

## Extended Projections of Adjectives and Comparative Deletion

### 0. Introduction

comparative subclauses in English:

- (1) a. Mary is taller than Peter is **tall**.  
b. The desk is longer than the office is **wide**.

Comparative Deletion: traditionally referring to the deletion of a GIVEN AP

cf. Bresnan (1973)

but: overt operators in English (dialectal differences):

- (2) a. <sup>?</sup>Mary is taller than **what** Peter is.  
b. \*The desk is longer than **what** the office is **wide**.

other languages permit overt operators and APs, e.g. Hungarian:

- (3) 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 **amennyire** Péter volt **magas**.  
Mary taller than how.much Peter was tall  
'Mary is taller than Peter.'

→ question: how differences in the operators and in the information structure interact

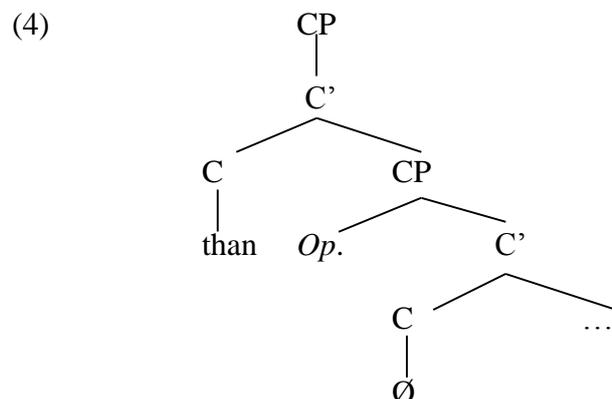
i.e. how languages differ in terms of Comparative Deletion

proposal:

- Comparative Deletion is dependent on the overtness of the operator
- AP deletion is dependent on whether the AP may be stranded

### 1. Operator movement and the left periphery of the comparative subclause

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



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

reasons for movement:

- comparatives obey islands (e.g. *wh*-island, complex NP islands)
- overt operators also realised in the lower [Spec; CP] position – cf. (2) and (3)

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

→ not specific to comparatives

## 2. Givenness, F-marking and the copy theory of movement

two copies of the degree expression:

(5) Mary is taller than [**x-tall**] Peter is [**x-tall**].

questions:

- what moves up to the lower [Spec; CP]
- what eliminates material from the lower [Spec; CP]
- what happens to the lower copy

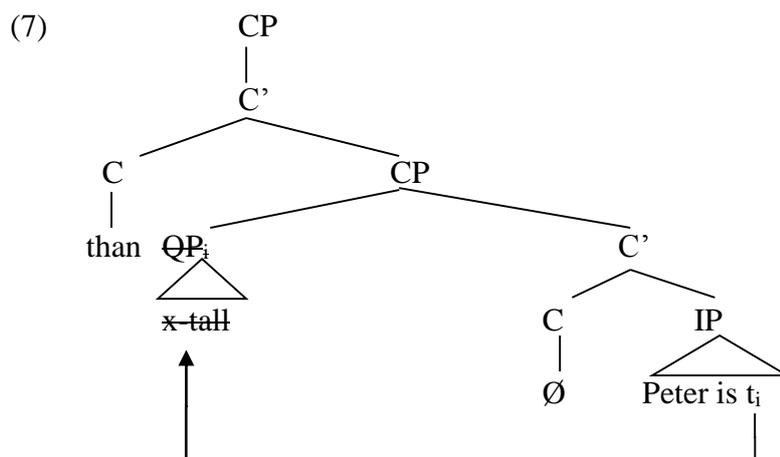
in (5): movement of the entire degree expression

interrogatives with *how*:

- (6) a. **How tall** is John?  
 b. \***How** is John **tall**?

operator inseparable from the lexical AP (← internal structure of the degree expression)

movement:



deletion in [Spec; CP]: Comparative Deletion (cf. Bacsikai-Atkari 2012)

lower copy: regularly deleted at PF as a lower copy

cf. Bošković and Nunes (2007: 44–48); Chomsky (2005: 12); Bobaljik (2002)

in (5): possible because the AP is GIVEN – recoverability (cf. Merchant 2001)

→ both copies are deleted in (5):

(8) Mary is taller than [~~x-tall~~] Peter is [~~x-tall~~].

but: F-marked lower copies remain:

(9) The desk is longer than the office is **wide**.

underlyingly:

(10) The desk is longer than [~~x-wide~~] the office is [~~x-wide~~].

deletion of both copies not possible ← *wide* not GIVEN

higher copy has to be eliminated by Comparative Deletion

lower copy remains overt – the pronunciation of the higher copy would make the derivation crash at PF (cf. Bošković and Nunes 2007: 48)

*wide* in (9): contrastive – expresses the main contrast involved in the construction

clausal-final position: canonical position for foci in English

cf. Selkirk (1984, 1986); Nespors and Vogel (1986); McCarthy and Prince (1993)

overt lower copy of a non-contrastive AP: ungrammatical

should regularly be eliminated as a lower copy

should not appear in a contrastive position

(11) ??/\* Mary is taller than Peter is **tall**.

### 3. On Hungarian operators

• operator *amilyen* ‘how’:

(12) 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.’

→ *amilyen* inseparable from the lexical AP

• operator *amennyire* ‘how much’:

(13) 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.’

→ *amennyire* separable from the lexical AP

- no zero operator:

- (14) a. \*Mari magasabb, mint **magas** Péter volt.  
Mary taller than tall Peter was  
'Mary is taller than Peter was.'
- b. \*Mari magasabb, mint Péter volt **magas**.  
Mary taller than Peter was tall  
'Mary is taller than Peter was.'

differences not dependent on whether the AP is GIVEN or F-marked:

- (15) a. Az asztal hosszabb, mint **amilyen széles** az iroda.  
the desk longer than how wide the office  
'The desk is longer than the office is wide.'
- b. \*Az asztal hosszabb, mint **amilyen** az iroda **széles**.  
the desk longer than how the office wide  
'The desk is longer than the office is wide.'
- (16) a. Az asztal hosszabb, mint **amennyire széles** az iroda.  
the desk longer than how.much wide the office  
'The desk is longer than the office is wide.'
- b. Az asztal hosszabb, mint **amennyire** az iroda **széles**.  
the desk longer than how.much the office wide  
'The desk is longer than the office is wide.'
- (17) a. \*Az asztal hosszabb, mint **széles** az iroda.  
the desk longer than wide the office  
'The desk is longer than the office is wide.'
- b. \*Az asztal hosszabb, mint az iroda **széles**.  
the desk longer than the office wide  
'The desk is longer than the office is wide.'

→ Hungarian has no Comparative Deletion but there are two types of operators:

- *amilyen*: must move together with the AP:

higher copy of the entire degree expression overt in [Spec; CP]

lower copy of the entire degree expression deleted regularly

- *amennyire*: can move out on its own – if so:

higher copy of *amennyire* appears overtly in [Spec; CP] but no AP there

lower copy of *amennyire* deleted regularly, AP remains overt in situ

difference also attested in interrogative operators:

- *milyen* ‘how’:

- (18) 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?’

- *mennyire* ‘how much’:

- (19) 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?’

#### 4. The structure of degree expressions

DegP – degree head

- takes two arguments (cf. Lechner 2004)

lexical AP

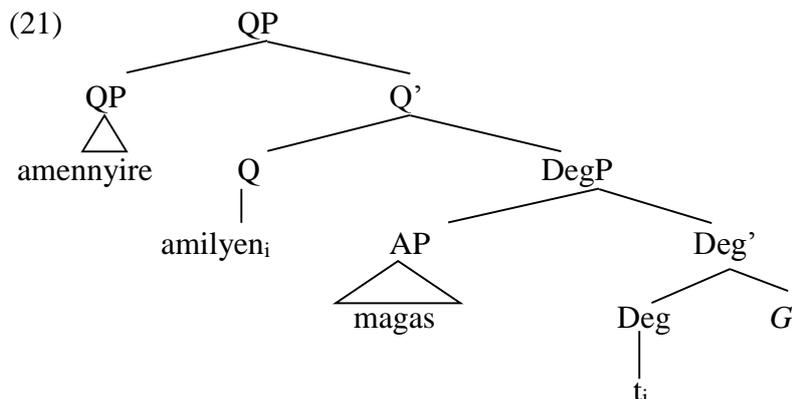
Grade argument – standard value

- 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*)

### 5. Proforms

so far: degree expressions containing a lexical AP

*amilyen*: may appear without a lexical AP

- (22) Mari magasabb, mint **amilyen** Péter volt.  
 Mary taller than how Peter was  
 ‘Mary is taller than Peter was.’

Deg head may not require an overt AP

expectation: *amennyire* should differ

← proforms standing for the DegP, not the QP

- (23) \*Mari magasabb, mint **amennyire** Péter volt.  
 Mary taller than how.much Peter was  
 ‘Mary is taller than Peter was.’

### 6. Operators in English

three (possible) operators: zero, *how*, *what*

- *what*: invariably proform Deg head that prohibits the co-presence of an overt AP

- (24) a. ? Mary is taller than **what** Peter is.  
 b. \*Mary is taller than **what** Peter is **tall**.  
 c. \*The desk is longer than **what** the office is **wide**.

similarly in interrogatives:

- (25) a. \***What tall** is Peter?  
 b. \***What** is Peter **tall**?

- *how*: available only for some speakers; Deg head requiring the co-presence of an overt AP

- (26) a. <sup>OK</sup>\*Mary is taller than **how tall** Peter is.  
 b. \*Mary is taller than **how** Peter is **tall**.  
 c. \*Mary is taller than **how** Peter is.

- zero: Deg head

(27) ??/\*Mary is taller than Peter is **tall**.

### 7. The role of information structure

Comparative Deletion  $\neq$  the elimination of a GIVEN AP

positional differences between GIVEN and F-marked APs (if the operator is separable)

*amennyire* ‘how much’ + GIVEN AP:

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

preverbal position: contrast position (focus) – cf. É. Kiss (2002), Bródy (1990, 1995)

→ preferred position for an F-marked AP

*amennyire* ‘how much’ + F-marked AP:

- (29) a. ?A macska kövérebb, mint **amennyire** **széles** a macskaajtó volt.  
 the cat fatter than how.much wide the cat flap was  
 ‘The cat is fatter than the cat flap was wide.’
- b. A macska kövérebb, mint **amennyire** a macskaajtó **széles** volt.  
 the cat fatter than how.much the cat flap wide was  
 ‘The cat is fatter than the cat flap was wide.’
- c. ?A macska kövérebb, mint **amennyire** a macskaajtó volt **széles**.  
 the cat fatter than how.much the cat flap was wide  
 ‘The cat is fatter than the cat flap was wide.’

cyclic movement: from VP to FP, from FP to CP → two positions for the stranded AP

## Conclusion

three factors:

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

reducing Comparative Deletion:

overtness requirement on the operator taking a lexical AP in [Spec; CP]

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