A NOTE ON NITINAHT NUMERALS[1]

Thom Hess

Department of Linguistics
University of Victoria

With one exception the numerals from one to ten in the three Southern Wakashan languages reveal the same system of counting in the first decade.[2]

	Makah	**Nitinaht**	**Ahousaht (Nootka)**
1.	ċak"a·ʔak	ċawa·ʔk	ċawa·k
2.	ʔaƛ	ʔaƛ	ʔaƛa
3.	wi·	qakaċ	qacċa
4.	bu·	bu·	mu·
5.	šuč	šuč	suča
6.	či·χpa·ɬ	či·χpa·ɬ	ṅupu
7.	ʔaƛpu	ʔaƛpu·	ʔaƛpu
8.	ʔaƛasub	ʔaƛasib	ʔaƛak"aɬ
9.	ċak"a·sub	ċawa·sib	ċawa·k"aɬ
10.	ƛaχ"	ƛaχ"	ḥayu

This system, like many others throughout the world, "fills in" the numerals for six through nine by figuring from the units for five and ten. Eight and nine are formed by back-counting from ten; the suffixes -sub, -sib and -k"aɬ all mean *lacks* or *needs*. Thus eight is literally *two lacking* and nine is *one lacking*.

Like the eighth numeral, the words for seven are also built upon ʔaƛ(a) *two*; but the added element -pu must have been an old suffix meaning something like *left*, *more* or

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1 The language names used in this paper are those traditional in linguistic and anthropological descriptions of Southern Wakashan. However, it should be noted that in October, 1984 the Nuuchahnuulth Tribal Council meeting at Tin-wis near Tofino, British Columbia proclaimed that the language and people previously known as *Nitinaht* be called henceforth *Ditidaht*. This new name more closely approximates the name as pronounced in the language itself.

Similarly, the name *Nootka* is not liked by many bands grouped under that term and the preferred designation is *Nuuchahnuulth*. However, this new name, which is primarily cultural in reference, presents problems to linguists for it includes both those who speak Nitinaht (or Ditidaht) as well as those from Bamfield and northward. When speaking of languages, I see no alternative to *Nootka* unless it be *Northern Nuuchahnuulth*.

2 The Ahousaht data have been provided by Mr. Peter Webster and Mr. George Louie, both of whom grew up on Flores Island in British Columbia. The Nitinaht forms are primarily from Mr. John Thomas. The Makah information is also from Mr. Thomas and *The Makah Counting Workbook*. Mr. Thomas' home village is Clo-oose, British Columbia.

extra.[3] So ʔaƛpu·/ʔaƛpu is *two more (than five)* or *two left (after five)*. Similarly, Nootka has also ṅupu *six* derived from ṅu(p), a second morpheme also meaning *one*, and -pu. Thus, the Nootka count from ċawa·k *one* to suča *five* and then (6) *one left*, (7) *two left*, (8) *two lacking*, (9) *one lacking*, (10) *ten*.

Counting to ten in Nitinaht and Makah follows the same system as Nootka except for the sixth numeral, čiˑxpaˑɬ, which has no known etymological connection with the other number words. This numeral does not fit into the system and is most likely an innovation,[4] for it would be strange to count *two left* without a preceding *one left*.

Although all three sets of number words are very similar, the Nitinaht and Makah vocabularies appear to have shared a common evolution apart from Nootka. In the next decade, however, Nitinaht is the odd man out. Both Makah and Nootka count *ten and one, ten and two*, etc., while Nitinaht adds a special "teen" suffix[5] to the numeral stems of the first decade, much as English does.

	Makah	**Nitinaht**	**Ahousaht (Nootka)**
11.	ƛaxʷ ʔiš ċakʷaˑʔak[6]	ċawayuˑkʷ	ḥayu ʔuḥiš ċawaˑk
12.	ƛaxʷ ʔiš ʔaƛ	ʔaƛayuˑkʷ	ḥayu ʔuḥiš ʔaƛa
13.	ƛaxʷ ʔiš wiˑ	qakaċayuˑkʷ	ḥayu ʔuḥiš qacča
14.	ƛaxʷ ʔiš buˑ	buyuˑkʷ	ḥayu ʔuḥiš muˑ
15.	ƛaxʷ ʔiš šuč	šučayuˑkʷ	ḥayu ʔuḥiš suča
16.	ƛaxʷ ʔiš čiˑxpaˑɬ	čiˑxpaˑɬayuˑkʷ	ḥayu ʔuḥiš ṅupu
17.	ƛaxʷ ʔiš ʔaƛpu	ʔaƛpayuˑkʷ	ḥayu ʔuḥiš ʔaƛpu
18.	ƛaxʷ ʔiš ʔaƛasub	ʔaƛasibayuˑkʷ	ḥayu ʔuḥiš ʔaƛakʷaɬ
19.	ƛaxʷ ʔiš ċakʷaˑsub	ċawaˑsibayuˑkʷ	ḥayu ʔuḥiš ċawaˑkʷaɬ

In the decades from twenty onward, Nitinaht departs even more radically from the other two languages. Both the Makah and Nootka systems are vigesimal while the Nitinaht is decimal.

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[3] Compare the etymologies of English *eleven* and *twelve*.

[4] Unless ʔaƛpu·/ʔaƛpu is a borrowing in Nitinaht and Makah. Note that it was just this etymon which was borrowed into the Northern Wakashan Kwakiutl. There *seven* is ʔəƛəbu. (Words borrowed into kʷaḵʷala have voiceless stops and affricates replaced by voiced ones, e.g., bidə from *Peter*, ǧiwas from Island Comox qiwas *deer*.)

It is most interesting to note that Nitinaht and Makah are not alone among Northwest languages with this apparent anomalous numeral for *six*. Dell Hymes has called to my attention the similar phenomenon in Chinook. The word for *seven*, sínamôkct, is built upon the one for *two*, môkct. However, the word for *six* bears no apparent relation to ēxt *one*. (These Chinook forms are from Boas 1911.)

[5] There may have been a longer stem for *ten* in the proto language, perhaps *ɣayuukʷ which by apocope (and the well attested shift /ɣ/ to /ḥ/ resulted in the Nootka ḥayu and by the loss of the first syllable gave yu·kʷ in Nitinaht. Compare the identical case in nearby Salish:

Saanich	čə́səʔ	two
Lushootseed	sá liʔ	two
Cowichan	yəsé?lə	two

[6] ʔiš in Makah and ʔuḥʔiš in Nootka are both more or less equivalent to *and*.

	Makah	Nitinaht	Ahousaht (Nootka)
20.	caqi·c	caqi·c	caqeyc[7]
30.	qax"u·k"	wiyu·k"[8]	caqeyc ʔuḥʔiš ḥayu
40.	ʔaƛi·q	ʔaƛi·q	ʔaƛi·q
50.	ʔaƛi·q ʔiš ƛaχ"	šaša·čtaʔdk"	ʔaƛi·q ʔuḥʔiš ḥayu
60.	wi·yu·q	či·χpa·łi·q	qacċi·q
70.	wi·yu·q ʔiš ƛaχ"	ʔaƛpu·q	qacċi·q ʔuḥʔiš ḥayu
80.	bukyi·q	ʔaƛasibi·q	muyi·q
90.	bukyi·q ʔiš ƛaχ"	ċawa·sibi·q	muyi·q ʔuḥʔiš ḥayu
100.	šuči·q	ʔuba·qƛ	suči·q

The word for *forty* is the same in all three languages, viz., ʔaƛi·q, which can have only one literal meaning, *two score*. Furthermore, every other occurrence of -i·q in both Makah and Nootka clearly means *score*. Note the words meaning *sixty*, *eighty* and *one hundred*.

In Nitinaht, however, -i·q has come to mean *ten* (or *-ty* if you prefer) for the numerals from sixty through ninety. Six times -i·q is sixty, not 120, etc.[9] Also, the numerals for fifty and one hundred both seem to be relatively recent neologisms; each has a transparently literal significance; šaša·čtaʔdk" is *hand on one side*. It is composed of šaša·č, a reduplication of šača·s *appendage on one side* (such as an arm or wing), and the suffix -taʔdk" *on the hand*. The concept behind this number seems to refer to the fact that counting on the fingers by tens is completed on one hand. (Note, by the way, that there is no etymological connection between the stem šaša·č and the etymon for five, šuč/suča in spite of their similarity.)

The word for *hundred*, ʔuba·qƛ, derives from ʔuʔu·ʔbχ *just fits* and the suffix -(a)q(a)ƛ *inside*. In the old days, a storage basket held one hundred dried salmon, whence the name ʔuba·qƛ *just fits inside* to represent *hundred*.

However, although it is the hundred dried salmon inside the basket that gives rise to the name ʔuba·qƛ, the suffix -(a)q(a)ƛ does not mean *inside the basket* but rather it refers to the fact that the basket was kept *inside* a cupboard (or more precisely an inset shelf built into the house wall opposite the side door).

From this concept of a basket full of one hundred dried salmon to stand for *hundred*, the suffix -taʔk *container, basket full* has come to play a role in number terms above one hundred. Thus, ʔaƛχtaʔk ʔuba·qƛ *two baskets full just fit inside* is *two hundred*, qakaċχtaʔk ʔuba·qƛ *three baskets full just fit inside* is *three hundred*, etc.

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[7] This may be a misrecording for caqi·c.

[8] The root for *thirty* in Nitinaht is the same etymon as *three* in Makah and the suffix is elsewhere *-teen*, i.e., *ten*. Notice also that the Makah term for *thirty* involves the same suffix etymon; and the root might prove to be the same etymon as qakać/qacċa *three* in Nitinaht and Ahousaht (if /k/ > /x/). If so, then the root etyma for *three* and *thirty* in Makah neatly match *thirty* and *three* in Nitinaht.

[9] Observe the similarity between the Albanian and Nitinaht counting systems - especially the formation of the numeral *forty* in both:

Albanian:	10	1'20	3'10	2'20	5'10	6'10
Nitinaht:	10	20	3'10	2'20	50	6'10

(Menninger 1969: 69).

Two facts suggest that the Nitinaht decimal system is an innovation. First, the word for *forty* (unless it is a borrowing) shows that at one time -i·q meant *score* in Nitinaht as well as in the neighbouring languages. Secondly, if Nitinaht counting by tens represents the older system, then one must posit two independent vigesimal innovations, one for Makah which lies to the south of Nitinaht and one for Nootka which lies to the north. This seems much less likely than supposing a single change from vigesimal to decimal.[10]

What was the impetus behind this change from vigesimal to decimal in Nitinaht? The neighbouring Salish languages are decimal and might have been an influence; but both Makah and Nootka also have Salish neighbours. Perhaps, however, the Nitinaht had a period of particularly close contact with some Salish group. Many years ago Laurence C. Thompson informed me that Mary Haas had collected a set of numerals from the Nitinaht at Pachena Bay which her consultant referred to as the "old" Nitinaht way of counting. She recognized these "old" numerals as being of Salish origin.[11] This counting does indeed suggest a strong Salish influence on at least some Nitinaht.

Up to this point we have assumed a single system of counting in each language which in Nitinaht has altered over the years. However, a couple of systems - or at least methods - may have coexisted. As pointed out above, the etymon čiˑχ̣paˑɬ *six* in Nitinaht and Makah does not fit well into the first decade of numbers in Southern Wakashan for it has nothing to do with the concept of *one more* or the like.

A clue to the origin of čiˑχ̣paˑɬ comes from one of my Ahousaht consultants, Mr. George Louie. He says that -paˑɬ means *add to*[12] and describes how his maternal grandfather, who was Ahousaht, counted by holding his right palm up facing away from himself. Using a finger of the left hand as a pointer, he went from the little finger to the index touching the top of each. Then, on the count of five, he pulled his thumb down so that it formed a right angle to the fingers. "Next he added the left hand saying čiˑχ̣paˑɬ." The idea behind čiˑχ̣paˑɬ is, in Mr. Louie's words, *add other hand*. Although this gloss is probably not literal, - the meaning of the root či(ˑ)χ̣ is apparently lost to memory - the general import is right. Since most finger counting changes hands for six, in time the word must have supplanted the original numeral among the Nitinaht and Makah.

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10 Note, however, that decimal systems do sometimes give way to vigesimal gradations. The Old Irish decimal counting has been completely replaced by the vigesimal in Modern Irish. Beginning in the eleventh century the French decimal system acquired some vigesimal gradations under Norman influence. In Sicily eggs, fruit, and people are all calculated by twenties - again due to the Normans (Menninger 1969: 64 ff.).

11 In fact, according to Thompson and M. Dale Kinkade they resemble most closely the numerals in the languages of the Tsamosan Branch of Salish (personal communication).

12 In *Nootka Texts* (Sapir and Swadesh 1939: 325), this suffix is glossed as *along with ...; in the same group with ....*

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