Operators in Comparative and Parenthetical Clauses

0. Introduction

Parenthetical constructions in Hungarian introduced by mint ‘than/as’:

(1) A teknősök, mint tudjuk, szeretik a rákot.
    The turtles as know-1.Pl. like-3.Pl. the shrimp-Acc.
    ‘Turtles, as we know, like shrimp.’

Mint introduces ordinary comparative subclauses too:

● comparatives expressing equality:

(2) Peti olyan magas, mint az apja.
    Peter so tall as the father-Poss.3.Sg.
    ‘Peter is as tall as his father.’

● comparatives expressing inequality:

(3) Peti magasabb, mint az apja.
    Peter taller than the father-Poss.3.Sg.
    ‘Peter is taller than his father.’

comparative operator – e.g. amilyen ‘how’ in the subclause

● optionally present in ordinary comparative subclauses (following mint)

● cannot co-occur with mint in parenthetical clauses

→ proposal: mint + comparative operator ruled out in parentheticals due to the presence of a null operator (standing for the missing object)

→ further question: languages without overt comparative operators (e.g. German)

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1. Operators in comparative subclauses


(4) \[
\begin{array}{c}
C' \\
C \quad \text{than} \quad Op. \quad C' \\
\text{CP} \\
\end{array}
\]


targets the lower [Spec; CP] position

comparative operator: relative operator

reasons for movement: comparatives obey islands

- wh-island:

(5)  
\text{a. } *\text{Frank killed more dragons than } OP_x \text{ Margaret wondered [whether to kiss } t_x]. \\
\text{b. Frank killed more dragons than } OP_x \text{ Margaret wanted to kiss } t_x. \\

- complex NP islands:

(6)  
\text{a. } *\text{Frank killed more dragons than } OP_x \text{ he had outlined [a plan to kill } t_x]. \\
\text{b. Frank killed more dragons than } OP_x \text{ he planned to kill } t_x.

overt operators also realised in the lower [Spec; CP] position

overt operators in English:

(7)  
% John is taller \textbf{than what} Mary is.  \text{ (Chomsky 1977, 87, ex. 51a)
2. Comparative subclauses in Hungarian

comparative complementiser: mint ‘as/than’

● optional overt operators (cf. Bacskai-Atkari 2013):

(8) a. Peti olyan magas, mint (amilyen) az apja.
Peter so tall as how the father-Poss.3.Sg.
‘Peter is as tall as his father.’

   b. Peti magasabb, mint (amilyen) az apja.
Peter taller than how the father-Poss.3.Sg.
‘Peter is taller than his father.’

● amilyen ‘how’ may be combined with a lexical AP (↔ what in English):

(9) a. Peti olyan magas, mint amilyen (magas) az apja.
Peter so tall as how tall the father-Poss.3.Sg.
‘Peter is as tall as his father.’

   b. Peti magasabb, mint amilyen (magas) az apja.
Peter taller than how tall the father-Poss.3.Sg.
‘Peter is taller than his father.’

● if the AP in the subclause is not e-GIVEN (cf. Merchant 2001), then it cannot be eliminated:

(10) a. A kutya olyan kövér, mint amilyen széles a kutyaház.
the dog as fat as how wide the doghouse
‘The dog is as fat as the doghouse is wide.’

   b. A kutya kövérebb, mint amilyen széles a kutyaház.
the dog fatter than how wide the doghouse
‘The dog is fatter than the doghouse is wide.’

→ quantified expression may remain overt irrespectively of whether it is e-GIVEN or not

   e-GIVEN QP: logically identical QP in the matrix clause (cf. Bacskai-Atkari 2010)

but: if the AP is e-GIVEN, then the operator is also optional in Hungarian

   AP requires the presence of the operator otherwise
3. Parenthetical clauses and operators

parenthetical clauses introduced by mint ‘as’

expectation: operator should be optional

no matrix clausal antecedent in the form of a QP

→ no lexical AP taken by the operator

element ahogy ‘how’ – normally a VP-modifying adverbial operator

(11) a. A teknősök, mint (ahogy) tudjuk, szeretik a rákot.
the turtles as how know-1.Pl. like-3.Pl. the shrimp-Acc.
‘Turtles, as we know, like shrimp.’

b. Az igazgató, mint (ahogy) elmondta, maga is meglepődött a
the headmaster as how PART-said-3.Sg. himself too surprised-3.Sg. the
good results
‘The headmaster, as he said, was surprised by the good results himself.’

↔ amilyen ‘how’: cannot co-occur with mint:

(12) a. Peti, (*mint) amilyen magas, be fogja verni a
Peter as how tall PART Aux.Fut.3.Sg. hit the
fejét.
head-Poss.3.Sg.Acc.
‘Peter, tall as he is, will hit his head.’

b. Peti, (*mint) amilyen magas ember, be fogja verni a
Peter as how tall person PART Aux.Fut.3.Sg. hit the
fejét.
head-Poss.3.Sg.Acc.
‘Peter, tall as he is, will hit his head.’

lexical AP (and/or NP) in (12) cannot be deleted ↔ comparatives

→ operator has to remain overt if the AP moves to the [Spec, CP] position
question: why \textit{mint} has to be eliminated

\leftrightarrow \text{comparatives}

\leftrightarrow \text{parentheticals with } \textit{ahogy}

4. \textit{Null operators in parenthetical clauses}

some properties of reduced parenthetical clauses


\begin{itemize}
  \item the verb lacks one of its arguments required by its valency
  \item no overt syntactic link to the host they are attached to
  \item host clause visible to parenthetical clause but not vice versa
  \item one valency requirement of the parenthetical verb satisfied by the host clause itself
\end{itemize}

empty operators in parentheticals (Schneider 2007; Heringa 2011)

\textit{as}-parentheticals: null operator moving to [Spec; CP] \sim missing object (Potts 2002: 62)

(13) Cuckoos don’t build nests, as \textit{Op}_1 \textit{everybody knows } t_1.

Hungarian parentheticals: verb in the objective paradigm

(14) \begin{itemize}
  \item a. \textit{A teknősök, mint } \textbf{tudjuk}, szeretik a rákot.
        \textit{the turtles as } \textit{know-1.Pl.Objective like-3.Pl. the shrimp-Acc.}
        \textit{‘Turtles, as we know, like shrimp.’}
  \item b. *\textit{A teknősök, mint } \textbf{tudunk}, szeretik a rákot.
        \textit{the turtles as } \textit{know-1.Pl.Subjective like-3.Pl. the shrimp-Acc.}
        \textit{‘Turtles, as we know, like shrimp.’}
\end{itemize}

\rightarrow \text{there must be an object that the verb agrees with}
no overt object relative pronoun in Hungarian parentheticals:

(15) a. *A teknősök, mint amit tudjuk, szeretik a rákot.
    the turtles as what-Acc. know-1.Pl.Objective like-3.Pl. the shrimp-Acc.
    ‘Turtles, as we know, like shrimp.’

    b. *A teknősök, mint amit tudunk, szeretik a rákot.
    the turtles as what-Acc. know-1.Pl.Subjective like-3.Pl. the shrimp-Acc.
    ‘Turtles, as we know, like shrimp.’

overt relative pronouns would trigger the subjective paradigm:

(16) a. Ez az, amit tudunk.
    this that what-Acc. know-1.Pl.Subjective
    ‘This is what we know.’

    b. *Ez az, amit tudjuk.
    this that what-Acc. know-1.Pl.Objective
    ‘This is what we know.’

null operator licenses a resumptive pronoun:

(17) A teknősök, mint azt tudjuk, szeretik a rákot.
    the turtles as that-Acc. know-1.Pl.Objective like-3.Pl. the shrimp-Acc.
    ‘Turtles, as we know, like shrimp.’

null operator targets the lower [Spec; CP] → cannot co-occur with elements that moving there

5. Multiple operators

recall: comparative operators may appear in parentheticals:

(18) Peti, (*mint) amilyen magas, be fogja verni a fejét.
    Peter as how tall PART Aux.Fut.3.Sg. hit the head-Poss.3.Sg.Acc.
    ‘Peter, tall as he is, will hit his head.’
but: *mint* ‘as’ a higher C head and null operator in the lower [Spec; CP] – e.g. (14):

(19)

→ comparative operator *amilyen* ‘how’ and null operator competing for the same position?

- *amilyen* may co-occur with the null operator – (18)
- *mint* can co-occur with the null operator but not with the comparative operator – (18)
- there are two [Spec; CP] positions

→ multiple operators in (18):

(20)

- *mint* ruled out because of the Doubly Filled COMP Filter
- *amilyen* has to move up to a [Spec; CP] position – [EDGE] feature
- overtness requirement: there has to be an overt element marking [+compr] at the left edge
6. Multiple complementisers

ahogy ‘how’ may co-occur with mint ‘as’:

(21) A teknősök, mint (ahogy) tudjuk, szeretik a rákot.
the turtles as how know-1.Pl. like-3.Pl. the shrimp-Acc.
‘Turtles, as we know, like shrimp.’

→ ahogy cannot be in the higher [Spec; CP] – it follows mint

→ ahogy cannot be in the lower [Spec; CP] – there is the null operator

proposal: ahogy is a grammaticalised (lower) C head:

(22)

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CP
  C'
   C
     mint Op. C'
            ahogy

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- ahogy cannot combine with lexical APs (↔ amilyen ‘how’)
- the absence of mint results in degraded acceptability

(23) ?/?? A teknősök, ahogy tudjuk, szeretik a rákot.
the turtles how know-1.Pl. like-3.Pl. the shrimp-Acc.
‘Turtles, as we know, like shrimp.’

→ Force-marking higher C head filled only if lower C head moves up – markedness

  overt marking of [+compr] – preferably in the higher CP node

  ahogy normally not moving there ↔ amilyen as an operator
• possible because it does not have features a C head could not have – grammaticalisation
  ~ other complementisers in Old and Middle Hungarian (cf. Bacskai-Atkari 2012)
  relative cycle (cf. van Gelderen 2004, 2009; Roberts and Roussou 2003)

7. German comparatives

two comparative complementisers:

• wie ‘as’ – comparatives expressing equality:

(24) Peter ist so groß wie Paul.
Peter is as tall as Paul
‘Peter is as tall as Paul.’

• als ‘than’ – comparatives expressing inequality:

(25) Peter ist größer als Paul.
Peter is taller than Paul
‘Peter is taller than Paul.’

no overt comparative operator

historically, wie ‘how’ was an operator but has been reanalysed as a C head – even if it
co-occurs with als (cf. Jäger 2012)

→ two overt C heads possible (depending on the speaker/dialect):

(26) % Peter ist größer als wie Paul.
Peter is taller than how Paul
‘Peter is taller than Paul.’

→ no interaction expected between complementisers and (comparative) operators

8. German parentheticals

German as-parentheticals: introduced by wie ‘as’:

(27) Schildkröten mögen, wie man weiß, Schrimps.
turtles like-3.Pl. as Pronoun knows shrimps
‘Turtles, as we know, like shrimps.’
structure in (19): *wie* a higher C head and null parenthetical operator in lower [Spec; CP]

(28) 
```
  CP
   C'
    C
     mint
     C'
     ...  
   CP
   \O\
```

but: *soviel* ‘as much’ or *soweit* ‘as far’ can occur:

(29) a. Schildkröten mögen, **soviel** man weiß, Schrimps.

   turtles like-3.Pl. as.much Pronoun. knows shrimps

   ‘Turtles, as far as we know, like shrimps.’

   b. Schildkröten mögen, **soweit** man weiß, Schrimps.

   turtles like-3.Pl. as.far Pronoun. knows shrimps

   ‘Turtles, as far as we know, like shrimps.’

*soviel*/soweit cannot co-occur with *wie ≠ amilyen* cannot co-occur with *mint* in Hungarian

← soviel, soweit not operators

*so* ‘as’ in comparatives: degree element in the matrix clause

(30) a. Hans hat **so** viel Geld [**wie** Peter].

   Hans has as much money as Peter

   ‘Hans has as much money as Peter.’

   b. Hans ist **so** fleißig [**wie** Peter].

   Hans is as diligent as Peter

   ‘Hans is as diligent as Peter.’

similarly in English:

(31) Turtles, **as** far [as we know], like shrimps.
differences in selectional restrictions:

- English: *as* selects a CP headed by *as*

- German: *so* selects a CP headed by *wie* ↔ *soviel, soweit* select a CP headed by Ø

→ parenthetical clause not necessarily only a comparative subclause (CP) but can also be a comparative QP (quantifier phrase) taking a CP complement

**Evidence:** lexical AP can also be present:

(32) Peter, *(so)* groß wie er ist, wird sich den Kopf anschlagen.
Peter as tall as he is will himself the-Masc.Acc. head hit
‘Peter, tall as he is, will hit his head.’

English:

(33) Peter, **tall** as he is, will hit his head.

→ degree elements in German (and English) not in the CP-domain ↔ Hungarian

- degree elements are not operators

- AP licensed without an overt degree operator

**Conclusion**

comparative parenthetical clauses contain two operators

- comparative operator and null operator

- they can co-occur in two distinct [Spec; CP] positions

→ three possible configurations:

- two operators

- overt *mint/wie* + null operator

- two overt C heads + null operator

all other configurations ruled out by economy principles

comparative parenthetical clause: not necessarily only a CP – can be a QP taking a CP
References


Heringa, Herman (2011) Appositional Constructions. Utrecht: LOT.


