

Comparative Deletion and the Overttness Requirement

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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 **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)
- ◉ Lechner (1999, 2004)
problems (Bácskai-Atkári 2010a)
- ◉ 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?

Copies

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

Copies

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

Copies

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

Subdeletion structures

- (8) The table is longer
[_{CP} than [_{CP} [_{QP} **x-wide**]_F the desk is [_{QP} **x-wide**]_F]].

Subdeletion structures

- (8) The table is longer
[_{CP} than [_{CP} [~~_{QP} x-wide~~]_F the desk is [_{QP} 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.'

Hungarian

- ◉ *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.'

Hungarian

- 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

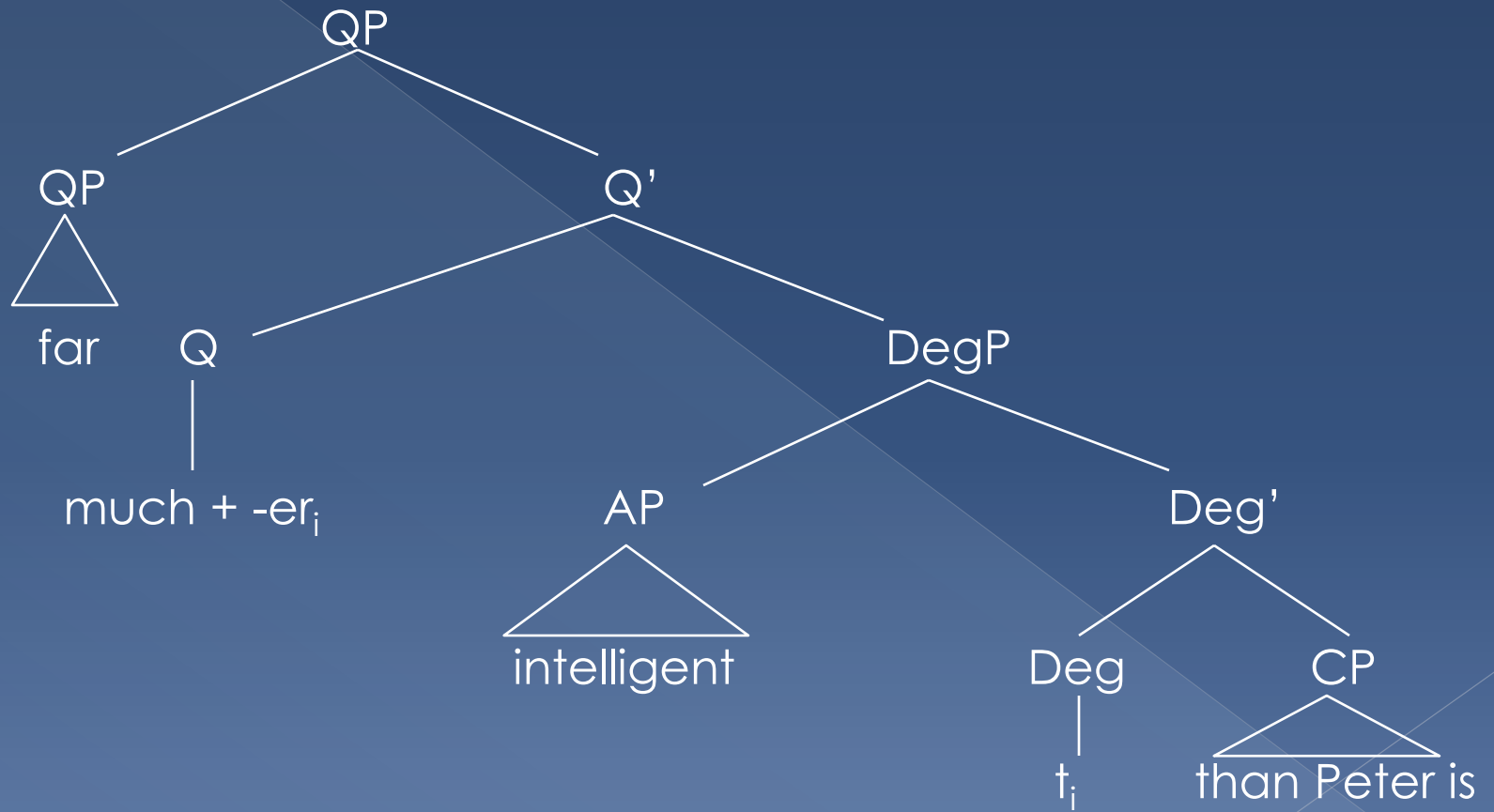
◎ *mennyire* 'how much':

(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?'

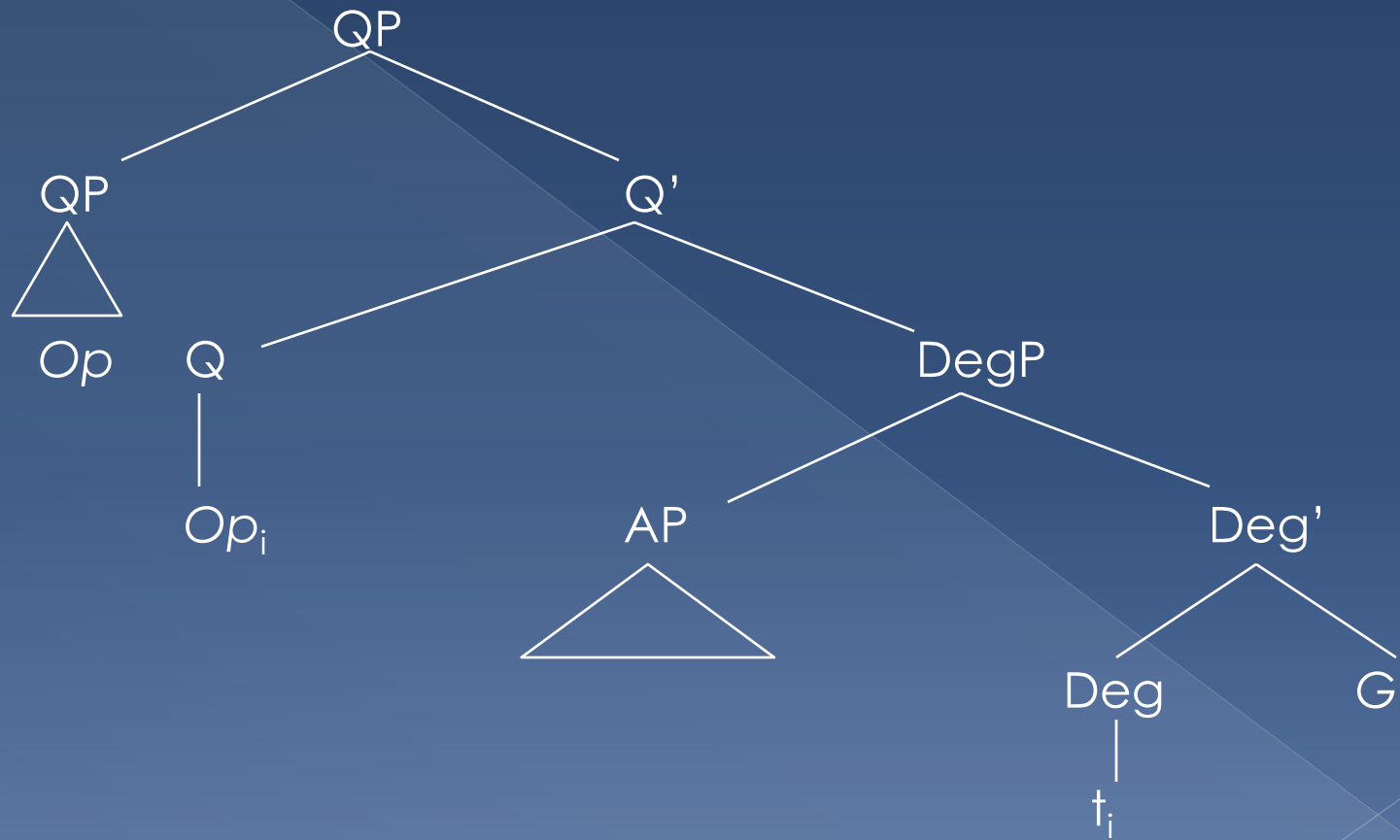
Degree expressions

(18)



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**.

English

- ◉ 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.NEUToffice 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

(28)

	overt	covert
Deg head	<i>how</i> (English) <i>amilyen</i> (Hungarian) <i>hoe</i> (Dutch)	zero (English)
QP modifier	<i>amennyire</i> (Hungarian) <i>jak</i> (Czech)	zero (Dutch) zero (German) zero (Italian)

Overttness 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
- \emptyset – licensed
- \emptyset 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 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



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.'

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~~.

Hungarian

- (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)

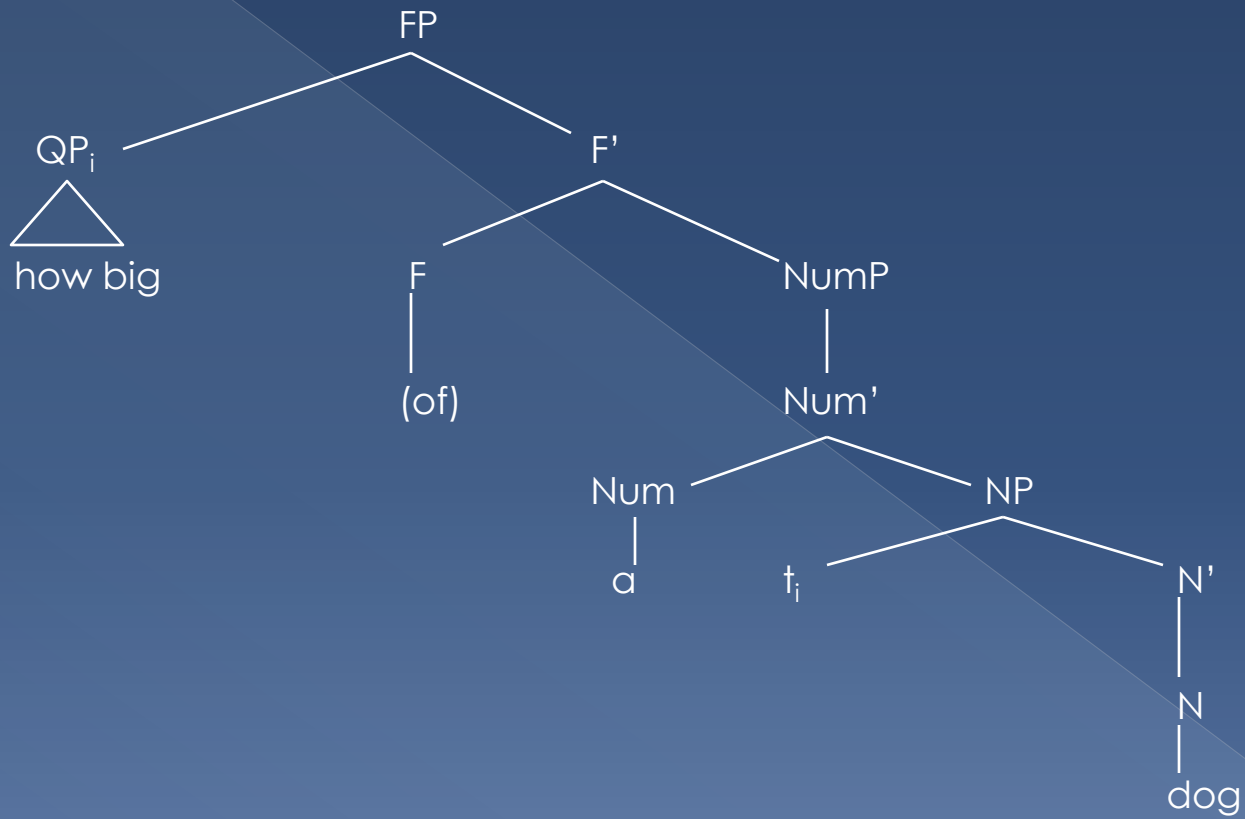
→ question: why the quantified AP is not grammatical

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.

Structure

(38)



Linear ellipsis

- (39) a. *Ralph bought a bigger cat
than Mike [_{VP} bought [_{FP} x-big [_{NUMP} a cat flap]_F]].
- b. *Ralph bought a bigger cat
than Mike [_{VP} ~~bought~~ [_{FP} x-big [_{NUMP} a cat flap]_F]].
- c. Ralph bought a bigger cat
than Mike [_{VP} ~~bought~~ [_{FP} ~~x-big~~ [_{NUMP} a cat flap]_F]].
- d. *Ralph bought a bigger cat
than Mike [_{VP} ~~bought~~ [_{FP} ~~x-big~~ [_{NUMP} ~~a cat flap~~]_F]].

Overttness requirement

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

Overttness requirement

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

Overttness requirement

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

Overttness requirement

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

Overttness requirement

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

Overttness requirement

(40) Ralph bought a bigger cat
than Mike [_{NumP} a cat flap]_F].

Generalised overttness requirement

- PF-interpretable configuration:

(41) $X_{[EDGE]} Y$

- PF-uninterpretable configuration:

(42) $[EDGE] Y$

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!



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