THE FUNCTIONAL STRUCTURE OF SOME NITINAHT CLAUSES

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1. INTRODUCTION: NITINAHT AS A COMMUNICATIVE SYSTEM[1]

Language is used for a variety of different purposes, but communicating with others is a primary one. Communication is a cooperative enterprise between the speaker and the listener(s), and it proceeds most smoothly when formal rules known to both sides are observed. It has been argued persuasively (Givon 1979) that syntactic rules developed from more pragmatic modes of communication, such as discourse strategies, because both the expression and processing of utterances became more efficient when structural devices were imposed and guidelines for interpreting them were recognised.

The specific rules adopted by individual languages vary, but two general approaches are common, one based on word order, the other on the case-marking of nouns. In a language with rigid word order, the linear arrangement of words or elements alone can indicate their syntactic role. In English the order noun-verb-noun in the main clause correlates very highly with the

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[1] The transcription system used is the one laid out in Thomas and Hess (1982), with some minor modifications. The glottal is shown by ʔ when associated with vowels, by ' when associated with consonants. The pharyngeal is shown by ʕ The lateral affricate is shown by ƛ. Vowel length is shown by · (u·). Components within a syncretic morpheme are linked by +.

The following abbreviations are used for grammatical morphemes:

ABS –	absolutive	MOM –	momentaneous
CAUS –	causative	OBJ –	object
CLASS –	classifier	PERF –	perfective
CONT –	continuative	Q –	interrogative
DEF –	definite	REF –	referential
DUR –	durative	S –	singular
IND –	indicative		
LOC –	locative		

First, second, and third person references are denoted by 1, 2 and 3, and are in the singular unless otherwise stated.

grammatical roles of subject-verb-object. Chomsky (1965) relied on this fact when he defined a subject exclusively in terms of linear arrangement, as the NP of S.

Meanwhile, languages in which the word order is comparatively free often exhibit a sophisticated system of case-marking on the nouns; two examples are Serbo-Croat and Turkish.

Studies have been carried out showing how native speakers develop processing strategies that take into account these different language-specific characteristics (Bever 1979; Schieffelin 1981; Slobin 1973, 1982).

By comparison, the Nitinaht clause is distinguished by the relative flexibility of its word order and the paucity of its case-marking system. Whereas both these methods contribute something to disambiguating the clause, neither completely explains it.

Flexibility is a well-known feature of Wakashan syntax. Swadesh (1939: 78) said of Nootka, another Wakashan language: "Normal words do not fall into classes such as noun, verb, adjective, preposition, but all sorts of ideas find their expression in the same general type of word, which is predicative or non-predicative according to its paradigmatic ending." In effect, roots are not marked for grammatical category, but by adding the appropriate affixes they can take on a nominal or verbal function.

A definite or deictic suffix is associated with nominal phrases and may occur on nouns or adjectives, while suffixes for mood, person and aspect denote a verbal function. For example,[2] the root sus- 'swimming' may be found in the forms: susa·ʔa 'he is swimming', or susa·bt̓aq 'the one who was swimming'. In this system the grammatical role is principally identified by the co-

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[2] The Nitinaht language belongs to the Wakashan family and is spoken on the west coast of Vancouver Island. Elicitation was carried out under the auspices of Linguistics 500: Field Studies between September and February, 1984-85. The consultant was Mrs. Flora Joseph. The course supervisor was Dr. T. Hess. All the examples cited (unless otherwise identified) and the observations made on them are based on the data collected during the course. It should be stressed that the aim in this study was to examine the different types of utterances recorded in an attempt to elucidate the strategies that were employed in producing them. The comments that are made should be taken as applying within the context of conversational speech and not to continuous texts where different conditions may obtain. The scope of the inquiry is limited to surface production and does not discuss the development of morphemes from underlying forms.

occurrence of unbound affixes and this enables stems to function in different capacities.

Jacobsen (1979: 106-107) argues, however, that distinctions are observed between the roots of different word classes. He points out that whereas all major words may occur as predicates, there are gaps in the inflectional possibilities available to some classes, especially when these occur as arguments (i.e. independent words or adjuncts) and not as predicates. For example, words which belong to the noun class may occur without identifying suffixes in the role of subject or object while words in a class of verbs may only occur in these roles in a nominalized form, for example when followed by a definite suffix.

The predicate is generally towards the beginning of the sentence, in first or second position;[3] the order of the remaining words in the sentence is not rigid but may vary. Much of the important grammatical information is contained within the predicate, and here there are definite constraints governing the order of morphemes. The predicate is composed of a stem, in initial position, which may or may not be followed by other suffixes, and the predicating elements, the mood and person markers, are in word-final position (Klokeid 1978).

In regular, declarative, indicative sentences the predicating elements of mood and person are often combined into a single morpheme, though some segmentation is possible. The stems to which these inflections can be attached may fulfil a number of different functions; they include the semantic verbal component, descriptive and deictic terms, entities, quantifiers and conjunctions. Most items that carry an important part of the communicative message can function as predicative stems, while lesser elements such as particles never do (Swadesh 1939). Other morphemes can occur in a fixed order between the stem and mood/person inflections and contribute additional lexical material or grammatical information on causation, aspect, etc. If the predicate stem is not formed around a major concrete constituent, it typically begins with a root that indicates only the general nature of the following statement, for example that it is referential or locative.

Pronoun subjects and objects are shown by predicate-final inflections, except for third person object pronouns, which are not marked.[4] If the subject and object of the sentence are not

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[3] Other elements can precede the predicate, for example particles that act as interjections. One such utterance collected was: su, ʔuʔubxaʔX̌a 'now, that's enough'. It is also possible for adjunct subjects to precede the predicate, but no examples of this construction were collected.

[4] For a full discussion of the subject-object suffix combinations in the indicative, see Carlson and Thomas (1979).

pronouns but formed by independent, non-predicative words, the
subject generally follows the predicate and precedes the object
unless there are special considerations. Nitinaht can,
therefore, be classed as a VSO language.

The case-marking of participants is minimal. The predicate
generally shows agreement with the subject in person and number.
An agent-patient relationship may be overtly marked by a
causative morpheme, signalling that the object has been affected
by an agent-controlled action. At other times the object may be
accompanied by a component that designates it as such, ʔu·yuqʷ,
cf. (26) '(the boy chased) the dog away', ...ʔu·-yuqʷ čí·k̓ʷaʔ⅃-aq.
Similarly, locative phrases may be flagged as such by a preceding
locative morpheme, ʔíyax̌: ʔíyax̌-aʔtax̌-s ʔax̌kíʔ (LOC-band+member-IND+1
this) 'I live right here', i.e. 'I am a member of this band'.

Elsewhere, simple locative statements are expressed by means
of transitive verbs, and no overt grammatical distinction is made
between the entity being located and its location.

When references are known from an earlier context, for
example, when a thematic subject or object is being discussed,
there is a preference for encoding these references by pronoun
markers or leaving them unexpressed. Nitinaht, therefore, relies
heavily on anaphora and ellipsis. This tendency, coupled with
the paucity of devices for marking participant roles, might be
expected to lead to ambiguity. It is assumed that listeners will
draw upon their knowledge of the world and the probable semantic
relationships involved to make sense of the utterance, when the
shape of the sentence itself does not do so.

In discussing the shape of the sentence in Nitinaht (and the
forces that control it), I have tried to choose a framework that
is suitable for this particular language and not one transposed
from another system. For example, virtually all types of
predicative structures in English can be described in terms of a
subject and predicate (Lyons 1977: 469), and, as these components
are usually grouped together in a neat configuration, the English
sentence lends itself easily to a bipartite analysis along these
lines. Hukari (n.d.) draws attention to the difficulty of
imposing structural definitions of subject and object upon a west
coast Indian language such as Halkomelem, where the VSO word
order precludes the verb and its object being regarded as a
structural unit in a two-dimensional tree, and he suggests that
the solution may lie in finding other definitions for such
categories. He later analyses the subject of a sentence in
Halkomelem in terms of its thematic role (Hukari n.d., Chapter 3:
3; 9). A similar difficulty arises in Nitinaht which is also a
VSO language and where the grammatical categories of subject and
object do not appear to be given clear and consistent expression
in the surface structure. Structural patterns in Nitinaht
clauses are dominated by the stem that forms the predicate and it
may belong to one of several constituent classes. To accommodate
these factors, the analysis has been based on the valency of the

predicate, i.e. the number of arguments that the predicate, or
operator takes. Thus, an intransitive sentence has a monovalent,
or one-place operator (the subject), a transitive sentence is
bivalent, the two arguments being the subject and object, and so
forth.

2. AFFIXATION

The morphological system is extremely important as Nitinaht
uses affixes to convey both lexical and grammatical information.
A very brief outline follows, to show how the system works.

There are no prefixes in Nitinaht, but there is sometimes
reduplication of the initial stem element (for example to show
repetition). A few infixes are also observed, but the
overwhelming majority of affixes are suffixes which are attached
to a root or stem in a particular order. Suffixes are applied to
actions to mark agent control and aspect; aspect is discriminated
with precision - the categories include momentaneous, inceptive,
continuative, and perfective, among others. Entities may also
carry suffixes, notably to show definiteness and possession.

Other grammatical information is contained in inflectional
suffixes which follow non-inflectional ones and give details on
tense, person, number, voice and other features.[4] Some of these
categories have developed into a sophisticated sub-system.
Carlson (n.d.) lists the following modal distinctions:
indicative, interrogative, inferential, quotative, conditional,
counterfactual, and imperative.

One of the most distinctive characteristics of Wakashan
languages is their "lexemic" suffixes, i.e. suffixes which have a
lexical input. These suffixes were divided into two classes by
Swadesh (1939) who called them restrictive and governing
suffixes. Restrictive suffixes modify the meaning of the
preceding stem by adding greater precision. For example,
physical activity is almost always linked to the type of surface
on which it occurs, contrasting (1) ?aλ-a?s-a 'two people are
sitting on the ground outside' with (2) ?aλ-i?s-a 'two people are
sitting on the beach'. The location must be specified for the
utterance to be completed. Similarly, references to objects
often include classifying suffixes which describe size or shape:
bu·-p̓eλ λicλib (four-CLASS mat) 'four (longer-than-wide) mats'.

Governing suffixes were defined by Swadesh (1939: 84) as
suffixes which, when added to a predicate stem, become "the
semantic nucleus of the resultant theme". He gave as examples in

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[4] For a full discussion of the subject-object suffix combinations
in the indicative, see Carlson and Thomas (1979).

Nootka: *child+have*, 'I have a child' and *herring+eat*, 'I am eating herring.'[5]

Examples of governing suffixes in Nitinaht clauses are discussed below.

3. DECLARATIVE CLAUSES

This report is limited to examining the structure of some indicative, affirmative, declarative clauses, as it is assumed that this type of utterance represents the simplest, least marked form of construction that will best illuminate the basic strategies employed in sentence formation. Perhaps the most interesting contrast in the Nitinaht clause is that between what is fixed, rule-governed and subject to constraint and what is optional, variable and open to choice. The position of the predicate and the order of the morphemes composing it follow regular patterns but the class of its initial constituent is one of the variables. Some of the options available to the Nitinaht speaker in forming a predicate and the factors that may influence his choice are discussed below.

It was found that predicate stems fall into two major classes: (a) those that introduce simple, concrete statements of various kinds, in which the initial element performs a specific function, and (b) the remainder which present less concrete relationships, dealing with abstract or complex situations; these are introduced by a stem that has minimal semantic or syntactic implications.

The content of the utterance, then, appears to influence both the shape of the clause and the choice of the predicate stem. It is in order to take this fact into account, i.e. that the information in the message has a bearing on its form of expression, that a purely formal syntactic analysis has been discarded in favour of one that is based on the communicative function of the clause.

The idea of dividing up a sentence according to the value of the information contributed by each element was broached by members of the Prague School of Linguistics, and they called this operation functional sentence perspective. Linguists such as Halliday (1970) and Lyons (1977) later adopted these ideas and developed them in relation to English. Firbas (1972) pointed out that communication is not a static but a dynamic property and that each constituent can be assessed according to a rising scale of communicative dynamism because the extent to which each constituent advances communication is reflected by its position

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[5] ƛananak-aḥ 'I have a child'; λoy̓i·saḥ 'I am eating herring' (Swadesh 1939: 85).

in the sentence. The old information is retrievable from context and therefore has the lowest degree of communicative dynamism. It is called the theme (or topic) and is usually represented by the subject which, in English, typically precedes the predicate. The new, essential information is context-independent and so it has the highest degree of communicative dynamism; it is the rheme (or focus) and is generally found in the predicate in English. In North America the terms topic and focus (or comment) are preferred and more or less correspond to the notions of theme and rheme, respectively.

This discussion examines the structure of Nitinaht clauses in relation to the function of the initial predicate stem component and the type and number of arguments the predicate takes.

4. DESCRIPTIVE CLAUSES

In simple descriptive statements, an entity is credited with a property or attribute. Both the nominal and adjectival component are treated as attributives. This ascriptive element forms the predicate stem and suffixes for person and mood are added to it.

(1) dašukʷ-s (strong-IND+1) 'I am strong'

(2) ha·č-ʔa ʔax̌kíʔ salax̌a·ɬ (long-IND+3 this bulrush) 'this is a long piece of bulrush'

(3) hapu·ɬ-as (beard-IND+2) 'you have a beard'

(4) hapaqsɬ-a ya· qu·ʔs-aq (mustache-IND+3 here man-DEF) 'the Indian has a mustache'

These statements follow the same pattern. The ascriptive element which conveys the key information and carries the highest degree of communicative dynamism is in the predicate in initial position and the verbal inflections are affixed to it. The subject of attribution is coded by a pronoun contained in the ending in (1) and (3) and by an independent word following the predicate and a deictic element in (2) and (4). The most salient position appears to be at the beginning of the sentence, and it is occupied by the rheme or focus. The theme or topic typically occurs later, either at the end of the predicate if it is coded by a pronoun, or after the predicate if it is represented by an independent word.

If an unequivocal relationship can be understood from a knowledge of the entities involved, the utterance may consist only of a justaposition of these two components plus the necessary verbal inflections without giving more detailed coding. This appears to be the strategy followed in (3) and (4).

5. DEIXIS

Two types of deictic constructions were observed in this corpus, but only one of the stems, ya·ł, was observed as a predicate.

(5) ya·ł-a?λ-'a (here-now-IND+3) 'here he comes'

(6) ya·?-as-a (here-ground-IND+3) 'it's right here, on the ground'

Also:

(7) ?u-x̌ʷ-a ya· k̓up-a· (REF-ABS-IND+3 here guess-CONT) 'he is guessing'

See also (4).

Another deictic expression, ?ax̌ki? 'this', did not appear as a predicate stem in this corpus:

(8) ṗa-čiλ-s-icx̌ ?ax̌ki? (gift-PERF-IND+1-2+OBJ) 'this is my gift to you'

(9) hitx̌aẃi·łib-a·k-s ?ax̌ki? (daughter-POSS-IND+1 this) 'this is my daughter'

See also (2).

Further elicitation is needed to confirm this preliminary finding. If the distinction is, indeed, real, the two constructions may be derived from different sources, with ya·ł, which has locative connotations referring to ostensive definition, while ?ax̌ki? 'this' signals definiteness + proximity, similar to the contrast observed in other languages. The deictic locative was employed as the predicate stem only in the simplest sequences. In longer utterances or when there was a shift in emphasis it was placed after the predicate, in what appears to be a less prominent position.

6. ACTION CLAUSES

The simplest situation consists of an actor performing an activity. When the subject is the only argument of the predicate, the sentence is intransitive. When the action affects another entity, the sentence is transitive. Additional coding devices are employed, where necessary, to clarify the relationships between entities. In particular, Nitinaht makes a fundamental distinction between activities that have a perceptible impact upon another object, especially where it leads to a second event, and those that do not. The effect of action directed upon an object tends to be marked in some way, while

transitivity per se, the simple presence of another participant, need not be. The actor or agent (the grammatical subject) is not marked unless there is a need for special focus. (For a discussion of transitivity and participant roles, see Halliday 1967, Cruse 1973, Lyons 1977 and Allerton 1982).

In these clauses, the action is pivotal as it defines the operations and interaction of the participants. The action component, then, forms the predicate stem.

(10) písat-k̓ʷ-a či·k̓ʷa·ʔɫ-aq (run-DUR-IND+3 dog-DEF) 'the dog is running'

(11) sus-a·-ʔa čitapk̓ʷ-aq (swim-CONT-IND+3 whale-DEF) 'the whale is swimming'

(12) sa·s-ƛ-'a pí·špíš-aq (climb-MOM-IND+3 cat-DEF) 'the cat is climbing up'

(13) sa·s-a šučs-aq (climb-IND+3 tree-DEF) 'he has climbed up the tree'

(14) cas-í·ks-a či·k̓ʷa·ʔɫ-aq sič-í·ʔt-aq (chase-after-IND+3 dog-DEF tail-POSS-DEF) 'the dog is chasing his tail'

(15) cas-í·ks-a pí·špíš-aq cíbicíbe·ʔ-aq (chase-after-IND+3 cat-DEF rat-DEF) 'the cat is chasing the rat'

In examples (10-12) the action term in the predicate is monovalent; it has only a single argument representing the performer of the activity. In examples (13-15) the operator is bivalent and there is a second participant, the object. When both the subject and the object are denoted by independent words following the predicate, as here, the normal word order is observed and the subject precedes the object.

If the object is represented by a third person pronominal form it is not overtly marked and, in non-causal situations, must be inferred. For example, (12) can be glossed either as 'the cat is climbing up' or 'the cat is climbing up it'.

In these examples, the central activity is presented as a process that does not terminate in a perceptible change of state. Another type of clause portrays a cause-and-effect relationship in which the action undertaken by the agent directly affects the behaviour of another entity. Typically, this circumstance is coded by a causative morpheme, -aʔp/-aʔb <//-ʔap// that is attached not to the object itself but to either the predicate or the semantic action component if this is an adjunct outside the predicate. When third person objects are not overtly marked, the causative morpheme helps to indicate that the situation arises from the interaction between two participants.

(16) tílq-saʔp-'a (squash-MOM+CAUS-IND+3) 'he squashed it'

(17) ʔamaš-a·ʔp-'a (breast-CAUS-IND+3) 'she is nursing him (her baby)'

(18) ʔapt-a·-s (hide-CONT-IND+1) 'I am hiding'

(19) ʔapt-a·ʔp-s (hide-CAUS-IND+1) 'I am hiding it'

Similarly, when the causative morpheme is added to a description of a static condition, it alters the interpretation, making the situation dynamic by the intervention of an agent.

(20) ʔu-kʷ1ċ+o·s-a (REF-in+surface-IND+3) 'it is inside', i.e. in the basket

(21) ʔu-kʷ1ċ+o·s-aʔp-s pukʷʔo·-aq (REF-in+surface-CAUS-IND+1 basket-DEF) 'I put it in the basket', i.e., I caused it to be in the basket

(22) ba·q-1ʔdax̌-1k (what-do-Q+2) 'what is the matter with you?'

(23) ba·q-1ʔdax̌-ʔaʔp-1k (what-do-CAUS-Q+2) 'what are you doing to it?'

The causative morpheme is not applied across the board in agent-patient relationships, rather some sharp distinctions are observed, in accordance with the precise nature of the interaction.

(24) bap-aqλ-1yλ-'a č1·k̓ʷaʔ1-aq beʔ1λqċ-aq (bite-rear-MOM-IND+3 dog-DEF boy-DEF) 'the dog bit the boy's rear'

(25) ba-ʔa·ʔat-p-'a č1·k̓ʷaʔ1-aq beʔ1λqč-aq (bite-down-CAUS-IND+3 dog-DEF boy-DEF) 'the dog bit the boy down', i.e., the dog bit the boy so that he fell out of the tree

In (24) the dog bit the boy but no visible consequences ensued, and the causative morpheme does not appear. In (25) the boy fell down from the tree as a result of being bitten; the causative morpheme is introduced to mark the connection between the two events.

(It has been suggested, in a personal communication by Dr. Carlson, that the causative morpheme may derive in this case from -p rather than -ʔap and act as a transitivizer, preventing a passive interpretation: baʔa·ʔaća 'he is being bitten down').

Some actions are inherently transitive in that they require two participants to take place. One example is cas- 'chase'; see (14) and (15) above. In such cases, it may not be considered necessary to denote the presence of another participant by the causative or object morpheme. When the motion was not random but directed towards a goal, the causative morpheme again was not employed in this instance; instead the relational term, ʔu·yuqʷ, helped to show the target of the action.

(26) cas-šƛ-'a beʔiƛqċ-aq ʔu·-yuqʷ či·k̓ʷaʔɬ-aq (chase-MOM-IND+3   boy-
     DEF REF-OBJ dog-DEF) 'the boy chased the dog away'

The stem-suffix combination, ʔu·yuq·ʷ, is a device that is used,
as here, to identify the entity against (or towards) which the
action (or feeling) is directed. It is especially helpful in
clarifying the object status of an argument, when the agent and
the object are both represented by independent words. It does
not necessarily code a cause-and-effect relationship, and appears
to differ in this from the causative morpheme. (A more detailed
investigation of precisely how these two constructions differ,
while clearly important, cannot be undertaken here.)

When there is a change of emphasis, and the object, not the
agent, becomes the topic, a passive suffix, iʔt-, <//ʔit-//
indicates the switch.

(27) x̓ux̓up-iʔt-aʔp-a haʔuʔb-aq (hang-PASS-CAUS-IND+3 fish-DEF) 'the
     fish is being hung up (by her)', i.e. the fish was caused
     (by her) to be hung up.

(Jacobsen (1979: 120) gives examples in Makah of parallel
structures for the sentence 'the bear bit the dog', in the active
and the passive. The object, 'the dog', is indicated by ʔu·yuq in
the active voice. In the passive ʔuyuq drops out and the passive
suffix is added to give the corresponding passive reading, in
which 'the dog' is seen as the topic.[6]

In summary, in the action clauses examined above, there is
little evidence for a broad abstract category of grammatical
object. The object is treated in several ways and the
distinctions appear to be made according to criteria that suggest
they are consistent with certain semantic correlates. The
variants include: marking the object that is visibly affected by
agentive action, by a causative morpheme; leaving the object
unmarked in non-agentive clauses or where the impact of the
action is not stressed; and identifying the object status of an
argument by ʔu·yuq in cases where this is considered desirable.

7. OTHER CONCRETE RELATIONSHIPS: GOVERNING SUFFIXES

In the examples elicited, governing suffixes were used as
operators to establish a relationship between two arguments. The
relationships in question did not seem to be perceived as
agentive but as belonging to some other simple category, such as

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[6] bačil ʔaƛi·tqʷaɬ q̓idi·liq ʔu·yuq (bite-mom.-ind.-3   bear dog-art.
   obj.) 'the bear bit the dog'
   bacix̓it q̓idi·liq ʔaƛi·tqʷalx̓it (bite-mom.-pass.   dog-art.   bear-
   rel.-pass.) 'the bear bit the dog'

possessive, factitive, etc. Moreover, it is the object involved in the process - the item made, prepared or possessed - that presents the new information and thus carries the most communicative value. This concrete component generally forms the initial element of the predicate while the verbal component that links the two participants involved in the process follows as a suffix with lexical input. The subject in most of the examples is shown by a pronominal marker. The entire proposition is economically condensed into a single word in this way.

(28) ʔadk-adak-s (fire-have-IND+1) 'I have a fire'

(29) qaqad-uʔk-ƛ-s (sliver-have-now-IND+1) 'I have a sliver'

(30) qa·ʔawa-ci·ɬ-s (basket-make-IND+1) 'I am making a basket'

If the emphasis shifts from the target item to, say, a particular aspect of the process, this is reflected by a rearrangement of the component morphemes.

(31) ha·ẇil-čʔa-ƛkʷ-s qaʔawc (finish-make-MOM+PERF-IND+1) 'I have finished making the basket'

The important information is that the task has been completed, and this morpheme is placed in the most salient position, introducing the predicate stem. The product, the basket, is represented by a independant word and it is now moved out of the predicate to another position later in the clause, after the subject.

Other concrete relationships that were expressed by means of governing suffixes were the following.

(32) x̌ubis-x̌tiʔd-a x̌aʔ (cedar-made+of-IND+3 this) 'this (stake) is made of cedar'

(33) mitu·l-aʔtax̌-s (Victoria-member-IND+1) 'I live in Victoria', i.e., I am a member of the Victoria band

The above examples show that there is a keen awareness of the communicative dynamism of the different components in an utterance which is reflected by the form in which it is expressed. The item that offers the greatest advance in communication is preferred as the nucleus or initial component of the predicate. As this component tends to vary from clause to clause, so, too, does the composition of the predicate stem. The content of the message, then, appears to have a decisive influence on the framing of short, simple utterances.

8. OTHER FACTORS AFFECTING CLAUSE STRUCTURE

The different types of clause listed above are notably short and present a concrete situation. Each type serves a distinctive communicative function and is expressed in what is assumed to be a canonical form of utterance. A consistent structural pattern can be discerned, in which the element that is contextually independent and introduces fresh or key information composes the predicate stem. Thus, in clauses devoted to these kinds of statements, the deictic, ascriptive and action components form the predicate and occupy what seems to be the most salient sentence position by virtue of the information they contribute. Similarly, it is customary in Nitinaht for the predicate to begin with a negative morpheme in negative clauses and an interrogative morpheme in informational questions, as shown by the following examples.

Negative: wa-sad-s ((NEG-want-IND+1) 'I don't want to'
Interrogative: baq-kʷi·ł-i· (what do-Q+3) 'what is he doing?'

An impersonal statement can be made simply by adding the mood and third person singular markers to a suitable root: wi·qse·-ʔa (wind-IND+3) 'it is windy'.

However, when a single, well-defined component does not provide the focus, an alternative method of construction may be employed. The clauses examined above were limited to a predicate and not more than two arguments and, like other Wakashan languages Nitinaht appears to favour simple clauses with a limited number of nominal arguments (Jakobsen 1979; see below). This development is perhaps to be expected in a language that has minimal case-marking, no precise equivalent of prepositions and loose word order. For example, Russian marks the functions of certain secondary participants by case inflections alone, among them the possessive, benefactive and instrumental roles. English can introduce any number of extra notions by deploying specialized prepositions: *he cut the bread on the table with a knife for his daughter*, etc. Nitinaht expresses these ideas by morphological and syntactic means.

Creider (1979) made the following comments on the relationship between topic and focus (or theme and rheme) in relation to syntactic order among specific language groups.

> Languages that treat initial position as topical and final position as focusing are SVO (English, Spanish, Czech, Russian). Languages that treat initial position as topical and preverbal position as focusing are verb-final (Hungarian, Quechua). Finally, languages that treat initial position as focusing and final position as topical are verb-initial (Nandi, Tagalog, Malagasy). These latter languages always have a means of reversing this order to produce sentences that have initial

topics. This reversed order is found in discourse contexts where the topic is not known or predictable from the preceding context. (1979: 19)

Nitinaht may perhaps be classed as belonging to the group that treats initial position as the focus, and it also has a strategy for changing this order if a different sequence is considered advisable. It does not completely fit Creider's analysis, however, because the topical position, usually reserved for the subject, is not final but intermediate, following the focus, i.e. either at the end of the predicate or directly after it. The position for secondary focussing appears to be after the subject, near or at the end of the sentence. When the important new information cannot easily be contained in a single, discrete, hierarchically dominant unit, such as is suitable for forming a predicate stem, then it is placed lower in the clause, after the predicate word.

If this is the case, an alternative method of sentence construction is invoked that takes these circumstances into account. The predicate is introduced by a root that is applicable to a wide range of situations; two of the commonest are ʔu- and hit-, which indicate only that the following statements deal with a referential subject or location, respectively. A large number of Nitinaht clauses that do not fit readily into a narrow, task-specific category appear to start in this way. Apart from announcing the general nature of the following statement, these types of roots have limited linguistic scope. They cannot stand as independent words, nor can they be followed directly by mood and person inflections but they must be combined with a suffix. Insofar as these roots represent a convenient device for opening the sentence with scant lexical input, they have been compared to place-holders (such as the English *it* in *it is raining*); see Swadesh and Swadesh (1933).

9. REFERENTIAL AND LOCATIVE STATEMENTS

The stem ʔu- can introduce any referential statement, that is, one in which there is a reference to a specific entity later in the sentence. It is commonly applied in discussing non-concrete relationships, for example when identity is being established.

(34) ʔu-x̌ʷ-s Flora (REF-ABS-IND+1 Flora) 'I am Flora'

(35) ʔu-kʷaqł-a x̌aʔ qiceẏk (REF-call-IND+3 that pencil) 'that is called a pencil'

The stem ʔu- also has a number of other usages. It provides a convenient way of rearranging elements when a shift in focus is considered desirable for some reason. The displaced stem is

moved to the end of the sentence.[7]

(36) piċip-x̌tiʔd-a (cedarbark-made+of-IND+3) 'it is made of cedar-bark'

(37) ʔu-x̌ʷtiʔd-a x̌aʔ piċip (REF-made+of-IND+3 this cedarbark) 'this is made of cedar-bark'

Locative descriptions are handled in various ways according to the nature of the statement being made. Statements that are considered relational may be introduced either by ʔu- or by hit-; hit- can only refer to statements of location and has, therefore, a narrower application than ʔu-. (See Thomas and Hess 1982: 59 for a more detailed discussion.)

Locatives that are handled in English by prepositions such as *in*, *on*, are treated as relationships having two participants, or arguments, - the referent (X) and the location (Y). The element specifying the precise locative relationship, e.g. 'in, on' is expressed as a suffix following the stem.

(38) hita-ċ+o·s-a   (LOC-in+surface-IND+3)   'it   is   inside (something)'

(39) ʔu-kʷiċ+o·s-a   (REF-in+surface-IND+3)   'it   is   inside (something)'

(The surface morpheme indicates that the item is not set directly on the ground. The locative suffixes derive from -ċu·s 'in or on a surface', in (38), and -či/kʷi 'at, in' + -ċu·s- in (39).)

In sentences where the arguments are not represented by independent words the person marker agrees with the referent, and this is perhaps to be expected as there are many terms for places which can be expressed as suffixes, e.g. '(on) the beach', '(on) the ground' and '(in) the canoe': hit-qs-aʔx̌-a (LOC-canoe-now-IND+3) 'he is now in the canoe'.

If both the referent and the place are represented by independent words following the predicate their relative order is

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[7] The question of which pattern to use in a particular case is not always clear and may depend on a number of factors, of which discourse strategy is one. For example, Jacobsen (1979: 108) states that, in Makah, a related language, the pattern with ʔu- would be used in answering a question such as 'What do you have?', and the stem formed from an NP in offering unsolicited information. This observation may not always apply in Nitinaht. The question, 'What is the stake made of?' (baq-x̌tid-i· kaɬeyk-aq) brought the response x̌ubis-x̌tiʔd-a ('cedar-made+of-IND+3) rather than a formulation such as ʔu-x̌tiʔd-a ... (REF-made+of-IND+3 ...).

interchangeable, and neither appears to be considered functionally more important in the relationship, as reflected by hierarchic ordering; that is, the sequence can be STEM-in--- MOOD+PERSON X Y, or STEM-in---MOOD+PERSON Y X. (Again, it is assumed that the semantic relationship will be grasped intuitively; a smaller object will be inside a larger one, and so on.)

(40) ʔu·-kʷ-ks-ap̓-e·s-a puk̓ʷo·ʔ-aq hu·mhu·m̓-aq (REF-DUR-on-up-surface-
     IND+3 basket-DEF shell-DEF) 'the shell is on the basket
     (above the floor)'

(41) ʔu-·kʷ-ks-ap̓-e·s-a hu·mhu·m̓-aq puk̓ʷo·ʔ-aq (REF-DUR-on-up-surface-
     IND+3 shell-DEF basket-DEF) 'the shell is on the basket'

10. EXTENDED CLAUSES

The referential stem, ʔu-, can also be seen in the following sentences.

(42) ʔu·-si·ł-a xa·daʔk̓-aq butí·yu bíʔat (REF-prepare-IND+3 woman-DEF
     cutup sockeye) 'the woman is boiling cut-up sockeye'

(43) ʔu-qʷo·ʔał-s qakac̓-qabł bucubux̌ʷ ʔiyax̌-x̌ hida·-qaλs-aq (REF-see-IND+1
     three-CLASS bear LOC-ABS LOC-wood-DEF) 'I saw three bears
     in the woods'

(44) ʔu-kʷč-a·-ʔa bucubux̌ʷ-aqi·c̓-aq x̌ix̌-aq (REF-wear-CONT-IND+3 bear-
     POSS-DEF skin-DEF) 'he is wearing a bear-skin'

What is common to these utterances is some form of complexity. Nos. (42) and (43) both introduce several arguments and present difficulties in shaping the sentence around a single dominant component. In (44) the proposition is a simple one containing only two arguments, and here the article worn, *bearskin*, is the focus. It takes, however, a linguistically complex form, being composed of two words and five morphemes in all; again, this complicates the problem of placing a single pivotal stem in the predicate. In these conditions ʔu- becomes the predicate stem and the important, new information is positioned later in the sentence.

As the clause expands, there is a tendency not to add extra information by tacking it on to the original structure, as in the case of the English prepositions, cited above. The preference is to limit the number of arguments a predicate controls. When additional arguments are added to the proposition, one method of doing so is by inserting accompanying semantic verbal components to handle them, and this may entail rearranging the entire sequence of morphemes. In this way the clause may be reorganised around a new predicate stem, while the initial stem loses its predicating role and is moved to a position later in the clause.

(45) siqida·k-'a xa·da?k̓-aq (cook-IND+3   woman-DEF) 'the woman is
     cooking'

(46) ?u-·cax̌a?d-a yadaqk-k̓ʷ-aq siqida·k (REF-for-IND+3 child-POSS-DEF
     cook) 'she is cooking a meal for her child'

(47) dix̌-x̌-a?p-'a (stir-ABS-CAUS-IND+3) 'she is stirring it'

(48) spu·na-x̌aẃa·ł-a dix̌-x̌-a?b (spoon-use-IND+3 stir-ABS-CAUS) 'she
     is stirring it with a spoon, i.e., she is using a spoon to
     stir it

     This feature of Wakashan languages was commented on by
Jacobsen.   He draws attention to the fact that there is
reluctance in Makah to admit more than one nominal argument per
clause and that clauses usually consist of just verb-subject or
verb-object. He also argues that the function of ?u·yuqʷ is to
create a separate prepositional clause that expresses the object
(1979: 119-120).

11. DISCUSSION

     It is evident that the first and most urgent problem that a
Nitinaht speaker faces is the selection of a predicate stem. In
making his decision he pays attention to the function of the
utterance, and, if it is simple and clear-cut, he shapes the
sentence around the most salient item - an attributive in
attributive statements, an action component in descriptions of an
activity, etc. If the message is semantically or linguistically
complex or does not deal with a concrete situation, this method
gives way to a more flexible approach to sentence construction in
which a root that applies to a wider range of situations forms
the initial element of the predicate. Then the new, contextually
independent information which constitutes the focus is introduced
later in the sentence.

     It has been possible to present and discuss only a limited set
of sentences in this paper; other important aspects of sentence
formation that cannot be mentioned here concern changes in focus,
branching sentences and discourse strategy. Nevertheless, the
data cited above suggest that the function of the utterance may,
under certain conditions, have a decisive influence on the
structure of the clause in Nitinaht, that is, that form is
related to content.

     The implications of this assumption are far-reaching and leave
many avenues to be explored. Perhaps the most promising is one
which clarifies the judgements a speaker must make in choosing
between alternative solutions. For example, an attributive will
form the predicate stem in a simple descriptive statement in
which it is the focal element, but it does not do so when it
operates at a phrasal level and qualifies a local noun.

(49) cas-i·ks-a ʔi·x̌-aq pi·špiš ʔu·-yuqʷ či·k̓ʷaʔɫ-aq (chase-after-IND+3
     big-DEF cat REF-OBJ dog-DEF) 'the big cat is chasing the
     dog'

     Whereas the procedure here is not hard to follow, it is not
always as transparent and it may be influenced by language-
specific considerations. An illustration is provided by the
numerals and quantifiers, which are regarded as highly salient
items and often enter the predicate stem.

(50) šuči-p̓eyɫ-a ʔax̌aʔ kaceyk̓-aq (five-CLASS-IND+1 there stick-DEF)
     'there are five (long, thin) sticks'

(51) ćawa·ć-qadaq-šiƛ-s kaceyk (one-win-MOM-IND+1 stick) 'I have won
     one stick' (in a game)

(52) qakać-ak-s x̌apat (three-have-IND+1 basket) 'I have three
     storage-baskets'

(53) ʔu-siyak̓-ƛ-s bu·-p̓eyɫ ɫicɫib (REF-make-MOM-IND+1 four-CLASS mat)
     'I have made four mats'

     In (50)-(52), the numerals appear to have the most
communicative value; they combine easily with the governing
suffixes and they form the predicate stem. In (54) the
information structure of the message is similar but the numeral
has been moved to later in the clause.

     Further study is needed to elucidate how these decisions are
arrived at before any firm conclusions can be drawn.
Nevertheless, it can tentatively be suggested that a set of
criteria exists for imposing a hierarchical order in selecting a
predicate stem. This hierarchy is derived from the dynamic
relationship of the contributing factors: they include the
function of the clause and its informational and linguistic
content. These considerations regulate the form of the predicate
and, with it, the basic shape of the sentence.

     An obvious and pressing task for future inquiry is to discover
how the order of priorities operates by taking one basic phrase
and expanding it in different directions, adding, by turns, an
attributive, a numeral, a locative phrase, separately and in
combination, and so forth.

     Attempting to analyse the Nitinaht language is not an easy
task because it appears to offer unorthodox solutions to some
fundamental structural problems. An examination of those
utterances in this sample which expressed short, simple
propositions found that they rarely gave clear indications of
being organised in strict, formal patterns according to abstract
grammatical categories such as subject and object. Further
scrutiny showed that these clauses could readily be sorted into
patterns that reflected their functional structure, and this fact
raises the possibility that the system appeals to semantic

principles at some level. To accommodate the constant reordering
of components that such a system implicitly demands, syntactic
units display a notable flexibility both in form and location.
The above conclusions are, of course, tentative, being based on a
limited sample, and more searching and detailed investigations
are needed before any firm conclusions can be drawn. Analysing
the structure of the Nitinaht clause is, however, a thought-
provoking experience that makes one reexamine many of the axioms
of linguistic organisation.

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