0. Introduction

Contemporary linguistics has set itself the task of characterizing the notion "possible grammar of a language". If we elaborate a theory of grammar which will permit the construction of a unique grammar (or perhaps of a very few grammars) for any given language, then we will have succeeded in characterizing a significant part of the innate mental capacity which every human being utilizes in acquiring and using his language. It is this innate capacity which accounts both for the amazing speed with which a child acquires his language and for the remarkable, if subtle, uniformity found in language, not merely between two people who speak the same language, but also between those who speak what seem at first to be quite disparate languages.

Many proposals have been made concerning the possible structure of a grammar: the classic example is Noam Chomsky's (1957) contention that rewrite rules of both the phrase structure and transformational types must be permitted; earlier suggestions had by and large imposed much heavier constraints on the form of a grammar (cf. Postal 1964). There has been a growing realization, however, that the power of a transformational grammar as allowed by the present theory is much too great: any characterization we could offer at present of the notion "possible grammar" would be grossly inadequate. The basic research problem in linguistics today, then, is to constrain the power of grammars.

Any proposal for a new type of rule or constraint in the grammar, with its own distinct formal properties, must be examined in this light. While in a sense such a proposal calls for extending the power of the grammar, it is possible that significantly greater constraints can be imposed elsewhere in the grammar. The net result would be a desirable one: a more elaborated, yet more tightly constrained, conception of what a possible grammar involves. However, it is important to show that any such proposal allows constraints to be imposed elsewhere: for if the relevant observations can be handled elsewhere in the grammar, by permitting properties of rules which are independently motivated, then by adding the new proposal to the theory we are not moving any closer to a characterization of the notion "possible grammar".

A case in point is the output condition or surface structure constraint. A number of linguists, beginning with Haj Ross (1957) and Dave Perlmutter (1968; 1970) have observed that certain well-formedness condition on the output of transformations in many languages cannot be stated as a part of any particular rule involved, rather these may be stated as a condition on surface structures in
general, in these languages. That is, there is a part of the grammar, the set of surface structure constraints, which applies as a filter after the transformations, marking as ill-formed those sentences which contain dis-

allowed configurations.

The proposal that a grammar be permitted to include surface structure constraints has received support in a number of studies, e.g. Hale 1973, Sasse 1971.

In this context, consider the Nitinat Auxiliary: this is a sequence of clitics surfaces variously indicating tense, mood, subordination, conjointing, person and number of subject and object, and the like.

As I will show below, the Auxiliary always moves to a certain place in the sentence or other constituent with which it is associated. Perlmutter (1970:217) advances the claim that "in all languages in which clitics move to a particular place in the sentence, there are surface structure constraints on the relative order of clitics." A study of the Auxiliary in Nitinat reveals well-formedness conditions which cannot be stated satisfactorily as conditions on transformations, but which can be stated as a single surface structure constraint. Like such constraints for other languages, the Nitinat surface structure constraint takes the form of a chart which shows the well-formed surface sequences of clitics. The chart below indicates the permitted sequences of Auxiliary categories. One and only one formative representing each of these categories is permitted per surface Auxiliary, a listing of the formatives that may occur in each category is found in Appendix A. The category names in chart (1) are not wholly satisfactory, as a study of the two appendices shows.

(1) Chart of permitted surface sequences of Auxiliary categories

SEQ:PAST:FUT:SPEC:I:II:III:

(Abbreviations: SEQ = Sequential; INF = Inferential/intentional; FUT = Future; PAST = Past; SPEC = Specifier; I = First person pronoun; II = Second person pronoun; III = Third person pronoun; MOD = Modal; REP = Repetitive)

Like the surface structure constraints suggested by Perlmutter and Hale, the above output condition for Nitinat is, as we will see below, largely motivated by restrictions on clitics with pronominal reference: the arguments in the main thesis hinge on the proposition that the DeepStructure configuration of pronominal formatives is very different from the surface structure configuration, i.e. that there exist transformations which move or create constituents with pronominal reference. But it has been argued, convincingly in my opinion, that coreference is established by interpretive rules which follow the transformations on each cycle.

In this framework, elaborated in greatest detail in Jackendoff 1972, pronouns are always generated in the base, and never introduced by transformations (though they may be moved by independently motivated transformations). Suppose that this framework could be extended, and an interpretive account of pronominal clitics adequately motivated, thus permitting the generation of pronominal clitics in the base. Then it can be concluded that output conditions apply to the output of the base, not to the output of the transformational component.
But, as Emonds 1970 has observed, the formal properties of phrase structure rules which are needed anyway are sufficient to express output conditions of the type proposed in the literature. Thus adding the output condition component to the grammar does not permit us to tighten the grammar up anywhere, rather we simply end up allowing widely divergent possible grammars for any given language. The conclusion under these circumstances could only be that output conditions must be disallowed.

In sections 1 - 6 below, a series of observations concerning the Auxiliary of Nitinat are presented, observations which could be used to motivate a surface structure constraint. But in addition, an alternative is considered: that the speculations in the preceding paragraph are basically correct, namely that an interpretive account of anaphora is preferable. This alternative would largely vitiate the need for output conditions. However, there remains some evidence that output conditions are needed.

1. The Position of the Auxiliary

Since the syntax of Nitinat and the other West Coast Languages of Vancouver Island is not discussed extensively in the published literature, this account must include some relatively elementary background information. Moreover, at this stage in the study of these languages, even the elementary observations that one makes may be far off the track, and so it is important to spell out in some detail what seems obvious, but does in fact need verification. The bulk of the background discussion has been relegated to Appendix B, but it is appropriate to make at least a few observations here.

The following typical simple sentences of Nitinat illustrate different tense, mood, and pronominal elements in the Auxiliary: In sentence 1 - 3 there is an Aux(iliary) consisting simply of the declarative mood morpheme 'a. 9

(1) P'osčak 'a xāda' ak 'aq.
(Tired DECL(arative) girl the)
'the girl is tired'

(2) 'Aptā 'a xāda' ak 'aq 'iyag ch'apats 'aq.
(hide DECL girl the in canoe the)
'the girl is hiding in the canoe'

(3) Dāčili 'a xāda' ak 'aq 'óyoq bowach '
(watch DECL girl the to deer the)
'the girl is watching the deer'

Sentences 1' - 3 are in the present tense form: there is no overt tense inflection here. The corresponding sentences in the past tense do display a tense inflection, namely ibt, and it appears in AUX positions. Sentences 4-6 correspond to 1' - 3.

(4) P'osčak ibt 'a xāda' ak 'aq.
'the girl was tired'

(5) 'Aptā ibt 'a xāda' ak 'aq 'iyag ch'apats 'aq.
'the girl was hiding in the canoe'

(6) Dāčilih ibt'a xāda' ak 'aq 'óyoq bowach 'aq.
'the girl was watching the deer'

Sentences 1' - 6 are straightforward assertions: as already mentioned, the morpheme 'a DECL(arative) indicates this. Sentences 7 through 12 correspond respectively to 1' through 6, but are not out-and-out assertions. Rather, the speaker is expressing a possibility or his uncertainty: the modal gisch 'maybe' which replaces the DECLarative indicates this.
If the subject is first or second person, then there is normally no overt subject noun phrase. However, the Auxiliary contains a morpheme to indicate the person and number for every non-third person singular subject (i.e. a third person singular subject is represented by zero in the Auxiliary). The subject of the following sentences is second person singular.

(14) P'osåk _g.  
    (tired DECL.)  
    'You're tired'

(15) Dáchil _e _g 'ëyoq bowach 'aq.  
    'You're watching the deer'

The second person singular subject of 14-15 is represented only by the Auxiliary morpheme _g—the first person singular is also represented in the Auxiliary by _g, but the Declarative morpheme is zero, not _a, before the first person _g:

(16) P'osåk _g  
    'I'm tired'  
    (tired 1)

(17) Dáchil _g 'ëyoq bowach 'aq.  
    'I'm watching the deer'

When the modal morpheme is giš, then first and second persons singular are distinctive, being represented by _g and _k, respectively, as illustrated in 18-19. Observe that the person morpheme is infixed in the modal. The latter formative consists of the parts giš- and -ish; when these come together, as in the third person singular (e.g. 7-12 above), the vowels contract by a perfectly
The morphological and phonological alternations discussed in the preceding paragraphs are not untypical of Nitinat Auxiliary formation. By and large, morphologically transparent examples have been selected for this paper, but it has not always been feasible to do this. The reader should refer to the Appendix in cases of non-obvious analyses.

In all the above sentences, the position of the AUX sequence is immediately after the verb; in all instances, the verb has been the first word of the sentence. In many sentences, however, the verb is not the first word, and then the AUX does not follow it. In 1.1, two such situations are examined: sentences containing negatives and topicalized noun phrases, respectively.

1.1 Consider the sentences 20-24 below. In 20 and 21, the propositions of 1' and 2, respectively, are negated; in 22-24, the propositions of 14-16, and 18, respectively are negated. The negative formative is wik.

(20) Wik 'a po'säk xädä'ak 'aq. 'The girls isn't tired'
(21) Wik 'a 'aptä xädä'ak 'aq 'iyaq ch'apats 'aq. 'The girls isn't hiding in the canoe'

(22) Wik 'a a p'osäk. 'You're not tired'
(23) Wik a p'osäk. 'I'm not tired'
(24) Wik gisish p'osäk. 'I guess I'm not tired'

When the negative wik is present, AUX no longer follows the verb; rather it follows wik. By this change in the position of AUX contributes nothing to the change in meaning between the sentences 1' and 20, 2 and 21, and so on; the addition of wik to 20, 21, etc. is sufficient to account for this. In order to preserve the observation about the relationship between the pairs 1' and 20, etc., it is necessary to assume that they have the same underlying order, and that a rule, which we can call AUX-shift, changes the position of AUX so that it follows wik if present, and if not, then the verb.

The AUX-Shift rule is not needed merely to account for differences between corresponding positive and negative sentences. Independent motivation is provided by a study of certain reordering possibilities. In general, any prepositional phrase may be moved to the left of the verb. For example, the prepositional phrase 'iyaq bowach 'aq in 3 (repeated below for convenience) may be optionally placed as in 25; similarly, 17 has the optional variant 26.
(23) Déchil 'a xàda'ak 'aq 'ôyq bowach 'aq.
(Look DEER girl the to dear the)
'The girl is looking at the deer'

(25) 'Ôyq 'a bowach 'aq dëchil xàda'ak 'aq.

(17) Déchil e 'ôyq bowach 'aq. 'I'm looking at the deer'
(DECL.1)

(26) 'Ôyq e bowach 'aq dëchil.

For convenience, I will refer to the rule which shifts a prepositional phrase to the left of the verb as the Topicalization rule. The striking thing about sentences such as 25 and 26 in which topicalization has applied is that the sentence auxiliaries appear inside the prepositional phrase immediately following the proposition. The rule of AUX-shift, in order to place the Auxiliaries correctly, must be able to accomplish this. Now, so far we have seen that the auxiliaries may follow the verb (11 - 19), the negative xik (20-24), or a proposition (25 - 26). What is common to the position of the Auxiliaries in all of the sentences is that it is in second position, that is, it immediately follows the very first word of the surface sentence, whatever that word may be. The rule of AUX-shift is thus most generally applicable if formulated in the following terms:

(27) AUX-shift

Move the AUXiliary into second position.

Observe that there is no way to define the deep structure position of the Auxiliaries, since second position can only be determined subsequent to the application of movement transformations. There is no clear answer as to the deep structure position of the Auxiliaries, and the resolution of this question must await further investigation. In any case, it is sufficient for present purposes to observe that each sentence has associated with it in deep structure an Auxiliary, and the surface structure position of the Auxiliary is determined as set out above.

1.2. Sentences are not the only constituents with an associated Auxiliary: both noun phrases and prepositional phrases may contain Auxiliaries. For present purposes, it is sufficient to illustrate the noun phrase Auxiliary; the prepositional phrase Auxiliary will be reserved for later examination.

Consider the underlined morpheme in sentence 28: This morpheme 'ag functions as a definite determiner (contrast 29), and has up till now been glossed simply as 'the'.

(29) Sokîl lët a xàl 'ag.
(Grab past I ball DET)
'I grabbed the ball'

(25) Sokîl lët a xàl.
'I grabbed a ball'
The contrast between the modals 'a 'declarative' and gi-ish 'maybe' is paralleled by a distinction between the determiners 'aq and another determiner, uwa:

(30) Dächil ibt s 'qyoq ch'bibat 'aq.
(watch past I to chief DET)
'I watched the chief'

(31) Dächil ibt s 'qyoq ch'bibat uwa.
(watch past I to chief DET)
'I watched someone who may be a chief'

Thus there is a similarity in grammatical categories between sentence and noun phrase Auxiliaries. Pronominal morphemes and tense morphemes may also appear in the noun phrase Auxiliary, as illustrated in the Appendix.

The AUX-Shift rule is perfectly general in application, and serves to determine the surface position of the noun phrase Auxiliary. In 32, and 33, the Auxiliary follows the first word of the noun phrase, whether that word be the noun or an adjective. Any other order of formative yields an illformed sentence, as in 34.

(32) Dächil 'a John 'qyoq bowsac 'aq.
(Watch DECL john to deer DET)
'John watched the deer'

(33) Dächil 'a John 'qyoq 'ig (big) 'aq bowsac.
'John watched the big deer'

(34) *Dächil 'a John 'qyoq 'ig bowsac 'aq.

2. Subject-Object Agreement

Included among the elements of the Auxiliary of any sentence in Nitinaht is a morpheme which agrees in person and number with the subject of the sentence. For example, contrast sentences 34 and 35 below: the subject noun phrases are xäd'aq 'aq 'the woman' (third person singular) and xatzúdachiy 'aq 'the woman' (third person plural), respectively. The difference in number is reflected by the Auxiliary morpheme al (reduced to 1 after a vowel). There is no overt Auxiliary morpheme for the third person singular, as has already been noted.

(35) Tl'ixw 'a xäd'aq 'aq.
(laugh DECL woman the)
'The woman is laughing'

(36) Tl'ixw 'a 1 xatzúdachiy 'aq.
(laugh DECL: III: plural woman the)
'The women are laughing'

Three persons (first:second:third) and two numbers (singular:plural) are distinguished among the Auxiliary morphemes, resulting in a not unfamiliar pattern with a six-position paradigm, including the unmarked third person singular. The following sentences illustrate the paradigm. (There is some allomorphy of pronominal elements conditioned by adjacent Auxiliary morphemes, but these will have no bearing on the issues at hand and can be safely skipped over).

(37) Pisatok ibt s 'iqag t'ashh 'aq.
(Run past DECL:1 on road the)
'I ran down the road'
(36) Pisatok lbt i'id 'iyag t'ashî 'aq.
'We ran down the road'

(39) Pisatok lbt 'as 'iyag t'ashî 'aq.
'You ran down the road'

(40) Pisatok lbt 'asuw 'iyag t'ashî 'aq.
'You (Plural) ran down the road'

(41) Pisatok lbt 'as 'iyag t'ashî 'aq.
'He/she ran down the road'

(42) Pisatok lbt 'a l 'iyag t'ashî 'aq.
'They ran down the road'

An adequate grammar of Nitînat must include a rule to the effect that
the person and number of the subject noun phrase is duplicated in the Auxiliary.
I turn below to a reconsideration of the precise formulation of this rule. First,
it is appropriate to take note of a few additional facts which must be accounted for. In sentences 43 and 44, the complement of the verb consists of a
prepositional phrase, in which the preposition is 'öyoq.

(43) 'Öshablo' Itl s 'öyoq Bill.
(Something: tell Future DECL:I to Bill)
'I'll tell a story (lit: something) to Bill'

(44) 'Öshablo' Itl s 'öyoq s{"ow'a.
'I'll tell a story to you'

This prepositional, which is generally equated with the English to
by speakers of Nitînat, enjoys a special status in a number of respects. What
is of interest here is that, when 'öyoq governs a pronoun, there exists a
paraphrase of the sentence, e.g. 45 paraphrases 44.

(45) 'Öshablo' Itl s itsg.
(something: tell Future DECL:I you)

The Auxiliary of sentence 45 contains a morpheme itsg 'you' agreeing
with the complement of the verb, and moreover the complement (including itsa
'öyoq has been deleted) in the case of the subject

This optional paraphrase is in general available whenever there is a
prepositional phrase consisting of the preposition 'öyoq and a pronoun. As
in the case of the subject morphemes in the Auxiliary, those which agree with
the pronoun complement distinguish three persons and two numbers. Again, those
agreements facts must be accounted for in the grammar of Nitînat, and we are
obliged to posit a rule to accomplish this task.

Setting aside reflexives and reciprocals, 5 there are two restrictions
on possible combinations of the grammatical persons as subject and complement
in sentences like 44 - 45. One of these restrictions reflects hierarchical
conditions associated with passivization. 5 Briefly stated, the surface subject
of the (active or passive) sentence must be equal to or higher than the active
object or passive agent on the following hierarchy (where "object" includes direct
object of the verb as well as object of the preposition 'öyoq).
1. Speaker or listener
2. Other than speaker or listener, and animate
3. Other than speaker or listener, and inanimate

When the subject and object are of equal rank, say where both are third person and animate, then the active and passive are optional variants. The following sentences illustrate this: the active (46) and passive (47) are equally grammatical, since the subject and object are both in third position on the hierarchy. In (47), the passive morpheme 'it is suffixed to the verb; the agent preposition in the passive is 'ogít.

(46) Ta'cqshitl ibt 'a Bill John.
(spear PAST DECL Bill John)
'Bill speared John'

(47) Ta'cqshitl'it ibt 'a John 'ogít Bill.
(Spear:Passive PAST DECL John Agent:Passive Bill)
'John was speared by Bill'

If the subject is first person, and the object is inanimate, then the passive is ungrammatical since it would violate the hierarchy:

(48) Ta'cqshitl ibt e John.
(Spear Past DECL:1 John)
'I speared John'

(49) *Ta'cqshitl'it ibt 'a John 'ogít siy'a.
(Spear:Passive Past DECL:1 John Agent:Passive 1)

Conversely, if the (deep) subject is inanimate and the object is the first person, then the active form violates the hierarchy, and so the passive is obligatory:

(50) *Bachitl ibt 'a ch'ikwäl 'óyoq siy'a.

(51) Bachitl'it ibt 'a 'ogít ch'ikwäl.

Moreover, when both the subject and object noun phrases are of the highest rank, no passive is possible:

(52) Bachitl ibt 'a 'óyoq sow'a.

(53) *Bachitl'it ibt 'as ogít siy'a.

(54) Bachitl ibt 'as 'óyoq siy'a.

(55) *Bachitl'it ibt 'as gojit sow'a.

It was observed above that when a sentence contains a prepositional phrase consisting of 'óyoq plus a pronoun, then there exists a paraphrase with an auxiliary pronominal morpheme and minus the prepositional phrase. As it stands, that observation implies that, since there are six person-number categories, and therefore twenty-eight possible subject-object combinations (disregarding reflexives), therefore there should be twenty-eight possible combinations of subject and object auxiliary morphemes. However,
a consequence of the passivization hierarchy is that eight of these combinations can never in fact appear in well-formed surface structures. These eight are the combination of a third person singular or plural subject with a first or second person subject, singular or plural. Observe that in the passivization hierarchy, any third person noun phrase inevitably ranks lower than any first or second person noun phrase. Hence the passive always applies if the subject is third person and the object first or second person. A sentence like 30, although structurally identical to 44, must undergo the passive (yielding 31) in which case its structure no longer matches that of 44, and so there is no paraphrase available for 30 in the fashion that 44 is paraphrasable with 45.

What we have just seen, then, is that the ungrammaticality of the combination third person subject plus first or second person object in the Auxiliary is explained in a straightforward way. Namely, no grammatical surface structure exists with that combination, since the passivization hierarchy always requires such sentences to appear in passive form on the surface.

1.1. When we set aside reflexives, and take the passivization hierarchy into account, we are left with twenty possible combinations, in active sentences, of subject and object in terms of person and number. These comprise:

First person (singular or plural) subject and second or third person (sg or pl) object (eight combinations)

Second person (sg or pl) subject and first or third person (sg or pl) object (eight combinations)

Third person (sg or pl) subject and third person (sg or pl) object (where subject and object are not coreferential) (four combinations)

All of these combinations do in fact yield well-formed active surface structures. Combinations of third person subjects and third person objects are displayed by way of example in the following paradigm:

(36) Biblical Aram. 'a yādaqiš 'eyq xāda'ah 'aq, (watch past Mkcl child to woman Bqf) 'a child watched the woman'

(37) Biblical Aram. 'a yāda 'ēyq watsēśašíy 'aq, (watch past Mkcl to woman Bqf) 'a child watched the woman'

(38) Biblical Aram. 'a l yādaqīš 'ēyq xāda'ah 'aq (watch past Mkcl third plural children to woman Bqf) 'some children watched the woman'

(39) Biblical Aram. (l) yēyādaqīš 'ēyq watsēśašíy 'aq. (watch past Mkcl third plural children to woman Bqf) 'some children watched the woman'

Consider now sentences similar to 56 - 59, but in this subject and the object (governed by 'ēyq) are third person pronouns, singular or plural, in correspondence with 56-59. While there is no distinction between the singular and plural pronouns in form (both are yā) they are distinguished by the
rule which matches them with paraphrases containing Auxiliary morphemes referring to the object.

From what has been observed so far, then, we would fully expect each of 56 and 59 to have a distinctive paraphrase in the manner that 45 is paraphrased by 42. The interesting thing is that only three of the predicted paraphrases are in fact grammatical.

(60) Dâlshiti lbt 'a.
    'she/he watched her/him'

(61) Dâlshiti lbt 'a l. (Third Person-Plural)
    'she/he watched them.'

(62) Dâlshiti lbt 'a l.
    'they watched her/him'

(63) *Dâlshiti lbt 'a l (a)l.
    'they watched them'

Sentence 59 cannot be paraphrased with 63, for the latter is ungrammatical. However, a clue to the explanation here is provided by 64, which is both a paraphrase of 59 and grammatical.

(64) Dâlshiti lbt 'a l.
    'They watched them'

Here we are dealing with an ambiguous sentence, for 64 is the same surface sentence as 61 and 62. Moreover, sentence 60 is also in fact ambiguous, for it can paraphrase not only 56 (with appropriate changes of nouns to pronouns) but also 57, 58, 59 (and hence also 61 and 62):

(60) Dâlshiti lbt 'a.
    (watch Fast DECL)

1. 'she/he watched he/him'
2. 'she/he watched them'
3. 'they watched her/him'
4. 'they watched them'

Obviously, we must conclude that it is optional to show agreement in the Auxiliary with a deleted third person plural noun phrase governed by 'âbyg. Now it is possible to state the restriction which makes 63 ungrammatical.

(65) It is not permitted to have agreement in the Auxiliary with both subject and object if both of these are third person plural.

This statement of the restriction is not by any means a principled explanation however, and it is appropriate now to consider what the explanation must be. Two possibilities suggest themselves; the choice between them is inseparable from the choice between two ways of expressing subject-object agreement in the Auxiliary — this problem was set aside earlier in this section, and I now return to it.

2.3. The grammar of Mitinit must be capable of predicting when two sentences may mean the same thing. Therefore, we must include in the grammar rules of semantic interpretation which pair the syntactic representation of a sentence with its meaning. Each sentence has associated with it two syntactic representations, the underlying and the surface (for present purposes I disregard
intermediate representations). These are, then, two places where we can permit the rules of semantic interpretation to establish that Auxiliary pronominal morphemes refer to the subject and object. Let us consider each of these in turn.

Firstly, suppose that the underlying representation of Auxiliary pronominal morphemes consists of the corresponding independent pronouns in subject and object positions. For example, the underlying representation of (61) would be (66) (irrelevant details are simplified or omitted):

(61) dîlshiti ibt 'a l.
    (watch Past DECL Third-Plural)
    'he/she watched them'

(66) [ = (61)]

[Diagram]

The reference and grammatical function of the Auxiliary pronominal morphemes can be read directly off the form and position of their underlying counterparts. Now, a transformational rule is needed which will delete the preposition 'byog, convert the pronouns to Auxiliary formatives, and move them into the Auxiliary. Let us refer to this analysis of subject-object agreement in the Auxiliary as the Transformational Solution.

Recall that (61) is also paraphrased by one of the readings of (60). To account for this and other observations already made in connection with the ambiguity of (60), the Transformational Solution must permit the insertion of the third-Plural Morpheme (a) to be optional even when the prepositional phrase 'byog yā is deleted.8

The Transformational Solution has now been sufficiently elaborated to permit the generation (insofar as pronominal formatives are concerned) of all the grammatical sentences examined so far, in all of their possible readings. I leave it as an exercise for the reader to verify this in detail consistent with individual taste. The important thing to notice is that the Transformational Solution still permits the generation of the decidedly ungrammatical (63). There is no reason to block the generation of the deep structure (67) which underlies (63), since (67) also yields the well-formed sentence (68) if the object is not deleted at all, and as well 60 and 64 if the option to not insert (a)1 is exercised, for either subject or object or both.
The mechanism of surface structure constraint provides a means of expressing the restriction which makes 63, but not 60, 64 or 68, ungrammatical. Permit the grammar to generate the deep structure, 67. Then, let the transformational rules apply, deriving the surface structures 60, 63, 64, and 68 from 67. Then, at the level of surface structure, check each sentence against the condition expressed in 69. As our study of Nimitat proceeds below, we will see that condition (69) generalizes to the form (1), presented in the introduction above. It should already be clear that the output condition (1) subsumes (69). This condition requires us to mark 63 as ill-formed.

(69) Output Condition on Auxiliaries

No sentence may contain in the Auxiliary more than one morpheme representing any one grammatical person category.

That there may be zero, one, or a maximum of two pronominal morphemes is handled by the transformational rules which introduce the pronominal morphemes.

We have now seen that if the transformational solution for subject-object agreement is accepted, then a surface structure constraint will express a restriction that must be placed on pronominal Auxiliary morphemes. In sections 3 and 3, it is shown that the surface structure constraint (69), in a slightly more general form, has independent motivation since it explains other facts about Nimitat as well. Before turning to these, however, it is necessary to recall that the transformational solution is not the only reasonable way of handling subject-object agreement.

2.6. Consider the possibility that rules of semantic interpretation may apply to the surface representation of a sentence. For example, suppose that the reference and grammatical function of the Auxiliary pronominal morphemes are established at that point. In that case, the representation of sentence 51, that could be relevant, is not 66, but rather 70 below. (In this framework, empty nodes, indicated by _, are generable in the base).
The deep structure 66 that was proposed for sentence 61 under the transformational Hypothesis receives no motivation in the analysis presently under consideration. Since all the pronominal morphemes are generated in the case in this analysis, I refer to it as the Phrase Structure Solution.

The rules establishing anaphoric relations will link the pronominal morpheme in the Auxiliary with one of the empty noun phrases. The morpheme \( (a) \) is unmarked as to whether it refers to subject or object, and so may be linked in coreference with either of the empty nodes in (70). Some of the Auxiliary pronomes are, however, marked as to whether they may refer to subject or object. Consider (45), for example: it is repeated here, along with its surface tree (71).

(45) 'Esahabat' iti s itsg.
(something: tell Future Decl: I you.)

(71)

The Auxiliary morpheme itsg may refer only to an object noun phrase, and so the reference rules will link it with the object of the preposition in (71). This leaves only the subject noun phrase in 71 to be the antecedent of the first person morpheme a (which is unmarked for subjecthood versus objecthood).

Contrast this with 72/73 in which the second person morpheme is marked as subject:

(72) 'Esahabat' iti s is.
(something: tell Future I you)

(73)
The subject morpheme in the sentence Auxiliary has been duplicated in the prepositional phrase Auxiliary in 84 and 86. Let us assume a transformational rule which will duplicate the subject Auxiliary in the Auxiliary of any prepositional phrase, that is, a rule which will derive 84 and 83, 86 from 83, and so on. More than just the subject morpheme may be copied: 87 is equivalent to 83-84. In this sentence, the tense morpheme is also duplicated in the Auxiliary of the prepositional phrase.

It is possible for only the tense morpheme to be duplicated, and not the subject pronoun.

The copying rule proposed above must, therefore, duplicate either tense or the subject pronoun, or both. I therefore refer to it as the Tense-Subject Copying rule. Consider now the interaction of Topicalization with Tense-Subject Copying. The examples of topicalization above all involve prepositional phrases which have not undergone Tense-Subject Copying. Suppose we apply topicalization now to sentences such as 84, 87, and 88, which have undergone the copying rules; the respective results are displayed below in 89-91, respectively. Each of these sentences is ill-formed, regardless of what order the Auxiliary sequence is placed in.

It is obvious that the same prepositional phrase may not both be topicalized and have Auxiliary morphemes copied into it. The output condition (69), with slight modification, will account for this fact: observe that both 89 and 90 contain Auxiliary sequences with more than one morpheme representing a single person category, namely the first person s. Sentence 91 does not contain a violation of the output condition as it stands; rather, the illformedness appears to be due to the presence of two tense morphemes in a single Auxiliary sequence. A more generalized form of the output condition (69) will exclude 91:

Output condition on Auxiliaries (revision of 69)
No sentence may contain in a single surface Auxiliary sequence more than one morpheme representing any tense or grammatical person.
Again, 92 is a less general form of the surface structure constraint stated in the introduction.

To generate sentences like 89-91 at all requires that the two rules involved be ordered as follows:

**Tense-Subject Copying**
**Topicalization**

We should consider the consequences if the two rules were so ordered as to apply instead in the opposite order:

**Topicalization**
**Tense-Subject Copying**

Continuing with 83 and the related sentences (84, 87 - 91), I present their common underlying representation here (the derivation of the subject Auxiliary pronominal is ignored):

(93)

```
S   Aux
  /\   /
 VP /  \ PP
  |    |
 V  N  NP
  P  D  Fut
  /   /
'ta'amashedi 'ojoq bowac 'aq 'itl
(spear to deer the Future)
```

Applying topicalization to 93 would yield the tree 94:

(94)

```
S  Aux
  /\   /
 VP /  \ PP
  |    |
 N  NP  Fut
  /   /  
'ojoq bowac 'aq ta'amashedi
```

Suppose now that Tense-Subject Copying is formulated so as to apply only to prepositional phrases which are situated to the right of the verb. Then this rule could not apply in 94 and so 89-91 could not be generated at all. Thus the output condition as stated in 92 would be unnecessary.

6. An Interpretive Solution for Topicalization

If it could be shown that even the interpretive semantic position requires an output condition of the form of 92, then there would be a strong argument in favour of the need for surface structure constraints. The sentences examined in part 3 provide data which make such an argument possible.

Implicit in both the alternative solutions discussed in part 3 is the assumption that pronominal and tense morphemes may be copied by a transformational...
rule, i.e. these two solutions are both consistent with the semantic theory assumed under the Transformational Hypothesis in part 2. Let us now examine an analysis of these same sentences which is consistent with the interpretive theory of semantics adopted under the Phrase Structure Solution in part 2.

According to the latter theory, pronominal formatives receive their semantic interpretation (in particular, the assignment of coreference) after the transformational rules have applied to the sentence. Therefore, there is no motivation for deriving the pronominal formatives from noun phrases by means of transformations, they may be simply generated in the base. Suppose then that we permitted the free generation of Nitinat Auxiliary pronouns in the base: both sentential and prepositional phrase Auxiliaries could dominate these elements in the underlying representation. (Again, call this the Phrase Structure Solution). This solution would entail the generation of the structures underlying all the variants 83, and 87 through 91. But recall that 89-91 are ungrammatical: to exclude them, the output condition (92) must be incorporated into the Phrase Structure Solution. The alternative is to adopt the Tense-Subject Copying rule, and weaken the Phrase Structure Solution, so that some pronominal (and tense) morphemes — namely those in the prepositional phrase Auxiliary — are created by the transformational component.

With the interpretive approach as well, then, 83-91 provide debatable support for surface structure constraints.

5. Tense-Subject Copying and Prepositional Object Conversion

Evidence for a role for a surface structure constraint in Nitinat is provided by the interaction between Tense Subject Copying and a rule which resembles the Subject-Object Agreement rule.

Sentences 95-96 exemplify Tense-Subject Copying: observe that the object of the preposition is a pronoun. It so happens that there is a third variant possible here, namely 97. In the latter sentence, the object pronoun gwa'a 'you' does not appear, but an Auxiliary pronominal itag does, and it is one with the same person and number as the object pronoun in 95-96.

(95) Ch'apatsíl a 'gwa'gad sow'a.
    (cane:make Decl:1 for you)
    'I'm building a canoe for you'

(96) Ch'apatsíl a 'gwa'gad a sow'a.
    (cane:make Decl:1 for I you)

(97) Ch'apatsíl a 'gwa'gad a itag.
    (cane:make Decl:1 for I you)

Let us assume for a moment at least, a rule of Prepositional Object Conversion, a rule which will optionally apply, converting a pronoun which is the object of a preposition into the corresponding Auxiliary pronominal morpheme. The interesting fact about 97 is that it has undergone not only Prepositional Object Conversion, but also Tense-Subject Copying. If the sentence had undergone only the former and not the latter, it would be ungrammatical:

(98) *Ch'apatsíl a 'gwa'gad itag.
    (cane:make Decl:1 for you)
That is, it is only possible to have an Auxiliary Object morpheme if a subject morpheme is also present in that Auxiliary. Now, given the above two transformational rules, it is possible to block the generation of 98. Apply Tense-Subject Copying first, and then apply Prepositional Object Conversion, making it contingent on the presence of a (subject) pronominal in the prepositional phrase Auxiliary.

If all pronominal formatives are generated in the base, then a way can be found to make certain that object Auxiliary pronominals are generated only if a subject one is also generated; however, this is the position which was shown in the previous section to require an output condition to handle topicalized sentences. If the Tense-Subject Copying rule is adopted, to avoid that output condition, and all other pronominal morphemes generated in the base, then 98 would be generateable in the base, and an output condition needed to block it.

Thus it is definitely not possible to adopt either a strictly conventional transformational or interpretive position, and avoid the need for output conditions. Only an interpretive analysis, modified so as to allow the two rules of Tense-Subject Copying and Prepositional Object Conversion, seems to function without any recourse at all to surface structure constraints.

6. Topicalization of Noun Phrases

It was mentioned earlier that noun phrases as well as prepositional phrases may be topicalized. However, as has been mentioned, the set of noun phrases that may appear to the left of the verb is limited, being constituted by and large by a set of adverbial noun phrases such as 'ibay 'yesterday' (or 'abey 'aq, with a determiner). Besides this limitation there is another restriction on topicalization of noun phrases, which has some bearing on the present topic. Consider the following sentences: they are arranged in pairs, the second in each instance having undergone topicalization.

\[(99a)\] Owiy ibt 'a 'iyag Tlo'oos 'âbay.
(\text{go Past Decl at/to Clo-cose yesterday})
'He went to Clo-cose yesterday'

\[(b)\] 'âbay ibt 'a owiy 'iyag Tlo'oos.
(\text{yesterday Past Decl go at/to Clo-cose})

\[(100a)\] Owiy ibt 'a 'iyag Tlo'oos 'âbay 'aq.
(\text{Go Past Decl at/to Clo-cose yesterday Dat})
'He went to Clo-cose yesterday'

\[(b)\] 'âbay 'aq ibt 'a owiy 'iyag Tlo'oos.
(\text{yesterday Dat Past Decl go at/to Clo-cose})

\[(101a)\] Owiy 'iyag Tlo'oos 'âbay.
'He went to Clo-cose yesterday'

\[(b)\] 'âbay owiy 'iyag Tlo'oos.

\[(102a)\] Owiy 'iyag Tlo'oos 'âbay 'aq.
'He went to Clo-cose yesterday'

\[(b)\] 'âbay 'aq owiy 'iyag Tlo'oos.

When topicalization moves one of the restricted set of noun phrases,
The coreference rules will of necessity link the second person morpheme in with the subject node, since the former is in the subject form. This leaves only the object of the preposition 'ðyoq to serve as the antecedent of the first person morpheme s.

Consider now the problem of sentence 63, the ill-formed sentence which the Transformational Solution allows to reach the surface, and which is therefore blocked by a surface structure constraint. It has already been pointed out that there is no motivation for a deep structure like 66 for 63 under the Phrase Structure Hypothesis. Pronominal noun phrases appear in 66 as a means of expressing the grammatical function of the surface Auxiliary pronouns. But under the Phrase Structure Hypothesis, these facts are expressed in terms of the surface structure. Therefore, the deep structure of 63 in this analysis differs from the surface structure only in the presence of ðyoq and in the position of the Auxiliary: it occurs in second position in surface structure, which I have assumed to follow the verb phrase in deep structure. Thus the restriction on generating 63 is expressible at the level of deep structure, and in fact can be handled by an appropriate formulation of the base rules, thereby eliminating the need for any new rules such as output conditions. The following phrase structure rules will generate all the grammatical combinations of Auxiliary pronoun morphemes exemplified so far, and none of the ungrammatical ones, in particular the combination 6(a)(i) ai.

(74) Aux -----. (PA)(V)(VX)(I)(II)(III)
(74) can be readily modified to generate all the possible combinations of tense, mood, and pronominal morphemes, by incorporating the observations in Appendix A. However, it is unnecessary to show this in detail at this point, since any difficulty in expanding the Phrase Structure Solution would also apply to the surface structure constraints required under the Transformational Hypothesis, and so would have no bearing on the choice between the two analyses.

The Phrase Structure Hypothesis contains one apparent problematic aspect which can be readily resolved. It should be obvious that with the free generation of pronouns both when dominated by NF and when dominated by AUX that the Phrase Structure Solution permits the generation of sentences like 75 and 76 below.

(75) *Dălishitl ibt s itaq 'ðyoq yâ. (Watch Past Decl:I you to him)
(76) *Dălishitl ibt s itaq 'ðyoq sow'a. (Watch Past Decl:1 you to you).

In each of the above, there are two object pronouns: one in the Auxiliary, and one in a prepositional phrase governed by 'ðyoq.

Jackendoff (1972:112) has suggested a general constraint, which he calls the Consistency Condition, that would serve to rule out 75 as semantically well-formed. I present this condition below in slightly modified form, to suit the particular circumstances of Hitinat.

(77) Consistency Condition

If the grammar marks a pronominal morpheme and a noun phrase as coreferential, they must in fact be able to describe the same individual.
Since the Auxiliary morpheme iteg refers to the listener, and the pronoun yâ to any person other than the listener or speaker, it is obvious that the Consistency Condition requires them to be non-coreferential. Thus 75 has two non-coreferential formatives in the same grammatical function of object, and can be marked as ill-formed on that basis.

However, the Consistency Condition does not rule out 76, since both iteg and gov'a refer to the listener. Since it is a general true that the object cannot be expressed by both an Auxiliary pronominal and a noun phrase (including an independent pronoun), we can include in the rules establishing coreference the following:

(78) Object Agreement

An Auxiliary pronominal may not be coreferential with any object noun phrase except an empty one.

This formulation of object agreement would mark iteg and gov'a in 76 as non-coreferential; this would leave the sentence containing two distinct object and thus ill-formed. It also handles 75.

The Phrase Structure Solution, then, can handle the facts presented above without recourse to surface structure conditions.

Analogous solutions can be constructed for the facts presented by Perlmutter (1971), Szamoni (1971) and Hale (1973). The latter, for example, examining person marking in Walbiri, finds that there is an enclitic Auxiliary, occurring in second position in surface structure, and containing pronominal formatives referring to the subject and object.

Hale assumes that Auxiliary pronominals are absent in the underlying representations, and are introduced by an agreement transformation; the bulk of his paper is concerned with choosing between alternative formulations of the needed transformations, e.g. whether the transformation moves the pronouns into the Auxiliary, or copies the pronouns, or copies only certain semantic features such as person and number. Whatever the choice among these might be, a surface structure constraint is needed to restrict the number of Auxiliary pronominals to a maximum of two under certain circumstances and three under other circumstances (Hale, 1973:333-5).

But if the Auxiliary pronominals were generated in the base, and their grammatical function established interpretively at the level of surface structure, then the surface structure constraint would be unnecessary.

In conclusion, I have shown that surface structure constraints can be used to express a restriction on Nitinat Surface sentences (as has been argued similarly for Walbiri, etc). However, I have also shown that the surface structure constraint is not the only way to express the facts, in particular, that if an interpretive account of subject-object agreement is accepted, then no surface structure constraint at all is necessary.

3. Tense-Subject Copying and topicalization

Any argument in support of output conditions which involves restrictions on pronominal morphemes, is weak, since there exists the possibility of an interpretive account of pronominalization. Therefore, evidence in favor of the output condition proposed for Nitinat must be sought elsewhere to make a
convincing case. The output condition as proposed under the transformational solution for pronominalization made reference only to pronominal morphemes.

In this section, an application of the output condition 69 developed above are examined, and it is shown that the output condition can be extended in a natural way to handle certain related restrictions on tense morphemes. (It will be recalled from section 1 that the Auxiliary is a sequence of tense, mood, pronominal, and other formatives). However, it is again the case that an alternative solution, not involving an output condition, is available.

Commonly, the verb is the initial word in a finite sentence; we have seen that the negative word which precedes the verb, however. In addition, there is a restricted set of noun phrases, of an adverbial nature, which may be moved into a position to the left of the verb. Also, any prepositional phrase may be moved to the left of the verb. Let us then assume that there is an optional rule — call it Topicalization, which moves any prepositional phrase or one of the designated noun phrases adverbial to the left of the verb. For example, Topicalization derives 79 from the same structure underlying 80; similarly the source for 81 underlies 82.

(79) 'Aby ibt s 'owiy 'iyag Natuli
    (Yesterday past Decl:I go at/to Victoria)
    'I went to Victoria yesterday'

(80) 'owiy ibt s 'iyag Natuli 'Aby.
    (Go Past Decl:I at/to Victoria yesterday)

(81) Ch'Apatsul s 'eteaged John.
    (Canoe:build Decl:I for John)
    'I am building a canoe for John'

(82) 'Otegado s John ch'Apatsul.
    (For Decl:I John canoe:build)

In every sentence, the sentential Auxiliary morphemes come in second position with respect to surface order. Thus if the noun phrase adverbial in sentence-initial, then the Auxiliary follows and encircles to, the first word (in 79, the only word) in the adverbial. When a prepositional phrase begins the sentence, as in 81, then the sentence Auxiliary is inserted into the prepositional phrase immediately after the preposition, it being the first word.

Now let us consider the Auxiliary, mentioned earlier, which is more directly associated with a prepositional phrase. A sentence containing prepositional phrase Auxiliary has a paraphrase lacking the Auxiliary. For example, compare 83, and 84, which are optional variance, as are 85 and 86.

(83) Tz'axwtlili 'itl s '6yoq bowach 'aq.
    (Speak Fut I to dear [Dec])
    'I'll speak the dear'

(84) Tz'axwtlili 'itl s '6yoq s bowach 'aq.
    (speak Fut Decl:I to I dear [Dec])

(85) Ch'Apatsul ibt s 'Otegado John.
    (canoe:build Past Decl:I for John)
    'I built a canoe for John'
then either there must be no Determiner as in 99, or no sentential mood morpheme as in 102, or both must be absent, as in 101. (The sentences with the Declarative 'a are typical of conversation; those with no overt mood or tense, the so-called 'absolutive' (Hass and Swadesh 1933), are characteristic of narrative style).

If both noun phrase Determiner and an overt sentential mood end up in the same surface Auxiliary sequence, then the sentence is ungrammatical should topicalisation apply. (100).

The only way to state this is as a condition on the output of the rule of topicalisation. Now, this condition can be collapsed with the surface structure constraint 92, when we recall that the determiners and the mood morphemes mark such the same kind of categories, as exemplified by sentences 16, 18, 30, 31 among others. For convenience, I will refer to the set of Determiners and mood morphemes as the Specifiers. With this definition, the output condition can be stated as in (1).

7. Conclusion

In conclusion, I have shown that much of the work that the surface structure constraint 103 would do in Nitinat can be handled in other ways, especially if an interpretive account of pronominalization is adopted. Nevertheless, the proposed output condition does express in a very general way restrictions which would have to be made ad hocly a part of several individual rules, and at least one set of sentences discussed above (section 6) cannot be handled without recourse to an output condition.

Has this really been demonstrated? A full discussion of this isn't given (looks like author ran out of time).

NOTE: due to shortage of time, only the first of the two appendices which I intended to include are presented here. I expect to make the other appendix available at the conference in August.
Appendix A: The Formatives of Hitan: Auxiliary

The permitted combinations of formatives may appear only in the following order:

SEQ - INF - PUT - FAST - SPEC - I - II - III - MOD - REP

A listing of the Auxiliary morphemes follows:

SEQ (sequential)
- sequential /*atl*/

INF (interstitial-intentional)
- interstitial /*bt*/
- intentional/immediate future /*'a'is*/

PUT (future tense)
- Future /*'itl*/, /*'ik*/

FAST
- past /*ibt*/, /*it*/

SPEC (specifier, mood, determiner)
- known (declarative) /*'a*/
- unknown /*gi*/ (takes modal /*-ish*/)
- known complementizer (definite determiner) /*sg*/, /*gil/, /*g/.
- unknown complementizer /*owi*/
- realis complementizer /*ga'a*/
- unrealis complementizer /*gwi*/
- past unitalitative /*gwi*/
- quotative /*ov*/
- quotative complementizer /*gi*/
- quotative known complementizer (quotative determiner) /*i*/
- conjoining known specifier /*ga'a*/.
- interrogative (yes-no questions) /*guk*/, /*i*/.
- interrogative (content questions) /*gik/, /*i/
- imperative /*'i*/.
- purposive complementizer /*'ig*/

I. (First person pronoun)
- singular (1) /*a*/
- plural (we) /*id*/
- conjoined, sg or pl. /*p*/

II. (Second person pronoun)
- singular subject /*is*/
- first person object, /*a*/ /*sok*/
- (otherwise)
- singular object /*itag*/
- plural subject /*ow'is*/ /*ow'ichis*/ (with first person object), /*sok'is*/
- /*ow'ichis*/ (otherwise).
- plural object /*ow'itag*/ /*ow'ichitag*/.

III. (Third person pronoun)
- singular (unmarked)
- plural /*ai*/ /*i*/.
MDD (Modal)
Unknown /-ish/ (with specifier /gi-/
'come' - Imperative /-ik'a/, /-ika/ (with imperative specifier /'i'/).
'go' - Imperative /-chi/ (with imperative specifier /'i'/.
Usitative /ik/
Wonder /wa/, /ish/.

ERP (Repetative)
Repetative /cta/
'just', 'merely' /sa/
In early 1970, I completed a paper dealing with much the same data as the present article, in which I argued that there must exist surface structure constraints in the grammar of Nsitnát. I am grateful for perceptive commentary on my earlier ideas by Hu Matthews, Avery Andrews, and Sung-Do Cook. Ken Hale's influence on successive versions of this paper, while increasingly less direct, has been, I think, undiminished in its positive effect.

I am grateful to the members of the Nsitnát community, especially the late Mary Chips, and Frances and Joe Edgar for their hospitality and assistance in my study of Nsitnát, from 1966 to 1970. For many of the semantic observations in Appendix B, I am particularly indebted to Don Edgar, Frances Edgar, and Joshua Edgar, who devoted much time to pondering over the models, and to formulating explicit accounts of their intuitions. However, none of them has had an opportunity to verify the present version of this article, I take all responsibility for misstatements and omissions.

Beans and Swadesh (1933:198) used the term 'word suffix' for a set of morphemes that is nearly, but not completely coterminous with the set of Auxiliary formative. Sapir and Swadesh (1939:236-241), in dealing with the more northerly West Coast languages related to Nsitnát, called the corresponding set 'incremental suffixes'. These scholars based their distinction on phonological criteria, while the present study is concerned with syntax as well. In addition to Auxiliary formative, 'incremental' or 'word suffixes' include certain transformationally introduced suffixes such as the Passive morpheme.

While the Auxiliary elements are written as separate units, it should be kept in mind that they are entities as such, always coalesce in surface structure with immediately preceding lexical item to form a single phonetic word. The status of the Auxiliaries in the West Coast languages of Vancouver Island was recognized long ago, e.g. by Bremot (1910) and significantly was also reflected in the manuscripts prepared by Alex Thomas (Sapir and Thomas 1910-). However, in the published versions of Thomas' material (Sapir and Swadesh 1939, 1955) (Thomas and Aries 1970), Auxiliary encodings are written solid with the preceding word. Approximate phonetic values are indicated below. This orthography is however somewhat abstract. It is essentially the one described in some detail in Klok (1972; in preparation). See that paper, as well as Beans and Swadesh (1933) for discussion of Nsitnát phonology. Since 1972, I have modified the representation of vowels, the observation that phonetically long vowels are now represented by a macron, e.g. Ô, rather than by double letters as previously, oo. This change follows a recommendation by Ron Hamilton.
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Notes:
- Short vowels:
  - /a/ and /e/ are short.
  - /o/ and /ɔ/ are short.
  - /u/ and /uː/ are short.
- Long vowels:
  - /aː/ and /eː/ are long.
  - /oː/ and /ɔː/ are long.
  - /uː/ and /uː/ are long.
Reflexives are marked by a reflexive prefix on the verb or preposition, while reciprocals are marked by a suffix on the verb. In neither case does an object auxilliary enclitic appear.

In Klokid (1969:11) I failed to state the condition on passivisation in its most general form for Nittinat, as well as for the more northerly West Coast languages. Discussing passivisation in Makah, a West Coast language spoken to the south of Nittinat, Jacobson (1973:2-3) notes that the condition on passivisation as formulated in Klokid (1969:11) holds for Makah equally as for its northern relatives. One would suspect that the more general condition is valid for Makah.

While the pronominal enclitic -al may refer to either subject or object, there is a marked preference for it to refer to the subject, if no first or second person morpheme is also present. Thus the preferred reading for 6l/62/6 is the one indicated for 62, viz. 'They watched her/him'.

It may be that a similar situation holds for the Makah language, and this may be what lies behind some of the remarks in Jacobson (1973) concerning the interpretation of the Makah cognate of Nittinat -al.

Jacobson (1973) observes that the restrictions for Makah pronoun sequences are much more severe than for Nittinat. For example, not only is the Makah cognate of the sequence -al-al 'III:II:II' illformed, but also those which combine second person (singular or plural) with third person plural, e.g. the word formed Nittinat Auxiliaries -go - sok - al (conditional:II (singular):III (plural)) and -go - sow - ichi - al (conditional:II (plural):III (plural)) find no grammatical cognates in Makah.

It is a little misleading to claim that the agreement rule deletes the preposition 'gyoq'. This preposition may in fact be retained even if object agreement applies:

(i) Apcâ a 'gyoq yea.
(hide X to she/her)
'I'm hiding from her/him'

(ii) Apcâ a al 'gyoq.
(hide I III to) (= I)

(iii) Apcâ a al.
(hide I III) (= I)

Therefore, what is really needed is a separate rule which optionally deletes 'gyoq under certain circumstances. Also, the deletion is not entirely dependent on object agreement having applied. Compare these equivalent sentences:

(iv) Apcâ a 'gyoq Bill.
(hide I to Bill)
'I'm hiding from Bill'

(v) Apcâ a Bill.
(hide I Bill) (= iv)

This is discussed in greater detail in part below.

Under the transformational solution, it is possible to add an al box condition to the agreement rule, to block that rule from inserting the morpheme al should that morpheme already be present in the Auxiliary. This alternative has not been pursued in detail here, since there are several independent sets of evidence consistent with this transformational solution which support the output condition. Therefore, the regular condition of the agreement rule would be allowing a generalization.
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