1 Introduction

Throughout Uto-Aztecan, pluractionality—semantic plurality of the event denoted by a verb—is marked by a combination of affixation and reduplication of the verb (for an overview of reduplication in Uto-Aztecan see Heath 1977 and Langacker 1977), and it is common for each language to employ various strategies to encode subtle nuances of verbal plurality. However, the southwestern regions of Western and Central Numic have lost reduplication as a productive strategy for expressing pluractionality.

In this talk, I will compare the forms and functions of markers of pluractionality in two dialects of Northern Paiute (Uto-Aztecan; Western Numic): Oregon Northern Paiute (ONP), which uses reduplication, and Mono Lake Paiute (MLP), which does not use reduplication.

At the end, I will also make some tentative observations about the loss of reduplication in MLP (and southwestern Western and Central Numic).
2 Background

Newman (1990:53) draws a distinction between two types of verbal plurality: inflectional plurality and derivational plurality. These types are defined in (4).

\(4\)

a. **Inflectional Plurality**: Agreement with the subject or the object  
   (e.g. *They are fishing for salmon*)

b. **Derivational Plurality**: Semantic plurality of the event denoted by the verb (e.g. *flap* vs. *flutter*)

A typology of pluractionality (Cusic 1981; see also Bybee et al. 1994; Lasersohn 1995; Mithun 1988), emphasis mine:

\(5\)

a. **Event-internal** pluractionality: ‘the units of action are conceived of as confined to a single occasion, and to a single event on that occasion.’ (Cusic 1981: 78)

b. **Event-external** pluractionality: ‘the units of action are potentially distributable, though not necessarily distributed, over multiple occasions.’ (Cusic 1981: 79)

(6) The mouse nibbled the cheese. [event-internal]

(7) The mouse bit the cheese over and over again. [event-external]

Definitions:

- **Iterative**: Event-internal repeated action
- **Repetitive**: Event-external repetition in time
- **Distributive**: Event-external action distributed across locations or individuals
- **Habitual**: Event-external pluractionality that ‘describes a situation which is characteristic of an extended period of time, so extended in fact that the situation referred to is viewed not as an incidental property of the moment but, precisely, as a characteristic feature of a whole period’ (Comrie 1976: 27-28)
- **Continuative**: Similar to the progressive aspect but additionally specifies that the action is deliberately kept going; ‘keep X-ing’ or ‘continue X-ing.’

3 Oregon Northern Paiute

3.1 Reduplication

Reduplication in ONP has two functions; it signals either distributivity or iterativity. The reduplication is of the first syllable of the verb stem, and indicates that “the action is performed more than once, whether it is the same singular action performed by plural actors or a repeated action performed by a single actor” (Thornes 2003:412). The differing semantics is conditioned by the Aktionsart of the verb.  

1Strictly speaking, continuative aspect does not encode pluractionality. It is included here because the markers of pluractionality often encode continuativity as well.

2This observation was first made in a talk by Reiko Kataoka, Maziar Toosarvandani, and me at the Friends of Uto-Aztecan Conference in August 2006.
→ Semelfactive verbs receive an iterative interpretation.

(8) Kai üü=sa’a i=kwassi wi-witsö’i-u-si wi’i-u-dua mii tia’a. 
NEG 2=might 1=tail RE-wag.swing-PNC-SEQ fall-PNC-SUBJ QUOT thusly
‘No, you might fall off when I wag my tail.’ [Thornes 2003:477]

(9) Su=nana u=bi-pi-ma-tatsi. 
SUBJ=man 3=RED-IP:butt-IP:hand-slap
‘The man is spanking him/her.’ [Thornes 2003:412, ex. 66c]

→ Verb roots of other Aktionsart types (i.e. accomplishments, activities, achievements, and states) receive an event-external, distributive or repetitive reading.

(10) a. yaisi ka=ibii pa’a-kwai hau ma-mani-piini 
then OBL=DEM high-LOC how RE-do/attach-PFV.STAT
‘and then (they) attach it all the way up to here...’ [Thornes 2003:412, ex. 66a]

b. Noo-’yu-na mia’a-si u=bu-punni-ya. 
all-NOM-ATTR go.PL-SEQ 3=RE-see-TRNSL
‘All of them are going to see him.’ [Thornes 2003:412, ex. 66b]

c. yaisi tüwao ka=tü=piia tü-patsa-kwai-tu mi-mia-u, ka=kutsu 
then also OBL=POSSESS=friend APS-kill.SG-LOC-ALL RE-go-PNC OBL=cow
‘and also (they) went to where their friend was killed, the cow’ [Thornes 2003:481]

d. Nümmi=sa’a mai muhi tsu-tsunua-u mii tia’a. 
1.PL.EXCL=MOD DEM first RE-enter-PNC QUOT thusly
‘Let us go in there first,” so said.’ [Thornes 2003:491]

(11) nümmi waha u=wo-kwo’isa-si ka-oka-himma 
we.EXCL twice 3=RE-wash-SEQ KA-that-something
‘having twice washed it out, those things’ [Thornes 2003:524]

3.2 Yakwi
Thornes describes the suffix -yakwi/-yai\(^3\) as a marker of habitual or repetitive action.

→ Repetitive action

(12) a. uu tu’i chúgwì-chai-si=ga 
thusly try do-REP-SEQ=MOD
‘Having been doing thusly (trying to pry up a large stone)...’ [Thornes 2003:410, ex. 63c]

b. Umü, yaisi una-’yu=ga sükwi-apaga oha’a yaga-chakwi mi’i, su=nümüdzoho. 
they then DEM-PRED=MOD just-some babe cry-HAB QUOT NOM=people.masher
‘They (did), and (he) was out there (somehow) pretending to cry like a baby, that Nemedzoho.’ [Thornes 2003:512]

\(^3\)Thornes describes -yakwi and -yai as distributional variants, -yakwi occurring in main clauses and -yai occurring in subordinate clauses. This description differs from those of Liljeblad (1966) and Snapp, Anderson, and Anderson (1982), who attribute a meaning difference to the two suffixes. Liljeblad glosses -yakwi as the ‘repetitive-habituative’ and -yai as the ‘progressive-repetitive,’ and Snapp, Anderson, and Anderson gloss them as ‘habitual (imperf)/repetitive’ and ‘habitual (perf),’ respectively. These authors give no further description of the semantics of these morphemes, however. In my survey of these forms, I have found no evidence supporting Liljeblad’s analysis and follow Thornes in considering these to be variants of one another.
c. Oono, aa mū=puupisa, u-ka-u=ga mū=nattua, ka=u=mia-’yakwi and.then ah PL=obsidian 3-OBL-U=MOD PL=father.and.son KA=3=go.SG-HAB mū=tattsigi-na.
PL=chip-PTCP
‘And, ahh, some obsidian, that’s what the father and son must have chipped it when[ever] it [=Nemechozina] was gone.’ [Thornes 2003:507]

→ Habitual action

(13) a. obi tia’ númmi-’númmi-’yakwi paana kai mū=punni
dem thusly wanter-RNDM.SG-HAB PROH NEG PL=see.DUR
‘...so (he) would wander around, but didn’t see them...’ [Thornes 2003:410, ex. 63a]
b. una-’yu sawa-naga-’yu yaga-na naka-’yakwi
dem-ABL sagebrush-among-ABL cry-PTCP hear-HAB
‘...(we) used to hear (it) calling out there among the sagebrush.’ [Thornes 2003:543]
c. Su=mi=naa pūno’o awamoasū yotsi-u-yai-na.
nom=1.pl=father also early.morning rise-PNC-HAB-PTCP
‘Also, our father would get up early in the morning...’ [Thornes 2003:410, ex. 63d]

→ Some ONP examples might better be characterized as Continuative aspect.

(14) CONTEXT: And then Nemedzoho tried to lift that–tried to lift that rock, tu’i tsa-hūga’ni-chakwi.
try IP:grasp-be.open-HAB
‘kept trying to pry it open.’ [Thornes 2003:517]

(15) CONTEXT: It kept lying there, ‘ūsododo-chakwi tia
snore-HAB thus
‘snoring away like that.’ [Thornes 2003:518]

(16) Ni=nimai-’yakwi “Talk English! Talk English!” 1.PL=tell-HAB
‘(They) kept telling us, “Talk English! Talk English!”’ [Thornes 2003:537]

(17) | Iterative | Redup. |
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4 Mono Lake Paiute

MLP does not utilize reduplication to mark pluractionality. Instead, a series of suffixes are used (cf. (3)).

4.1 Heggwi

→ The main function of -heggwi is to signal event-external repetitive action.
From the translations of these examples, it is not entirely clear that -heggwi marks event-external, repetitive action, especially when compared with the examples in the following sections. My characterization of this suffix comes mainly from the metalinguistic comments of the consultants during elicitation sessions.

→ A few examples containing -heggwi also appear to have habitual semantics. It is possible that these examples are just special cases of repetitive action, exemplified above, and that the habitual reading is supplied from the surrounding discourse.

Other examples involving -heggwi seem to be somewhat between repetitive action and habitual action.
b. Pauma-heggwi.
   rain-HEGGWI
   ‘It sometimes rains.’

c. Pa’a poo-we huu-heggwi.
   water road-LOC flow-HEGGWI
   ‘Water runs over the road sometimes.’

Heggwi also interacts with external aspect. It can combine with -wünü, the marker of continuous aspect, to indicate an action that is repeated and ongoing. The examples below show the same range of frequency of action as the examples with only -heggwi.

(21) a. Pauma-wünü-heggwi.
    rain-CONT:SG-HEGGWI
    ‘It’s raining off and on.’

b. Isu nana ika tühüddda puni-wünü-heggwi.
   this man this deer see-CONT:SG-HEGGWI
   ‘The man sees the deer now and then.’

c. Isu nana nobi-tu-wünü-heggwi.
   this man house-VBZR:make-CONT:SG-HEGGWI
   ‘The man is working on the house now and then.’

d. Isu nana nobi-gwe iga-wünü-heggwi.
   this man house-LOC enter-CONT:SG-HEGGWI
   ‘The man is entering the house every once in a while.’

(22) Pa’a poo-we huu-wünü-heggwi.
    water road-LOC flow-CONT:SG-HEGGWI
    ‘Sometimes water is running over the road.’

(23) Saa-wünü-heggwi.
    cook-CONT:SG-HEGGWI
    ‘I’m always cooking.’

→ Wünüheggwi also signals Continuative aspect, just as -yakwi alone does in ONP.

(24) a. Isu nana ika wünüüdü kwiba-wünü-heggwi.
    this man this tree hit-CONT:SG-HEGGWI
    ‘The man is hitting the tree steady.’

b. Isu nana sua’e-wünü-heggwi.
   this man laugh-CONT:SG-HEGGWI
   ‘The man laughs every once in a while.’
       ‘The man keeps laughing.’

c. Isu nana ika tühüdddü koti-wünü-heggwi.
   this man this deer shoot-CONT:SG-HEGGWI
   ‘The man keeps shooting the deer.’

d. Isu nana tübbi-we katü-wünü-heggwi.
   this man rock-LOC sit-CONT:SG-HEGGWI
   ‘The man keeps sitting on the rock.’
4.2 Event-internal functions

MLP has two suffixes that signal event-internal pluractionality: -zagati and -bodoti. Zagati indicates iterative action, in which the subevents are distributed in time. Bodoti, on the other hand, indicates iterative action, in which the subevents are (often) distributed in space.

4.2.1 Zagati

The suffix -zagati signals even-internal iterativity of the action described by the verb.

    this woman this man hold-PART:NOM kiss-ZAGATI
    ‘The woman is kissing (several times) the man while holding him.’

b. Kwiba-hu-zagati.
    hit-PNC-ZAGATI
    ‘(I) am just hitting (not steady) (it) now and then.’

c. Isu nana todota’ni-zagati.
    this man knock-ZAGATI
    ‘The man is knocking on the door.

d. Isu nana nobi-tu-zagati.
    this man house-VBZR:make-ZAGATI
    ‘The man works on the house now and then.’

e. Pa’a poo-we huu-zagati.
    water road-LOC flow-ZAGATI
    ‘The water runs over the road every once in a while.’

f. Hudziba wünüdü-gwe jozi-hu-zagati.
    bird tree-LOC fly-PNC-ZAGATI
    ‘The bird is flying about in the tree.’

I have found no suffix in any other Numic language that is cognate with -zagati, and it appears to be an innovated marker of pluractionality.4

4.2.2 Bodoti

Bodoti is similar to -zagati in that it can signal event-internal iterative action.

(26) a. Pauma-bodoti.
    rain-BODOTI
    ‘It rains and stops, rains and stops.’

b. Isu nana ika ‘drum’ kwiba-bodoti.
    this man this drum hit-BODOTI
    ‘The man hits the drum.’

c. Isu mogo’ni ika nana tonza-bodoti.
    this woman this man hit-BODOTI
    ‘The woman hits the man (over and over).’

4The form -zagati is also found in the Pyramid Lake (Nevada) dialect of NP. However, further investigation is needed to determine if it is also a marker of pluractionality. I thank Tim Thornes for drawing my attention to this fact.
In MLP -bodoti also functions as a marker of random motion on verbs of movement. This function must be the original function in MLP, as a cognate suffixes are found in other Western Numic languages (cf. ONP -bodo/-podo ‘back and forth’ (Thornes 2003:398; Liljeblad 1966:99); W. Mono -poto ‘back and forth’ (Lamb 1957:273); E. Mono -podo ‘back and forth’ (Norris 1986:148)).

(27)  a. Ünüts’i’i mia-bodoti.
       fast go-BODOTI
       ‘(He) is going around fast.’

     b. Huu-bodoti.
       flow-BODOTI
       ‘(It) is floating in the water.’

     c. Hudziba wünüü-gwe jozi-bodoti.
       bird tree-LOC fly-BODOTI
       ‘The bird is flying around in the tree.’

As a marker of pluractionality, -bodoti often retains its motion sense, and the meaning that arises is one of spatial iterativity.

(28)  a. Tüka-bodoti.
       eat-BODOTI
       ‘(He) is running and eating.’

     b. Isu nana ika tühüdda puni-bodoti.
       this man this deer see-BODOTI
       ‘The man goes over and looks at the deer every now and then.’
       ‘The man is scouting the deer.’

     c. Isu nana katü-bodoti.
       this man sit-BODOTI
       ‘The man goes around sitting.’
       (such as on a horse, merry-go-round, or ferris wheel)

     d. Isu nana ika wünüü kwiba-bodoti.
       this man this tree hit-BODOTI
       ‘The man goes back and hits the tree.’

     e. Isu nana su’a’e-bodoti.
       this man laugh-BODOTI
       ‘The man laughs every once in a while (going around in a car).’

     f. ? Isu dog süünüki-bodoti.
       this dog shiver-BODOTI
       ‘The dog went around shivering.’

→ Interestingly, -bodoti may to be incompatible with verbs of accomplishment such as nobitu ‘to build a house.’ However, I haven’t systematically tested this to determine if this is, in fact, an incompatibility between aspect types or some other restriction.

(29)   * Isu nana nobi-tu-bodoti.
       this man house-vbzr:make-BODOTI
       Intended: ‘The man goes about building the house.’

Cross-linguistically, it is not uncommon for motion suffixes (or verbs) to become markers of pluractionality. Bybee et al. (1994:163-4) suggest that motion verbs can be a source of iterative markers, citing the Alyawarra iterative, which also has the meaning of doing something while moving. Cusic (1981) also notes that pluractional markers often have secondary meanings involving motion.
4.3 Continuative functions

Along with -wunuheggwi, there are two other suffixes in MLP that mark Continuative aspect: -wunudui and -punni. Both of these suffixes have the meaning ‘to keep/continue X-ing; to be X-ing steady.’ At present, the subtle difference in meaning between these suffixes is not known.

4.3.1 Wunudui

The continuative suffix -wunudui is a compound suffix comprised of the continuous marker -wunu and a suffix of unknown origin -dui. It seems that -dui is dependent on the presence of the continuous marker, as forms without it are ungrammatical (e.g. *koti-dui ‘shoot-DUI’). As a matter of pure speculation, -dui might be an intensive marker acting on -wunu.

(30) a. Isu nana ika tühudda koti-wiü-dui.
   this man this deer      shoot-CONT:SG-DUI
   ‘The man keeps shooting the deer.’
   (Constantly; as with a machine gun)
b. Isu nana askwisü’e-wünü-dui.
   this man sneeze-CONT:SG-DUI
   ‘The man sneezed all the time.’
   ‘The man is sneezing all the time.’
c. Tammi habinobi-gwe tu’e-wünü-dui.
   We:INCL bedroom-LOC stay-CONT:SG-DUI
   ‘We stayed in the same room over and over again.’
   ‘We stay in the same room all the time.’
d. Isu nana tübbi-we katü-wünü-dui.
   this man rock-LOC sit-CONT:SG-DUI
   ‘The man is still sitting down on the rock.’
e. Isu nana ika wünüdü kwiba-wünü-dui.
   this man this tree      hit-CONT:SG-DUI
   ‘The man is hitting the tree steady.’

4.3.2 Punni

In MLP, -punni is also a marker of continuative aspect.

(31) a. Isu nana ika tühüdda puni-punni.
   this man this deer      see-PUNNI
   ‘The man keeps looking/staring at the deer constantly.’
b. Pauma-punni.
   rain-PUNNI
   ‘It’s still raining.’
c. Isu nana tübbi-we katü-punni.
   this man rock-LOC sit-PUNNI
   ‘The man keeps sitting down/resting on the rock.’
d. Isu nana nobi-tu-punni.
   this man house-VBZR:make-PUNNI
   ‘The man is still building the house.’
e. Isu nana nobi-gwe iga-pünni.
   this man  house-LOC enter-PÜNNI
   ‘The man goes in and out of the house.’
f. Pa’a poo-we huu-pünni.
   water road-LOC flow-PÜNNI
   ‘The water is just running over the road.’
g. Isu nana sua’e-pünni.
   this man  laugh-PÜNNI
   ‘The man keeps laughing.’

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5 The loss of reduplication

→ Reduplication is no longer a productive strategy for marking pluractionality in southwestern Western and Central Numic: Mono, MLP, Tümpisa Shoshone (Panamint), and Western Shoshoni.
→ It is maintained in ONP and Comanche (and Southern Numic).

Figure 1: Approximate area of the loss of reduplication in Western and Central Numic (adapted from Norris 1986)
There are two logical possibilities for how this situation came about:

- Possibility 1: Pluralactional reduplication had already been lost in Proto-Western and Central Numic, and thus is a shared genetic characteristic of the present day languages.

- Possibility 2: The loss of reduplication is an areal phenomenon either due to language contact or drift.

Possibility 1 seems very unlikely. For this to be the case, ONP and Comanche would have had to ‘reacquire’ reduplication either through language-internal development or through borrowing. Language-internal development would be a strange analysis, and borrowing, at least for ONP, doesn’t seem to be the case. Reduplicated forms in neighboring languages—Washo, Klamath, and Maidu—have different functions from those in ONP.

Possibility 2 is more likely.

- There are a number of innovated suffixes in MLP, indicating that a single form didn’t spread in usage overtaking reduplication.

- Even stronger evidence is that the pluralactional suffixes in MLP, Mono, Tümpisa Shoshone, and Western Shoshoni are not cognates.

MLP: heggun, zagi, bodo, wünüdui, pünni
6 Bibliography


Thornes, Timothy Jon. *A Northern Paiute grammar: with texts*. Ph.D. diss, Univ. of Oregon.