion attested with zero operators when the lexical AP also moves up

obligatory if the operator is a Deg head

optional if the operator is a QP modifier

## ***Conclusion***

variety in terms of Comparative Deletion in Germanic languages

linked to the overtiness of the operators

three factors:

- overtiness of the operator – Comparative Deletion
- position of the operator in the degree expression – AP separable
- information structure – preferred position of the AP

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