Pluractional Reduplication in Southern Hill Nisenan

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Acknowledgements

# Nisenan (nsz)

- Language family: Maiduan
- Range: California's Central Valley and the western Sierra Nevada foothills.
- 4 major dialects (Golla 2011):
    - Northern Hill
    - Central Hill
    - Southern Hill
    - Valley
- Language revitalization efforts at the Shingle Springs Rancheria focus primarily on *Valley Nisenan* and *Southern Hill Nisenan.*
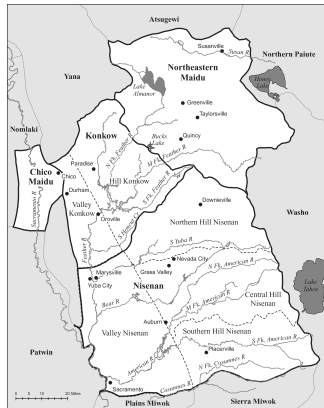
Map of Maiduan languages (Golla 2011:137).

Nisenan (nsz)

- Nisenan language revitalization efforts are primarily *document-based*.

- The only dialects with comprehensive documentation available are Central Hill and Southern Hill Nisenan.

- Language revitalization efforts at the Shingle Springs Rancheria rely heavily on the extant documentation for Southern Hill Nisenan.
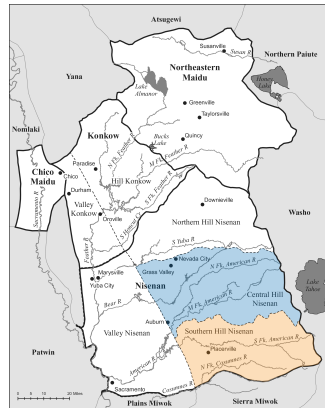
Map of Maiduan languages
(adapted from Golla 2011:137).

Southern Hill Nisenan documentation

By far the largest, richest language resource for Southern Hill Nisenan is a $\approx 21,000$-word corpus of oral narratives.

- Narrated by William Joseph (Bill Joe), native speaker of Southern Hill Nisenan and a respected story-teller.
- Elicited & transcribed by Hans J. Uldall, a Dutch phonetician.
- Collected in the early 1930's.
- Published in 1966.
- Covers a wide range of genres (traditional, autobiographical, etc.)

Very little linguistic analysis of this corpus has been done.

Purpose of this work

Bill Joe's narratives are one of the primary sources of multi-word utterances for the southern dialects of Nisenan.

An understanding his speech is vital for the revitalization efforts at the Shingle Springs Rancheria.

This work aims to support those efforts by describing the form and function of reduplication in Bill Joe's verbal morphology.

Data sources

All data is drawn from Bill Joe's oral narratives (Uldall & Shipley 1966).

J. Geary has done extensive segmentation and glossing of the original parallel Nisenan-English texts as part of the Shingle Springs Rancheria's revitalization efforts.

Nisenan Verbs

Nisenan verb stems occasionally consist of just one root (1).

More often verb stems consist of two roots (2)...

or a classifier / particle followed by root (3).

(1) *mey* 'give'

(2) *wəək-k'oy* 'go see' < *wəək* 'see' + *k'oy* 'go'.

(3) *ɨ-daw* 'come' < *ɨ* 'DIRECTIONAL' + *daw* 'come'.

Note: We present Nisenan language data using the Shingle Springs Rancheria Language Program's orthography.

Patterns of reduplication

Three patterns of reduplication surface in Bill Joe's verb stems:

- Partial reduplication in which the initial CV of the rightmost root is copied.
- Full reduplication of the rightmost root.
- Full reduplication of the whole stem.

(4) a. *mey* 'give' → *me-mey*
  b. *ɨ-daw* 'come' → *ɨ-da-daw*

(5) a. *sɨ-kʼəl* 'cut (in two)' → *sɨ-kʼəl-kʼəl*
  b. *mə-təw* 'curse' → *mə-təw-təw*

(6) a. *ya-pʼam* 'hit, slap' → *yapʼam-yapʼam*
  b. *hon-pin* 'breathe' → *honpin-honpin*

Reduplication in context

Context indicates that reduplication pluralizes verbal predicates:

(7) Initial CV of the rightmost root copied

a. *mey* 'give' → *me-mey*
Context: Women give out buns to all the visitors during Big Time.
→ The event denoted by 'give' occurs many times.

b. *ʔi-daw* 'come' → *ʔi-<u>da</u>-daw*
Context: Multiple groups of people come to Big Time independently over several days.
→ The event denoted by 'come' occurs several times.

Reduplication in context

Context indicates that reduplication pluralizes verbal predicates:

(8) Rightmost root copied

a. *sɨ-k'əl* 'cut in two, sever' → *sɨ-k'əl-k'əl*
Context: A man chops up deer meat to distribute to a group.
→ There is a plurality of 'severing' events.

b. *mə-təw* 'curse' → *mə-təw-təw*
Context: Two quarrelers curse at each other rapidly over and over
(translated as 'curse all up and down').

Reduplication in context

Context indicates that reduplication pluralizes verbal predicates:

(9) Full verb stem copied
   a. *ya-p'am* 'hit, slap' → *yap'am-yap'am*
   Context: A man hits another man repeatedly with a rock.
   → There is a plurality of 'hitting' events.

Hypothesis: Reduplication encodes *pluractionality*.

Pluralizing verbs

Languages differ in how they express plurality in the verbal domain.

In English, plurality in the verbal domain is implicit (10)...

...or expressed periphrastically (11).

(10) *He chopped the meat.*
→ World knowledge leads the listener to assume he chopped several times in quick succession rather than just once.

(11) *They exited the building one by one.*
→ 'One by one' let's us know several 'exiting' events occurred.

Other languages encode pluractionality morphologically, such as Yurok (Garrett 2001), Kaqchikel (Henderson 2012), and Piipaash (as we saw yesterday in Powell 2023).

Types of pluractionality

There are two categories of pluractionality cross-linguistically:

- Event-internal
- Event-external

Languages can encode none, one, or both types.

Event-internal pluractionals

Denote a large number of temporally or spatially contiguous repetitions of an event that all occur on the same occasion, e.g.

- chopping up meat into pieces (many 'cutting' events)
- beating something (many 'hitting' events)
- poking someone over and over to annoy them (many 'poking' events)

Event-internal pluractional morphemes occur with semelfactives and achievements (Henderson 2012:50) — rapid, punctual events that can occur or be performed in quick succession.

Event-external pluractionals

Denote some number of repetitions of an event (could be many or few repetitions), which need not be contiguous, e.g.

- the intermittent explosion of fireworks over the course of a few hours during a holiday
- the periodic visits from a friend who lives far away

Event-external pluractionals can also have habitual or distributive readings.

They are 'aspectually promiscuous', i.e. they can occur a wider variety of verb classes than can event-internal pluractionals (Henderson 2012:52).

See Henderson (2012) for a thorough description of pluractionality.

Goal of our analysis

Our goal is to determine if there are consistent semantic differences between the three patterns of reduplication in Bill Joe's speech.

- ʔɨ-_da_-daw
- sɨ-_k'əl_-k'əl
- _yap'am_-yap'am

A note on ambiguous forms

The reduplicated form of verbs whose rightmost root is CV are ambiguous between the two patterns of partial reduplication.

(12) *mɨ-'o* 'shoot' → *mɨ-'o-'o*

(13) *k'aa-be* 'feel with hand' → *k'aa-be-be*

We ignored these phonologically ambiguous forms for our analysis of the semantics of reduplicated verbs.

If consistent semantic differences between partial and full-reduplication of the rightmost root are found, we can then return to these ambiguous forms and use context to determine which underlying pattern Bill Joe was using.

Reduplication of initial CV of the rightmost root

Context indicates this pattern encodes **event-external pluractionality**.

- Conveys intermittent repetition of an event;
- there can be significant downtime between repetitions;
- it can have distributive readings;
- it can have habitual readings.

(14) *mey* 'give' → <u>*me*</u>-*mey*
E.g. women give out buns to visitors during Big Time.

(15) *wəək-k'oy* 'go see' → *wəək-<u>k'o</u>-k'oy*
E.g. two friends living far apart go see each other periodically throughout their lives.

Reduplication of initial CV of the rightmost root

Context indicates this pattern encodes **event-external pluractionality**.

- Conveys intermittent repetition of an event;
- there can be significant downtime between repetitions;
- it can have distributive readings;
- it can have habitual readings.

(16)   ɨ-*daw* 'come' → ɨ-<u>*da*</u>-*daw*

   → Used with a 3.PL subject to describe multiple groups of people coming independently to Big Time.

   → Used with 3.SG subject to describe a man who 'keeps coming' to another man's home so regularly that the unwilling host fears the visitor is pursuing one of the women of the household.

Reduplication of initial CV of the rightmost root

Given the many examples available and their semantic consistency, we feel confident concluding that this pattern of reduplication encodes event-external pluractionality.

Full reduplication of the rightmost root

Context indicates this pattern encodes **event-internal pluractionality**.

- Consistently conveys many contiguous repetitions of an event, all occurring on the same occasion.
- Restricted to semelfactive verbs, e.g. cut, poke, jerk.

(17) *sɨ-kʼəl* 'cut (in two), sever' → *sɨ-kʼəl-kʼəl*
      E.g. a man chops up deer meat to distribute to a group.

(18) *sɨt-tək* 'poke' → *sɨt-tək-tək*
      E.g. someone 'keeps on poking' a rattlesnake with a stick to make it angry.

(19) *wi-yək* 'jerk' → *wi-yək-yək*
      E.g. a man jerks repeatedly on a rope as a signal to his comrades.

(20) *mə-təw* 'curse' → *mə-təw-təw*
      E.g. two quarrelers curse at each other rapidly over and over.

Full reduplication of the rightmost root

The semantics of this pattern of reduplication are very consistent across the corpus, so we feel confident in concluding that this pattern encodes event-internal pluractionality.

Full reduplication of the whole stem

... is the least clear-cut pattern.

It *may* encode event-internal pluractionality — it does seem to convey multiple contiguous repetitions of the event denoted by the verb:

(21) *ya-p'am* 'hit, slap' → *yap'am-yap'am*
E.g. a man 'keeps beating' another man with a rock (on one occasion).

(22) *wi-'o* 'throw' → *wi'o-wi'o*
E.g. a man distributes money to his friends by throwing fifty cents at a time into each of their hats.

Full reduplication of the whole stem

But full reduplication appears to be licit with non-semelfactives
(e.g. breathe).

(23) *hon-pin* 'breathe, pant' → *honpin-honpin*
     E.g. a bear goes along panting heavily because he is angry.

Caveat: we know little about verb semantics in Southern Hill Nisenan;
English 'breathe' may not be a good equivalent for the semantics of *honpin*.

Full reduplication of the whole stem

There are also cases in which it may serve a more discursive function, conveying intensity as well as repetition:

- Bill Joe uses <u>sɨk'əl</u>-sɨk'əl and even <u>sɨk'əl</u>-<u>sɨk'əl</u>-sɨk'əl rather than sɨ-<u>k'əl</u>-k'əl 'chop up', as in (17) above, when narrating an occasion on which White men killed three Nisenan and cut up their bodies.

- Bill Joe uses wi-<u>yə</u>k-yək (< wiyək 'jerk') to describe jerking on a rope as a signal in example (19) above, but he uses <u>wiyə</u>k-wiyək when recounting a time he jerked the reins of a horse very hard in an attempt to knock off the rider.

Summary

Three patterns of reduplication surface in Bill Joe's derived verb stems:

- Reduplication of initial CV of the rightmost root, e.g. ʔɨ-*da*-*daw* = event-external pluractional

- Full reduplication of the rightmost root, e.g. sɨ-*k'əl*-*k'əl* = event-internal pluractional

- Full reduplication of the whole stem, e.g. *wi'o*-*wi'o* = Less clear, event-internal pluractional and/or discursive emphasis

Revisiting ambiguous forms

We can now determine from context which reduplicative morpheme Bill Joe
applied in cases where the phonological form of the verb is ambiguous:

(24) *mɨ-'o* 'shoot' → *mɨ-'o-'o*
      E.g. said of a location: there were hunters there shooting all the time.
      Event-external pluractional (initial CV only)

(25) *k'aa-be* 'feel with hand' → *k'aa-be-be*
      E.g. a man feels around on his face after being struck.
      Event-internal pluractional (whole second root)

Revitalizing the southern dialects of Nisenan

Shingle Springs Rancheria staff use Bill Joe's oral narratives as a means to teach the language (e.g. in language classes and in planned efforts to repackage some of his oral narratives as children's books).

- To do so effectively requires that we understand the nuances of Bill Joe's speech, including his use of reduplication.

Here we have established that Bill Joe systematically uses different reduplication patterns to encode event-external and event-internal pluractionality.

- This finding allows us to predict the form of unattested pluractional verbs in Southern Hill Nisenan for language teaching and revitalization purposes.

Revitalizing the southern dialects of Nisenan

This finding also allows us to infer the meanings of reduplicated forms that are not transparently glossed or translated in the documentation of Bill Joe and other southern speakers.

This is especially helpful:

- Documentation is scarce for other southern Nisenan speakers and primarily consists of word lists rather than discourse.
- Pluractional morphology is only interpretable *in context*.

This highlights the unique contribution these narratives can make to Nisenan revitalization efforts.

Revitalizing the southern dialects of Nisenan

Shingle Springs Rancheria staff are hoping to revitalize oral storytelling practices by creating and sharing their own narratives.

To do so effectively requires that we understand the full range of structures that one can employ to create morphologically rich, colorful, and engaging narratives.

Bill Joe's narratives are an amazing resource for this purpose!

Speaker-specific differences & revitalization outcomes

Our results highlight how speaker-specific differences may influence the outcomes of language documentation, in particular linguists' ability to document specific morpho-semantic constructions, which in turn influences the outcomes of document-based language revitalization.

- Henderson (2012:17) reports that pluractional morphemes/constructions are rare in naturally occurring discourse in Kaqchikel and English.
- Similarly, we have found very few examples of reduplicative pluractionals in the Central Hill Nisenan oral narratives published in Eatough (1999).
- Bill Joe's narratives contain numerous examples, reflecting his unique storytelling style.

Since documentation may be skewed towards individual speakers, it is important to remember how speaker-specific differences can affect the range of constructions that one encounters in documentation and thus affect document-based language revitalization efforts.

The end, thank you!

Summary of findings:

- Reduplication of initial CV of the rightmost root, e.g. ʔi-_da_-daw =
  event-external pluractional.

- Full reduplication of the rightmost root, e.g. si-_k'əl_-k'əl =
  event-internal pluractional.

- Full reduplication of the whole stem, e.g. _wi'o_-wi'o =
  Less clear, event-internal pluractional and/or discursive emphasis.

References

Eatough, Andrew. 1999. Central Hill Nisenan texts with grammatical sketch. Berkeley, CA: University of California Press.

Garrett, Andrew. 2001. Reduplication and infixation in Yurok: Morphology, semantics, and diachrony. International Journal of American Linguistics 67(3). 264-312.

Golla, Victor. 2011. California Indian languages. Berkeley, CA: University of California Press.

Henderson, Robert. 2012. Ways of pluralizing events. PhD dissertation, UC Santa Cruz.

Powell, John. 2023. Morphology of Piipaash (Yuman) Number, Part II. Paper presented at the Society for the Study of Indigenous Languages of the Americas Annual Winter Meeting.

Uldall, Hans Jørgen, and William Shipley. 1966. Nisenan texts and dictionary. Berkeley, CA: University of California Press.