On the Behavior of Suffixes in Nuuchahnulth*

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1. INTRODUCTION

Nuuchahnulth, formerly called Nootka, is spoken on the west coast of Vancouver Island, B.C., Canada. The language has generally been characterized as exclusively suffixing (Swadesh (1939), Rose (1981)). This characterization is based on the observation that almost all morphologically dependent morphemes attach to the right of the root and form a phonologically integral unit with it.

(1) p.239 [#180]
ʕini:ƛmiṅḥmatki
ʕini:ƛ-miṅḥ-matak-ʔi·
dog-PL-DIM-PROB-DEF
'the little ones appearing to be dogs'

The traditional characterization of the dependent morphemes as suffixes appears to be appropriate in the above, but as the following examples show, their behavior is rather unusual for ordinary *suffixes*.

(2) p.294 [#342]
čapicɫ
čapic-(č)i·ɫ
canoe-make
'He made a canoe.'

(3) p.294 [#343]
ƛuɫi:ɫ čapic
ƛuɫ-(č)i·ɫ čapic
nice-make canoe
'He made a nice canoe.'

(4) p.294 [#344]
muːkʷi:ɫ ƛuɫ čapic
muː-(č)i·ɫ ƛuɫ čapic
four-make nice canoe
'He made four nice canoes.'

The semantic head with which the morpheme -(č)i·ɫ 'make' is associated is the same in (2), (3) and (4). However, -(č)i·ɫ is attached to different roots depending on the modification structure within the phrase. Attachment of affixes to a stem is ordinarily sensitive to the inherent lexical or morphological characteristics of the stem and therefore the relationship between suffixes and the stems is generally more selective and permanent. The kind of nomadic behavior observed in the above examples is typically associated with *clitics* rather than *affixes*.

This paper is concerned with the above-illustrated clitic-like behavior of the 'suffixes' in Nuuchahnulth. We first examine the morphosyntactic characteristics of the 'suffixes'. We then explore the best way to characterize the 'suffixes' in Nuuchahnulth by evaluating the observations in the light of general theories of affixes and clitics and of general structural trends in Nuuchahnulth grammar.

2. SUFFIX TYPES

The 'suffixes' in Nuuchahnulth can be divided into three types according to their semantic and morphophonological characteristics: LEXICAL SUFFIXES, CLAUSE-LEVEL INFLECTIONS and NOMINAL-PHRASE-LEVEL INFLECTIONS.

a) Lexical suffixes

Nuuchahnulth has approximately 400 derivational bound morphemes that have lexical meanings, that is, meaning typically expressed by roots in other languages. These bound morphemes, commonly called 'lexical suffixes', are strongly derivational in that they have a strong lexical/semantic tie with the stem. More specifically, the lexical suffixes (1) make a significant but idiosyncratic semantic contribution to the lexical meaning of the resulting stem, (2) have strong morphophonemic effects (including operations that change the stem shape, such as reduplication, or lengthening and shortening of the stem vowel) on the stem, (3) have idiosyncratic distribution patterns, i.e. show arbitrary gaps in combinatorial possibilities, and (4) occur positionally closest to the stem.

These 'lexical suffixes' do not simply modify or enhance the semantic or morphosyntactic characteristics of the stem but have the derivational power comparable to that of compounding, that is, root–root combining, in other languages. See the following examples:

(5) p.311 [#430]
qi·či·ɫmup
qi·-či·ɫ-mu·p
long.time-for..days-absent.for..
'He was absent for many days.'

(6) p.295 [#355]
ʕiɫčsnaʕɫ
ʕiɫč-(c)snaʕɫ
dog-tease
'He teased the dog.'

The meanings of 'being absent for' and 'for so many days' in the sentence (5) and 'to tease' in (6) do not arise from the roots qi·- 'long time' or ʕiɫč- 'dog'. These concrete substantial meanings are being brought in by the suffixes attached to the root.

They can be attached to a single-word stem or a phrase. The phrase can be either a NOMINAL PHRASE or a PREDICATE PHRASE. The NOMINAL PHRASE is a phrasal constituent that consists of a nominal[1] head and optional modifiers, i.e. QUALIFIER, QUANTIFIER, QUANTITY or ADJECTIVAL[2]. When more than one modifier is present, they strictly follow the order QUALIFIER > QUANTIFIER > QUANTITY > ADJECTIVAL. The PREDICATE PHRASE may consist of multiple predicative stems or QUALIFIER + predicative stem.

b) Clause-level inflection

Nuuchahnulth clauses are inflected for mood, person and number. Historically, markers for mood and that for person and number were separate, but synchronically they are fused inseparably. As a result, the suffixes for mood-person-number takes the form of an unanalyzable paradigm. These suffixes exhibit a number of inflectional characteristics: they (1) make constant, predictable semantic contributions, (2) do not affect the lexical meaning of the resulting word, (3) have weak morphophonemic effects on the stem, (4) do not show arbitrary gaps in combinational possibilities, and (5) occupy a peripheral position within the inflected word.

Clauses can also contain suffixes indicating plurality, diminutive quality, mode or tense, but they are not obligatory categories and not strictly part of the inflectional system. However, in this paper, following Rose (1981), I group them together with the true inflectional suffixes, i.e. the mood-person-number suffixes, based on the fact that they share the above mentioned characteristics.

CLAUSE-LEVEL INFLECTION can be associated only with a clausal predicate, i.e., a single-word predicative stem, predicative NOMINAL PHRASE, or PREDICATE PHRASE.

(7) p.109 [#351]
waˤit ci·qci·qšλiš
waˤit CVC-ciq-[L]-šiλ-ʔi·š
frog IT-talk-GRAD-MOM-IND
'The frog (not some other creature) started to talk.'

(8) p.44 [#35]
hisšiλmaˤqλintiš čakup
his-šiλ-maˤaqλ-int-ʔi·š čakup
hit-MOM-want.to..-PAST-IND man
'A man wanted to hit it.'

*hisšiλmaˤqλ čakupintiš

The fact that the clause-level inflectional suffixes are always attached to the predicate and never to the arguments (subjective or objective) shows that, although they indicate semantic features of the entire clause, the clause-level inflections are properties more of the predicate than the entire clause. This in turn suggests that there is a sharp distinction between PREDICATES and ARGUMENTS as structural domains.

c) Nominal-phrase-level inflection

Nonpredicative nominal phrases can be associated with semi-inflectional suffixes indicating diminutive, mode, tense, possession, mood and definiteness. These suffixes exhibit most of the behavioral characteristics of the inflectional suffixes, but are not part of the obligatory morphological system for nominal phrases. In this sense these suffixes are not inflectional. Nonetheless, again following Rose (1981), I do not distinguish these suffixes from the true inflectional set.

NP-LEVEL INFLECTION is associated with a nonpredicative constituent, either a single-word stem or nonpredicative nominal phrase.

3. PATTERNS OF ASSOCIATION BETWEEN SUFFIX AND PHRASE

In this section we examine patterns of 'phrasal suffixation' from two perspectives. One is in terms of the physical position of the suffixes within the phrase, and the other is in terms of word order flexibility within the phrase associated with the suffixes.

3.1. Lexical Suffixes

Nominal Phrases

When lexical suffixes are associated with a nominal phrase, they are invariably attached to the first constituent of the phrase regardless of the semantic head.

(9) p.294 [#342]
čapicł
čapic-(č)i·ł
canoe-make
'He made a canoe.'

(10) p.294 [#343]
λułi·ł čapic (*čapicł λuł)
λuł-(č)i·ł čapic
nice-make canoe
'He made a nice canoe.'

(11) p.294 [#344]
mu:kʷi·ł λuł čapic (*čapicł mu:)
mu:-(č)i·ł λuł čapic
four-make nice canoe
'He made four nice canoes.'

The behavior of -*(č)i·ł* 'make' in (9), (10) and (11) suggests that the suffix does not have any inherent morphosyntactic relationship with any of the elements in the phrase. Its attachment appears to be quite mechanically based on the syntactic ordering of the elements.

There is one alternative to this mechanical view of suffix attachment. Considering the fact that the constituents of a nominal phrase are ordered according to the strict scheme QUALIFIER > QUANTIFIER > QUANTITY > ADJECTIVAL > NOMINAL, the morpheme attachment might alternatively be characterized in terms of a modifier hierarchy of some sort (cf. Rose 1981: 294). However, this alternative must be rejected because of the following fact. Among qualifiers, there are some (e.g. *tani* 'really') that follow, rather than precede, the modified predicate. When such qualifiers occur in a nominal phrase, the lexical suffix attaches to the modified adjectival rather than the qualifier. Compare the quantifier that precedes the adjectival, *ʔi·ħʷ-* in (12), and the quantifier that follows, *tani* in (13).

(12) p.295 [#352]
ʔi·ħi·ł λuł čapic
ʔi·ħʷ-(č)i·ł λuł čapic
really-make nice canoe
'He made a really nice canoe.'

(13) p.295 [#353]
λułi·ł tani čapic
λuł-(č)i·ł tani čapic
nice-make really canoe
'He made a really nice canoe.'

If attachment of the lexical suffix is determined by the semantic class of the modifier then we would expect the suffix to attach to the qualifier *tani* in (13) regardless of the non-initial position.

One might be able to get around this problem by arguing that there are two different kinds of QUALIFIER, i.e. a phrase-initial type that can attract the lexical suffixes over other modifiers, and a phrase-medial type that cannot attract the suffixes. Even if the semantic distinction between these subtypes is justified, there is still strong evidence against the argument. As we will see below, the phrase-medial quantifier can still attract other types of suffixes over the syntactically preceding modifiers. This shows that the inability to attract the suffix is not an inherent property of phrase-medial quantifiers. Rather, this constraint has to do with the nature of the lexical suffixes, or, viewed from a different perspective, with the nature of suffixing within a phrase associated with the lexical suffixes.

Thus, attachment of the lexical suffixes is clearly not a matter of the semantic class of the modifier. It seems most reasonable to conclude that the attachment of lexical suffixes is based on syntactic order.

Predicate Phrases

When lexical suffixes are associated with a predicate phrase, they are always attached to the QUALIFIER or the higher predicate, which appears in the left-most position within the phrase. The order of elements within the predicate phrase seems to be fixed: the QUALIFIER or the higher predicate precedes the governed predicate.

(14) p.296 [#361]
ʔi·ħli·ʔił mačiλ ˤini:λ
ʔi·ħʷ-li·ʔiła ma-čiλ ˤini:λ
really-pretend.to bite-MOM dog
'He pretended to really bite the dog.'

Position of Lexical Suffixes in the theories of affix and clitic

Given the suffixing pattern reminiscent of clitics, it is useful to see how the lexical suffixes fit into theoretical frameworks that distinguish affixes and clitics. Although crosslinguistic characterizations of affixes and clitics are yet to be established as uncontroversial definitions, some criteria have proven useful in distinguishing the two. In their frequently cited paper, Zwicky & Pullum (1983) give the following criteria.

i) *Selectivity with respect to the base of phonological dependence*
AFFIXES: high degree of selection
CLITICS: can exhibit a low degree of selection

ii) *Combinatorial flexibility*
AFFIXES: often have arbitrary gaps in the set of combinations
CLITICS: no arbitrary gap in the set of combinations

iii) *Morphophonological idiosyncrasies*
AFFIXES: very common
CLITICS: no idiosyncrasies

iv) *Semantic idiosyncrasies*
AFFIXES: occasionally show idiosyncrasies in semantic contribution
CLITICS: no idiosyncrasies

v) *Effect of syntactic rules affecting the word*
AFFIXES: can be affected
CLITICS: cannot be affected

vi) *Relationship to a cliticized word*
AFFIXES: cannot attach to the material already containing clitics
CLITICS: can attach to material already containing clitics

One general picture emerges from the above characterization: the word-affix combination is governed by lexical or morphological (word-internal) considerations, whereas the word-clitic combination is controlled more by syntactic or word-external considerations. Affixes have a DIRECT relationship to their host roots or stems: they lexically and morphologically subcategorize for the stem they are attached to. Clitics, on the other hand, have only an INDIRECT relationship to their hosts. They subcategorize for and are associated with the entire phrase (cf. Klavans 1985; Anderson 1992) and only through a separate clitic placement operation are these clitics phonologically attached to the surface host.

Based on these criteria, Nuuchahnulth lexical suffixes are more like affixes in that they show (1) arbitrary gaps in the set of combinations, (2) morphophonological idiosyncrasies, and (3) semantic idiosyncrasies. However, not all criteria point in the same direction. In terms of selectivity with respect to the base of phonological dependence, the lexical suffixes align themselves with clitics in exhibiting a very low degree of selection. The lexical subcategorization of the lexical suffixes appears to have little, if any, bearing on the choice of the phonological base, which is quite untypical of affixes.

This conflict in characteristics results in difficulty in determining whether the lexical suffixes are affixes or clitics based on the standard criteria. This difficulty, however, should be considered not a problem for the theories of affixes and clitics themselves, but rather as the problem of application of the theories to the language. The standard theoretical framework for distinguishing types of morphemes, in particular affixes and clitics, has proven useful for the description of many languages, and therefore it should not be abandoned prematurely. The framework, however, is not necessarily uniformly applicable to all languages. Nuuchahnulth appears to be one of the languages where the standard criteria are of less use.

It is important to explore reasons why the framework fails to apply to Nuuchahnulth. Characterizing the problem Nuuchahnulth lexical suffixes raise as a problem of application does not save the usefulness of the standard framework unless we can specify the causes of inapplicability or distinguish Nuuchahnulth, for which the framework is not very useful, from those languages for which it is on theory-independent grounds.

It is not easy to determine based on the above observation alone which, between the affix-like aspect and clitic-like aspect, is the more basic aspect of the lexical suffixes. We can get some clues from the typological facts about affixes and clitics and from the nature of morphological structuring the lexical suffixes are involved. Crosslinguistically cliticization is most often found in the morphology peripheral to the word structure, such as inflectional morphology, and is highly unlikely to be found in the word-internal derivational morphology. As we saw, the lexical suffixes have a highly derivational relationship to the stem in terms of morphophonology and semantics. Taking these facts into account, it is more natural to assume that the lexical suffixes are associated with the stem through suffixation rather than cliticization.

Now that we have concluded that the lexical suffixes are in fact *affixes*, we must address the problem of the clitic-like suffixing pattern. The peculiarity of the suffixing pattern lies in the fact that the lexical suffixes can take a phrase as their domain of suffixation. Assuming that the relationship between the lexical suffixes and their bases is comparable to the tight word-internal relationship between derivational affixes and their stems in other languages, it seems most reasonable to think that the phrase suffixed by the lexical suffixes is forming a syntactically very tight constituent comparable to a lexical stem.

Although a phrase forming a constituent as tight as a single lexical stem might seem quite unusual, this line of thinking is also supported by the observations we made about the behavior of the lexical suffixes and the phrase associated with them. The lexical suffixes are mechanically attached to the first constituent in the phrase. And within the phrase suffixed with the lexical suffixes, the order of elements cannot be changed in any way. The inflexibility in suffix placement and element ordering suggests that the phrase does not have discernible internal syntactic structure and is treated as a single unanalyzable chunk for the purpose of morphosyntactic operations including suffix placement.

In sum, the lexical suffixes in Nuuchahnulth, despite the surface peculiarities in the suffixing pattern, can still be considered *affixes* that participate in the word-internal morphology. In Nuuchahnulth, unlike other languages, it is possible to use a phrase as the base for suffixation by grouping the elements in the phrase into a single tight constituent without discernible internal syntactic structure. When the lexical suffixes are suffixed to such a phrasal base, physical placement of the suffix follows a pattern reminiscent of cliticization.

3.2. Clause-level Inflection

Predicative Nominal Phrases

CLAUSE-LEVEL INFLECTION can be attached to a nominal phrase when it is serving as the predicate. The inflection must be attached to the first constituent of the phrase regardless of its semantic class.

(15) p.55 [#90]
ƛuↄↄi·š ḥawiⱡ Bill
ƛuↄ-ↄi·š ḥawiⱡ Bill
good-IND chief
'Bill is a good chief.'

(16) p.56 [#95]
ↄaya·ˁšↃuⱡminḥ
ↄaya·-a·ˁš Ↄuⱡ-minḥ
many-EVID good-PL
'There's many nice ones.'

There are a few exceptional QUALIFIERS that do not follow this pattern. For example, a noninitial qualifier *tani* 'really' attracts the inflection even though it does not occur phrase-initially. Also, when ↄi·qḥi 'still' is the initial qualifier, the inflection is not attached to the qualifier, but to the following constituent.

Within a predicative nominal phrase, the order of elements is rigid and cannot be changed.

Predicate Phrases

When the predicate consists of multiple predicative words, inflection is attached to the higher predicate. In a phrase consisting of qualifier + predicative head, the order of constituents is flexible, and whichever precedes the other carries inflectional morphemes.

(17) p.53 [#81]
čamaḥtaʔƛnaḥč huˑxʷsʔat Bill
čamaḥta-'aƛ-na-ḥa·-č *huˑxʷsʔat Bill*
really-TEMP-PAST-INTER-INF rest
'Did Bill really rest?'

(18) p.53 [#82]
tuxšiƛiš čamaḥt Bill
tux-ši(ƛ)-ʔi·š **čamaḥt** *Bill*
jump-MOM-IND really
'Bill really jumped.'

Again, some qualifiers show deviant patterns: some can attract the inflection noninitially, while some can be left uninflected initially. The following are some examples of the latter.

(19) p.53 [#80]
hiˑkʷaƚ hitaḥtiˑč
hiˑkʷaƚ *hita-ḥt-(y)iˑ-č*
almost there-apart-INDEF-INF
'It almost separated into two parts.'

(20) p.54 [#86]
ʔiˑqhi ƛuˑkʷaˑnaˤš John
ʔiˑqhi ƛuˑkʷaˑna-a·ˤš John
still doctor-EVID
'John is evidently still a doctor.'

Position of Lexical Suffixes in the theories of affix and clitic

The clause-level inflectional suffixes show a suffixing pattern similar to that of the lexical suffixes, but they are more like clitics in their peripheral role in word formation. In addition to the low degree of selectivity with respect to the base of affixation, they show fewer arbitrary gaps in the set of combinations, fewer morphophonological idiosyncrasies, and fewer semantic idiosyncrasies, all of which point to cliticization.

There is, however, a reason to refrain from identifying the clause-level inflectional suffixes as clitics. Although the suffix attachment generally follows a clitic-like pattern, there are some idiosyncratic exceptions. Considering that the number of exceptional cases itself is not that big, one might argue that these exceptions are just accidents and can be ignored. But this argument is not as convincing as it seems. Recall that, when the phrase is serving as the base for the lexical suffixes, attachment of the suffix is based strictly on the linear order, and that all cases including those involving the 'exceptional qualifiers' follow the rule. This shows that, if all that the clause-level inflection is sensitive to is linear order, the suffixation pattern could be absolutely regular without the observed exceptions. Given this consideration, the existence of exceptions suggests some degree of lexical or semantic connection, which is impossible with clitics, between the suffix and the base of suffixation. In other words, clause-level inflection can 'see' (= be sensitive to) the internal predicative structure to a certain extent.

The view of the clause-level inflectional suffixes as affixes might seem to be in conflict with their low selectivity with respect to the base. But this surface conflict can be resolved if we recall the general structural trends in Nuuchahnulth. In this language, as we discussed above, a phrase can form a single domain of affixation. Thus, the low selectivity associated with the phrasal domain is a fact about the general structure of the language, and not a fact about the inherent characteristics of the suffix.

In sum, the clause-level inflectional suffixes are *affixes*. When these suffixes are associated with a phrase, suffix attachment is less selective with respect to the base. This 'low selectivity' behavior is what is granted by the general structural characteristics of the language, not by the inherent characteristics of the suffixes themselves.

3.3. NP-level inflection

Nominal Phrases

The inflectional suffixes associated with a nominal phrase are most commonly attached to the (first, if there is more than one) modifier. Within the phrase, modifiers usually precede the nominal head. Thus, the most preferred structure is MODIFIER-INFLECTION NOMINAL (hence MOD-INFL NOM).

(21) p.44 [#36]
tupkakṁinḥisi mamaḥƚ
tupk-akʷ-ṁinḥ-ʔis-ʔi· CV#-maḥli
black-DUR-PL-DIM-DEF DISTR-house
'a bunch of little black houses'

Other patterns of inflection placement and constituent ordering occur naturally as stylistic variants. These alternative patterns, nevertheless, are all relatively rare and dispreferred outside the appropriate contexts. The following are examples of possible alternatives.

NOM-INFL MOD

(22) p.44 [#37]
čapici ƛaʔu
čapic-ʔi· ƛaʔu·
canoe-DEF other
'the other canoe'

(23) p.44 [#38]
ha qawintʔi ʔaya
ha qawi-int-ʔi· ʔaya
the berry-PAST-DEF many
'the many berries (since destroyed)'

MOD NOM-INFL

(24) p.45 [#40]
ʔaya čaškakṁinḥ
ʔaya čašk-akʷ-ṁinḥ
many fast-DUR-PL
'many fast ones'

(25) p.45
ƛaʔu čapici
ƛaʔu· čapic-ʔi·
other canoe-DEF
'the other canoe'

NOM MOD-INFL

(26) p.45 [#41]
haˑʔa ˤiniˑƛ tanaˑkaƚ
haˑʔa ˤiniˑƛ tani-ʔak-a·ƚ
that dog really-POSS-PL
'their huge dog'

(27) p.45 [#43]
quˑʔas taʔiṁinḥi
quˑʔas ta-'iƚ-ṁinḥ-ʔi·
adult drift-in.house-PL-DEF
'the sick people'

In addition to the above variations, there are cases where the inflectional suffixes are distributed over constituents of the nominal phrase.

(28) p.45 [#44]
tupkaki maḥliṁinḥ
tupk-akʷ-ʔi· maḥli-ṁinḥ
black-DUR-DEF house-PL
'the black houses'

Position of Lexical Suffixes in the theories of affix and clitic

The NP-level inflectional suffixes, just like the clause-level inflectional suffixes, show apparently clitic-like characteristics. Placement of these suffixes is not based on a lexically specified relationship with the stem. The suffixes can basically be attached to any nominal phrase. Morphophonological changes triggered by the suffixes do not affect the stem as much. And the semantic contribution of the suffixes to the word meaning is not idiosyncratic.

The above observations could suggest that the NP-level inflectional suffixes are clitics. The key factor here is, as in the case of the clause-level inflectional suffixes, the morpheme placement pattern. Other characteristics are rather neutral with respect to the question of affix vs. clitic. They certainly suggest that the NP-level inflectional suffixes are peripheral to word formation, but do not indicate how far the suffixes are from the core of the word formation. They can be peripheral within the word, in which case they are inflectional affixes, or can be peripheral to the word, in which case they are clitics. The domain of suffixation can clarify this ambiguity: a phrasal domain suggests word-external affixation, and a word-level domain word-internal affixation.

In the case of the NP-level inflections, although there is no clear answer to the domain question, it seems reasonable to think at least that the suffixing pattern is based not solely on phrase-level considerations. The suffixes are *associated* with the phrase in that their host is selected within the boundary of the phrase, but they do not treat the phrase as a *domain of suffixation* in a strict sense. If the phrase as a whole is serving as a domain, then the kind of flexibility observed with the NP-level inflections should not exist.

The basis for considering the NP-level inflectional suffixes as clitics is further weakened by the observation that Nuuchahnulth suffixes in general are structurally associated with the whole phrase when they are related to the stem within a phrase. Given this general structural trend underlying the grammar of the language, we should discount the relevance of phrase-level association in determining the nature of the suffixes.

In sum, the NP-level inflectional suffixes are best considered affixes. Although their surface behavioral pattern might suggest that they are clitics, the flexibility in the choice of the base causes problems with that analysis. Viewing the NP-level inflections as affixes does not introduce any problem since their clitic-like surface behavior can be accounted for by the general structural trends in Nuuchahnulth.

4. STRUCTURAL TRENDS IN NUUCHAHNULTH

In this section, we will lay out the general picture of 'phrasal suffixation', based on the accounts in the previous section.

4.1. General suffixing pattern

The observations made in the above sections are summarized in the following table.

	Nominal Phr	Predicative Phr
LEXICAL SUFFIX	*Always first*	*Always first*
CLAUSE-LEVEL INFL	*Mostly first*	*Mostly first*
NP-LEVEL INFL	*First preferred but flexible*	—

Table 1: Summary of the suffixing patterns

In Nuuchahnulth, phrase-level considerations play an important role in determining the placement of suffixes regardless of suffix type. Based only on this fact, one might conclude that Nuuchahnulth suffixes are in fact *clitics*. That this is not a reasonable conclusion can be shown by several facts. The first and clearest counterargument comes from the nature of the lexical suffixes. The LEXICAL SUFFIXES are maximally derivational and stem-bound and this fact is in irreconcilable conflict with the characteristics of clitics. Second, the clitic-like suffixing pattern is imperfect with the INFLECTIONAL (CLAUSE-LEVEL or NP-LEVEL) SUFFIXES. They tend to be attached to the first constituent in a phrase but this is not an ironclad rule. Although this is not a major counterargument, it is enough to show that the INFLECTIONAL SUFFIXES cannot provide strong support for the clitic analysis. Third, the clitic analysis cannot explain the pattern of flexibility in the suffixation. As we saw above, attachment of INFLECTIONAL SUFFIXES is more flexible than that of the LEXICAL SUFFIXES. If we assume that the LEXICAL SUFFIXES and INFLECTIONAL SUFFIXES are different types of clitics, the former being the 'Derivational clitics' and the latter 'Inflectional clitics' (cf. Anderson (1992)[3]), and if we also assume that application of the cliticization rule can be irregular depending on the nature of the host-clitic relationship, then we would expect the 'Derivational' type (i.e. LEXICAL SUFFIXES) to be more irregular than the 'Inflectional' type (i.e. INFLECTIONAL SUFFIXES). Since the derivational relationship is generally closer and more idiosyncratic than the inflectional relationship, it is more likely to force the rule to compromise to its advantage. However, this expectation is not borne out. The observed pattern shows the opposite trend. This inconsistency again weakens the argument for the clitic view.

Thus, both the semantic and morphophonological nature of the base-suffix relationship and the overall suffixation pattern suggest that the clitic-like suffixation pattern is not part of the inherent characteristics of Nuuchahnulth suffixes. Instead, what allows the suffixes to take a whole phrase as their domain seems to be the structural characteristics of phrases in Nuuchahnulth. In other words, the Nuuchahnulth suffixes can be attached to a phrase because the phrase can form an extremely tight constituent without internal syntactic structure, rather than because the suffixes are morphologically *clitics*.

4.2. The Nature of Phrases

In this section, we reframe our discussion of phrasal suffixation in terms of the nature of phrases, and show that our solution of ascribing the unusual domain phenomena to the structural characteristics of the language is not an ad-hoc one but is in fact motivated by the general structural facts. The discussion is organized in terms of the nature of the phrasal domain. Phrases associated with the lexical suffixes form a stem (STEM-FORMING), those with the clause-level inflectional suffixes form a clause-level predicate (PREDICATE-FORMING), and those with the nominal-phrase-level inflectional suffixes form an argument (ARGUMENT-FORMING). Our observations made in the above sections are summarized as follows.

	Nominal Phr (MOD > NOM)	Predicative Phr (QUAL > pred)
STEM-FORMING	*Fixed*	*Fixed*
PREDICATE-FORMING	*Fixed*	*Flexible*
ARGUMENT-FORMING	*Preferred but flexible*	—

Table 2: Summary of the element ordering within a phrase

Derivational phrasal domain vs. Inflectional phrasal domain

First we examine the difference between the phrasal domain associated with derivational suffixes and that associated with inflectional suffixes, i.e., STEM-FORMING PHRASES vs. PREDICATE-FORMING PHRASES. Although we cannot see a significant difference between them when they take the form of nominal phrases,

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[3] Anderson distinguishes DERIVATIONAL CLITICS (PHRASAL AFFIX) and INFLECTIONAL CLITICS as follows: The DERIVATIONAL CLITICS 'correspond to the operation of rules that alter the semantic content (including whatever controls discourse function) of a phrase', whereas the INFLECTIONAL CLITICS 'realize the "Phrasal Properties" of their domain.'

there is a clear difference in ordering flexibility when they are predicative phrases. The ordering inflexibility within the STEM-FORMING PHRASE suggests that the phrase forms a single structural constituent without internal syntactic structure. Since the phrase is structurally a 'simple stem', the element cannot be reordered for reasons external to the internal composition, such as discourse considerations, just in the same way the order of a string of bound morphemes cannot be changed by principles external to the word-building process. The relatively flexible ordering within the PREDICATE-FORMING PHRASE, on the other hand, suggests that the phrase is structurally a combination of elements with internal structure.

This structural difference between the phrases is compatible with observations made with the general suffixation pattern. The lack of internal syntactic structure in the STEM-FORMING PHRASE explains the regularity in placement of the lexical suffixes. The lexical suffixes do not have any alternative positions of attachment because in the STEM-FORMING PHRASE there is only one structural constituent for the lexical suffixes to attach to[4]. As for the PREDICATE-FORMING PHRASE, the assumption that the elements in the phrase are structurally discernible can predict the flexibility in suffix placement.

Thus, phrases in Nuuchahnulth can form constituents with different degrees of analyzability depending on the function they are put to. The internal structure of a phrase can be 'frozen' to form a single structural unit in order to render the whole phrase as a stem. The phrase in this form can be associated with the lexical suffixes just like ordinary lexical stems. A phrase with discernible internal structure can be used as a clausal predicate. In this case, because the elements in the phrase are recognizable as separate elements, there is room for alternative ordering or suffix placement.

PREDICATE-FORMING PHRASE vs. ARGUMENT-FORMING PHRASE

PREDICATE-FORMING PHRASES and ARGUMENT-FORMING PHRASES can be compared only when they take the form of a nominal phrase. The ARGUMENT-FORMING PHRASES show a flexibility that cannot be observed in the PREDICATE-FORMING PHRASES. The relationship between elements in these functional types seems to be qualitatively different. However, it is not clear at this point what constitutes the underlying key differences between these two functional types. Nonetheless, the difference in flexibility in the element ordering is roughly parallel to that in suffix placement.

5. CONCLUSION

In this paper, we examined the phenomenon of 'phrasal suffixation' in Nuuchahnulth. Phonological attachment of the 'suffixes' appears to be based largely on phrase-level considerations. This seems to suggest that they are in fact *clitics*. In Nuuchahnulth, however, all types of suffixes, including the strongly derivational LEXICAL SUFFIXES, can take a phrase as the domain of suffixation. The fact that the 'phrasal suffixation' phenomenon is not limited to peripheral morphology (e.g. inflectional morphology) but is observed across the board makes it less preferable to consider the 'suffixation' in Nuuchahnulth as *cliticization*. Instead, it seems more reasonable to assume that the 'phrasal suffixation' is warranted by general structural trends. In Nuuchahnulth, phrases form a syntactically tight constituent, sometimes as tight as a single lexical stem. This structural tightness allows the whole phrase to be the domain of suffixation.

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[4] The question of why the phrase-inital position is chosen for such machanical suffixation is a whole different issue and is beyond the scope of this paper.

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