# At All Times in Old Hungarian - MaSzAT Meeting - 

Ágnes Bende-Farkas<br>RIL-HAS<br>agnesbf@gmail.com

October 27, 2016

## 1 Introduction

Main focus:

- Range of readings of (nouns marked with) the suffix -nkéd in Old Hungarian. From universal quantifier to pluractional adverbial.
- Range of 'quantifying' expressions from independent quantifiers to dependent operators (crosslx-ly). Analyses of such expressions.

NB, the main concern is not the inventory + analysis of distributive/pluractional expressions in OH or MH .

### 1.1 Interlude: Modern Hungarian

MH -nként is officially a distributive case marker. -nta/-nte: distributivetemporal.
a. Mari időnként elkésik/beteg

Mary time-DIST is-late/ill
'From time to time, Mary is late/ill' - (plural) temporal existential
b. Ebben a faluban családonként van három ló

This-INE the village-INE family-DIST is three horse
'In this village there are three horses per family'
Every family has three horses.
c. A beteghez csak egyenként léphettek be a The sick-ela only one-dist step-POSS-PAST-3PL into the látogatók
visitor-PL
'Visitors could only enter the patient's room one by one/one after the other'
d. Mari szálanként festette be a haját Mary one.hair-DIST dyed into the hair-POSs.3SG-ACC 'Mary dyed her hair one (piece of) hair at a time'

Rate phrases (Csirmaz-Szabolcsi, Keenan-Paperno):
(2) a. Ez a lap kéthetente / kéthetenként jelenik meg This the journal two-week-TEMP.DIST / two-week-DIST appears MEG
'This journal appears twice a month'
b. Vegyen be naponta / naponként három aszpirint Take-IMP.2SG into day-TEMP.DIST / day-DIST three aspirin-ACC 'Take three aspirin a day'
(3) a. Naponta történik valami day-TEMP.DIST happens something 'Every day there is something new/something new occurs'
b. Minden nap / ?Naponta történhet valami Every day / ?day-TEMP.DIST happen-POSS something 'Every day, any day, something (unexpected) may occur'
a. Mari egyenként / ?fejenként elbúcsúzott ..... a
Mary one-DIST / ?head-DIST away-said.goodbye-PAST the diákjaitól
student-POSS.3SG.PL-ABL
'Mary said goodbye to her students, one after the other'
b. A katonák kaptak fejenként / ?egyenként egy The soldiers received head-DIST / ?one-DIST one lakktáskát és három csomag biztosítótűt patent.leather-case-ACC and three pack safety-pin-ACC 'Each soldier was given a patent leather case and three packets of safety pins.'

Pluractional adverbials:
(5) Ezt a tudást nemzedékről nemzedékre /???nemzedkékenként adták át

This-ACC the knowledge-ACC generation-DEL generation-SUBL / generationDIST give-PAST-3PL through 'This knowledge was passed from generation to generation'
(6) Károli versről versre / ?versenként fordította a Károli verse-DEL verse-SUBL / ?verse-DIST translated the Bibliát
Bible-ACC
'Károli translated the Bible verse after verse'
A little more about (plural) existentials:
(7) a. Mari időnként kosarazik Mary time-DIST basket-VBSFX-3SG 'Mary sometimes plays basketball'
b. A divat koronként változik The fashion age-DIST change 'Fashion changes from one age to another'
c. Mari nyaranta a Pireneusokban túrázik Mary summer-temp.dist the Pyrenees-Ine trek-3SG 'In the summer Mary (usually/sometimes) goes trekking in the Pyrenees' (Weaker than habitual -?-)

## $2-N k e ́ d$ in OH

### 2.1 Quantifiers

- Koronkéd $\cong$ Always:

With state descriptions: one uninterrupted state. (This is the preferred reading; the 'interrupted state' reading is also available. The point: the existence of the 'uninterrupted' reading.)
(8) De koronkeed dagalyosok voltatok mywltha foghwa

But age-DIST swollen-PL be-PST-2PL since beginning ysmertelek
know-PST-1SG
'But you've always been full of yourselves, ever since I've known you' (Jordánszky C. 220)
(9) az wtolso kÿrthnek zozattÿa koronkeed the last trumpet-DAT cry-POSS.3SG always
fÿlembe zenghedóz
ear-poss.1SG-ILL resonates
'the blasts of the last (Judgment Day) trumpet are incessantly res-
onating in my ears' (Érdy C. 10a)
(10) De te kerdened azt tartozik e ember mindoncoron az imadsagra iǵekozni auaǵ nem ...ez el'eten imadsagra nem zúgseg coronked a rea ualo iǵekozet
'You might ask whether one should always be eager to pray ...such prayers do not require that you always be eager and ready (to utter them)' (Guary C. 121)
(11) Soha az en zŷvem el ne alogŷek de koronked hozad vígíazon
'May my heart never fall asleep (slacken), may it always be alert for / attuned to you' (Lobkowitz C. 1)
(12) Lassatok hoğ ne vtallyatok meg egyet ez kysdedek kezzel; mert vgy mondok tynektek, hogy hw óryzó angyaly menyorzagban koronked neezyk en atyamnak zynet, ky menyben vagyon
'Beware lest you should repudiate but one of these children; for, I tell you, their guardian angels in heaven do at all times behold my heavenly father' (Jordánszky C. 471; Mark 6)

Restrictor-NS division (and context):
(13) koronkeed bykath aldozyeek hẅ byneyerth es age-DIST bull-ACC sacrifice-IMP-3SG he sin-3sg.pl-cslfnl and
kosth ystennek dyczeeretyre ram-ACC god-DAT praise-POSS.3SG-CSLFNL
'He (Aaron) should always sacrifice a bull for his sins, and a ram to praise God' (Jordánszky C. 99)
'Whenever Aaron sacrifices something for his sins it should be a bull, and whenever he sacrifices something in praise of God, it should be a ram.'
(14) valamy zyletendyk hym nemzeth, azth koronkeed
something be-born-FUT.3SG male issue that-ACC age-DIST
wr ystenuek aldozzad
lord god-Dat sacrifice-IMP.2SG
'whatever male issue is born, that should always be sacrificed to God' (Jordánszky C. 233)

In (14), the Restrictor is the correlative clause ('whatever male animal is born (first)'), the NS is the (remnant of the) main clause ('that should be
sacrificed to God'). Succintly: 'All firstborn animals are to be sacrificed to God'.

Analysis: your favourite analysis of always. Universal quantifier over times/eventualities (Rooth, von Fintel, de Swart, ...). Restrictor-NS division: Focus, presupposition, ellipsis. . . BFÁ's secret favourite:

$$
\begin{equation*}
\forall \varepsilon .\left[C(\varepsilon) \rightarrow \exists \varepsilon^{\prime} .\left[R\left(\varepsilon, \varepsilon^{\prime}\right) \wedge \varphi\left(\varepsilon^{\prime}\right)\right]\right] \tag{15}
\end{equation*}
$$

- A somewhat fishy case: Naponkéd (lit. 'day-dist')
(16) Es lakozÿk wala naponkeed nagÿ gÿenÿerewseggel

And dwell PAST day-N-LY great pleasure-INS
'And he dwelt (there) with great pleasure every day' (Érsekújvár C.
$5 \mathrm{r})$
naponkeed presumably combines with the manner adverb: 'And he dwelt there, and each day he felt great pleasure'

Scope interaction between -ked and modal: $\forall>\diamond$ rather than $\diamond>\forall$.
(17) hogÿ kÿ naponked eshetel wgÿan azon korsagban
that who day-ly fall-poss-2SG same that illness-ACC
'Every day it is possible for you to come down with the same illness' (Érsekújvár C. 211vb)

Paraphrase: 'Someone has fallen ill, and every day, any day, you too may come down with the same disease'.
(18) kirol naponked tartozunk mi halaadassal
(Mary) 'to whom every day we owe gratitude and thanksgiving' (Tihany C. 62 v )
Scope problem (temporal / modal)
(19) a. kinek naponked harom ezor uitezok alnakuala uduart (Euphemianus) 'whose courtiers each day numbered three thousand knights' (Tihany C. 10r)
b. Naponked az o hazaba harom aztal zegenok etetnek uala
'Every day at his house the poor were fed at three tables' (Tihany C. 10r)
lit. 'three tablefuls of poor people'
(20) amí alamísnat adnak vala neký ísten zeretety̋rt czak annŷt hag vala maganak kíuel naponked meg erý
'(St Alexa) whatever alms he was given for the love of God, he only kept for himself what he needed day after day' (Lobkowitz C. 225-
(21) az istennek vtan az v́ zent eleteben kezde naponked iobrol iobra neuekodnie
(St Anne) 'on the path to God she became better and better, day after day' (Kazinczy C. 23v)
(22) the naponked az en ikomnek tÿztolletot tez ego gertÿaual
(Christ to young man) 'you pay your respects to my grandmother by lighting a candle, day after day' (Kazinczy C. 27v) ('dependent' candle)

### 2.2 Distributivity operators

(23) zollywnk arrol ky mynden naponkeed
speak-SBJV.1PL that-DEL which every day-SUP-DIST
zemewnk elót forog
eye-POSS.1PL before revolve-3SG
'Let us speak about that which is before our eyes every day' (Érdy C. 20a)
(Lit.: every daily)
(24) A baratoc eǵgenkent kíkí naǵ síruan kí meǵen vala The monks one-DIST whowho great cry-PART out go PAST az ayton es čak ommaga marada a fey̋edelm the door-SUPRSSV and only he-self remained the prince 'The monks left through the door one after the other, amidst great sobs (each of them sobbing), and only the abbot himself remained' (Nagyszombat C 401)
(25) ennek vtanna mínd fel allanak egenked egỷmas vtan es míndeník vgy̌an predíkallía vala mínt Bodog zent ferench
'after this they (the bishops) all stood up, one by one, one after the other, and every one of them preached just like the Blessed Saint Francis' (Lobkowitz C. 22)
(26) Igon meltosagossok: merth istennek mynd feÿenkeed leanÿ es fÿaÿ 'They are venerable, since each and every one of them is the son or daughter of God' (Sándor C. 1v)
(27) Heten vadnak, Mel'eket az o At'ok az ordog mind egenkét kazdagon el hazasýta
(the daughters of cupidity) 'They are seven in number, all married off richly by their father the devil, one after the other' (Székelyudvarhely
C. $95 \mathrm{r}-\mathrm{v}$ )

Dormition, Kazinczy C.:
(28) a. tehat kezdek az apastalok egenked azzonunkat dicernie:
'so the apostles began the praise of our lady, one after the other' (8r)
b. Ennek vtanna v́tolok feÿenked bucut von
'After this she(Mary) said farewell to them, one after the other' (9r)
c. azzonunkat seregonked kornol allak:
(the inhabitants of Heaven) 'surrounded our lady, each in his cohort' (9v)
(angels with angels, martyrs with martyrs a.s.o.)
(29) a. kiket peldaznak touaba ez madarnak fiai: feienked minketh 'What do the children of this bird stand for? They stand for each and every one of us' (Tihany C. 8v)
b. Mikepen azert az madarnak fiait az aspis keǵo megh olÿ: Ezonkepen mies feienked az elso zilenknek uetkoknek miattok mnd(sic!) megh hotunk uala
'Just as the fledglings were killed by the serpent, each and every one of us has died on account of the original sin of our first parents' (Tihany C. 9r)
c. mel eredet bin zalla feienked mi reank:
'which original sin was inherited by each and every one of us' (Tihany C. 33v)

### 2.3 Pluractional adverbials

'Pluractionality': a plurality of events (described by the verb). Pluractional vb morphology (cf. Henderson, diss). Pluractional readings due to bare plurals:
(30) John found fleas on his dog for a week (Dowty)

Pluractional adverbials: one by one, dog after $\operatorname{dog}, \ldots$
(31) ha valami konuet lath vala ottan oda futh vala es a tob germokok mogíara ígen hannía uala leuelọnkent
'When he (St Thomas) saw a book he ran to it and, like the other children, he tossed page after page (in the book)' (Debrecen C. 204)
(32) Ezek ny̋nčenek heaba, mert y̋génkét wrvnk Crŷstvs mondasy̋ 'these are not empty words, since they are the sayings of our lord Christ, word after word' (Székelyudvarhely C. 116v)
(33) Akarta volna az vr isten hogÿ en voltam volna az jdevben ez velagon. es meteltettem volna jzenkent foltonkent az en vram iesesnak(sic!) zerelmert
'How I wish God had wanted me to live then (among early Christians and martyrs) and be chopped up bit by bit for the greater love of my Lord Jesus' (St Margaret (of Hungary)'s Legend 10v)
(34) Mith tez zegen frater? ha zomeidnek welagat el weztendod: zikseg nekod aitonked koldulnod:
'What are you to do, poor friar? If you lose your eyesight you'll have to go begging from door to door' (Tihany C. 55r)
(35) walamÿnemw twodomanÿws belcz embernek meg hatnÿa hogÿ az egihazẏ zentseghes zolosmat zerewel zerzene orankeed ÿdeÿen koran mondanÿ
(the emperor asked the pope) 'to appoint a wise scholar to devise a system / an order of holy chants to be sung hour after hour (the Chants of the Office)' (Érsekújvár C. 158va)

Distributivity op. or pluractional? Bracketing?
(36) ennek wthana az epÿstolakat ewangelyomokat mÿnd eztendewnked enekelwen
'after this the epistles and gospels were all sung yearly / year after year' (Érsekújvár C. 158va)

## 3 (Some) Analyses

### 3.1 Zwarts

Joos Zwarts (L\&P 2013): plural reading of $N$ to/after/by $N$ built up compositionally, from computing 'sums' of singularities.

### 3.2 Beck-von Stechow

Background: static semantics for plurals by Beck (à la Link, Sternefeld).
(37) Dog after dog came in

1. Two plural entities: D (dogs), E (events).
2. Partition D and E (cells are atoms/singletons).
3. Order the cells of E (e.g. $e_{1} \prec e_{2} \prec e_{3}$ ). $\prec$ is immediate precedence.
4. See if there is a bijection btw the cells from D and the cells from E .
5. Ignore the first dog.

### 3.3 Henderson, Henderson-Brasoveanu \& followers

Dynamic plural logic (Van den Berg, Nouwen, Brasoveanu). Evaluation w.r.t. sets of assignments.

Individuals: $\pm$ atomic. $\rightarrow$ two sources for plural readings:

- The individuals themselves (if not atomic) - domain plurality
- the sets of assignments: if $H$ is a set of assignments and $x$ a variable one can obtain the set of values assigned to $x$ by members of $H$ $\left(\left\{d_{i} \mid d_{i}=h_{i}(x), h_{i} \in H\right\}\right)$. - Evaluation plurality (if such a set is not a singleton).

Main ex (Brasoveanu-Henderson SALT 19):
(38) a. The boys each recited a poem
b. The boys recited a poem one by one

Main test: 'internal' vs 'external' different.
(39) a. The boys each recited a different poem.
(Internal reading OK: poems vary with boys)
b. The boys recited a different poem one by one.
(Only external reading: different anaphoric)
$\rightarrow \mathrm{B} \& \mathrm{H}$ : the expression responsible for storing pluractional dependencies is not accessible.
'Storing' dependencies:

- Each: 'Decomposition' yields a relation over individuals: $\left\{\left\langle g_{i}(x), g_{i}(y)\right\rangle \mid g_{i} \in\right.$ $G\}$. Side note: universal quantification in this framework:
(40) $\quad\langle\operatorname{Max}(R), \Delta(\mathrm{NS})\rangle$

NL: Maximise Restrictor and distribute over Nuclear Scope.

$$
\begin{array}{llll}
G & x(\text { boys }) & y(\text { poems }) & \ldots  \tag{41}\\
g_{1} & \text { bo }_{1}=g_{1}(x) & \text { poem }_{1}=g_{1}(y) & \ldots \\
g_{2} & \text { boy }_{2}=g_{2}(x) & \text { poem }_{2}=g_{2}(y) & \ldots
\end{array}
$$

- One after the other: a relation over individuals and functions (viz. boys and fns matching boys with poems). 'Encapsulation'.

$$
\begin{array}{lll} 
& x \text { (boys) } & f \text { (boys-poems) }  \tag{42}\\
g & \text { the.boys }=g(x) & g(f) \\
& \left\{\left\langle b_{i}, p_{i}\right\rangle \mid \ldots\right\}
\end{array}
$$

Given $g \in G: g(x)=$ the-boys, and $g(f)$ is a correspondence btw members of $g(x)$ (individual boys) and poems.

One by one: a functional dependency btw individuals and events (!). Individual(s) denoted by an overt constituent from the same clause. B\& H : the functional dependency is in fact a $\theta$-role.

NL paraphrase of B\& H's proposal:
(43) Given event predicate $E$ and event $e$, collect (linearly ordered) atomic subevents $e^{\prime}$ of $e$, s.t. the image set of $\theta$ is not a singleton, and atomic $e^{\prime}$ s are assigned atomic values (by $\theta$ ).

Dependency btw boys and poems mediated by the Davidsonian argument.

### 3.3.1 Panaitescu

Panaitescu (SuB 2012): redefining 'traditional' distinctions in terms of B\&H:
(44) a. 'Event-external' pluractionals $\approx$ distribution. (Panaitescu: Romanian tot (reading: again and again).)
b. 'Event-internal' pluractionals $\approx$ encapsulation. (Panaitescu: Spanish frequentative andar.)
a. ?El zorro anduvo matando una gallina

The fox walk.SP killing a hen
'The fox has been killing a hen' (repeatedly?) (Spanish)
b. ?Vulpea tot ucidea o găină

Fox-the all kill-IMPF one hen
'The fox kept killing a hen' (repeatedly?) (Romanian)
a. Juan ha andado llamando por teléfono a cada uno de sus amigos 'John has been phoning every one of his friends' (one after the other, one call per friend)
b. Ion a tot sunat toţi prietenii
'John has been incessantly calling all his friends' (several calls per friend)
'Decomposition' (acc. to Panaitescu) characterises quantifiers, distributive operators, event-external pluractionals. 'Encapsulation' (Panaitescu): eventinternal pluractionals and (if and when necessary) each (B\&H).

### 3.4 Observations concerning OH -nkeed

$\lambda P . \lambda$ Sthing. $[\operatorname{Max}(x, P), O p(S t h i n g(x))]$
$P$ : the $N$-kéd attaches to. Sthing: the translation of the constituent $N$-kéd is adjoined to. Missing: correspondences and dependencies. First (tentative) hypothesis: -kéd could have originally been a (totally underspecified) distributivity operator. Reason: emergence of 'purely' quantificational and 'purely' pluractional interpretation easier to conceive.

1. Capable of decomposition and encapsulation. (Btw, in B\&H's framework each can also be analysed as decomposing or encapsulating).
2. Does not need clausemate 'antecedent'.
3. Dependency need not rely on thematic roles. E.g. ajtónkéd 'from door to door': a correspondence between subevents and stages of spatial path (marked by doors).
azzonunkat seregonked kornol allak:
(the inhabitants of Heaven) 'surrounded our lady, each in his cohort' (9v)
(angels with angels, martyrs with martyrs a.s.o.)
Readings: (i) surrounding is a process, its stages marked by cohorts from heaven; (ii) 'surround' describes a state; heavenly cohorts correspond to spatial regions.
4. Point $1 \rightarrow$ (event-internal) pluractional reading not basic for nkéd.

More observations:

1. -nkeed introduced a plurality;
2. -kneed expressed a dependency between two variables; one of these bound the individual argument of the $N$ it combined with.

Interlude: if Panaitescu is right, what distinguishes a quantifier from an event-external pluractional? (Some points: R-NS division, absence of functional dependencies, the need to impose a certain kind of structure on events...)

Main OH cases:

- (Propositional) quantifier: koronkeed.
(49) koronkeed bykath aldozyeek hẅ byneyerth es age-DIST bull-ACC sacrifice-IMP-3SG he sin-3sg.pl-cslfnl and kosth ystennek dyczeeretyre ram-ACC god-DAT praise-POSS.3SG-CSLFNL
'He (Aaron) should always sacrifice a bull for his sins, and a ram to praise God' (Jordánszky C. 99)
'Whenever Aaron sacrifices something for his sins it should be a bull, and whenever he sacrifices something in praise of God, it should be a ram.'
- R - NS division. Dependency: relation between two eventualities. With state descriptions: quantification over times. (Reconsider always as quantifying over times?)
- Distibution over 'own' variable.
- Vacillating between quantificational and event-external pluractional interpretation: naponkeed. Quantifier status: scope relations. Pluractional reading: dependencies.
hogÿ kÿ naponked eshetel wgÿan azon korsagban that who day-ly fall-poss-2SG same that illness-ACC 'Every day it is possible for you to come down with the same illness' (Érsekújvár C. 211vb)
(51) az istennek vtan az v́ zent eleteben kezde naponked iobrol iobra neuekodnie
(St Anne) 'on the path to God she became better and better, day after day' (Kazinczy C. 23v)

Needed: correspondence btw a succession of days and a succession of degrees. (The degree of day $_{n}$ has to be greater than the degree of day ${ }_{n-1}$.)

- Distributivity operators: should be easy. Correspondence between individuals and eventualities, without imposing a linear order on subevents. (Cf. Each and every one of us died.)
- Event-internal pluractional readings:
(52) ha valami konuet lath vala ottan oda futh vala es a tob germokok mogíara ígen hannía uala leuelonkent
'When he (St Thomas) saw a book he ran to it and, like the other children, he tossed page after page (in the book)' (Debrecen C. 204)

Relationships:

- The book and its collection of pages.
- A linearly ordered sequence of events matching a sequence of pages.

Diachronic speculations:
$\oplus$ The case of fejenként: distributivity marker $\rightarrow$ rate phrase. Possibly: functional dependency introduced/reinterpreted as dependencty via $\theta$-roles. (53-b) involves a relation between soldiers (Beneficiaries) and what they received (Themes).
a.???A katonák fejenként jöttek

Int.: 'Soldiers were coming, one after the other'
b. A katonák kaptak fejenként / ?egyenként egy The soldiers received head-DIST / ?one-DIST one lakktáskát és három csomag biztosítótűt patent.leather-case-ACC and three pack safety-pin-ACC 'Each soldier was given a patent leather case and three packets of safety pins.'
$\oplus$ egyenként 'one by one': in OH it marked distribution over atoms (+ pluractional dependencies). Missing: distribution over groups of cardinality $n$ in general.
(54) De mert meglen keuessen valanak az baratok nem boczathattya uala ewket ketten ketten : mendenykyt kewlewn boczattya uala Castellomokba es falukba
'But, since there were still few monks (in the Franciscan order) he (St Francis) could not send them off in twos: he sent them individually to castles and villages' (Jókai C. 82)
$\oplus$ Loss of strict distributivity. MH időnként 'from time to time'.
(55) Mind az egész Bibliát versenként fordítottuk 'We have translated the entire Bible verse after verse' (Károli, p. 44)
(56) Noha pedig volt darabonként az Bibliának valami része megfordítva, de (teljes bibliafordítás eddig nem létezett)
'Although there have been partial translations of the Bible, pieceKÉNT' (there has been no complete translation so far) (Károli, p. 44)

Valami rész (some part) - darabonként (in pieces, a piece here and a piece there)

Katalin É.Kiss (p.c.) in the Debrecen dialect $x$ darabban van ('be in piece') means ' $x$ is incomplete, not full' (e.g. the wine in the barrel).

## Acknowledgements

The research reported here was carried out with financial support from HNSRF (OTKA), projects NK 78074, K 112057, ERC_15_HU 118979.

## Primary Sources

Károli: Gáspár Károli 1590: Szent Biblia, azaz Istennek ... (Preface to Bible translation). In Gábor, Csilla, ed. 2013: Keresztyéni felelet. Hitviták a 1617. századból. (Christian Retort. Debates on Religion from the 16th and ${ }^{17}$ th Centuries.) Polis Kolozsvár (-Cluj-Klausenburg). Pp. 37-45.

For information on OH codices please consult
http://omagyarkorpusz.nytud.hu/hu-codices.html or
http://nyelvemlekek.oszk.hu/tud/szoevegkiadasok

