On the classification of Wakashan lexical suffixes

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1. The problem

- Nuu-chah-nulth (Nootka) is a Southern Wakashan language spoken on Vancouver Island in British Columbia, Canada.
- Nuu-chah-nulth has over 100 locative lexical suffixes which are used to describe the location of an argument of a sentence (Rose 1981, Davidson 2002).

1.1 The proposal

- claim: locative suffixes in Nuu-chah-nulth are a sub-type of affixal predicate
- affixal predicates in Nuu-chah-nulth productively incorporate their direct objects (Yiu and Stonham 2000, Davis and Sawai 2001, Wojdak 2003)
- claim: the combinatory properties of lexical suffixes fall out from the argument structure of their predicate class (eg. unaccusative, transitive, location, locatum)
- claim: locative affixal predicates in Nuu-chah-nulth fall into two classes: locatum and location predicates (terminology is from Hale & Keyser 2002).

(4) a. **locatum predicate**

b. **location predicate**

<table>
<thead>
<tr>
<th>location</th>
<th>locatum</th>
<th>location</th>
</tr>
</thead>
<tbody>
<tr>
<td>či (w)</td>
<td>locatum</td>
<td>či</td>
</tr>
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</table>

- locatum predicates incorporate only their direct object **locatum (theme) argument**;
- location predicates incorporate only their direct object **location** argument.

2. Syntactic diagnostics for the argument structure of affixal predicates

- claim: the combinatory properties of affixal predicates fall out from the argument structure of their predicate class (eg. transitive, unaccusative, location, locatum)
- affixal predicates incorporate their direct object:

(5) a. **transitive affixal predicate**

b. **unaccusative affixal predicate**

c. **locatum affixal predicate**

d. **location affixal predicate**

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<thead>
<tr>
<th>agent</th>
<th>PRED</th>
<th>theme</th>
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<tr>
<th>location</th>
<th>locatum</th>
<th>PRED</th>
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Question: what determines the combinatory properties of locative suffixes in Nuu-chah-nulth?

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1 I would like to thank my Nuu-chah-nulth consultants for their patience and dedication in sharing their language with me: Mary Jane Dick, Katherine Fraser, Christine Nicolaye, Barbara Touchie, Sarah Webster, Barney Williams Jr., Barney Williams Sr. All data presented here is from the Ahousaht dialect. Thanks also to Matt Davidson, Henry Davis, Rose-Marie Déchaine, Doug Pulleyblank, Olga Steriopolo, Martina Wiltchko and Florence Woo for their helpful comments & suggestions. Fieldwork on Nuu-chah-nulth was funded by a UBC Hampton Fund Research Grant in the Humanities and Social Sciences awarded to Henry Davis, and by Jacobs Research Fund grants (2001, 2002) awarded to the author. This research is supported by Killam & SSHRCC doctoral fellowships.
• in the absence of incorporation, all classes of affixal predicates attach to the expletive morpheme ₇₃

(6) a. ƛsiicumwikʷš
    ƛsiicum-wik[-L]-ʔš
    headband-on headaches-3.IND
    S/he’s wearing a headband.

b. ?uuwikš
   ƛsiicum
   ?u-wik[-L]-ʔš  ƛsiicum
   ʔ- on headaches-3.IND  headband
   S/he’s wearing a headband.

• diagnostics for the syntactic position of arguments in Nuu-chah-nulth
  (i) incorporation: only objects incorporate
  (ii) person inflection: matches subject
  (iii) possessor-raising: marking on predicate corresponds to subject
  (iv) word order: neutral VSO

2.1 Transitives
• structure for transitive affixal predicates:

(7) agent
      PRED
      theme

**diagnostic #1:** only objects incorporate

(8) a. maʔtɬʔ’amitrʔš
    maʔtɬʔ-aap-mlt-ʔš
    house-buy-PST-3.IND
    man
    A man bought a house.

b. * ʔaap-mlt-ʔš
    maʔtɬ
    man-buy-PST-3.IND
    house
    A man bought a house.

**diagnostic #2:** person inflection matches subject

(9) tanaʔuʔat-siš
    tana-ʔuʔat-siš
    money-find-1sg.IND
    I found money.

(10) ?uʔəʔčisʔš
    čisqmis
    ?u-łəć[+L]-siš čisqmis
    ʔ- cook-1sg.IND
    meat
    I am cooking meat.

**diagnostic #3:** possessor-raising corresponds to subject

• a possessive marker on the predicate refers to the subject, not to the object
  (Davidson 2002, Ravinski in prep).

(11) ʔuʔuʔaat-uk-siš
    čisqmis
    hupkuwtəʔ
    ʔ- find-POSS-1sg.IND
    dog
    ball
    My dog found the ball.

(unavailable interpretation: “The dog found my ball.”)

**diagnostic #4:** neutral VSO word order (Ahousaht dialect)

(12) ʔuʔuyukʔš
    Ken
    Kay
    ʔuʔ-yuk[+R]-3.IND
    Ken
    Kay
    ʔ- cry-for-3.IND
    Ken
    Kay
    Ken is crying for Kay.

(unavailable interpretation: Kay is crying for Ken)

2.2 Unaccusatives
• this class of predicates has a single argument:

(13) ʔuʔuʔatʔš
    paasitəʷ thəlth
    ʔuʔ-ʔatʔš
    paasitəʷ thəlth
    ʔ-arrive-3.IND-PL
    Americans
    The Americans arrived.

(14) a. ʔuʔuʔatʔš
    quəʔatsəʔš
    quəʔas-ʔatʔ-ʔš
    people-reside-3.IND
    man
    There’s people living there.

b. * quəʔas-ʔatʔ-ʔš
    maʔtɬ
    people-reside-3.IND
    house
    There’s people living in the house.

• to the best of my knowledge, there are no unergative affixal predicates in Nuu-chah-nulth. Unergative predicates in the language are non-affixal.

(15) nunaʔuk-wəʔas-ʔš
    čisqmis
    sing-FUT-3.IND
    man-DER
    The man is going to sing.

• structure for unaccusative affixal predicates

(16) PRED
    theme
diagnostic #1: only objects incorporate

- the argument of an unaccusative affixal predicate incorporates:

  (17)  paastinʔathniʔiš
         paastinʔath-ʔiiʔiš
         Americans-arrive-3.IND
         Americans came.

  (18)  ?ayasuʔwaʔiš
         ?aya-suuk-waʔiš
         many-die-3.QUOT
         Lots died.

diagnostic #2: person inflection (inapplicable)

- this test fails to distinguish unergative and unaccusative predicates. The single argument of both types determines subject inflection.

diagnostic #3: possessor-raising (inapplicable)

- this test does not distinguish between unergatives & unaccusatives. For both, the possessor-marking on the predicate refers to its sole argument (Ravinski in prep).

(19) unaccusative predicates (affixal & non-affixal)

a.  hininʔ-ak-it-ʔiš        naʔišku
    arrive-POSS-PST-1sg.IND  aunt
    My aunt arrived.  (non-affixal predicate)

b. ʔa-ʔiiʔ-ak-it-ʔiš        naʔišku
    ʔarrive-POSS-PST-1sg.IND  aunt
    My aunt arrived.  (affixal predicate)

(20) unergative predicate (non-affixal)

ʔiʔʔiʔakitsiš        naʔišku
ʔiʔ-ʔ[ʔ]-ak-miʔ-ʔiš        naʔišku
cry-CONT-POSS-PS-1sg.IND  aunt
My aunt was crying.  (non-affixal predicate)

2.3 Locatum and location predicates

- structure for the two classes of locative predicates:

(21) a. locatum affixal predicate           b. location affixal predicate

    location       PRED       locatum       PRED       location

diagnostic #1: only objects incorporate

- only the direct object locatum of the locatum predicate may incorporate:

  (22)  a.  haʔum-ʔu-ʔiš        qaʔuuc-ʔiš
        food-in-container-3.IND  basket-DET
        There’s food in the burden basket.

b.  *  qaʔuuc-ʔu-ʔiš        haʔum
        basket-in-container-3.IND  food

(23)  a.  ʔiʔočum-ʔuxs-ʔiš        ʔuucma
        straw.hat-on_head-3.IND  woman
        A woman is wearing a straw hat.

b.  *  ʔuucma-ʔuxs-ʔiš        ʔiʔočum
        woman-on_head-3.IND  straw.hat

diagnostic #2: person inflection matches subject

- in locatum predicates, the person inflection corresponds to the location:

  (25)  a. ʔa-ʔeitum-ʔiš        ʔačkaʔs
        ʔeitum-1sg.IND        1sg.IND
        I’ve got a comb on the side of my head.

b.  ʔiʔočum-ʔuxs-ʔiš        ʔuucma
    straw.hat-on_head-1sg.IND  woman
    I’m wearing a straw hat.

- for location predicates, the person inflection corresponds to the locatum

  (26)  a. ʔaʔu-ʔeituk-ʔiš        ʔačkiʔs
        ʔeituk-1sg.IND        1sg.IND
        I’m going to Tofino.

b.  čapx-ʔaas-it-ʔiš        hint-ʔiš        ʔapři-ʔaq
    man-beside-PST-1sg.IND  come-PERF  friendly-very
    I was sitting beside a man coming this way. He was very friendly.
diagnostic #3: possessor-raising corresponds to subject

- with locatum predicates, the possessor marker on the predicate can only refer to the location, not to the locatum.

(27) ʔu-ʔaʔ-uk-ʔiš čimti Lucy čupčupšum̥- \(\text{on.surface-POSS-3.IND}\) name Lucy sweater
There is a name on Lucy’s sweater.
(consultant’s comment: “could be ANY name, like a team name”)

= ✓ A name is on Lucy’s sweater. (possessive = location)
= * Lucy’s name is on a sweater. (possessive = locatum)

(28) * ʔu-qunm-uk-ʔiš sáčkałs Lucy
\(\text{on.head-POSS-1sg.IND}\) comb Lucy
(cannot mean “Lucy has my comb(s) in her hair.” (possessive= locatum))

- with location predicates, the possessor marker on the predicate can only refer to the locatum, not to the location.

(29) qaʔuuc-čiʔak-ʔiš yáŋa basket-\(\text{in-POSS-1sg.IND}\) salal.berries
= ✓ my salal berries are in the burden basket. (possessive= locatum)
= * the salal berries are in my burden basket (possessive = location)

(30) ʔu-qančak-uk-ʔiš qaʔuuc makuvias
\(\text{go.to-POSS-3.IND}\) grandchild store
My grandchild is heading towards the store. (possessive= locatum)
= * Grandchild is heading towards my store. (possessive= location)

diagnostic #4: neutral VSO word order (Ahousaht dialect)

- in ambiguous contexts, speakers prefer fixed VSO word order.

- for locatum predicates, we predict default predicate-location-locatum word order.

(31) ʔu-qañk̥-ʔiš čámāq̥q̥ak̥-ʔi čiixsac
\(\text{inside-3}\) oven-DET frying.pan
There’s a frying pan in the oven.
(consultant’s comment: “you have to use this order, or else it sounds like the oven is in the frying pan”)

- for location predicates, word order is standardly predicate-locatum-location.

(32) ʔu-či-ʔiš yáŋa-ʔi qaʔuuc
\(\text{in-3.IND}\) salal.berries-DET burden.basket
The salal berries are in a burden basket.

2.4 Summary

- affixal predicates in Nuu-chah-nulth fall into four classes:
  - (i) transitive
  - (ii) unaccusative
  - (iii) locatum
  - (iv) location

- affixal predicates suffix to (incorporate) their direct object

3. An alternative proposal: governing or restrictive lexical suffixes

Question: what determines the combinatory properties of locative suffixes in Nuu-chah-nulth?

- the traditional means of classifying lexical suffixes in Wakashan is to divide them into two main classes (Sapir and Swadesh 1939, Swadesh 1939, Rose 1981, Nakayama 1997, Davidson 2002):
  1. a root-like class of “governing” suffixes
  2. a modificational class of “restrictive” suffixes

- under the governing/restrictive analysis, locative suffixes belong to different classes (Davidson 2002: 181):
  - (a) “location” suffixes like -či”in” are “governing” (root-like)
  - (b) “locatum” suffixes like -čaq̥ in a container” are “restrictive” (modifiers)

3.1 Problem #1: Similar syntactic distributions as incorporating predicates

- Boas (1947: 237) rejected the governing/restrictive distinction in Wakashan, noting that it is not "based on internal evidence, but rather on our European classifications" (see Nakayama 1997 and Davidson 2002 for discussion).

- in Wojdak (2003b), I present evidence for syntactic similarities between “governing” and “restrictive” suffixes:
  - (i) subject-object asymmetry in incorporation (cf. §2.1, 2.3)
  - (ii) suffixation to the expletive ƛ̥ in the absence of incorporation
  - (iii) suffixation to a wh-pronoun & relative pronoun objects
in the absence of incorporation, both "governing" and "restrictive" suffixes attach to the morpheme ʔuː, which I analyse as an expletive (Wojdak 2003a)

(33) a. mahʔiʔamitʔiš čąkup ("governing" suffix)
    mahʔiʔ-ʔaap-ʔiš čąkup
    house-buy-PST-3.IND man
    A man bought a house.

b. ?uʔamitʔiš čąkup mahʔiʔ
    ?uʔ-ʔaap-ʔiš čąkup mahʔiʔ
    Ø-buy-PST-3.IND man house
    A man bought a house.

(34) a. haʔumcuʔiš niisyʔakʔi ("restrictive" suffix)
    haʔum-ʔuʔ-ʔiš niisyʔakʔi
    food-in.container-3.IND pot-DET
    There's food in the pot.

b. ?uʔ-čuuʔ-ʔiš niisyʔakʔi haʔum
    Ø-in.container-3.IND pot-DET food
    There's food in the pot.

both "governing" and "restrictive" suffixes attach to wh- & relative- pronoun objects

(35) a. ?aʔiʔamith Louis
    ?aʔiʔ-ʔaap-ʔi Louis
    what-buy-PST-3.INT Louis
    What did Louis buy? ("governing" suffix)

b. ?aʔiʔčuʔ ?aʔiʔ niisyʔakʔi
    ?aʔiʔ-čuʔ-ʔiʔ ?aʔiʔ niisyʔakʔi
    what-in.container-3.Q DEIC pot-DET
    What's in this pot? ("restrictive" suffix)

(36) a. haʔumsiʔaqsiʔi typography "sing" Mary
    haʔumsiʔaq-ak-ʔi typography "sing" Mary
    older.sibling-POSS-1sg.IND DEIC man-DET REL-wait.for-3.REL Mary
    The man who Mary is waiting for is my older brother. ("governing" suffix)

b. ?uʔčuʔakaʔi kəʔtəʔqwaʔaqsiʔi typography "sing" Mary
    ?uʔčuʔakaʔi kəʔtəʔqwaʔaqsiʔi typography "sing" Mary
    good-result-POSS-3.IND straw hat REL-on.head-3.REL DEIC woman-DET
    The hat that lady is wearing is very nice. ("restrictive" suffix)

3.2 Problem #2: Non-restrictive uses of "restrictive" suffixes

- restrictive suffixes are proposed to have a less influential effect on the stem, neither determining its core semantics (Rose 1981) nor its syntactic class (Davidson 2002).
- it is claimed that "restrictive" affixal predicates do "not determine the class of the resultant word" (Davidson 2002). This claim corresponds to the following interpretational possibilities:

(37) qaʔuuc-ʔu pack.basket-in.container
    = 'pack-basket (that is) in a container'
    * 'in a pack-basket’  (Tseshaht dialect: Davidson 2002: 181 ex. 275b)

- problem: my fieldwork on Nuu-chah-nulth has shown the opposite pattern:

(38) wíkum ?uʔiʔi haʔumcuʔi
    wík-ʔum ?uʔiʔi haʔum-čuuʔ-ʔi
    NEG-2sg.IMP(F) give food-in.container-DET
    Don't give her the one with food in it!
    (does not mean "Don't give her the food that's in a container.")

- this interpretation is unexpected under the governing/restrictive hypothesis.²

3.3 Problem #3: Absence of unergative suffixes

- unergative suffixes appear to be systematically absent in Nuu-chah-nulth
- all unergative predicates in Nuu-chah-nulth are non-affixal
- the governing/restrictive hypothesis does not predict the absence of unergative suffixes
- the absence of unergative suffixes follows from an analysis where Nuu-chah-nulth lexical suffixes are predicates which incorporate their objects: unergatives predicates would not have an object they could incorporate.

(39) argument structure for the non-affixal predicate nunuuk "sing"

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agent               PRED
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² The interpretation follows from the predicate/argument flexibility which characterizes Wakashan languages. Any predicate can be converted to an argument in Nuu-chah-nulth via the addition of the enclitic determiner ʔaʔ (Wojdak 2001).
3.4 Problem #4: Lack of uniformity within the "restrictive" class

- "restrictive" suffixes in Nuu-chah-nulth include (Davidson 2002):
  - a large class of "spatial disposition" suffixes
    - (a) path-orientation, eg. ʔəf "attached on"
    - (b) locative
      - locale type, eg. ʔəs "on the ground"
      - site type, eg. ʔiyam "in a container"
  - a small miscellaneous class
    - (a) degree suffixes, eg. ʔəq "very"
    - (b) plural suffixes, eg. ʔədub, ʔə "plural"
- claim: functional elements & lexical predicates do not form a unified class
- functional "restrictive" suffixes do not have the distribution of predicates:

  (40) a. * ʔu-minh-ʔəs quəς
      Ø-PL-3.IND person
  
  b. * ʔu-qaq-ʔəs qəʔaʔə
      Ø-very-3.IND beautiful

- claim: even the predicative "restrictive" suffixes do not form a unified class
- predicates listed as "restrictive" (Sapir and Swadesh 1939, Rose 1981, Davidson 2002) fall into 3 classes:
  - (i) locatum predicates, eg. ʔəw "in a container" (example 20)
  - (ii) unaccusative, eg. ʔədub "reside" (example 14)
  - (iii) transitive, eg. ʔə̃uu "cook" (example 9)

<table>
<thead>
<tr>
<th></th>
<th>Transitive</th>
<th>Unaccusative</th>
<th>Locatum</th>
<th>Location</th>
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4. Conclusion

**Question:** what determines the combinatory properties of locative suffixes in Nuu-chah-nulth?

**Summary:**
- locative suffixes in Nuu-chah-nulth are affixal predicates which incorporate their objects
- locative suffixes show two different argument structures:
  - (1) locatum predicates which take a locatum argument as object
  - (2) location predicates which take a location argument as object
- the traditional governing/restriction distinction for Wakashan languages does not adequately treat the predicative properties of locative suffixes.

**Typological implications**
- lexical suffixation has long been treated as an areal feature of languages of the Pacific Northwest (see, for example, Sapir 1911, Swadesh 1948, Gerds and Hinkson 1996, Kinkade 1998, Mithun 1999).
- like Wakashan languages, Salish languages have "locative" lexical suffixes that denote body parts.

(41) ni ən kəc-cas
AUX 1sub. burn-hand
I burned my hand. (Halcomel Salish: Gerds 1998: 95 ex. 41)

- it has been proposed that Salish lexical suffixes derive historically from nouns (Carlson 1989) and have undergone differing degrees of grammaticalisation as modifiers (Gerds and Hinkson 1998).
- Gerds (1998: 97) notes that there is support for the notion that "lexical suffixes can be regarded as incorporated nouns that have lost their status as free-standing nominals".
- In Wakashan, however, the inverse is true: lexical suffixes pattern productively as incorporating predicates in Nuu-chah-nulth.
- lexical suffixes in Wakashan are only superficially similar to their counterparts in Salishan languages.

3.4 Conclusion

- the governing/restrictive analysis is unsuccessful in capturing the predicative properties of Nuu-chah-nulth suffixes.
- the governing/ restrictive hypothesis should be abandoned for Wakashan languages (see also Boas 1947)

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3 This is true for the Ahousaht dialect. I have yet to test the other dialects.
References


Wojdak, Rachel. in prep. Complex predicates and restructuring in Nuu-chah-nulth. Ms., UBC.


APPENDIX: Complex predicates in Nuu-chah-nulth

- in addition to their use as main predicates in a clause, locatum predicates also participate in the formation of complex predicates (Wojdak in prep):

(42) a. čik-aksur-it-ʔiš Ken yuč*iqšak
punch--on.mouth-PST-3.IND Ken you.sibling-POS
Ken punched his younger sibling on the mouth.

b. qaq-atuR[+R]-mit-ʔiš neen die--dream.of-PST-1sg.IND grandparent
I dreamt that grandparent passed away.

(43) a. waʔaμaʔaʔiš Kay mituuni
waʔaʔa-mabhaʔ-ʔiš Kay mituuni
go.to--want.to-3.IND Kay Victoria
Kay wants to go to Victoria.

b. qaʔaʔtuRhiʔiš neen
qaʔ-atuR[+R]-mit-ʔiš neen
die--dream.of-PST-1sg.IND grandparent
I dreamt that grandparent passed away.

c. wík-ʔuʌk-Şuκ-ʔiš marii
NEG-pay--talk.about-3.IND older.sibling
Your older sibling is talking about getting paid nothing.

- the complex predicates in (43) can be analysed as cases of restructuring (a.k.a. reanalysis, clause union; see Wurmbrand 2001). Restructuring predicates in Nuu-chah-nulth take an infinitival complement, and incorporate the embedded predicate (Wojdak in prep).

(43) a.

1sg

"learn"

"die"

qab

suva

"you"

b. qaʔ-ʔiš čik-it-ʔiš suva
die--learn-PERF-PST-1sg.IND you
I heard that it was you who died.

- for future research: is it possible to have a unified analysis of complex predicates where both the locative (42) and non-locative (43) cases are analysed as cases of restructuring? (Wojdak in prep)

- an alternative is treating the locative cases as compounds.