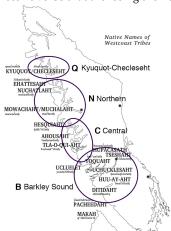
The Development of Adpositions in Nuuchahnulth

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1 Introduction: Word Categories and Adpositions

Nuuchahnulth (iso 639-3 nuk) has a long history of research into its syntactic categories, due to its syntactic flexibility. I argue for an incipient category of adpositions, derived from historic verbs that are losing their status as predicates.



Historical word category analyses:

- · Swadesh (1938): No word classes in the language at all
- · Jacobsen (1979): Verb and noun distinctions (adjectives implied)
- · Rose (1981): Verb, noun, adjective, and adverb (semantic categorization)
- Wojdak (2001): More evidence for verb and noun distinction
- · Nakayama (2001): Attempts to address full class system, rejects adpositions (only verbs, nouns, adjectives)

The above map shows the Nuucahhnulth dialects across Vancouver Island. I give data from 5 speakers and all dialect regions except Kyuquot-Checleseht (Appendix A).

My argument for a class of adpositions will show the innovation of a new lexical category and how grammaticalization functions in a language with great syntactic class flexibility. I look at two areas of the grammar where a category of adpositions is particularly likely:

- · a class of verb-like words called "prepositional predicates" (§3.1)
- the word ?uyi 'at the time of' (§3.2)

First I will give some background on syntactic predication, predicate coordination, and serial verbs ($\S 2$) in order to make sense of the data on adpositions.

2 Background

2.1 Syntactic predicates in Nuuchahnulth

Verbs (1), adjectives (2), and nouns (3) can all be predicates. "Predicate" here means the syntactic unit which takes a subject and/or complements in the syntax.

(1) naacsiičiλ?iš hałmiiḥa quu?as. naacs-i·čiλ=?i·š hałmiiḥa quu?as see-IN=STRG.3SG drowning person 'He sees a drowning person.'

- qwaċał?iš ḥaakwaañ?i. qwaċał=?irš ḥaakwaañ=?ir beautiful=strg.3 young.girl=Art 'The young girl is beautiful.'
- g) pisatuwiłma ?aanaḥi. pisatuwił=ma· ?aanaḥi gym=REAL.3 only 'It's only a gym.'

2.2 Linker Constructions

Predicates of any type may be coordinated with the "predicate linker" -(q)h. This includes verbs (4), nouns (5), and adjectives (6). It does not include complementizers, which may never be a predicate (7, 8).

- (4) ciqinkanna nihaaqh.
 ciq-(č)ink=!an- na- nih-ar-(q)h
 speak-with=now=neut.ipl drive-dr-link
 'We talked while driving.'
- (5) łuucmaqḥitqaċaʔaał taakšiλ piišmita.
 łuucma-(q)ḥ=(m)it=qaċa-ʔaał taakšiλ piišmit-arwoman-LINK=PST=INFR=HABIT always gossip-dr
 'There was a woman who kept gossiping.'
- (6) tikwaamitwa?iš čims ḥaa?akqḥ.
 tikw-a·=mit=wa·?iš čims ḥaa?ak-(q)ḥ
 dig-DR=PST=HRSY.3 bear strong-LINK
 'The bear was digging and strong.'
- (7) ?uušcuk?isit ?ani ?unaḥ?isitqa.
 ?uušcuk=?is=(m)it ?ani ?unaḥ=?is=(m)it=qa¹
 hard=dimin=pst comp small=dimin=pst=sub
 'It's a little hard (to do) because it's small.'
- *?uušcuk?isit ?aniqḥ ?unaḥ?isitqa.
 ?uušcuk=?is=(m)it ?ani-(q)ḥ ?unaḥ=?is=(m)it=qa¹
 hard=dimin=pst comp-link small=dimin=pst=sub
 Intended: 'It's a little hard (to do) because it's small.'

The linker must link one predicate to another, and may not link a predicate to a non-predicate like an adverb (9).

1

(9) *λupkaaqḥs qii.

λ̃upk-a·-(q)ḥ=s qii awake-dr-link=strg.isg long.time

Intended: 'I lay awake for a long time.'

2.3 Serial Verb Constructions

Nuuchahnulth allows verbs to be coordinated through juxtaposition without any overt coordinator. I call all such constructions serial verb constructions (SVCs). Different types of constructions have different syntactic requirements, but a few properties span multiple types:

- (i) two verbs can be coordinated in various orderings
- (ii) one VP may intervene between the other verb and its complement (10)
- (iii) cross-serial dependencies are not allowed (11, 12)
- (10) ?uuctiihs \(\) \(\) \(\) Queens Cove.

Puuctiiḥ=s hiḥ-a Queens Cove go.to.dr=Strg.1sg drive-ct Queens Cove 'I am driving to Queens Cove.'

(11) ?uuḥwał?iš kwaacsacum \(\)\(\)\(\)\(\)\(\)\amazasacum?i.

?u-L.ḥwal=?i'š \(\text{\tin\text{\t

3 Evidence for Adpositives

3.1 Prepositional Predicates

Woo (2007) defines a class of "prepositional predicates," words with preposition-like meanings but non-obvious syntactic structure. They have a few shared properties:

- They introduce core arguments (?uḥ for subjects, ?uukwit and ?uḥta for non-subjects) or peripheral arguments (?ukwink 'with', ?uuḥwat 'using', etc) adjacent to a main verb.
- Except for $\partial u \dot{h}$, all are polymorphemic: a suffix which attaches to the first word of their direct object.
- · In the citation form, they attach to the semantically empty bound root ∂u -.
- $\cdot\,$ In the proper context all may be used without the main verb.

Woo categorizes core argument prepositional predicates as ν within the Minimalist framework, and the others as full verbs which adjoin to another verb (SVCs by my definition). Evidence from the predicate linker supports the analysis of ∂uuk^wit and $\partial uhta$ as belonging to a functional, non-predicative category (13–16).

- (13) halilint?iš ?iiḥatis?atḥ ?uukwil ċišaa?atḥ čiicstalwitas.
 halili=int=?irš ?iiḥatis?atḥ ?u-L.(č)il ċišaa?atḥ čiicstal-witas
 ask=pst=strg.3 Ehattisaht do.to Tseshaht do.tug.of.war-going.to
 'The Ehattesahts invited the Tseshahts to play tug of war.'
- (14) *hałiiłint?iš ?iiḥatis?atḥ ?uukwiłḥ ċišaa?atḥ čiicstałwitas.
 hałiił=int=?i·š ?iiḥatis?atḥ ?u-L.(č)ił-(q)ḥ ċišaa?atḥ čiicstał-witas
 ask=pst=strg.3 Ehattisaht DO.TO-LINK Tseshaht do.tug.of.war-going.to
 Intended: 'The Ehattesahts invited the Tseshahts to play tug of war.'
- (15) ?uḥta Jane ?uʔukwił Alexandra yuukwiiqsu. ?uḥta Jane ?uʔukwił Alexandra yuukwiiqsu only.do.to Jane call Alexandra younger.sibling 'Only Jane can call Alexandra youngest.'
- (16) *7uḥtaqḥ Jane ?uʔukwił Alexandra yuukwiiqsu.
 ?uḥta-(q)ḥ Jane ?uʔukwił Alexandra yuukwiiqsu
 only.DO.TO-LINK Jane call Alexandra younger.sibling
 Intended: 'Only Jane can call Alexandra youngest.'

Woo's analysis of the peripheral prepositional predicates as all verbs is complicated by evidence from the predicate linker. For some of these words—?uuḥwat 'using' (17 18) and ?u-ucḥin 'for, on the behalf of' (19 20)—all speakers I worked with accepted examples both with and without linkers attached.

- (17) wikcukwap?ic \(\text{\hiis\hiisa} \) ?uuḥwał \(\text{\hiis\hiischuy\hak} \) wikcuk=!ap=?ic \(\text{\hiis-LR2L.a} \) ?u-L.ḥwał \(\text{\hiis\hiuu\hak} \) \(\text{\hiis\hiuu\hak} \) acomputer \(\text{`It's easy for you to write using a computer.'} \)
- 18) wikcukwap?ic žiisžiisa ?uuḥwaṭḥ žiisċuuyak.
 wikcuk=!ap=?ic žis-LR2L.a ?u-L.ḥwaṭ-(q)ḥ žiisċuuyak
 easy=CAUS=STRG.2SG write-RP x-using-LINK computer
 'It's easy for you to write using a computer.'
- 19) ?uucḥins mamuuk ?uušḥýumsukqs.
 ?u-L.cḥin=s mamuuk ?uuš-ḥýums=uk=qs
 X-BENEF=STRG.1SG work some-related.or.friend=POSS=DEFN.1SG
 'I'm working for my friend.'

(20) ?uucḥinqḥ?aমs mamuuk ?uušḥýumsukqs.

 ?u-L.cḥin-(q)ḥ=!ahs
 mamuuk
 ?uuš-ḥyums=uk=qs

 BENEF-LINK=NOW=STRG.1SG
 work
 some-related.or.friend=POSS=DEFN.1SG

 'I'm working for my friend.'
 'Tm working for my friend.'

For *?uupaat* 'with', all speakers recognized it with the linker attached (21, 22), and one of my consultants, Fidelia Haiyupis (northern dialect) only recognized the word with the linker attached.

(21) ?uupaałwitasaḥ yaqsči Sinukqas kaniswitas.

?u-L.paał-witas=(m)a·ḥ yaqsčiSin=uk=qa·s kanis-witas x-with-going.to=real.isg friend=poss=defn.isg camp-going.to 'Tm going to go camping with my friends.'

(22) Xiiḥpanačwitasaḥ ?uupaałḥ yaqsčaSinqas.

xiḥ-L.panač-witas=(m)a·ḥ?u-L.paał-(q)ḥyaqsčaSin=qa·sdrive-drift.around-going.to=real.isgx-with-linkfriend=defn.isg'I'm going to go driving around with my friends.'

For the word <code>?ukwink</code>, another word meaning 'with', my northern and central dialect speakers recognized the linker as a possible attachment (23), while my Barkley sound consultants Bob Mundy and Marjorie Touchie rejected it (24, 25).

- (23) ?ukwinkḥints ħiisħiisa?apt ?ucačiħ yuulu?il?atḥ.
- (24) ?ukwinkwitasaḥ yaqsčasin?akqas mituuni wałaak.

(25) *?ukwinkḥwitasaḥ yaqsčasin?akqas mituuni wałaak.

 $\begin{array}{lll} \text{?u-(\red{c})ink-(q)$$\rlap/$h-\'witas=(m)a'\rlap/$h} & yaq-s\red{c}aSin=?ak=qa's & mituuni & wałaak x-with-link-going.to=real.isg & who-be.friend=poss=defn.isg & Victoria & go & Intended: 'I'm going to go with my friend to Victoria.' & go & possible for the pos$

?uu?atup, another word meaning 'for, on the behalf of', is also a borderline case. As with ?uk wink, my Barkley Sound consultants did not accept it with the linker (27, 28) while others did (26).

(26) ?akuulis suwa ḥiyaḥi capac ?uu?atupḥ ḥaakwaaluk?itk.

?akuuli=ssuwa hiyahi capac?u-L.?atup-(q)h haakwaa\u00e4=uk=?itk.loan=strg.isg2sgD3canoebenef-linkdaughter=poss=defn.2sg'I'm loaning you that canoe for your daughter.'

(27) huyaałaḥ ʔuuʔatup taatṅaʔis.
huyaał=(m)a·ḥ ʔu-L.ʔatup taatṅa=ʔis.
dance=REAL.ISG X-BENEF child.PL=DIM
'I dance for the children.'

(28) *huyaałaḥ ʔuuʔatupḥ taatńeʔis.

huyaał=(m)a·ḥ ?u-L.?atup-(q)ḥ taatna=?is. dance=real.isg x-benef-link child.pl=dim Intended: 'I dance for the children.'

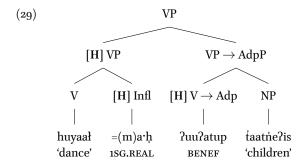
The properties of "prepositional predicates" are summarized in Table 1.

Table 1: Predicate status of adpositive-like words

		-
word	meaning	predicate status
?uuk ^w ił	obj marker	no
?uḥta	obj marker	no
?uuḥwał	using	yes
?uupaał	with	yes, relexicalized in N?
?uucḥin	benefactive	yes
?uk ^w ink	with	not in Barkley Sound
?uu?atup	benefactive	not in Barkley Sound

- $\boldsymbol{\cdot}$ There is considerable meaning redundancy among "prepositional predicates."
- · $\ \ ?uuk^wil$ and $\ ?uhta$ are definitively functional and non-predicative.
- $\cdot\,$ Other adposition-like words are on a cline from more to less predicate-like.
- The Barkley Sound dialect has reduced the predicativeness of words with meanings that still have a fully predicative alternate.

van Gelderen (2011) (p.187–191) cites evidence that serial verb constructions can be reanalyzed as coverbs, and speculates as to whether they can go on to become prepositions. $?uk^wink$ and ?uu?atup in the Barkley Sound dialect appear to have made this transition. The shift only requires a recategorization in the constituent structure, as schematized in (29), a tree for (26).



3.2 Puyi 'at the time of'

 ∂uyi looks polymorphemic, with the form of the empty root ∂u - at the beginning. However if it was polymorphemic at one time it has long since ceased to be analyzed this way.

- There is no contemporary *-yi which attaches to other roots, as seen with the "prepositional predicates."
- (Stonham 2005:p.346-347) cites historical forms -yi 'time' and -yiya 'at a time' which I have never seen used, but serve as potential sources for ?uyi.

All my consultants rejected ?uyi with a linker attached, except for the most conservative consultant, tupaat Julia Lucas, who gave the example (30), which was rejected by other elders. This marginality is reflected in the Nootka Texts (Sapir & Swadesh 1939, 1955), where ?uyiqh only appears once out of 16,655 lines and approximately 746 occurrences of ?uyi.

(30) ?uyiqḥwitass ?aðpit tin Sað hu?acačið.

?uyi-(q)ḥ-witas=s?aλ-pittin-ſaλhu?a-ca-čiλat.a.time-link-going.to=Strg.1sgtwo-timesbell.ringing-sound.ofback-go-perfT'll come back at two o'clock.'

In SVCs, one of the verbs can be separated from its object by the other verb (10). $\frac{\partial uyi}{\partial u}$ behaves the same way (31, 32). However, it can also can appear twice: once at the beginning of the clause and then again at the end, next to its object (33, 34). This type of sentence is extremely common in fluent speech.

(31) ?uyi?aaq\u00e4ni\u00e8 hi\u00e8imyił sucapit tin\u00ea\u00e8.

?uyi=?aaq\u00e1=ni\u00e3 hi\u00e3iml-\u00f3il su\u00e3a-\u00f3it tin-\u00e3a\u00e3 at.a.time=FUT=STRG.1PL gather.together-indoors five-times bell-sound.of 'We'll gather together at five o'clock.'

- (32) ?uyiwitasaḥ ?ucačiħ mituuni saantii.
 ?uyi-witas=(m)a·ḥ ?u-ca-čiħ mituuni saantii
 at.a.time-going.to=real.isg x-go-perf Victoria Sunday
 'I'm going to Victoria on Sunday.'
- (33) ?uyis?aał yaacuk ku?ał ?uyi.
 ?uyi=s=?aał yaacuk ku?ał ?uyi
 at.a.time=STRG.1SG=HABIT walk morning at.a.time
 'I walk in the morning.'
- (34) ?uyimtin?aała wałaak May ?uyi?ex.

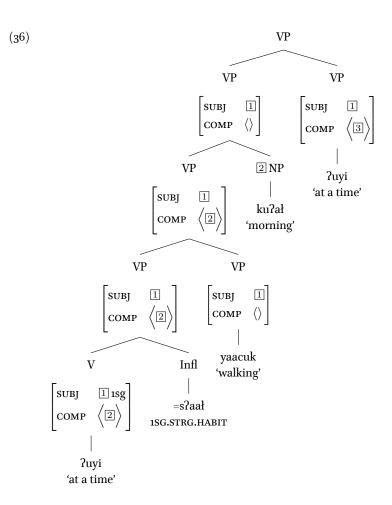
?uyi=imt=(m)in=?aaławałaakMay?uyi=!aħat.a.time=PST=REAL.1PL=HABITgoMayat.a.time=NOW'We would go in May.'

The only other word that doubles like this is the quotative *waa*, especially when the quote is long (35). I believe that something different is going on with *waa* (which regularly accepts the linker).

(35) waa?a\u00e1 nuviiqsu?i, ?u?umhiquusuu witkwaa?ap hiyahi nučii?i, siiwaasiiči?aq\u00e7\u00e8a\u00e3suuk haakwaa\u00e7ukqs waa?a\u00e8.

waa=!a\(\) nuwiiqsu=?i* ?u?umhi=quusuu witkwaa?ap hiiyahi nucii=?i* say=now father=art able.to=pssb.2pl destroy that mountain=art siiwaas-iici\(\) =!aq\(\) =!a\(\) =suuk haakwaa\(\) auk=qs waa=?a\(\) yours-incep=fut=now=neut.2sg young.girl=poss=defn.isg say=now 'Her father said, "If you are able to destroy that mountain, my daughter will become yours," he said.'

Nuuchahnulth permits free object-dropping, so one of the two *?uyi*s in sentences like (33, 34) could be analyzed as having a dropped object while the other one takes its typical complement. Such a tree would look like (36).



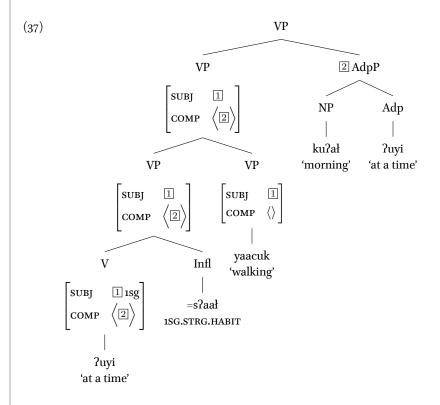
This analysis is unsatisfying for several reasons:

- (i) The second *?uyi* is not contributing anything semantically useful to the sentence and is not related to its conceptual object.
- (ii) The position of the second $\frac{\partial uyi}{\partial t}$ is completely coincidental: the SVC could easily be ordered another way.
- $(iii) \ \ This \ account \ can't \ explain \ why \ this \ structure \ doesn't \ occur \ with \ other \ SVCs.$
- (iv) It doesn't address the fact that *?uyi* is less predicative than other verbs, as seen from the predicate linker.

Another analysis is to propose two structures for the sentence, the one in (36), and another where the first ∂uyi has a dropped complement and the second one takes $ku\partial at$. Speakers have both structures in their mind at once. But this doesn't address problems (iii) or (iv).

The better analysis is that ∂uyi has disjoint lexical categorizations: as verb and as adposition. Adpositive ∂uyi takes a noun complement. Verbal ∂uyi takes a noun or an ∂uyi -headed

adpositional phrase. This preserves the correct constituency and semantics, and allows both *?uyi*s to be related to their notional object (37).



4 Conclusion

- · Some of the "prepositional predicates" and the word *?uyi* show evidence of category shift from verb to adposition.
- · Both are driven by reanalyses of serial verb constructions.
- The reanalysis can be seen through depredicatization, in that these reanalyzed words no longer accept the predicate linker.
- · One reanalysis simply depredicatizes a verb in a SVC.
- The other "doubles" the verb to force it to appear next to its argument, triggering a reanalysis of the doubled word.

These incipient adpositions may actually be unstable and part of larger grammaticalization processes in the language:

- The "prepositional predicates" are in constant flux. Woo lists some my consultants didn't know; I found others she doesn't mention. Nootka Texts contains more.
- *Auyi* may be on its way to second position inflection. The late Caroline Little, a literate speaker, alternated between writing it as a word and a suffix attached to the preceding element.

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A Speaker-example correlations

Fidelia Haiyupis, Northern dialect: (1, 10, 13, 14, 17, 18, 19, 20, 23).

Simon Lucas (traditional name yuulnaak), Northern dialect: (9)

Julia Lucas (traditional name tupaat), Central dialect: (2, 11, 12, 4, 5, 6, 15, 16, 26, 30, 31, 33, 35)

Bob Mundy, Barkley Sound dialect: (7, 8, 22, 32, 34)

Marjorie Touchie, Barkley Sound dialect: (3, 21)

Bob Mundy & Marjorie Touchie (joint session/joint judgment), Barkley Sound dialect: (24, 25, 27, 28)