

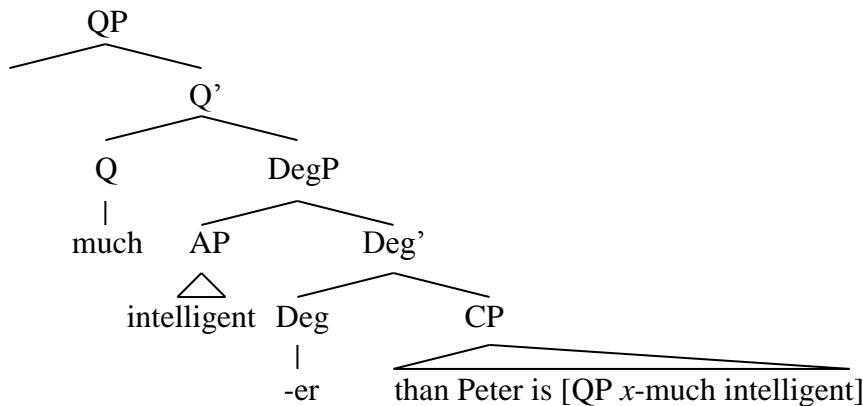
Our research aims at presenting how elliptical constructions in comparative subclauses can be analysed in selected Finno-Ugric languages.

1. The structure of comparatives

- (1) Mary is more intelligent [than Peter is *x-much intelligent*].

reference value of comparison: QP in the matrix clause
standard value of comparison: subclause

(2)



based on Izvorski 1995, White 1998, Lechner 1999, 2004, Kántor 2008a.

x = a certain absolute degree in the construction; realized as Ø in English

Evidence for QP layer: periphrastic comparatives (e.g. *more intelligent*)

The comparative subclause is a complement:

I. Deg° immediately followed by the *than*-XP:

- (3) More than ten people came. (Kántor 2008a: 100, ex. 15)

II. an element expressing the standard value is obligatory

III. selectional restrictions (Bhatt–Pancheva 2004: 3)

- (4) a. Mary is *more intelligent than/*as* Peter (is).
b. Mary is *as intelligent as/*than* Peter (is).

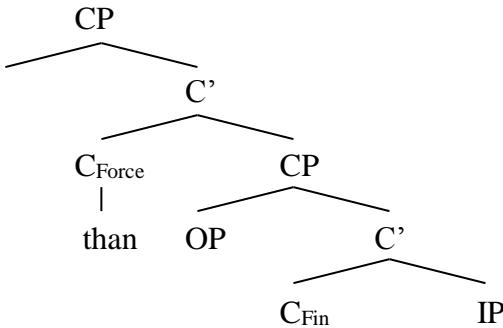
The AP is in [Spec; DegP] – (Kántor 2008b: 85)

- accounts for the formation of comparative APs both in morphological (e.g. *taller*) and in periphrastic (e.g. *more intelligent*) comparatives.
- accounts for “enough-inversion” (e.g. *big enough*)

* The first version of the present talk was given at the 11th International Congress for Fenno-Ugric Studies (CIFU11), 9–14 August 2010, Piliscsaba-Klotildliget, Department of Fenno-Ugric Linguistics, Pázmány Péter Catholic University.

Than: a complementiser (Kenesei 1992a) representing comparative Force (Rizzi 1999)
 it subcategorises for a CP, to the specifier of which the comparative operator moves via
 operator movement (Chomsky 1977; Kennedy–Merchant 2000):

(5)



the structure of the Left Periphery (Rizzi 1997: 297):

(6) [CP [TopP [FocP [TopP [CP]]]]]

In English, the comparative operator is normally covert; however, there are some dialectal differences – (7) is grammatical in New England English:

(7) John is taller than what Mary is. (Chomsky 1977: 87, ex. 51a)

Reasons for operator movement: comparatives obey islands.

Comparative operators are base-generated in specQP in the comparative subclause
 (Kántor 2008c)

Wh-island:

- (8) a. *John killed more dragons than OPx Mary wondered **whether** to kiss [tx dragons]
 b. John killed more dragons than OPx Mary wanted to kiss [tx dragons]

Complex NP island:

- (9) a. *John killed more dragons than OPx he had outlined **a plan** to kill [tx dragons]
 b. John killed more dragons than OPx he planned to kill [tx dragons]

Two basic types of comparatives:

- (10) a. The tiger is faster than the cat. *predicative*
 b. I have bigger tigers than Peter has. *attributive*

Subcomparatives:

- (11) a. The desk is longer than the rug is wide. *predicative subcomparative*
 b. Pico wrote a more interesting novel than he did a play. *attributive subcomparative*
 Kennedy and Merchant (2000:131, ex. 77)

2. Parametric variation in the comparative subclause (IE languages)

Three deletion operations: – Comparative Deletion (CD)

– Comparative Ellipsis (CE)

– Comparative Verb Gapping (CVG)

parametric setting: languages can be [\pm CD], [\pm CE], and [\pm CVG]

these are descriptive parameters, similarly to SVO, SOV etc.

- Comparative Deletion (CD): deletes the AP in predicative comparatives and the DP in attributive and nominal comparatives, if it is identical to its antecedent in the matrix clause (cf. Kennedy–Merchant 2000)

- (12) a. Mary is taller than Peter is _____{CD}. (_____{CD} = x-much tall)
b. Susan has bigger cats than Peter has _____{CD}. (_____{CD} = x-much big cats)

English has a [+CD] parameter: CD is obligatory:

- (13) a. *Mary is taller than Peter is tall.
b. *Susan has bigger cats than Peter has big cats.

By contrast, Bulgarian is [-CD]:

- (14) a. Мери по-висока беше от **колкото** **висок** Питър беше.
Mary taller was than **x-much** tall Peter was
'Mary was taller than Peter.'
b. Жужа по-голяма котка видя, от **колкото голяма** **котка** Питър къпеше.
Susan bigger cat saw than **x-much** big cat Peter bathed
'Susan has a saw a bigger cat than Peter bathed.'

- Comparative Ellipsis (CE): deletes everything, except for one focalised constituent expressing new information

Italian has a [+CE] parameter (CE is obligatory) – see Bacskai–Atkari (2010: 7–10):

- (15) a. Eva incontra Pietro più volte a casa che [a scuola].
Eve meets Peter more times at home that at school
'Eve meets Peter at home more often than at school.'
b. *Eva incontra Pietro più volte a casa che lei lo incontri a scuola.
Eve meets Peter more times at home that she him meets at school
'Eve meets Peter more times at home than she meets him at school.'

English is [-CE] (CE is optional)

- (16) Eve meets Peter more times at home than she meets him at school.

- Comparative Verb Gapping (CVG): if the operator is deleted, the finite verb must also be deleted

Bulgarian is a [+CVG] language:

– in predicative comparatives:

- (17a) Мери по-висока беше от **колкото** **висок** Питър **беше.**
 Mary taller was than **x-much tall** Peter **was**

(17b) *Мери по-висока беше от Питър **беше.**
 Mary taller was than Peter **was**
 ‘Mary was taller than Peter was.’

(17c) Мери по-висока беше от Питър.
 Mary taller was than Peter
 ‘Mary was taller than Peter.’

– in attributive comparatives:

- (18a) Жужа по-голяма котка видя, от колкото голяма котка Питър къпеше.
 Susan bigger cat saw than x-much big cat Peter bathed

(18b) *Жужа по-голяма котка видя, от Питър къпеше.
 Susan bigger cat saw than Peter bathed
 ‘Susan saw a bigger cat than Peter bathed.’

(18c) Жужа по-голяма котка видя, от Питър.
 Susan bigger cat saw than Peter
 ‘Susan saw a bigger cat than Peter.’

However, the phenomenon can be observed in ordinary relative clauses as well:

- (19a) Същата книга чета, като **която** Питър **чете.**
that.same book read than **what** Peter **reads**

(19b) *Същата книга чета, като Питър **чете.**
that.same book read than Peter **reads**

(19c) Същата книга чета, като Питър.
that.same book read than Peter
'I read the same book that Peter reads.'

English clearly has a [-CVG] parameter:

- (20a) Mary is taller than Peter is.
(20b) Susan saw a bigger cat than Peter bathed.

3. *Deletion, new, given*

Constraint: elided elements must be recoverable → *given* in the context → *not new GIVEN* (anaphorically recoverable) *versus NEW* ((con)textually non-derivable); Halliday (1967) *GIVENness* (lack of prominence) *versus novelty* (prominence); Taglicht (1982:222).
GIVEN: iff entailed by prior discourse (Schwarzschild 1999).

GIVENness: An utterance U counts as given iff it has a salient antecedent A and, modulo \exists -type shifting, A entails the \exists -F-closure of U [+GIVEN]. (Schwarzchild 1999, ex 25)

GIVENness in ellipsis domains (e-GIVEN): An utterance U counts as e-GIVEN iff it has a salient antecedent A and, modulo \exists -type shifting, A entails the \exists -F-closure of U, and U entails the \exists -F-closure of A (Merchant 2001).

Merchant's condition on ellipsis: a constituent α can be deleted iff α is e-GIVEN.
Merchant (2001: 38)

4. Hungarian

Hungarian clause structure:

- (22) [CForceP [TopP* [CFinP [TopP* [DistP* [FocP [AspP [VP ...]]]]]]]]

(Cf. Brody 1990a, 1990b, 1995 (AspP and FocP), É. Kiss 2002, 2006 (DistP, TopP, CP) Kántor 2008a, 2008b (split left periphery))

As for the split left periphery of Hungarian CPs:

- (23) a. [DP [CP Elemért [CP aki látja]]], szóljon neki.
 Elmer-ACC who sees notify-IMP-3RD/SING him-DAT
 'Whoever sees Elmer, please notify him.'
 b. Jelentkezzen [DP [CP Edével [CP aki beszélt]]]
 Come.forward-3RD/SING-IMP Ede-INS who talked
 'Whoever saw Ede, please come forward.'
 Kenesei (1992b: 588)

For further discussion, see Kántor (2008c, 2008d).

Hungarian is [-CD], [-CE], [+CVG].

- *Comparative Deletion and Comparative Ellipsis*

- (24) a. Péter sokkal kövérebb, mint Jancsi.
 Peter much fatter than Johnny
 'Peter is much fatter than Johnny.'
- b Péter sokkal kövérebb, mint (amilyen kövér) Jancsi valaha.is lesz.
 Peter much fatter than OP fat Johnny ever will.be
 'Peter is much fatter than Johnny will ever be.'
- (25) a. Péter sokkal gyorsabb autót vett, mint Jancsi.
 Peter much faster car-ACC bought than Johnny
 'Peter bought a much faster car than Johnny.'
- b. Péter sokkal gyorsabb autót vett, mint amilyen gyors autót Jancsi vásárolt.
 Peter much faster car-ACC bought than OP fast car-ACC Johnny purchased
 'Peter bought a much faster car than the one that Johnny purchased.'

- *Comparative Verb Gapping*

- (26) a. Péter sokkal kövérebb volt, mint Jancsi.
 Peter much fatter was than Johnny
 'Johnny was much fatter than Johnny.'
- b. Péter sokkal kövérebb volt, mint amilyen kövér Jancsi volt.
 Peter much fatter was than OP fat Johnny was
 'Peter was much fatter than Johnny was.'
- c. *Péter sokkal kövérebb volt, mint Jancsi volt.

- (27) a. Péter sokkal gyorsabb autót vett, mint Jancsi.
Peter much faster car-ACC bought than Johnny
‘Peter bought a much faster car than Johnny.’
- b. Péter sokkal gyorsabb autót vett, mint amilyen gyors autót Jancsi vett.
Peter much faster car-ACC bought than OP fast car-ACC Johnny bought
‘Peter bought a much faster car, than Johnny.’
- c. *Péter sokkal gyorsabb autót vett, mint Jancsi vett.

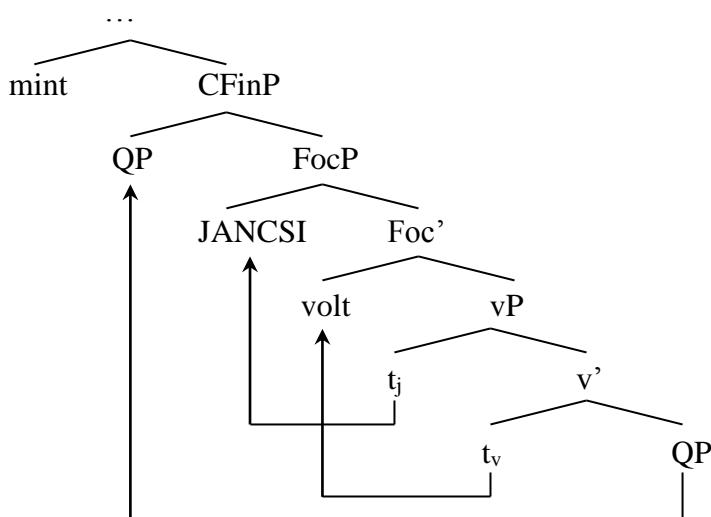
CVG and NEW versus GIVEN information:

- (28) a. Péter sokkal kövérebb, mint (amilyen/amilyen kövér) Jancsi (valaha.is) lesz.
Peter much fatter than OP OP fat Johnny ever will.be
‘Peter is much fatter than Johnny will ever be.’
- b. Péter kövérebb, mint ?(amilyen) Jancsi lenne, ha élne.
Peter fatter than OP Johnny be-3RD/SING-COND if live-3RD/SING-COND
‘Peter is fatter than Johnny would be, if he were alive.’
- c. Kövérebb vagyok, mint voltam.
fatter am than I.was
‘I am fatter than I was.’
- d. ?Több almát vettettem, mint Péter hámozott.
More apple-ACC I.bought than Peter peeled
‘The number of pears I bought is higher than that of those that Peter peeled.’
- e. Nagyobb macskát láttam, mint ?(amekkora macskát) etetett Péter.
Bigger cat-ACC I.saw than OP cat-ACC fed Peter
‘I saw a bigger than the one that Peter fed.’

The problem of CVG-effects:

- comparative operators are optionally present in the comparative subclause
- if they are absent, deletion of the verb is obligatory
- a constituent can be deleted iff it is GIVEN (e-GIVEN)

- (29) Péter sokkal kövérebb volt, [mint [QP amilyen kövér] Jancsi volt].



Focus: comparatives inherently encode contrast

- (30) a. Max is taller than Felix is.
 b. $\exists d [\neg(d(\text{tall(felix))) \& (d(\text{tall(max))))}]$
 Cf. Klein (1980) and Larson (1988)

Main stress on focussed element followed by reverse Verb-Verb Modifier order in Hungarian:

- (31) Aztán megpillantottam egy sokkal nagyobb macskát,
 then VM.noticed-1ST/SING a much bigger cat-ACC
 mint amilyet PÉTER pillantott meg.
 than OP Peter noticed VM
 'Then I noticed a much bigger cat than Peter.'

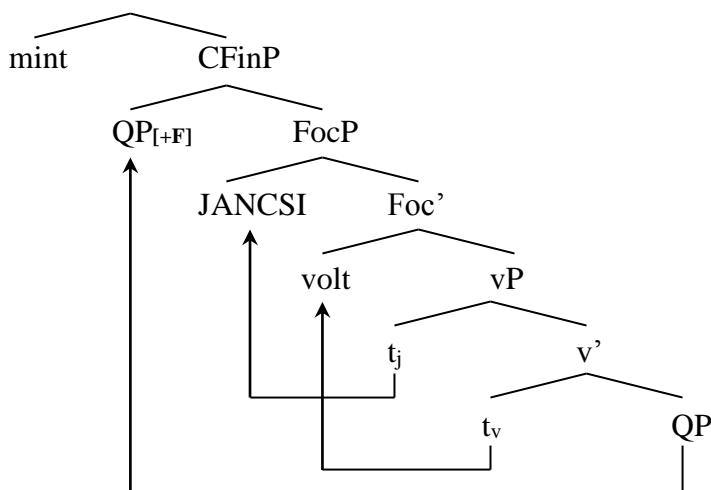
Kennedy and Merchant (2000):

- (32) a. Pico wrote a more interesting novel than he did a play.
 b. than he did [VP write [FP [OP_[+wh] interesting]_x F⁰_[+wh] [DP an t_x play]]]
 c. than he did [VP [VP write [FP [OP_[+wh] interesting]_x F⁰_[+wh] t_x]] [DP an t_x play]_i]
 (Kennedy and Merchant 2000:131)

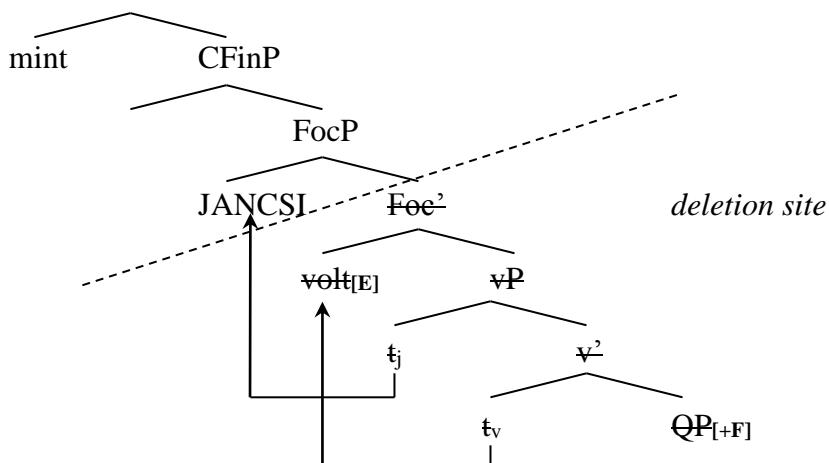
"Deletion effectively eliminates the otherwise fatal [+wh] F⁰ head inside VP."

PF-uninterpretability; the comparative operator's feature is PF-uninterpretable.

- (33) a. ...



- b. ...



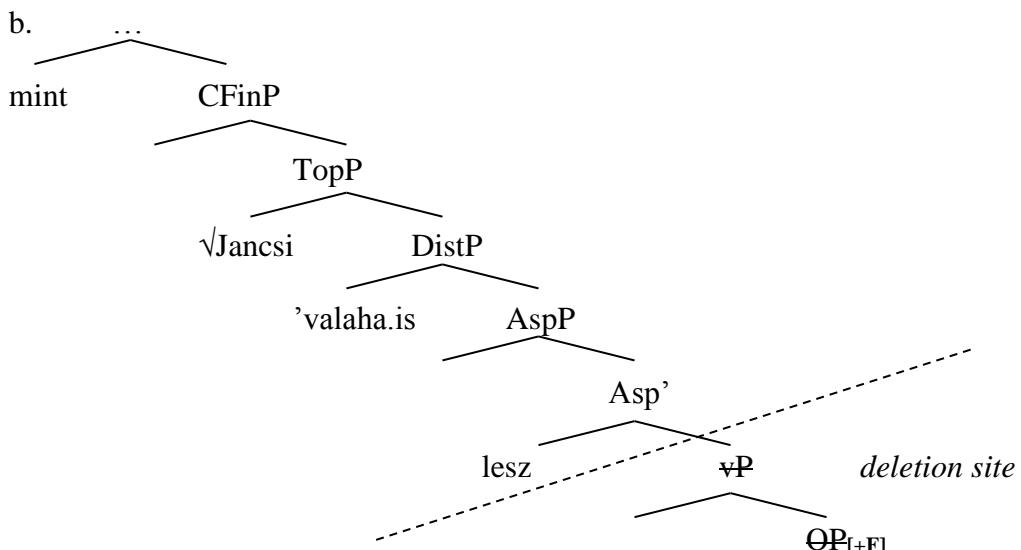
This is sluicing *per definitionem* (cf. Craenenbroeck and Lipták 2006).

A strong feature (in the sense of Chomsky 1995) which triggers the movement to the left periphery (specCP) can be deleted at PF (e.g., IP-deletion) obviating the need for movement to C. This allows the bare feature to move to C at LF, not at PF. See Merchant (2001) for further discussion.

Why Foc' is the constituent that is deleted after all? Because this is the constituent that is targeted by sluicing in Hungarian (Craenenbroeck and Lipták 2006).

Why isn't Foc' deleted in (28)?

- (34) a. Péter sokkal kövérebb, [mint \sqrt{Jancsi} 'valaha.is lesz].
 Peter much fatter than Johnny ever will.be
 'Peter is much fatter than Johnny will ever be.'



Here the maximal given constituent possible is vP after the verb has moved out.

Tendency of deleting the maximal given constituent possible

(Craenenbroeck and Lipták 2006:254, see also Merchant 2008)

5. Finnish

- *Comparative Deletion*

- (35) a. Joni on pidempi kuin Mari (*on)(*on pitkä).
 John is taller than Mary is. is tall
 'John is taller than Mary.'
- b. Joni on pidempi kuin (?mitä/*mitä pitkä) Mari (*on).
 John is taller than OP OP tall Mary is.
 'John is taller than Mary.'
- (36) a. ??Ostin nopeamman auton kuin miten nopean auton Petri osti.
 I bought faster car than OP fast car Peter bought.
 'The car I bought is faster than the one that Peter bought.'

- (36) b. Ostin nopeamman auton kuin Petrin ostama auto.
 I.bought faster car than Peter-PART buy-PART car
 'I bought a car faster than the one that Peter bought.'

c. ??Ostin nopeamman auton miten nopea Petrin ostama auto oli.
 I.bought faster car than OP fast Peter-PART buy-PART car was
 'I bought a car faster than the one that Peter bought.'

Typically narrow reading attributive comparatives are available (Lerner and Pinkal 1995)

- (37) a. George owns a faster car than this BMW. NRA
 b. George owns a faster car than Bill (does). WRA

I.e., the comparative subclause tends to be fundamentally predicative in Finnish, and the subject thereof bears the contrast necessary for comparison.

- (38) a. Ostin nopeamman auton täänän kuin Petri osti eilen.
 I.bought faster car today than Peter bought yesterday
 ‘I bought a faster car today than Peter bought yesterday.’
 b. *Ostin nopeamman auton täänän miten nopean auton Petri osti eilen.
 I.bought faster car today than OP fast car Peter bought y’day.

(39) Söin enemmän omenoita kuin Joni (söi)/(*söi omenoita).
 I.late more apples than John ate ate apples
 ‘I ate more apples than John ate.’

Finnish is [+CD]; CD targets the maximal projection containing the finite verb (I' /vP) in predicative comparatives; it targets DPs in attributive comparatives.

However, deletion can only target given material:

- (40) a. *Olen viisampi kuin sinä olet sukkela.
 am wiser than you are witty
 'I am wiser than you are witty.'
b. ?Olen viisampi kuin mitä sinä olet sukkela.
 am wiser than OP you are witty
 'I am wiser than you are witty.'

(41) Huoneeni on suorakaiteen muotoinen, ...
 my.room is rectangular shaped

a. hieman pidempi kuin mitä se on leveä.
 slightly longer than OP it is wide

b. ?hieman pidempi kuin se on leveä

c. hieman pidempi kuin leveä.

'My room is rectangular, it is slightly longer than ...'

- *Comparative Ellipsis*

Subcomparatives are indicative of [-CE]:

- (42) Huoneeni on suorakaiteen muotoinen, hieman pidempi kuin mitä se on leveä.
 my.room is rectangular shaped slightly longer than OP it is wide
 ‘My room is rectangular, it is slightly longer than it is wide.’

- (43) Ostin nopeamman auton tänään kuin Petri osti eilen.
 I.bought faster car today than Peter bought yesterday
 ‘I bought a faster car today than Peter bought yesterday.’

- *Comparative Verb Gapping*

No CVG-effects (see above).

6. Estonian

- (44) [CP [IP [vP [VP]]]] (default view, cf. Ehala 2006)

Estonian comparative operator: *kuivõrd*. For some speakers, *kui kuivõrd* is ungrammatical in any construction. Grammaticality judgments are indicated for both *kuivõrd*-sensitive and *kuivõrd*-resistant speakers in this order when they differ.

- *Comparative Deletion*

- (45) a. Jaan on pikem kui Mari (?on)
 John is taller than Mary is
 b. *Jaan on pikem kui Mari on pikk.
 John is taller than Mary is tall
 c. ??/?Jaan on pikem kui kuivõrd pikk Mari on.
 John is taller than OP tall Mary is
 ‘John is taller than Mary.’

- (46) a. Olen targem kui teie.
 am wiser than you
 b. */?Olen targem kui kuivõrd teie olete targad.
 am wiser than OP you are wise
 ‘I am wiser than you.’

- (47) a. Ostsin kiirema auto kui Peeter.
 I.bought faster car than Peter
 ‘I bought a faster car than Peter.’
 b. */?Ostsin kiirema auto kui kuivõrd kiire auto Peeter ostis.
 I.bought faster car than OP fast car Peter bought
 c. Ostsin kiirema auto täna kui Peeter eile.
 I.bought faster car today than Peter yesterday
 ‘I bought a faster car today than Peter did yesterday.’
 d. Ostsin kiirema auto kui Peeter ostis.
 I.bought faster car than Peter bought
 ‘I bought a faster car than Peter bought.’

- (48) a. Ma sõin rohkem õunu kui Jaan (sõi).
 I ate more apples than John ate
 b. *Ma sõin rohkem õunu kui mitu õuna Jaan (sõi).
 I ate more apples than OP apples John ate

Estonian is [+CD] for *kuivõrd*-sensitive speakers, and it is little less so for *kuivõrd*-resistants. CD targets I' predicative comparatives, and DPs in attributive comparatives in Estonian, too.

If the constituent is not given, there is no difference between *kuivõrd*-sensitive and *kuivõrd*-resistant speakers:

- (49) a. ?Olen targem kui teie olete arukas.
 am wiser than you are witty
 b. */?Olen targem kui kuivõrd teie olete arukas.
 am wiser than OP you are witty
- (50) ?Ma sõin rohkem õunu kui mitu pirni Jaan sõi.
 I ate more apples than OP pears John ate

- *Comparative Ellipsis*

The presence of two contrastive constituents is indicative of [-CE]:

- (51) Otsin kiirema auto täna kui Peeter eile.
 I.bought faster car today than Peter yesterday
 'I bought a faster car today than Peter did yesterday.'
- (52) B-kategooria filmide kino Hamburgis oli palju mõjukam, kui ta on seda nüüd.
 B category films-GEN cinema Hamburg-INE was more influential than it is that now
 'The cinema of B category movies in Hamburg used to be more influential than it is now.'

- *Comparative Verb Gapping*

- (53) a. Otsin kiirema auto kui Peeter ostis.
 I.bought faster car than Peter bought
 'I bought a faster car than Peter bought.'
 b. Ma sõin rohkem õunu kui Jaan sõi.
 I ate more apples than John ate
 'I bought more apples than John ate.'

References

- Bacskaï-Atkari, Julia (2010) Parametric Variation and Comparative Deletion. *The Even Yearbook* 9. 1–21.
- Bhatt, Rajesh–Roumyana Pancheva (2004) Late Merger of Degree Clauses. *Linguistic Inquiry* 35. 1–45.
- Brody, Michael (1990a) Remarks on the order of elements in the Hungarian focus field. In: Kenesei István szerk. *Approaches to Hungarian* 3: 95–122.
- Brody, Michael (1990b) Some remarks on the focus field in Hungarian. *UCL Working Papers in Linguistics* 2: 201–225.

- Brody, Michael (1995) Focus and checking theory. In: Kenesei I. szerk. *Approaches to Hungarian* 5: 29-44.
- Chomsky, Noam (1977) On WH-movement. In Culicover, Peter W. et al. (eds.), *Formal Syntax*. New York: Academic Press.
- Chomsky, Noam (1995) The Minimalist Program. Cambridge, MA: The MIT Press.
- van Craenenbroeck, J. and Anikó Lipták (2006) The Crosslinguistic Syntax of Sluicing: Evidence from Hungarian Relatives. *Syntax* 9.3: 248-274.
- Ehala, Martin (2006) The Word Order of Estonian: Implications to Universal Language. *Journal of Universal Language* 7:49-89.
- É. Kiss Katalin (2002) *The Syntax of Hungarian*. Cambridge University Press, Cambridge.
- É. Kiss Katalin (2006) Jól megoldottuk? Rosszul oldottuk meg? Az összefoglaló és a kirekesztő kifejezést tartalmazó mondatok szórendjének magyarázata. *Magyar Nyelv* 102.4: 442-459.
- Halliday, M.A.K. (1967) Notes on Transitivity and Theme in English – Part 2. *Journal of Linguistics* 3:199-144.
- Izvorski, R. (1995) A DP-shell for Comparatives. In *Proceedings of ConSOLE III*. 99-121.
- Kántor, Gergely (2008a) Edge-effektus és komparatív extrapozíció. *LINGDOK* 7. 95–121.
- Kántor, Gergely (2008b) A Phase-based Approach to Rightward Movement in Comparatives. *Newcastle Working Paper in Linguistics* 14. 81–99.
- Kántor, Gergely (2008c) Komparatív korrelatív szerkezetek a magyarban. *Nyelvtudományi Közlemények* 105:134-162.
- Kántor Gergely (2008d) On Hungarian Relative Operators. *The Even Yearbook* 8.
- Kenesei, István (1992a) On Hungarian Complementizers. In Kenesei, István and Pléh, Csaba (eds.) *Approaches to Hungarian* 4. Szeged: JATE. 37–50.
- Kenesei, István (1992b) Az alárendelt mondatok szerkezete. In: Ferenc Kiefer ed. *Strukturális magyar nyelvtan I. Mondattan*. 529-713.
- Kennedy, Christopher–Merchant, Jason (2000) Attributive Comparative Deletion. *Natural Language & Linguistic Theory* 18:89–146.
- Klein, E. (1980) A Semantics for Positive and Comparative Adjectives. *Linguistics and Philosophy* 4: 1-45.
- Larson, R.K. (1988) Scope and Comparatives. *Linguistics and Philosophy* 11: 1-26.
- Lechner, Winfried (1999) *Comparatives and DP-structure*. PhD dissertation. Amherst, MA: University of Massachusetts Amherst.
- Lechner, Winfried (2004) *Ellipsis in Comparatives*. Berlin–New York: Mouton de Gruyter.
- Lerner, J. and M. Pinkal (1995) Comparative Ellipsis and Variable Binding. *Proceedings of SALT V*: 222-236.
- Merchant, J. (2001) *The Syntax of Silence: Sluicing, Islands and the Theory of Ellipsis*. Oxford: Oxford University Press.
- Merchant, J. (2008) Variable Island Repair under Ellipsis. In: Kyle Johnson ed. *Topics in Ellipsis*. Cambridge, UK: Cambridge University Press. pp. 132-153.
- Rizzi, Luigi (1997) The Fine Structure of the Left Periphery. In Haegeman, Liliane (ed.) *Elements of Grammar*. Dordrecht: Kluwer. 281–337.
- Rizzi, Luigi (1999) *On the Position “Int(errogative)” in the Left Periphery of the Clause*. Retrieved March 31 2008, from <http://www.ciscl.unisi.it/persone/rizzi.htm>.
- Schwarzschild, Roger (1999) Givenness, AvoidF and Other Constraints on the Placement of Accent. *Natural Language Semantics* 7:141-177.
- Taglicht, J. (1982) Intonation and Assessment of Information. *Journal of Linguistics* 18:213-230.
- White, J.R. (1998) Syntax-LF Mapping and the Internal Structure of Comparatives. *UCL Working Papers in Linguistics* 10.