

REANALYSIS IN HUNGARIAN COMPARATIVE SUBCLAUSES

0. The problem

Modern Hungarian: comparative subclauses are introduced by *mint* ‘than’, which can be followed by an overt comparative operator (e.g. *ahányszor* ‘x-many times’)

Old Hungarian: comparative subclauses were initially and typically introduced by *hogy* ‘that’, and the comparative operator was covert

→ the development of the complementiser and of the operator are interrelated processes

reanalysis of the complementiser

change in the deletion of the operator

1. The structure of comparatives

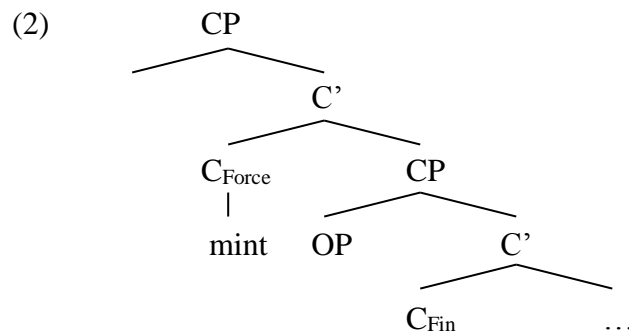
- (1) Anna ma többször telefonált Moszkvába, mint ahányszor Miki szokott.
Ann today more.times phoned-3.Sg. Moscow-Illat. than x-many times Mike does.
‘Ann phoned to Moscow more times today than Mike usually does.’

reference value of comparison: QP in the matrix clause

standard value of comparison: subclause

comparative subclause: CP, in Modern Hungarian introduced by the complementiser *mint* ‘than’ (cf. Kenesei 1992), representing comparative Force (see Rizzi 1999)

below the *mint*-CP there is another CP, to the specifier of which the comparative operator moves via operator movement (Chomsky 1977; Kennedy and Merchant 2000):



Rizzi's analysis of the Left Periphery (Rizzi 1997: 297):

(3) [CP [TopP [FocP [TopP [CP]]]]]

Modern Hungarian: *mint* is base-generated in the higher C head, and the operator moves to the lower [Spec; CP] – see Kántor (2008a); the operator can be overt:

(4) Marinak több macskája van, mint **ahány macskája** Péternek van.
Mary-Dat. more cat-Poss.3.Sg. is than **x-many cat-Poss.3.Sg.** Peter-Dat. is
'Mary has more cats than Peter.'

2. Parametric variation in the subclause

deletion phenomena – Comparative Deletion (CD)

an operation responsible for eliminating the QP from the comparative subclause, if it is logically identical with the one in the matrix clause (Bacskai-Atkari 2010: 10)

English: [+CD] language

(5a) *Ann is more enthusiastic than Peter is enthusiastic.

(5b) Ann is more enthusiastic than Peter is ____ .

when the QP is contained within a DP, the entire DP has to be moved (← DP island constraint, see Izvorski 1995: 217; Kántor 2008b: 148–149; on the constraint, see Kayne 1983; Ross 1986; Bošković 2005; Grebenyova 2004)

(6a) *Susan has bigger cats than Peter has cats.

(6b) Susan has bigger cats than Peter has ____ .

as opposed to English, Modern Hungarian is a [–CD] language:

(7a) Anna lelkesebb, mint **amilyen lelkes** Miki.
Ann more.enthusiastic than **x-much enthusiastic** Mike
'Ann is more enthusiastic than Mike.'

(7b) Zsuzsának nagyobb macskái vannak, mint **amilyen nagy macskái** Péternek vannak.
Susan-Dat. bigger cats are than **x-much big cats** Peter Dat. are
'Susan has bigger cats than Peter has.'

3. Diachronic change in Hungarian – an overview

in Old Hungarian, the subclause was initially introduced by *hogy* ‘that’, and the subclause also contained the negative element *nem* ‘not’ (Haader 2003a: 515):

- (8a) Mert iob hog megfog’dofuā algukmég’ vrat **hog né** méghal’l’ōc
 because better that caught-Past.Part. bless-3.Pl.Subj. Lord-Acc. that not die-3.Pl.Subj.
 ‘because it is better that we should bless the Lord caught than die’
 (BécsiK. 25)

- (8b) mert emberi elme, mindenkoron kezebb az gonozra, **hog’ nem** az iora
 because human mind always readier the evil-Subl. that not the good
 ‘because the human mind is always readier for evil than for good’
 (BodK. 2r)

later, *mint* ‘than’ could appear as well in typical sequences such as *hogy nem mint* ‘that not than’ – characteristic of Middle Hungarian (Haader 2003a: 515, 2003b: 681):

- (9a) maftan kozelben vagyon a’my Idweffeegwnk **honnem mynt** eleeb hyttok
 now nearer is the.our salvation-3.Pl.Poss. that.not than before thought-3.Pl.
 ‘our salvation is nearer now than we thought before’
 (ÉrdyK. 3; ex. from Haader 2003a: 515)

- (9b) az mentól alsobýkban is tob angýal uagon **honnem mýnth** az napnak feneben
 the more down-Ine. also more angel is that.not than the sun-Dat. light-Poss.
 ‘there are more angels in the basest one of them than in the sun’s light’
 (SándK. 1v)

the heads *hogy*, *nem* (also *sem* ‘nor’) and *mint* could fuse (see Haader 2003a: 515; Kenesei 1992: 43)

the element *nem* later could be left out, giving the sequence *hogy mint* (Haader 2003a: 515):

- (15) edesseget erze nagyoban **hogýmint** annak elotte
 sweetness-Acc. felt-3.Sg. bigger that.than that-Dat. before-Poss.
 ‘he felt sweetness more than before’
 (LázK. 140; ex. from Haader 2003a: 515)

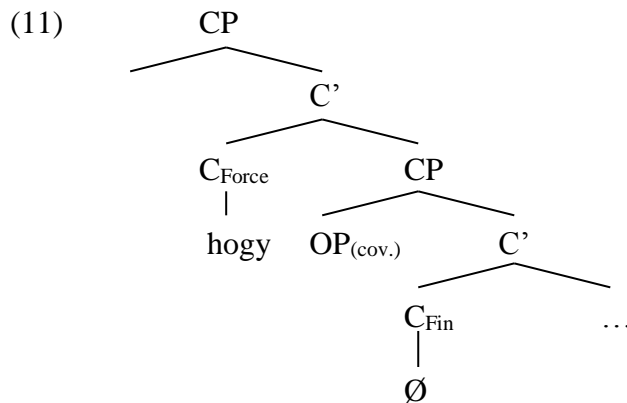
some data from the Old Hungarian corpus:

Codex	Date	<i>hogy nem</i>	<i>hogy nem mint</i>	<i>mint</i>
Jókai	btw. 1372 and 1448	3	4	4
Müncheni	1466	3		
Bécsi	btw. 1416 and 1450	18		1
Birk	1474	2	2	
Weszprémi	around 1512		7	
Gömöry	1516		1	
Sándor	around 1518	3	2	1
Pozsonyi	1520	3	1	
Bod	after 1520	4		2
Székelyudvarhelyi	1526–1528		3	

4. Reanalysis and parametric change

The initial setup:

- the subclause is introduced by the C_{Force} head *hogy* ‘that’
- the comparative operator is obligatorily deleted – [+CD] parameter
- the subclause contains the element a *nem* ‘not’ (← comparative Force)



hogy: C head (Haader 2003a: 515, 2003c: 263; Juhász 1991: 479 historically derive it from a pronoun meaning ‘how’, cf. Modern Hungarian *hogy* ‘how’)

fusion with other heads (see above)

introduces other finite clauses in the period – *that*-clauses, relative clauses
(Haader 2003a, 1991; Galambos 1907)

similar behaviour in other languages as well: Italian *che* or French *que* introduce comparative subclauses and also finite declarative clauses; these are C heads (see Rizzi 1997; Rowlett 2007: 147–148)

(12) Maria mangia più **che** Paolo. (Italian)
 Mary eats more than Paul
 ‘Mary eats more than Paul.’

(13) Anne est plus fatiguée **que** Marie. (French)
 Ann is more tired than Mary
 ‘Ann is more tired than Mary.’

The relation of *hogy* and *hogy nem*

the presence of the negative element can be observed in other languages as well (see Salvi–Vanelli 2004: 283–285):

(14) Maria mangia più che **non** Paolo. (Italian)
 Mary eats more than not Paul
 ‘Mary eats more than Paul.’

(15) L’exemple touche plus que **ne** fait la menace. (French)
 the.example touches more than not does the-Fem. threat
 ‘Examples touch more than threat does.’ (Corneille)

fusion: *hogy* and *nem* could also fuse: *hogynem* complex complementiser (Juhász 1991: 489, 494)

possibly also phonological change: *honnem*

(16) ez világyakrol kőnneb embornek eerteekoznőe **honnem** az menőeőekrol
 this mundane-Pl.Del. easier man-Dat. dissert-Inf. that.not the heavenly-Pl.Del.
 ‘it is easier for man to dissert on mundane than on heavenly matters’

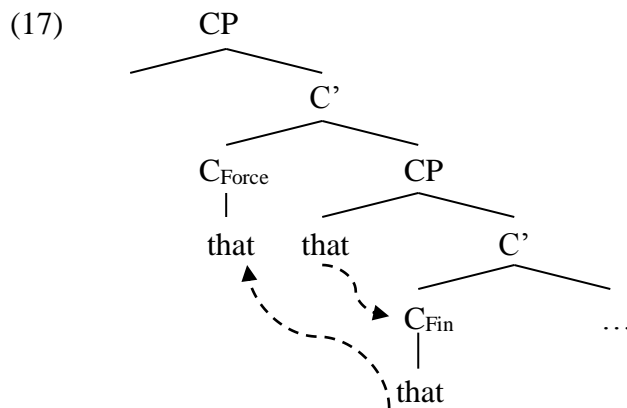
(SándK. 1r)

→ two C heads: *hogy* and *hogynem*

The relative cycle as a grammaticalization process

relative cycle: determiner → relative pronoun → C head (Roberts–Roussou 2003: 119, van Gelderen 2009)

English *that* – the pronoun moving to [Spec; CP] is reinterpreted as part of that CP, i.e. as a C head – van Gelderen (2009: 107): first in C_{Fin}, later in C_{Force} position



The appearance of *mint*

analogous structure with ordinary relatives

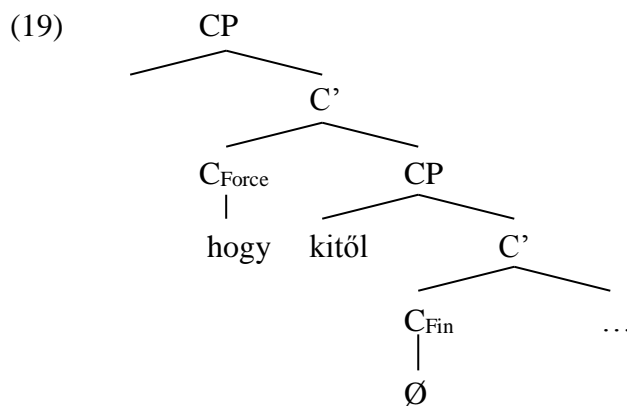
in Old Hungarian, and especially in Middle Hungarian, the sequence *hogy* + relative pronoun was frequent (see Galambos 1907: 14–18; see also Haader 1995, Dömötör 1995) it could also become a complex complementiser (Juhász 1992: 792; Haader 1995)

- (18) olýaat tezők ráýtad hog kýtól felz
 such-Acc. do-1.Sg. you-Sup. that what-Abl. fear-2.Sg.
 ‘I will do such to you that from which you will fear’

(SándK. 14v)

no phonological difference between the relative and the interrogative pronoun (i.e. present-day *ki* ‘who-Int.’ and *aki* ‘who-Rel.’), the process starting only in the late Old Hungarian period – Sipos (1991: 398), G. Varga (1992: 524–525), Juhász (1992: 791), Haader (1995)

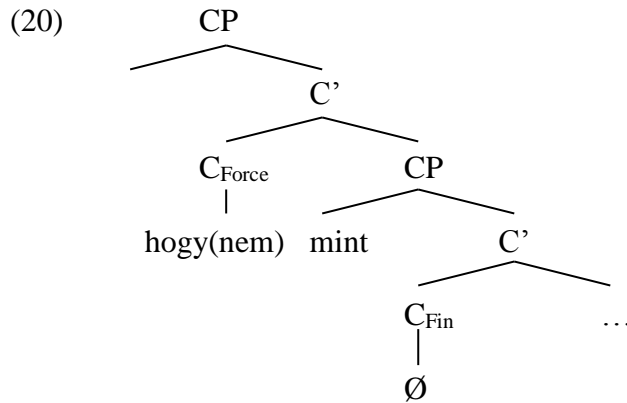
structure:



the hypothesis of Galambos (1907: 15): the relative pronoun was closer to its original pronominal function – later *hogy* becoming completely redundant

→ first step of the relative cycle: becoming relative pronoun

in comparatives: similarly to relative pronouns, the comparative operator appears in the lower [Spec; CP]: *mint* (relative pronoun, see Juhász 1991: 480–481; no phonological distinction ~ other relative pronouns, e.g. *ki* ‘who-Int.’ vs. *ki* ‘who-Rel.’)



the appearance of *mint*: possible because no other operator – similar phenomenon in other [+CD] languages:

(21a) % John is taller **than what** Mary is.

(Chomsky 1977: 87, ex. 51a)

(21b) % Die Welt ist mehr, **als was** wir sehen.
 the-Fem. world is more than what we see-1.Pl.
 ‘The world is more than what we see.’

(German)

(21c) % Er ist besser **als wie** du.
 he is better than how you
 ‘He is better than you.’

(German)

no sensitivity to the subtype of comparative (↔ Modern Hungarian)

proform: the pronoun stands for the entire QP, DP – does not contain a lexical AP or NP

G. Varga (1992: 525): the late Old Hungarian relative pronoun system still lacked the elements *milyen* ‘how’, *amilyen* ‘how-Rel.’; *mekkora* ‘how big’, *amekkora* ‘how big-Rel.’

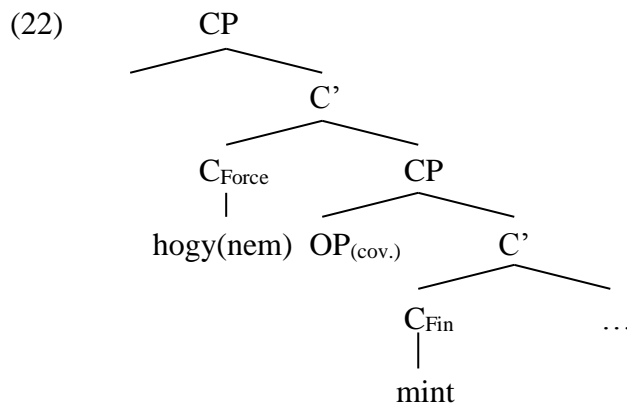
Old Hungarian is [+CD] before the appearance of *mint*; later [–CD]

The reanalysis of *mint*

second step of the relative cycle: operator \rightarrow C head

\rightarrow *mint* is generated in C_{Fin} ; C_{Force} still contains *hogy(nem)*

mint: remained insensitive to the choice of the matrix pronominal element (i.e. *annyiszor* ‘many times’, *akkora* ‘much big’, *olyan* ‘how’, cf. Juhász 1992: 799), did not develop into a proper operator morphologically
 \leftrightarrow other relative pronouns (e.g. *ki* ‘who-Int.’ and *aki* ‘who-Rel.’)



operator: empty (\leftarrow Doubly Filled Complementiser Filter)

Reanalysis in terms of the two C heads

instead of C_{Fin} , *mint* is generated in C_{Force} – in parallel with the disappearance of *hogy*

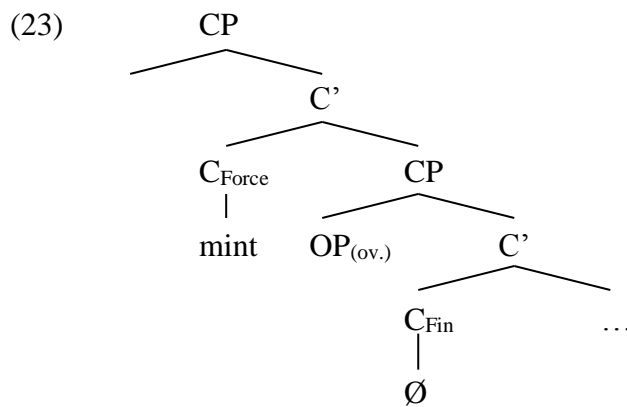
mint is interpreted as a head responsible for Force \rightarrow structural change

disappearance of *hogy* makes it possible for *mint* to appear in the higher C head

in the specifier of the lower CP, the operator can appear again (~first step of the relative cycle)

relative pronouns (*amennyi* ‘x-many’, *ahányszor* ‘x-many times’, *amilyen* ‘how-Rel.’ etc.)
→ analogy (relative clauses)

Galambos (1907): purists (e.g. Zsigmond Simonyi) thought it to be unnecessary
↔ in fact, it is a repetition of a diachronic change



Conclusion

→ the development of the complementiser and of the operator are strongly interrelated

relative cycle – reanalysis

analogy – the appearance of the operator

change in the deletion of the operator (whether it is obligatory)

References

- Bacsikai-Atkari, Julia (2010) Parametric Variation and Comparative Deletion. *The Even Yearbook* 9. 1–21.
- Bošković, Željko (2005) On the Locality of Left Branch Extraction and the Structure of NP. *Studia Linguistica* 59 (1). 1–45.
- Chomsky, Noam (1977) On WH-movement. In Culicover, Peter W. et al. (eds.), *Formal Syntax*. New York: Academic Press. 71–132.
- Dömötör, Adrienne (1991) Az alárendelő mondatok: A jelzői mellékmondatok. In: Benkő, Loránd (ed.), *A magyar nyelv történeti nyelvtana I.: A korai ómagyar kor és előzményei*. Budapest: Akadémiai Kiadó. 742–745.
- Dömötör, Adrienne (1995) Az alárendelő mondatok: A jelzői mellékmondatok. In: Benkő, Loránd (ed.), *A magyar nyelv történeti nyelvtana II/2.: A kései ómagyar kor: Mondattan. Szöveggrammatika*. Budapest: Akadémiai Kiadó. 666–693.
- Galambos, Dezső (1907) *Tanulmányok a magyar relativum mondatánáról*. Budapest: Athenaeum.
- Grebenyova, Lydia (2004) Sluicing and Left-Branch Extraction out of Islands. In: Vineeta Chand et al. (eds.) *WCCFL 23: The Proceedings of the 23rd West Coast Conference on Formal Linguistics*. Somerville, Mass.: Cascadia Press. 164–172.
- G. Varga, Györgyi (1992) A névmások. In: Benkő, Loránd (ed.), *A magyar nyelv történeti nyelvtana II/1.: A kései ómagyar kor: Morfematika*. Budapest: Akadémiai Kiadó. 455–569.
- Haader, Lea (1991) Az alárendelő mondatok: Az alanyi, állítmányi, tárgyi és határozói mellékmondatok. In: Benkő, Loránd (ed.), *A magyar nyelv történeti nyelvtana I.: A korai ómagyar kor és előzményei*. Budapest: Akadémiai Kiadó. 728–741.
- Haader, Lea (1995) Az alárendelő mondatok: Az alanyi, állítmányi, tárgyi és határozói mellékmondatok. In: Benkő, Loránd (ed.), *A magyar nyelv történeti nyelvtana II/2.: A kései ómagyar kor: Mondattan. Szöveggrammatika*. Budapest: Akadémiai Kiadó. 506–665.
- Haader, Lea (2003a) Az ómagyar kor: Mondattörténet: Az összetett mondat. In: Kiss, Jenő and Ferenc Pusztai (eds.), *Magyar nyelvtörténet*. Budapest: Osiris Kiadó. 500–560.
- Haader, Lea (2003b) A középmagyar kor: Mondattörténet: Az összetett mondat. In: Kiss, Jenő and Ferenc Pusztai (eds.), *Magyar nyelvtörténet*. Budapest: Osiris Kiadó. 677–690.
- Haader, Lea (2003c) Az ősmagyar kor: Mondattörténet: Az összetett mondat. In: Kiss, Jenő and Ferenc Pusztai (eds.), *Magyar nyelvtörténet*. Budapest: Osiris Kiadó. 260–267.
- Izvorski, Roumyana (1995). A Solution to the Subcomparative Paradox. In: Jose Camacho et al. (eds.), *WCCFL 14: The Proceedings of the 14th West Coast Conference on Formal Linguistics*, Stanford: CSLI Publications. 203–219.
- Juhász, Dezső (1991) A kötőszók. In: Benkő, Loránd (ed.), *A magyar nyelv történeti nyelvtana I.: A korai ómagyar kor és előzményei*. Budapest: Akadémiai Kiadó. 476–500.
- Juhász, Dezső (1992) A kötőszók. In: Benkő, Loránd (ed.), *A magyar nyelv történeti nyelvtana II/1.: A kései ómagyar kor: Morfematika*. Budapest: Akadémiai Kiadó. 772–814.
- Kántor, Gergely (2008a) On Hungarian Relative Operators. *The Even Yearbook* 8. 1–12.
- Kántor, Gergely (2008b) Komparatív korrelatív szerkezetek a magyarban. *Nyelvtudományi Közlemények* 105: 134–163.
- Kayne, Richard (1983) Connectedness. *Linguistic Inquiry* 14. 223–250.
- Kenesei, István (1992) On Hungarian Complementizers. In: Kenesei, István and Csaba Pléh (eds.), *Approaches to Hungarian* 4. Szeged: JATE. 37–50.
- Kennedy, Christopher and Jason Merchant (2000) Attributive Comparative Deletion. *Natural Language & Linguistic Theory* 18. 89–146.
- 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/persona/rizzi.htm>.
- Roberts, Ian and Anna Roussou (2003) *Syntactic Change: A Minimalist Approach to Grammaticalization*. Cambridge: Cambridge University Press.
- Ross, John Robert (1986) *Infinite syntax*. Norwood: Ablex Publishing.
- Rowlett, Paul (2007) *The Syntax of French*. Cambridge: Cambridge University Press.
- Salvi, Giampaolo and Laura Vanelli (2004) *Nuova grammatica italiana*. Bologna: il Mulino.
- Sipos, Pál (1991) A névmások. In: Benkő, Loránd (ed.), *A magyar nyelv történeti nyelvtana I.: A korai ómagyar kor és előzményei*. Budapest: Akadémiai Kiadó. 353–400.
- van Gelderen, Elly (2009) Renewal in the Left Periphery: Economy and the Complementiser Layer. *Transactions of the Philological Society* 107:2. 131–195.