Types of pluractionality and plurality across domains in ʔayʔaǰuθəm

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Pluractionality is found in many different languages to refer to some combination of "multiple participants, times, or locations" (Lasersohn 1995:240). In this paper, we argue for two types of pluractionality in ʔayʔaǰuθəm (Comox-Sliammon), an endangered Central Salish language. Reduplication is used to mark event-external pluractionality and requires events to be distributed in both space and time, while ablaut is associated with event-internal pluractionality.

We follow Wood (2007) in using the the notion of grouping in the nominal domain to analyze event-internal pluractionality in ʔayʔaǰuθəm. In contrast, the event-external pluractionality is analyzed with reference to non-singular sums of events distributed in time and space. The reduplicative process that marks event-external pluractionality is also found in the nominal domain. These reduplicated nouns are interpreted as distinct atoms, whereas other types of plural morphology in the nominal domain are associated with a collective readings. Data from ʔayʔaǰuθəm supports the hypothesis that plurality in the event and nominal domains has a shared structure (cf. Wood 2007; Henderson 2017).

Event-external pluractionality with spatio-temporal distribution

CVC reduplication marks event-external pluractionality, where events must be distributed in space and time (Huijsmans & Mellesmoen 2019). Though it is the case that the absolutive argument of a transitive verb is often plural, multiple participants are not sufficient for the use of plural reduplication on a verbal predicate. For the felicitous use of the pluractional marker in (1), events must be distributed in space and time. More specifically, it is not sufficient to have just a temporal (2) or just a spatial (3) distribution; events must be distributed in both time and space.

We propose the denotation in (4), which follows from Lasersohn's (1995:252) analysis of pluractionality in the verbal domain, and integrate Wood's (2007:122) use of a plural operator from the nominal domain to pick out non-singular sums of events of P. This is further modified to specify the requirement for distribution in both space and time, as seen in (1-3).

Event-internal pluractionality with repeated events grouped into one event

In contrast to the event-external pluractionality marked by CVC reduplication, pluractionality marked by ablaut most often refers to multiple actions applying to a single object, as shown in (5b), though it may also be used when a single action affects multiple objects. For instance, (5c) is acceptable in a situation where the speaker cuts up a single ribbon, cuts several ribbons at the same time with one cutting action, or cuts several different ribbons (each once) one after another. The ablaut plurality thus contrasts with the distributive pluractionality in allowing readings where events are not individuated by spatio-temporal distribution.

Though the ablaut plural verbs preferentially involve multiple actions applied to a single object (one of the diagnostic for event-internal pluractionality in Wood 2007), they are not canonical event-internal pluractionals because they are built on accomplishment and

achievement roots, while event-internal pluractionality typically involve semelfactives (Wood 2007, Henderson 2017). The ablaut plural verbs are not analogous to "swarm nouns" like the event-internal pluractionals analyzed by Henderson (2017), which require a larger number of contiguous repetitions with short durations, causing them to be incompatible with the preparatory and result stages of accomplishments and to only combine with achievement stems if coerced into a semelfactive reading. In light of this, we adopt Wood's (2007:124) approach, as in (6), to event-internal pluractionals, where plural events of P are grouped by the operator ↑, which maps a sum of individuals onto an atomic group (following Landman 1996). This analysis accounts for the pluractionality marked by ablaut, where the grouped events are themselves each events of P (rather than phases of P).

Event-external and event-internal pluractional markers in the nominal domain
The distributive type of plural reduplication occurs with nouns that have distinct entities (i.e. not with mass or collective nouns) in the nominal domain, as in (7a). It thus applies across domains to create plurals of spatio-temporally distinct atoms, where the atoms are entities or events. If we posit that each entity has a unique timeline, as well as a unique position in space, the spatio-temporal distribution requirement is satisfied in the nominal domain with the same denotation applied to entities instead of events. In contrast, other plural marking, such as in (7b), gives rise to an interpretation where the entities are interpreted as a group.

Typological perspective
Of the forty-seven languages Wood (2007) surveys, only six had more than two pluractional markers. ʔayʔaǰuθəm belongs to this category because it has a further distinction in event-external pluractionality between the spatio-temporal distributive plural (described in this paper) and another type that only requires a temporal distribution (see Mellesmoen 2018), in addition to event-internal pluractionality associated with ablaut. With two types of event-external pluractionality and one type of event-internal pluractionality, ʔayʔaǰuθəm has a rich cross-categorial system of plurality that requires a semantics which can refer to spatial and temporal distribution independently, as well as the two in conjunction, and moreover has at least one type of non-concatenative plural morphology that applies cross-categorially to nouns and verbs.

References

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(1) a. **Context: What would I say if I was going to lock the doors before leaving the house?**

    lək•likl-it=t^θəm   tə=ʔiman

    PL•lock-CTR=1S.SBJ.FUT   DET=door

    'I'm going to lock all the doors.'

  b. **Context: I press a button on my keys to lock all the doors of my car.**

    {#**lək•likl-it**/likl-it}=č   tə=ʔiman

    {#PL•lock-CTR/lock-CTR}=1S.SBJ   DET=door

    'I locked the doors.'

(2) **Context: Gloria keeps opening the window, but I find it too cold so I keep closing it.**

  a.   #**təq•təq-t=č**   tə=məmk̓iyustən

         PL•close-CTR=1S.SBJ   DET=window

         'I repeatedly closed the window.'

  b.   ǰaqa=č=gut   tə~tq-t   tə=məmk̓iyustən

         MOD=1S.SBJ=PRT   IPFV~close-CTR DET=window

         'I'm forever closing that window.'

(3) a. **Context: You have a view of a city as it gets dark and you see lights gradually coming on here and there.**

    χʷəw~χʷəẇ

    PL~turn.on

    'They're coming on.'

  b. **Context: Streetlights all coming on at the same time.**

    kʷi=ʔukʷ   {χʷəẇ/#**χʷəw~χʷəẇ**}

    DEM=all   {turn.on/PL~turn.on}

    'They all came on.'

(4) $\lambda e\,[*P(e)\,\&\,\forall e',e'' \subset e\,\neg\,[\tau(e') \circ \tau(e'')]\,\&\,\neg\,[\,\sigma(e') \circ \sigma(e'')\,]\,]$

(5) a.   č̓ət-t=čxʷ   b.   č̓at-at=čxʷ   c.   k̓apat=č

    cut-CTR=2S.SBJ   cut\<PL\>-CTR=2S.SBJ   cut\<PL\>-CTR=1S.SBJ

    'Cut it (once) (w. knife).'   'Cut it up (w. knife).'   'I cut it/them (w. scissors).'

(6) $\lambda e\,[\uparrow *P(e)]$

(7) a.i. mimaẇ   ii. məm•mimaw   b. i. qʷəłay   ii. qʷaqʷłay

      'cat'   'cats'   'piece of driftwood'   'driftwood'