1 Introduction

Background: NSRF project at RIL–HAS on diachronic syntax for Hungarian.
Work on quantification in Old Hungarian, in particular, on universal quantification and the contrast between mind ‘all’ and minden ‘every’.

Main aims for this presentation:

1. Propose a semantic analysis of (floating) all as a maximality operator sensitive to discourse information.
2. Argue that this analysis needs to be extended to those cases of all when it associates with mass terms, temporal or spatial expressions.

2 What Came First

2.1 All as the Proto-Quantifier

Gil (1995): the primary (non-distributive) universal quantifier is of the type of all. Every: a so-called distributive-key u.q. (The elements of the Restrictor set distribute over the Nuclear Scope set.)

Universals 2, 3 and 4:

(1) a. Briefly: non-distributive universal quantifiers \(\approx\) plural morphology, corresponding distributive-key universal quantifiers \(\approx\) singular morphology. (P. 328.)

b. If a language has a non-distributive universal quantifier, the distributive-key universal quantifier is morphologically derived from it. (p.329)
c. If a language possesses a distributive-key universal quantifier, it possesses a simple universal quantifier. (P. 330)

### 2.2 Diachrony


\begin{enumerate}
\item \begin{enumerate}
\item die ganze Welt
\item Bei zwei ssen aTist der Henkel abgrebrochen, drei sind noch ganz. Ich nehme nur die ganzen Tassen.
\end{enumerate}
\item Wer hat denn die ganzen Punkte hier gemalt?
\item Die ganzen Tassen sind verschwunden.
\item Die ganze Familie ist verschwunden
\item Die gesamten Einwohner — ‘all inhabitants’
\item Die gesamte Stadt — ‘all the town’
\item Die gesamte Milchstraße — ‘the entire Milky Way’
\item *der gesamte Tisch — ‘all the table’/‘the entire table’
\end{enumerate}

English: OE hal (‘whole’, ‘hale’).

Hungarian: (az) egész, (az összes). (Not in OH!)

\begin{enumerate}
\item egész nap (‘all day’, ‘the whole day’)
\item Az egész politikus szereti a pénzt (Eastern dialects)
\end{enumerate}

‘All politicians like money’

Hungarian mind: the indeterminate-pronoun mi ‘what’ + the adverbial suffix -n.

\begin{enumerate}
\item Egy kosárcsapatban öt-en vannak.
\item Az egész-en eljöttek. (East)
\end{enumerate}

‘There are five (players) in a basketball team.’

The whole-N PRT-came-PST3PL
‘All of them have come’

OH: *Mind* ‘all’ attested earlier than *minden* ‘every’. Conforms to Gil’s Universals 3 and 4?

### 3 (Floating) *All*

#### 3.1 Collections, Collective Readings

(8) a. The students *all* built a raft (C/∆)
    b. *All* the students built a raft (C/∆)
    c. *Every* student built a raft (∆ only)

Corresponding sentences with *every* odd:

(9) a. The students *all* gathered/assembled/met in the hall
    b. The students have *all* met before.
    c. I can’t bear to think of him living among *all* those New Age types.

(10) The diplomats *all* shook hands (with each other)

OH codices: attested occurrences with *mind* + reciprocal expressions. Not attested for *minden* ‘every’.

(11) *mend* vv scentíí es unuttei *cuzicun* iov all he saint-POSS.PL.3SG and chosen-POSS.PL.3G among right felevl iochtotnia flezie vvt. from arrive-CAUS-INF-3SG resurrect-SBJV.3PL he-ACC ‘May He resurrect him to be sent to the right of God, among all His saints and His anointed’ (Funeral Sermon and Prayer)

#### No Pair-list Readings

Chierchia: universal quantifiers in questions:

(12) a. Which woman does every boy like?
    b. His mother
    c. The Queen
    d. Bill likes Mary, Peter likes Sue, . . .

(13) a. Which woman do all the boys like?
    b. Their mother
    c. The Queen
Brisso: Chierchia’s explanation hinges on the semantics of every. Data with all suggestive that all is not a universal quantifier.

**Together and Separately**

*All/Mind* can co-occur with expressions marking (contributing?) distributive/collective readings:

(14) a. Tehat **mind** az zentők **egétembe** mondanak: Ez az **zyz**

Thus all the saint-PL together say-PL3: This the virgin:

‘Thus all the saints said together: This is the virgin’ (Kazinczy C. 9v)

(15) a. Heten vadnak, Mel’eket, az ő At’ok az

seven-ADV are, which-PL-ACC the she father-POSS-3PL the

őrdög **mynd egenkét** kazdagon el hazasyta,

devil all oneADV-DIST richly away marries

‘They (the daughters of cupidity) are seven in number, all of whom

are married off generously by their father the devil, one by one’

(Székelyudvarhely C. 95r–v)

b. Igon meltosagossok: merton ístennek **mynd feyenkeed**

very distinguished-PL because god-DAT all head-ADV-DIST

leany es fyay daughter-POSS.PL.3SG and son-POSS.PL.3SG

‘They are venerable, since each and every one of them is God’s

daughter or son’ (Sándor C. 1v)

One more OH example: egyszersmind. In MdH egyszersmind is like a conjunction (at the same time, altogether). In OH it was mind + egyszerre ‘all at the same time’, ‘all together’.

### 3.2 Time, Space, and Matter

OH: **mind** associated freely, frequently and productively with spatial or temporal expressions, and scales (esp. eventuality scales). English: likewise.

(16) “There was a rank of drawers built into the wall . . . and one of them was open all the way.” (Dell Shannon: Spring of Violence)

(17) “What he has got (on the mural) is the bad on the left and the good on the right . . . let me remind you, Sloan, that down here at the police station the
bad is all around us.” (Catherine Aird: After Effects)

Spatial expressions:

(18) az ev kőaltassok mőnd menyorzagiglan fel hallýk the PRO-3 cry-POSS.3PL all heaven-till up hear-PASS.3SG vala.
be-IMP
‘their cries could be heard all the way to Heaven’ (St Margaret’s Legend 41v)

(19) tahat az wtat mőnd be vontat bíboral es barsonial mőnd azentegházíglan (Lobkowicz Codex, 7)
‘Thus the road was all covered in purple and velvet, all the way to the church’

Regions of the body:

The entire region:

(20) az te testődet en mőnd el zagattattatom the you body-POSS.2SG-ACC I all away tear-CAUS-1SG ‘I’ll have your entire body torn to pieces’. (Kazincy Codex 15v)
Or: ‘I’ll have your body all torn to pieces’

The endpoint:

(21) Evneky ruhaýa nemykoron mőnd terdíg meg She-DAT gown-POSS.3G at-times all knee-till PRT sarosvl vala.
muddy-DENOM be-sc perf
‘Her gown would at times become muddied all the way to the knee’ (St Margaret’s legend 26v)

Temporal expressions:

Syntactic associate: expression denoting an (entire) interval.

(22) vőselven mőnd az tellyes napot nagý aytatos sýralmas spend-PART all the complete day-ACC big pious tearful jmadsagban prayer-in
‘spending the entire day in pious, tearful prayers’ (St Margaret’s Legend 7r)

Associate: expression denoting the final segment of an interval.
(23) ezenkepen al vala **mýnd** ebedýg
this-way-N stand be-PERF all lunch-till
‘and in this manner she would stand all the time, until lunchtime’ (St Margaret, 5v)

Associate: expression denoting the initial segment of an interval.

(24) mýnden ezendevben **mynd** attvl fogva. hog zent margit
every year-in all that-from begin-PART that saint margaret
azzonnac ýo okossaga volt . . .
lady-DAT good cleverness-POSS.3SG was
‘in every year, ever since Lady Saint Margaret was bright enough’
(she would wash her fellow nuns’ feet at Easter) (St Margaret, 6v)

MdH relics: **mindhalálig** (‘till death’), **mindaddig** ‘until that time’, **mindvégig** ‘at all times till the end’ (MdH: ‘incessantly’).

Main difference between OH and English: OH mind associated with expressions denoting (initial/final segments) of intervals. That is, no OH counterpart of ‘gapped’ readings. (Mind-ig ‘always’ not in the codices. Instead: **mindenkor-t-**lit. ‘every-when’, **mindenha**.)

(25) a. Pinocchio’s nose grew longer **all** those times when he told a lie.
b. At **all** times before you go to confession cleanse your thoughts. (Ins-pired by OH codices.)

Eventualities: Degrees/Paths of change:

(26) a. Idumea kiralanac tètemit meg egedette
Idumea king-POSS.3SG-DAT bone-POSS3.SG-ACC PRT burned
**mend** hamuiglan
all ash-till
‘He burned the bones of the king of Idumea all (the way) to ashes’
(Vienna C. 216)
b. & a. tplom **mend** földiglen
the. temple all earth-till down-break-CAUSE-PASS-PAST
leteröttetet
‘the temple was demolished all (the way) to earth’ (Vienna C. 261)

Narratives:
(27) ez beteg soror mỳnd meg monda az sororoknak ez felỳvl meg this ill sister all PRT told the sister-PL-DAT this above PRT mondott latast told vision-ACC 
‘This ailing sister recounted fully the aforementioned vision to the other sisters’ (St Margaret’s Legend, 63v)

Scales:
End of the scale

(28) mỳd ohozia fvтанac a kûsdèdtol fogyà mỳd annaggiclan all he-to run-IMPF-3PL the little-from begin-PART all the-big-till ‘they all ran to him, from small children all the way/all age groups to grownups’ (Vienna C. 38)

(29) [hogy megadassék a tartozás] mind mentol kisbe fill’eriglen [that prt-give-PASS the debt] all SUPERL smaller penny-till ‘so that the debt be repaid, entirely, to the last penny’ (Bod C. 17v)

4 Analysis

4.1 Dowty, Dowty–Brodie

Dowty (1987), Dowty and Brodie (1984): All is a VP-adverb that restricts the class of DPs that can combine with all-VPs:

(30) [all VP] = \{P ∈ D_NP| ∩ P ⊆ \{y|y* ∈ [VP]\}\}
where y* =df \{X|y ∈ X\} (the principal filter generated by y).

More reader-friendly notation: the principal filter generated by set A (in universe E):

(31) \(Φ_A =_{df} \{X ⊂ E|A ⊆ X\}\)

NB, on this analysis VPs are of type \(⟨⟨⟨e, t⟩, t⟩, t⟩\) (functions from generalised quantifiers to truth values).

Comments (following Hoeksema (1996)):

1. Correctly exclude MON\down DPs from associating with all.

2. Conjoined DPs as associates:
Tom, Dick and Harry were all conscripted.

3. Indefinite associates: predicted to be specific (and to be construed as referring expressions).

Five contestants, who were selected as finalists by the judge yesterday, will all perform again tomorrow. (D–B)

Hoeksema’s finding nonspecific indefinite associates perfectly appropriate:

Buildings, docks, vessels, and details of the Arctic landscape are all clearly visible. (Hoeksema’s (48a))

D, D–B on collective readings:

The students all gathered in the hall
The students all surrounded the publican

Distributive subentailments. (Whatever it takes an individual student to belong to a group that has gathered in the hall/surrounded the publican.)

#The boys are all a good team.
#The boys are all numerous.

4.2 Roberts

Roberts (1987): generalised distributivity and ontological versatility. All can associate with mass terms or ‘group atoms’. If I understand correctly, all corresponds to a generalised distributivity operator.

John was all tired out. ((172), p. 152.)
The dog was all wet. ((173), p. 152.)

Comment: all could also associate with the state description.

‘The dog was completely wet

Associating with ‘collective atoms’:

That group of children all built a raft. ((189a), p. 157.)
The committee all sang Christmas carols at the last meeting. (Fn 47, p. 158.)
Comment: *mind* + collective noun quite frequent in OH. *Faj-ta*-‘species’ is a ‘collective atom’ in MdH.

(41) Num heon muganec. ge mend w foianec halalut
Not only self-DAT but all he kin-POSS.3SG-DAT
evec.
deat-ACC eat-PAST
‘(In the forbidden fruit) he ate death, not only for himself but for all his kin’)
(Funeral Sermon and Prayer)

4.3 Brisson

Brisson (1997), Brisson (1998)

Ingredients of analysis:

1. Weakened analysis of plural definites. (CW: definites are like universal quantifiers.)

(42) a. The boys built a raft. (In fact, Bill slept through it all.)
    b. The boys all built a raft.

2. Generalised distributivity à la Schwarzschild (Schwarzschild (1992), Schwarzschild (1994), Schwarzschild (1996)): distributivity not necessarily atomic; generalised distributivity operator: *Part*, or *P*. *P* is a *VP*-operator, it is there ‘just because’.

3. Granularity: context-dependent cover over *U*, *Cov*, or *C*.

A cover over set *X*, *C* _X_ is a set of subsets *X* _i_ of *X* s.t. _∪_ *X* _i_ = *X*; no disjointness requirement on *X* _i,j_.

(43) a. The boys are hungry
    b. (*P*(*C*)(*hungry*))(the.boys’)
    c. [*N]* _g_ ∈ [*P*(*C*)(*V*)] _g_ iff ∀*x*. [*x* ∈ *C* _g_ ∧ *x* ⊆ [*N]* _g_ → *x* ∈ [*V*] _g_]

Allowing for exceptions: *x* ∈ [*boy*], and *x* ∈ *Y*; *Y* ∈ *C*, and *Y* ⊆ [*boy*].

4. Floating *all* prevents pragmatic weakening by requiring that *C* be a *good fit*:

(44) *C* is a good fit for set *X* iff
    ∀*y*. [*y* ∈ *X* → ∃*Z*. [*Z* ∈ *C* ∧ *y* ∈ *Z* ∧ *Z* ⊆ *X*]]
In prose: principal filters restricted to the noun set. Question: what about non-definite associates?

5. \( \Sigma \) On this analysis *all* is not a quantifier; it is more like a regulatory device, imposing an additional requirement on the way collections can be chopped into bits and pieces.

### 4.4 Hoeksema

Hoeksema (1996): Floating *each* and *all* are VP-adverbs of type \( \langle \langle e, t \rangle, \langle e, t \rangle \rangle \). *All* (with count associates) is basically assimilated to *each*:

\[
\begin{align*}
\text{a. } & [\text{each}] (P)(X) \text{ true iff } \forall x \in X: P(x); |X| \geq 2; \\
\text{b. } & [\text{all}] (P)(X) \text{ true iff } \forall x \in X: P(x); |X| \geq 2 \text{ (count);} \\
\text{c. } & [\text{all}] (P)(X) \text{ true iff } \forall x \subseteq X: P(x) \text{ (mass).}
\end{align*}
\]

\(( \subseteq : \text{material-part-of})\)

What is lost: generalised distributivity. NB, Hoeksema’s analysis is couched in a logic for plurals, so floating quantifiers can operate on non-atomic individuals. Lost: the strict atomicity of *each*, whether it is atom-atoms or atomic groups (collections presented as indivisible wholes).

### 4.5 Winter, Champollion

Champollion (2010) builds on Winter (2001): *All* — the determiner— is a plural counterpart of *every*. Derived from *every* by means of a type-fitting operation *dfit*.

### 4.6 A Proposal


Semantics: a collection \( X \) is presupposed. Asserted: \( \bigcap X \) holds of the predicate (VP). À la D–B, Brisson: *all* restricts possible DP–VP combinations.

Relationship with associate DP: (sentence-internal) anaphora resolution. (\( X \) is equated with a collective discourse referent /an expression denoting a portion of matter/an interval, . . . ) contributed by the associate.

Anaphora resolution: associate may be constructed ((32)), may be implicit (Hungarian), may be constructed from long stretches of discourse.

\[
\begin{align*}
\text{(46) } & \text{Tom, Dick and Harry were all conscripted.}
\end{align*}
\]
Mind elmentünk a moziba.
All prt-go-PAST.3PL the cinema-to
‘We all went to the cinema’

Discourse popping (fashioned after OH codices):

(48) (list and detailed discussion of e.g. the cardinal sins) … (you the reader)
bear all this in mind and behave accordingly...

Ontological versatility: a built-in feature of all/mind. So is the ability to associate with ‘atomic groups’.

Main point$_1$: all/mind is not a quantifier. ⇒ No Restrictor–Nuclear Scope division, no variable binding in the logic textbook sense. Scope: more like the scope interactions of definites.

Main point$_2$ (with diachronic overtones): association with spatial, temporal expressions, as well as association with atomic groups is not merely a reflex of the initial, unbleached interpretation (‘whole’, ‘entire’, ‘intact’). Although all/mind is not a quantifier in the logic textbook fashion it is nevertheless an operator. NB, the behaviour of OH Hungarian mind cannot be said to be a reflex of a stage when it was a content word: mind is a tailor-made operator (indeterminate pronoun + group-forming suffix).

Corollary: the semantics of plurals (plural individuals) and collectivity/distributivity not the main focus.

Main arguments for a unified analysis:

1. The richness of the data (even in present-day English).

2. The availability of the right tools for plurals, mass terms, times, eventualities, scales. . . . (Roberts)

3. Ever since Partee 1973: temporal expressions are like individual-denoting expressions and are treated accordingly. (Extended to eventualities, possible worlds (M. Bittner and students, esp. Matthew Stone and Adrian Brașoveanu.))

Back to the proposal, a prediction: Indefinite antecedents will be appropriate. A slight problem: MON↓ DPs in contexts like the following:

(49) a. Few senators (#all) admire Kennedy.
    b. Few senators admire Kennedy and they are all very junior.

(Lack of maximal witness set, hence, no non-trivial supremum?)
Distributive/Reciprocal readings: Two options: Hold the relevant surface expressions responsible. Brisson: such expressions are surface *indicators* of the relevant construal. At present undecided. (A ‘surfacy’ analysis would be preferable, but current research has revealed the need for covert operators and covert algebraic operations, cf. Anna Szabolcsi’s recent work on quantifier particles.)

Scope: all (its associate) can not enter scope interactions. Similarity to definites. (Not explored fully. Here it is sufficient to note the possibility itself.)

(50) a. Mary can’t remember *all* those jokes she heard in the pub.
    b. Sue was not affected by *all* the chaos around her.

4.7 Summary

Primary Sources

English quotes from Dell Shannon and Catherine Aird: e-books from libgen.org.

Old Hungarian:


References


