Comparative Deletion and the Overtness Requirement

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Dissertation project

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

(1) a. Ralph is more qualified than Jason is x-qualified.

b. Ralph has more qualifications than Jason has x-many qualifications.

c. Ralph has better qualifications than Jason has x-good qualifications.
Subcomparatives

(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)
- Problems (Bacskai-Atkari 2010a)
- Kennedy (2002)
(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 (Bacskai-Atkari 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)
(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}} \text{x-qualified}] \text{ Jason is } [_{\text{QP}} \text{x-qualified}]])].

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

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

c. Ralph has better qualifications \([_{CP} \text{ than } {_{CP} \left[ _{DP} \text{x-good qualifications} \right]} \text{ Jason has } {_{DP} \text{x-good qualifications}}]\).
Copies

(7)  

a. Ralph is more qualified
\[ \text{CP} \text{ than } \text{CP} \text{ [QP}_x\text{-qualified] Jason is [QP}_x\text{-qualified}]}. \]

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

c. Ralph has better qualifications
\[ \text{CP} \text{ than } \text{CP} \text{ [DP}_x\text{-good qualifications] Jason has [DP}_x\text{-good qualifications}]}. \]
Subdeletion structures

(8) The table is longer $[_{CP} \text{than } [_{CP} [_{QP} \text{ x-wide}]_F$ than the desk is $[_{QP} \text{ x-wide}]_F$].
The table is longer \([_{CP} \text{longer}]_{CP}[_{QP} x\text{-wide}]_{F}\) than \([_{CP} \text{longer}]_{CP}[_{QP} x\text{-wide}]_{F}\) the desk is \([_{QP} x\text{-wide}]_{F}\).
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.’
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.’
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.’
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?’
Degree expressions

(18)

QP

QP

far Q

much + -er_i

AP

intelligent

DegP

Deg'

CP

t_i

than Peter is
Operator positions

(19)

QP

QP

Op

Q

Qp_i

AP

DegP

Deg'

Deg_{t_i}

G
Hungarian operators

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

- *amennyire* ‘how much’: a QP modifier → extractable
(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 office wide is
    ‘The table is longer than the office is wide.’
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 als das Büro breit ist. 
the.MASC table is longer than the.NEUT office is wide
‘The table is longer than the office is wide.’
## Operators cross-linguistically

<table>
<thead>
<tr>
<th></th>
<th>overt</th>
<th>covert</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Deg head</strong></td>
<td>how (English)</td>
<td>zero (English)</td>
</tr>
<tr>
<td></td>
<td><em>amilyen</em> (Hungarian)</td>
<td></td>
</tr>
<tr>
<td></td>
<td><em>hoe</em> (Dutch)</td>
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<tr>
<td><strong>QP modifier</strong></td>
<td><em>amennyire</em> (Hungarian)</td>
<td>zero (Dutch)</td>
</tr>
<tr>
<td></td>
<td><em>jak</em> (Czech)</td>
<td>zero (German)</td>
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<tr>
<td></td>
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<td>zero (Italian)</td>
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</tbody>
</table>
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.’
amennyire ‘how much’ + non-contrastive AP

(31) Mari magasabb,
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.’
Hungarian

amennyire ‘how much’ + contrastive AP

(32) A macska kövérebb, the cat fatter

a. mint amennyire széles a macskaajtó volt. than how.much wide the cat flap was.3sg

b. mint amennyire a macskaajtó széles volt. than how.much the cat flap wide was.3sg

c. mint amennyire a macskaajtó volt széles. than how.much the cat flap was.3sg wide

‘The cat is fatter than the cat flap was wide.’
The cat
amennyire ‘how much’ + contrastive AP

(32) A macska kövérebb, 
the cat fatter

a. mint amennyire széles a macskaajtó volt. 
than how.much wide the cat flap was.3sg

b. mint amennyire a macskaajtó széles volt. 
than how.much the cat flap wide was.3sg

c. mint amennyire a macskaajtó volt széles. 
than how.much the cat flap was.3sg wide

‘The cat is fatter than the cat flap was wide.’
(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.
(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.’
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.
Linear ellipsis

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

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

- PF-interpretable configuration:
  \[(41) \ X_{[\text{EDGE}]} \ Y\]

- PF-uninterpretable configuration:
  \[(42) \ [\text{EDGE}] \ Y\]
Conclusion

Comparative Deletion: result of more general rules

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

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

References

References