How many letters are there?

*Distributivity and the verbal particle in Hungarian*

Kata Wohlmuth
katawohl@gmail.com

Vienna, 1\textsuperscript{th} December 2013.
The main roles of the verbal particle:

- give the **direction** of a movement (*le-megy* ‘go down’, *fel-megy*, ‘go up’)
- express Aktionsart (totality: *be-lát* ‘see the whole space’, delimitativity: *el-gondolokodik* ‘think for a while’)
- plays a role in both **situation and viewpoint aspect** (Csirmaz 2006):

\[(1) \text{Péter írta a levelet.} \quad \text{Pe} \text{ter wrote the letter}.
\text{‘Peter was writing/wrote the letter’}
\]
\[(2) \text{Péter meg-írta a levelet.} \quad \text{Pe} \text{ter PRT- wrote the letter}
\text{‘Peter wrote the letter’}
\]
About the Role of the Verbal Particle in Hungarian 2.

Verbs of creation: no need for the verbal particle for the telic interpretation.

Indefinite object:

(3) Péter írt egy levelet. atelic, imperfective/perfective
    Peter wrote a letter.
    ‘Peter wrote a letter’

Focus:

(4) PÉTER_{Foc} írta a levelet. telic, perfective \rightarrow terminative
    Peter wrote the letter
    ‘PETER_{Foc} wrote the letter’
Verbal Particle in Focus Sentences 1.

(5) \(PÉTER_{\text{Foc}} \text{ írta meg a levelet.}\)
    Peter wrote PRT the letter
    ‘Peter\textsubscript{Foc} wrote the letter.’

(6) \(PÉTER_{\text{Foc}} \text{ írta a levelet.}\)
    Peter wrote the letter
    ‘Peter\textsubscript{Foc} wrote the letter.’

Why to complicate it with focus? In these sentences we have definite NPs as object and still the aspect is terminative (cf. (3)-(4)).

\textbf{Assumption: In the focus sentences containing a verb of creation the role of the verbal particle is not to provide the terminative reading.}
Verbal Particle in Focus Sentences 2.

Replace the subject with a conjunct NP:

(7) $[\text{PÉTER ÉS MARI}]_{\text{Foc}}$ írta meg a levelet.
    Peter and Mary wrote PRT the letter

(7) → Peter wrote a letter and Mary wrote a letter as well.

(8) $[\text{PÉTER ÉS MARI}]_{\text{Foc}}$ írta a levelet.
    Peter and Mary wrote the letter

(8) → Peter wrote a letter and Mary wrote a letter as well.

**Assumption:** In the focus sentences containing a verb of creation the role of the verbal particle is to provide the distributive reading.
Distributive and collective reading

Distributive reading:

(7) \([\text{PÉTER ÉS MARI}]_{\text{Foc}} \, \text{írta meg a levelet.}\]

Peter and Mary wrote the letter

(7) a. \(\text{p} \cup \text{m} \in *\text{ÍR}/*\text{WRITE}\)

Distributivity is the pluralization on the verbal domain (Landman 2000).

Collective reading:

**Group-forming operator:** \(\uparrow\) a one-one function from SUM into ATOM

1. \(\forall \text{d} \in \text{SUM-IND}: \uparrow(\text{d}) \in \text{GROUP}\)
2. \(\forall \text{d} \in \text{IND}: \uparrow(\text{d}) = \text{d}\) \((\text{Landman 2000:100})\)

(8) \([\text{PÉTER ÉS MARI}]_{\text{Foc}} \, \text{írta a levelet.}\]

Peter and Mary wrote the letter

(8) a. \(\uparrow(\text{p} \cup \text{m}) \in \text{ÍR}/\text{WRITE}\)
The Source of Distributivity 1.

(7) \([\text{PÉTER ÉS MARI}]_{\text{Foc}} \text{írta meg a levelet.}\)  
Peter and Mary wrote the letter

(8) \([\text{PÉTER ÉS MARI}]_{\text{Foc}} \text{írta a levelet.}\)  
Peter and Mary wrote the letter

In (7) there are two writing events → as the result of the events there are two different letters written.

But due to its definite article, the uniqueness of the objects in the sentences is presupposed, cf. Heim (2011):

\[
[[\text{the}]] = \lambda P: \exists x \forall y [P(y) \leftrightarrow x = y]. \exists x P(x)
\]

Unlike in (8), in (7) the internal argument cannot refer to the letters that were written.
There are many cases when the presence of the verbal particle affects not the aspect but the event structure (É. Kiss 2004):

<table>
<thead>
<tr>
<th>TELIC EVENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Simple event structure</strong></td>
</tr>
<tr>
<td>- the verbal particle is absent</td>
</tr>
<tr>
<td>- event of creation</td>
</tr>
<tr>
<td>(9) Péter írt egy levelet. Peter wrote a letter</td>
</tr>
<tr>
<td>(10) Péter majdnem írt egy levelet. Peter almost wrote a letter</td>
</tr>
</tbody>
</table>

(10) is true iff Peter has not even started to write the letter.

(12) is ambivalent: it is true, if
a) Peter has not even started to write the letter
b) he has started to write, but did not manage to finish.
The Source of Distributivity 3.

(7) \([\text{PÉTER ÉS MARI}]_{\text{Foc}} \text{ írta meg a levelet.}\)  
Peter and Mary wrote the letter  
coll/dist.

(8) \([\text{PÉTER ÉS MARI}]_{\text{Foc}} \text{ írta a levelet.}\)  
Peter and Mary wrote the letter  
coll.

(7): the set of relevant individuals / end state  
process stage

(8): - end state/creation

In (7) due to the focus the process stage is indirect, but can be detected:

• we have the set \(A\) of the relevant individuals; \(A = A_1 \cup A_2 \cup A_3\)
  \(A_1 = \{\text{the individuals who have written the letter}\}\)
  \(A_2 = \{\text{the individuals who did not even start to write the letter}\}\)
  \(A_3 = \{\text{the individuals who have started to write, but did not manage to finish}\}\)
Unlike in (8), in (7) there is a process state:
(7) is true iff Peter was writing the letter \( j \) and Mary was writing the letter \( k \).

Clearly, in the process state of the writing event, the letter(s) cannot exist in the way they exist at the end of the event, but we still can refer to it/them.

What can exist in the process state of a creating event is the notion of the letter introduced by a discourse referent (Karttunen 1976). It does not refer to the letters written, but the letter that supposed to be written by Peter, Mary and at least one other person.
The Source of Distributivity 5.

Since in (8) there is no process stage due to the absence of the verbal particle, the internal argument can only refer to that particular letter which is the result of the writing event \( \rightarrow \) possible deictic interpretation:

\[
(8) \approx (8') \quad [\text{PÉTER ÉS MARI}]_{\text{Foc}} \text{írta ezt a levelet.}
\]

Peter and Marí wrote this the letter
‘Peter and Mary wrote this letter’

In (7) the internal argument does not have possible deictic interpretation.
The Source of Distributivity 6. - Back to Neutral Sentences

(13) *Péter és Mari meg-írta a levelet.*
    Peter and Mary wrote the letter

(14) *Péter és Mari meg-írt egy levelet.*
    Peter and Mary wrote a letter

(15) *Péter és Mari írta a levelet.*
    Peter and Mary wrote the letter

(16) *Péter és Mari írt egy levelet.*
    Peter and Mary wrote a letter.

The verb ír ‘write’ is basically ambivalent between the collective-distributive readings → in unmarked cases like (13)-(15) the context determines the final interpretation.

(16): **without process state, no distributive reading** is available
If the verbal particle is present ((7), (13), (14)), there are as many letters as many individuals the subject NP denotes.

If the verbal particle is absent ((8), (16)), there is only one letter written.
- As for verbs of creation, the distributive reading depends on the event structure

Complex event structure $\rightarrow$ possible distributive interpretation
Simple event structure $\rightarrow$ only collective interpretation

Dynamic representation for distributivity!
References


Thank you for your attention!