Reduplication revisited: verbal plurality and exhaustivity in the visual-gestural modality

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Overview

• Overview of treatments of nominal and verbal plurality
• Verbal pluractionality in SpL
• Verbal pluractionality in SL
  • LSF (Kuhn & Aristodemo 2017)
  • LSC: similarities and differences
• Pluractional vs. Aspectual markers
• Pluractional markers vs. [+distributive/exhaustive]
Number

• Morphological category **number** mainly studied in the nominal domain.

• However, there is a lot of typological and descriptive research documenting and studying verbal plurality.

• Almost absent in European languages, but widespread in many language families across continents.
Verbal plurality

• Expression of plurality of events through overt markers in verbal morphology.

• Phenomenon known as **pluractionality** or **pluractional** verbs (Newman 1980).

• Indicates multiplicity of actions, implying multiplicity of:
  • Participants
  • Times
  • Locations
a. na:nok waytas ge: we:wans ga:ma boqs
every day DEM women grind camas
Every day these women [as a group] grind camas.

b. na:nok waytas ge: we:wans gaga:ma boqs
every day DEM women PA-grind camas
Every day these women [individually] grind camas.

c. domi: cikas hohankanga
many bird PA-fly-around
Many birds are flying around [here and there].

d. coy honk ga?as sisi:ksi ka cis...
so it this-way PA-move also
And it began to move back and forth also...

Reduplication

• Reduplication is the most common morphological exponent of pluractionality (next to other affixes and stem change):

Mutàanee sun *fir*-fitoo (dàgà gidàajensù) people 3pl.perf RED-get out homes.their
‘Many people got out of their homes (one by one/at the same time from different houses).’

(Hausa, Soucková & Buba 2008: 137)
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Other markers

• For Spanish, Laca (2006) identifies the periphrases *andar/ir* + gerund as pluractional constructions (predicates of groups of events):

(i) María fue/anduvo leyendo *Guerra y Paz* (*de un tirón*).
   (Lit.: María was/went reading *War and Peace* (*in one go).* )

(ii) María anda preguntando por ti.
    (Lit.: María goes asking about you.)
Plurality in SLs

• In the **nominal domain**, certain nouns can carry plural marking by reduplication (Steinbach 2012):

<table>
<thead>
<tr>
<th>phonological feature</th>
<th>plural marking strategy</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. body anchored</td>
<td>zero marking</td>
</tr>
<tr>
<td>non-body anchored</td>
<td></td>
</tr>
<tr>
<td>b. (i) complex movement</td>
<td>zero marking</td>
</tr>
<tr>
<td>(ii) simple movement</td>
<td></td>
</tr>
<tr>
<td>c. (iia) midsagittal place of articulation</td>
<td>simple <strong>reduplication</strong></td>
</tr>
<tr>
<td>d. (iib) lateral place of articulation</td>
<td>sideward <strong>reduplication</strong></td>
</tr>
</tbody>
</table>
Plurality in SLs

a. *BOOK
   ‘books’

b. BOOK++
   ‘books’

3x

c. *BOOK++++
   ‘books’

DGS
Plurality in SLs

a. *CHILD
   ‘children’

b. *CHILD++
   ‘children’

c. CHILD>+++ 
   ‘children’

DGS
Plurality in SLs

• Other strategies: numerals, quantifiers, classifiers.
Verbal plurality in SLs

• Some attention to the **distributive/exhaustive** morpheme (in contrast to multiple): plural object marking that also implies distributivity/exhaustivity.

C) GIVE [exhaustive]
'give to each'
Verbal plurality in SLs

• Little attention to reduplication as pluractional marker.

• Often interpreted as aspect:
Verbal plurality in SLs

• First extensive treatment of pluractionality in SLs for LSF: Kuhn & Aristodemo (2017).

• Two pluractional markers in LSF:
  • /rep/: exact repetition → implies that subevents with the same participants are distributed over time;
  • /alt/: alternating two-handed repetition → implies that subevents are distributed across participants.

• They appear with a broad spectrum of verbs, both agreeing and plain.
**Figure 3**  Picture of FORGET-rep

**Figure 4**  Picture of FORGET-alt

(LSF, Kuhn & Aristodemo 2017)
• Temporal variation is obligatory.
• Variation across participants is not sufficient (but it is possible).
• It does not allow variation across participants and time (x-t1, y-t2, z-t3...) [except when there is variation across space].
/alt/

- Variation across participants.
- Requires a plural argument:
  
  (i) *JEAN ARRIVE-alt
      (Jean arrived.)

- Temporal variation is not sufficient:
  
  (ii) *OFTEN ONE PERSON FORGET-alt ONE WORD.
       (‘One person often forgot one word.’)
Interaction with distributive operators (LSF)

(i) STUDENT EACH FORGET ONE WORD.
   ‘Each student forgot one word.’

(ii) STUDENT IX-arc FORGET-alt ONE WORD.
   ‘The students forgot one word (the same one).’

• → The pluractional forms /alt/ and /rep/ are not distributive operators, they rather filter the plurality of a predicate of events.
LSC /rep/

• Variation over time (e.g., on Thursdays)

STUDENT OWN IX3-pl BOOK BRING FORGET-rep
‘My students kept forgetting to bring the book.’
LSC /alt/

• Variation over argument, not time: same day.

STUDENT OWN IX3-pl BOOK BRING FORGET-alt
‘My students forgot to bring the book.’
LSC /rep-arc/

• Variation over space (locative argument): +arc

SUPERVISOR SCHOOL GO-rep-arc
‘The supervisor went to several schools.’
LSC /rep/

• Without +arc, singular locative argument, temporal variation.

SUPERVISOR SCHOOL GO-rep
‘The supervisor kept going to the school.’
LSC /rep-arc/

• +arc also variation over internal argument

JOAN PASS-rep-arc
‘Joan passed several subjects.’
LSC: scope relations

• As in LSF, a distributive Q doesn’t multiply distribution.

STUDENT EACH-ONE ONE WORD FORGET-alt
‘Each student forgot one (same) word.’
LSC: scope relations

• It can multiply an indefinite N+ONE object.

EVERY-DAY JUAN WORD ONE FORGET-rep
‘Every day Juan forgot/used to forget one word.’
LSC: scope relations

• [AGAIN [rep]]

JOAN ENGLISH  **FAIL-rep AGAIN**
‘Once more, Joan has failed repeatedly.’
LSC: scope relations

• [AGAIN [rep-arc]]
LSC /alt/

• Also with singular subject and object, contextual licensing (=/= LSF).

IX1 DATE FORGET-alt
‘I forgot the date at different places/on different occasions.’
LSC /rep/

- Not a distributive operator over argument: single date.

STUDENT OWN IX3-pl DATE FORGET-rep
‘My students kept forgetting the date.’
LSC /alt/

• In combination with nonmanuals, it can convey degree.

RESTAURANT BUFET JOAN EAT-alt
‘At the buffet restaurant, Joan ate a lot.’
LSC /rep/

- In combination with nonmanuals, it can convey degree.

SATURDAY NIGHT JOAN DRINK-rep
‘Saturday night Joan drank a lot.’
Pluraccionality vs. aspect

- Link between pluraccionality and aspect. Not always clearly distinguishable.
- Plurality of events is independent of the distinctions perfective/imperfective and bounded/unbounded.
- Reduplication is the formal expression of related but distinguishable meanings (pace Wilbur’s analysis of /rep/ in her Event Visibility Hypothesis).
Pluraccionality vs. aspect

• Pluractionality must be distinguished from lexical aspect /Aktionsart, because pluractionality does not encode the internal structure of events primarily (aspect does) (Součková 2011).

• Also independent of grammatical aspect (viewpoint aspect) and the bounded/unbounded distinction.

a. Mutàànèn sun zaz-zàunaa
   people.the 3PL PF RED-sit.down
   ‘The people sat down’

b. Mutàànèn sunàa zaz-zàunàwaa
   people.the 3PL IMPF RED-sit.down.VN
   ‘The people are/ were sitting down’
Pluractional markers vs. [+distributive/exhaustive]

• ¿Is [+distributive/exhaustive] just another case of /rep-arc/?

SUPERVISOR SCHOOL GO-rep-arc, SOME NOT
‘The supervisor went to several schools, some other he didn’t.’
Pluralactional markers vs. [+distributive/exhaustive]

- Reduplication does not encode exhaustivity.
- Distribution licensed contextually or by overt operators (EVERY-DAY, EVERY-ONE).
- If there are no overt distributives, nonmanuals can encode it.
Pluractional markers vs. [+distributive/exhaustive]

• Two analyses of the redundant interaction between pluractional markers and distributive operators:

EVERY-DAY JUAN WORD ONE FORGET-rep

• Kimmelman (2015): pluractional as morphological agreement with the distributive operator.

• Kuhn & Aristodemo (2017): pluractional as predicate that takes scope over distributive operator that licenses it (it filters the plurality interpretation of a predicate of events, but it is not a distributive operator by itself).
Conclusions

• It is plausible to analyze the /rep/ and /alt/ (also /rep-arc/) morphemes as pluractionality markers, both in LSF and LSC (modality effect).

• However, there are differences in some semantic aspects between the two languages (expected variation).

• This allows revisiting the analysis of markers that were so far considered aspectual, as well as the [distributive/exhaustive] morpheme.

• This perspective must be explored wrt reduplication in the nominal domain and its interaction with the verbal one.
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