Comparative Deletion and the Overtness Requirement

Julia Bacskaï-Atkari
University of Potsdam

julia.bacskaï-atkari@uni-potsdam.de

Research Institute for Linguistics
Budapest
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Dissertation project

- structure of degree expressions
- Comparative Deletion
- Attributive Comparative Deletion
- diachronic changes (left periphery)
- optional ellipsis processes (subclause)
Introduction

Comparative Deletion:

(1) a. Ralph is more qualified than Jason is \textit{x-qualified}.

b. Ralph has more qualifications than Jason has \textit{x-many-qualifications}.

c. Ralph has better qualifications than Jason has \textit{x-good-qualifications}.
(2) a. The table is longer than the desk is **wide**.

b. Ralph has more books than Jason has **manuscripts**.

c. Ralph wrote a longer book than Jason did a **manuscript**.
Previous analyses

- Bresnan (1973)
- Kennedy (2002)
Hungarian

(3) a. Mari magasabb, mint amilyen magas Peti.  
Mary taller than how tall Peter  
‘Mary is taller than Peter.’

b. Marinak több macskája van,  
Mary-DAT more cat-POSS.3sg is  
mint ahány macskája Petinek van.  
than how many cat-POSS.3sg Peter-DAT is  
‘Mary has more cats than Peter has.’

c. Marinak nagyobb macskája van,  
Mary-DAT bigger cat-POSS.3sg is  
mint amilyen nagy macskája Petinek van.  
than how big cat-POSS.3sg Peter-DAT is  
‘Mary has a bigger cat than Peter has.’
Attributive Comparative Deletion

(4) a. Ralph bought a bigger cat than George did buy a big cat flap.
b. Ralph bought a bigger cat than George bought a big cat flap.
c. *Ralph bought a bigger cat than George bought a big cat flap.
d. *Ralph bought a bigger cat than George bought a big cat flap.
e. *Ralph bought a bigger cat than George bought a big cat flap.
f. *Ralph bought a bigger cat than George did buy a big cat flap.

Kennedy and Merchant (2000)
Questions

- the site of deletion (base position or left periphery)
- why Comparative Deletion seems to be obligatory in English
- obligatory verb deletion in attributive comparatives
- the ungrammaticality of an overt quantified AP in attributive comparatives (English)
Comparative Deletion

descriptively: a process which eliminates the QP or the quantified DP from the subclause, if it is logically identical with its antecedent in the matrix clause (Bácskai-Atkári 2010b, 2012)
Deletion

(5)  

a. Ralph was reading a novel and Peter was reading an epic.

b. *Ralph was reading a novel and Peter was writing an epic.
Operator movement

moved constituent: entire quantified AP (QP) or entire quantified DP in English

- operator cannot be extracted from within the QP
- QP cannot be extracted from within the DP (cf. Kayne 1983; Ross 1986; Izvorski 1995; Grebenyova 2004; Bošković 2005; Kántor 2008)
Interrogatives

(6) a. *How is Ralph qualified?
b. How qualified is Ralph?
c. *How big did Ralph see cats?
d. How big cats did Ralph see?
e. *How many did Ralph see cats?
f. How many cats did Ralph see?
(7) a. Ralph is more qualified
\([\text{CP} \text{ than } \text{CP} \ [\text{QP} \ x\text{-qualified}] \text{ Jason is } \ [\text{QP} \ x\text{-qualified}] ]\].

b. Ralph has more qualifications
\([\text{CP} \text{ than } \text{CP} \ [\text{DP} \ x\text{-many qualifications}] \text{ Jason has } \ [\text{DP} \ x\text{-many qualifications}] ]\].

c. Ralph has better qualifications
\([\text{CP} \text{ than } \text{CP} \ [\text{DP} \ x\text{-good qualifications}] \text{ Jason has } \ [\text{DP} \ x\text{-good qualifications}] ]\].
(7) a. Ralph is more qualified
\[ CP \text{ than } CP \{QP x\text{-qualified}\} \text{ Jason is } QP x\text{-qualified}\}].

b. Ralph has more qualifications
\[ CP \text{ than } CP \{DP x\text{-many qualifications}\} \text{ Jason has } DP x\text{-many qualifications}\}].

c. Ralph has better qualifications
\[ CP \text{ than } CP \{DP x\text{-good qualifications}\} \text{ Jason has } DP x\text{-good qualifications}\}].
(7) a. Ralph is more qualified
\([_{\text{CP}} {\textit{than}}}_{\text{CP}} [_{\text{QP}} \text{x-qualified}] \text{ Jason is } [_{\text{QP}} \text{x-qualified}]]\).

b. Ralph has more qualifications
\([_{\text{CP}} {\textit{than}}}_{\text{CP}} [_{\text{DP}} \text{x-many qualifications}] \text{ Jason has } [_{\text{DP}} \text{x-many qualifications}]]\).

c. Ralph has better qualifications
\([_{\text{CP}} {\textit{than}}}_{\text{CP}} [_{\text{DP}} \text{x-good qualifications}] \text{ Jason has } [_{\text{DP}} \text{x-good qualifications}]]\).
Subdeletion structures

(8) The table is longer $[_{CP} \text{than } [_{CP} [_{QP} \text{ x-wide}]_F] \text{ the desk is } [_{QP} \text{ x-wide}]_F]$. 
Subdeletion structures

(8) The table is longer \([_{CP} \text{CP}_{QP} x\text{-wide}}_F\) than \([_{CP} \text{QP}_{QP} \text{wide}}_F\), the desk is \([_{QP} \text{x-wide}}_F\).
Contrastiveness

(9)  
a. ??/*The table is longer than the desk is long.

b.  
A: The table is longer than the desk is wide.
B: No, the table is longer than the desk is LONG.
 Hungarian

- *amilyen* ‘how’ + non-contrastive AP:

(10)  
a.  Mari magasabb,  
Mary taller  
mint *amilyen magas* Péter volt.  
than how tall Peter was.3sg  
‘Mary is taller than Peter was.’

b.  *Mari magasabb,*  
Mary taller  
mint *amilyen* Péter volt *magas.*  
than how Peter was.3sg tall  
‘Mary is taller than Peter was.’
amennyire ‘how much’ + non-contrastive AP:

(11) a. Mari magasabb,
Mary taller
mint amennyire magas Péter volt.
than how.much tall Peter was.3sg
‘Mary is taller than Peter was.’

b. Mari magasabb,
Mary taller
mint amennyire Péter volt magas.
than how.much Peter was.3sg tall
‘Mary is taller than Peter was.’
Hungarian

- no zero operator (+ non-contrastive AP):

(12) a. *Mari magasabb,
    Mary taller
    mint **magas** Péter volt.
    than tall Peter was.3sg
    ‘Mary is taller than Peter was.’

b. *Mari magasabb,
    Mary taller
    mint Péter volt **magas**.
    than Peter was.3sg tall
    ‘Mary is taller than Peter was.’
Hungarian

- *amilyen* ‘how’ + contrastive AP:

(13) a. Az asztal hosszabb,
    the desk longer
    mint *amilyen széles* az iroda.
    than how wide the office
    ‘The desk is longer than the office is wide.’

b. *Az asztal hosszabb,*
    the desk longer
    mint *amilyen* az iroda *széles.*
    than how the office wide
    ‘The desk is longer than the office is wide.’
Hungarian

- *amennyire* ‘how much’ + contrastive AP:

  (14)  
  a. Az asztal hosszabb,  
      the desk longer  
      mint *amennyire széles* az iroda.  
      than how much wide the office  
      ‘The desk is longer than the office is wide.’

  b. *Az asztal hosszabb,  
      the desk longer  
      mint *amennyire az iroda széles*.  
      than how much the office wide  
      ‘The desk is longer than the office is wide.’
no zero operator (+ contrastive AP):

(15)  

a. Az asztal hosszabb, 
the desk longer 
mint széles az iroda.
than wide the office 
‘The desk is longer than the office is wide.’

b. *Az asztal hosszabb, 
the desk longer 
mint az iroda széles.
than the office wide 
‘The desk is longer than the office is wide.’
Interrogatives

- *milyen* ‘how’:

(16) a. **Milyen magas volt Péter?**
   how tall was.3sg Peter
   ‘How tall was Peter?’

b. * **Milyen volt Péter magas?**
   how was.3sg Peter tall
   ‘How tall was Peter?’
Interrogatives

- *mennyire* ‘how much’:

(17) a. **Mennyire** magas volt Péter?
    how.much tall was.3sg Peter
    ‘How tall was Peter?’

b. *Mennyire* volt Péter magas?
    how.much was.3sg Peter tall
    ‘How tall was Peter?’
(18) \[ \text{QP} \quad \text{QP} \quad \text{Q}' \quad \text{DegP} \quad \text{Deg'} \]

- far Q
- much + -er_i
- intelligent

than Peter is
Operator positions

(19)
Hungarian operators

- *amilyen* ‘how’: a Deg head → not extractable

- *amennyire* ‘how much’: a QP modifier → extractable
English

- *how*: a Deg head

(20)  

a. OK/*Mary is taller than how tall Peter is.

b. *Mary is taller than how Peter is tall.

c. OK/*The desk is longer than how wide the office is.

d. *The desk is longer than how the office is wide.
zero operator: Deg head

(21) a. ??/*Mary is taller than Peter is tall.
    b. The desk is longer than the office is wide.
Czech interrogatives

Jak ‘how’: QP modifier

(22) a. Jak vysoký je Karel?
how tall is Karel
‘How tall is Karel?’

b. Jak je Karel vysoký?
how is Karel tall
‘How tall is Karel?’
Czech comparatives

jak ‘how’: QP modifier (+ non-contrastive AP)

(23) a. Marie je vyšší, než jak vysoký je Karel.
    Marie is taller than how tall is Karel
    ‘Marie is taller than Karel.’

    b. Marie je vyšší, než jak je vysoký Karel.
    Marie is taller than how is tall Karel
    ‘Marie is taller than Karel.’
Czech comparatives

jak 'how': QP modifier (+ contrastive AP)

(23) c. Ten stůl je delší, that desk is longer než jak široká je ta kancelář. than how wide is that office ‘The desk is longer than the office is wide.’

d. Ten stůl je delší, that desk is longer než jak je ta kancelář široká. than how is that office wide ‘The desk is longer than the office is wide.’
Dutch interrogatives

- *hoe* ‘how’: Deg head

(24) 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?’
Dutch comparatives

- *hoe* ‘how’: Deg head (+ non-contrastive AP)

(25)  

a.  OK/*Maria is groter
    Mary is taller
    dan *hoe* groot Jan is.
    than how tall John is
    ‘Mary is taller than John.’

b.  *Maria is groter
    Mary is taller
    dan *hoe* Jan groot is.
    than how John tall is
    ‘Mary is taller than John.’
Dutch comparatives

- *hoe* ‘how’: Deg head (+ contrastive AP)

(25) c. OK/*De tafel is langer
the table is longer
dan *hoe* breed het kantoor is.
than how wide the.neut office is
‘The table is longer than the office is wide.’

- d. *De tafel is langer
the table is longer
dan *hoe* het kantoor breed is
than how the.neut office wide is
‘The table is longer than the office is wide.’
Dutch comparatives

- zero operator: QP modifier

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

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

zero comparative operator: QP modifier

(27)  a. ?Maria ist größer als Johann groß ist.
     Mary is taller than John tall is
     ‘Mary is taller than John.’

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

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<thead>
<tr>
<th></th>
<th>overt</th>
<th>covert</th>
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<tbody>
<tr>
<td><strong>Deg head</strong></td>
<td>how (English)</td>
<td>zero (English)</td>
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<tr>
<td></td>
<td>amilyen (Hungarian)</td>
<td></td>
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<td></td>
<td>hoe (Dutch)</td>
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<tr>
<td><strong>QP modifier</strong></td>
<td>amennyire (Hungarian)</td>
<td>zero (Dutch)</td>
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<td></td>
<td>jak (Czech)</td>
<td>zero (German)</td>
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<td>zero (Italian)</td>
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Overtness requirement

A phonologically visible lexical XP may appear in an operator position only if it appears together with a phonologically visible operator.

Combinations in [Spec,CP]:
- HOW – licensed
- HOW long – licensed
- Ø – licensed
- Ø long – not licensed
Czech

jak ‘how’ + non-contrastive AP

(29) a. ??Marie je vyšší, než jak vysoký je Karel.
   Marie is taller than how tall is Karel
   ‘Marie is taller than Karel.’

   b. Marie je vyšší, než jak je vysoký Karel.
      Marie is taller than how is tall Karel
      ‘Marie is taller than Karel.’

   c. Marie je vyšší, než jak je Karel vysoký.
      Marie is taller than how is Karel tall
      ‘Marie is taller than Karel.’
Czech

jak ‘how’ + contrastive AP

(30) Ten stůl je delší, that desk is longer

a. ??než jak široká je ta kancelář, than how wide is that office

b. #než jak je široká ta kancelář. than wide is wide that office

   c. než jak je ta kancelář široká. than wide is that office wide

   ‘The desk is longer than the office is wide.’
Hungarian

amennyire ‘how much’ + non-contrastive AP

(31) Mari magassabb,
Mary taller

a. mint amennyire magas Péter volt.
than how.much tall Peter was.3sg

b. #mint amennyire Péter magas volt.
than how.much Peter tall was.3sg

c. ??mint amennyire Péter volt magas.
than how.much Peter was.3sg tall

‘Mary is taller than Peter was.’
The cat is fatter than the cat flap was wide.
The cat
The cat is fatter than the cat flap was wide.”
Attributive Comparative Deletion

(33)  a. Ralph bought a bigger cat than George did buy a big cat flap.
    b. Ralph bought a bigger cat than George bought a big cat flap.
    c. *Ralph bought a bigger cat than George bought a big cat flap.
    d. *Ralph bought a bigger cat than George bought a big cat flap.
    e. *Ralph bought a bigger cat than George bought a big cat flap.
    f. *Ralph bought a bigger cat than George did buy a big cat flap.
Positional problem

(34) a. *Ralph bought a bigger cat than George bought a wide cat flap.

b. *Ralph bought a bigger cat than George did buy a wide cat flap.

related to the remnant NP:

(35) Ralph bought a bigger cat than George bought a big cat.
(36) Rudolf nagyobb macskát vett,
Rudolph bigger cat-ACC bought.3sg
mint amilyen széles macskaajtót Miklós vett.
than how wide cat flap-ACC Mike bought.3sg
‘Rudolph bought a bigger cat than Mike did a cat flap.’
Previous analyses

Kennedy and Merchant (2000): quantified AP not grammatical in a certain position within the nominal expression – deletion carried out by a more general process (VP-ellipsis)

(similar analysis by Reglero 2006 for Spanish)

→ question: why the quantified AP is not grammatical
Inversion

(37) a. [How interesting a play] did Brio write?
   b. I ate [too big a piece].
   c. Bob didn’t write [as detailed a proposal] as Sheila did.
(38)

Structure:

```
QP \_i
   \rightarrow how\ big

FP
   \rightarrow F'
       \rightarrow F
           \rightarrow (of)
               \rightarrow NumP
                   \rightarrow Num'
                       \rightarrow Num
                           \rightarrow a
                               \rightarrow t_i
                                   \rightarrow NP
                                       \rightarrow N'
                                           \rightarrow N
                                               \rightarrow dog
```
(39)  a.  *Ralph bought a bigger cat than Mike [\(\text{VP bought } \text{FP x-big } \text{NumP a cat flap}\_F]\].

   b.  *Ralph bought a bigger cat than Mike [\(\text{VP bought } \text{FP x-big } \text{NumP a cat flap}\_F]\].

   c.  Ralph bought a bigger cat than Mike [\(\text{VP bought } \text{FP x-big } \text{NumP a cat flap}\_F]\].

   d.  *Ralph bought a bigger cat than Mike [\(\text{VP bought } \text{FP x-big } \text{NumP a cat flap}\_F]\].
Overtness requirement

(40) Ralph bought a bigger cat than \[ FP_{x \text{-} big} \left[ NumP_{a \text{ cat flap}} \right]_F \] Mike \[ VP \text{ bought} \left[ FP_{x \text{-} big} \left[ NumP_{a \text{ cat flap}} \right]_F \right] \].
Overtness requirement

(40) Ralph bought a bigger cat than [_{FP}x-big [_{NumP}a cat flap]_F] Mike [_{VP}bought [_{FP}x-big [_{NumP}a cat flap]_F]].
Overtness requirement

(40) Ralph bought a bigger cat than \( \text{FP} \times \text{big} \left[ \text{NumP a cat flap} \right] \). Mike \( \text{VP bought} \left[ \text{FP} \times \text{big} \left[ \text{NumP a cat flap} \right] \right] \).
Overtness requirement

(40) Ralph bought a bigger cat than \([_{FP} x \text{-} big \left[_{NumP} \text{a cat flap}\right]_F]\) Mike \([_{VP} \text{bought} \left[_{FP} x \text{-} big \left[_{NumP} \text{a cat flap}\right]_F\right]]\)
(40) Ralph bought a bigger cat than Mike \([_{\text{NumP a cat flap}}}_{F}\).
Generalised overtteness requirement

- PF-interpretable configuration:

  (41) \( X_{[\text{EDGE}]} Y \)

- PF-uninterpretable configuration:

  (42) \([\text{EDGE}] Y \)
Conclusion

Comparative Deletion: result of more general rules

- overttness and extractability of operators
- overttness requirement on left-peripheral elements
- same overttness requirement attested in the nominal domain

→ no separate mechanism for Comparative Deletion / Attributive Comparative Deletion
Thank you!
Danke!
😊
References

References


