

The Causative Construction in Miskitu

Ken Hale

Introduction

Miskitu, a language of the Misumalpan family, is spoken on the Atlantic Coast of Nicaragua and Honduras. Although its lexicon and basic grammatical properties have been documented to some extent (e.g., Heath and Marx (1961); Salamanca and Scott (1985); Salamanca (1988)), detailed study of the syntax of Miskitu is in its infancy. The present study, necessarily descriptive in nature, has the modest purpose of presenting certain facts concerning the Miskitu causative, a construction which displays certain interesting, superficially paradoxical, properties by comparison with the causative of more amply documented languages.

The sentences in (1) below exemplify the Miskitu causative construction, and they illustrate the property of the Miskitu causative which has led us to use the term "insubordination" in reference to it (in Aviles et al. (1987)):

- (1)a. Yang mita tuktan ba yab-rika kauhwi-bia
I AG child DEF cause-FC fall-FUT
'I will make the child fall.'
- b. Yang (taim bani) tuktan ba yab-ri kauhwi-sa.
I (time all) child DEF cause-NFC falling-PRES
'I (always) make the child fall.'
- c. Yang mita tuktan ba yab-ri kauhwi-an.
I AG child DEF cause-NFC fall-PAST
'I made the child fall.'

The "insubordinate" character of this construction, and the interest which we believe that it has for linguistic theory, can be brought out best by first considering certain relevant aspects of the English sentences used to translate the Miskitu -- these translations are the nearest semantic and functional English

equivalents to the corresponding Miskitu and, we contend, the Miskitu and English constructions are linguistically comparable, albeit different in ways which will become clear momentarily.

The construction we are examining belongs to a set of structures appropriately termed "causative", involving not only the verb *yab-aia* (cause-INF) 'to cause, give' (with suppletive object-incorporating partners *ai-k-aia*, *mai-k-aia*, *wan-k-aia* 'to cause me, you, us (incl)'), but also the approximately synonymous *mun-aia* 'to cause', and the verb *swi-aia* 'to let, allow, leave'. These correspond rather closely to the English verbs *make* and *let*, and to their counterparts in any number of languages (e.g., Spanish *hacer*, *dejar*, French *faire*, *laisser*, Dutch *laten*, etc.), though interesting and important parametric differences between the languages abound, to be sure.

In the English construction, as represented in (1) above, the "causative verb" (i.e., *make* or *let*) -- or more accurately, the auxiliary of that verb -- bears the morphology which realizes the tense of the "causative event" as a whole. The "effect" verb (i.e., *fall*, in (1)) is uninflected, appearing in what is known as the "bare infinitive" (where the causative verb is *make*, *let*, at least). Details of morphology aside, the same would be true, in essence, in the corresponding sentences of Spanish, French, and other Indo-European languages. It is generally held for these languages that what we have called the "effect" verb here heads a predicate expression which is, at some level of syntactic representation, a complement to the causative verb. In any case, the "effect" verb is dependent, and its tense is dependent, or bound to that of the causative verb, one morphological realization of a bound tense being the infinitive. The causative verb itself has the characteristics of a main verb -- in the translation of (1a-c), therefore, the tense of the causative verb is free.

By contrast, in the Miskitu construction, it is the effect verb whose tense is "free", while the tense of the causative verb is dependent. Thus the effect verb in (1) can inflect for the full range of tenses typical of main clause verbs in Miskitu. The causative verb appears in the "connective" form (an extension of the term *conexivo* used in the CIDCA grammar, following Heath (1927)), which distinguishes just two tenses, future connective (FC), as in (1a), and non-future connective (NFC), as in (1b-c). This is a dependent form, and, accordingly, does not appear in root clauses. Rather, it appears as a non-final verb form in a variety of Miskitu constructions, of which the causative is just one.

While the non-future connective happens to be homophonous with the past tense of Miskitu, it must be distinguished from that, since in the construction under consideration here its temporal reference is dependent upon the tense of the final verb (i.e., the effect verb, in this case), as can be seen from the translations of (1b-c). Just as there is some reduction of tense distinctions in the connective, so also there is some minor reduction in the category of person. In the future connective, the person categories are reduced to two -- third (*-ka*) and non-third (*-(i)ka*). In the non-future connective, as in the homophonous past tense, the full three-person system is realized (i.e., first *-ri*, second *-ram*, third *-(a)n*). This picture is a slight simplification inasmuch as the first person inclusive, in its suffixal realization (in the connective and elsewhere), is identical to the third person -- hence, "third" above is to be understood as embracing the first inclusive as well.

The reason behind our use of the term "insubordination" should now be clear. In the causative construction, the "effect" verb, generally realized as a "dependent" or "subordinate" verb, in languages in which the construction has been extensively studied, displays the morphological characteristics of a "main" verb in Miskitu -- it is therefore "insubordinate", by comparison, at least. It remains to be seen, of course, what the precise nature of this Miskitu construction is. In particular, to what extent is it linguistically proper to liken the Miskitu construction to that represented by its typical Indo-European translation?

Is this really a causative construction, or does it belong to another construction type altogether? We will not be able to answer these questions fully here. Our purpose is rather to present data relevant to the study of the construction and to its position within the context of Miskitu grammar generally.

1. Further evidence for "insubordination"

In the previous section, evidence from tense inflection was used to argue that, in the Miskitu causative construction, it is the effect verb, not the causative verb, that assumes the grammatical characteristics of a main clause predicator, reversing the asymmetry found in English. In this section we consider some additional data supporting this argument. Here again, we will use the expository device of contrasting the Miskitu causative with that of English.

1.1. Negation in the causative construction.

Simplifying matters somewhat, sentence negation is effected in Miskitu by means of elements attached to the verb root (in the non-future) or placed after the inflected verb (in the future), as in the following examples:

- (2)a. Yang plap-ras.
 I run-NEG
 'I don't/didn't run.'
- b. Yang plap-amna apia.
 I run-FUT1 NEG
 'I will not run.'

In the negative of a causative construction, this morphology appears in association with the effect verb, not the causative verb:

- (3)a. Yang mita tuktan ba yab-rika kauhw-bia apia.
 I AG child DEF cause-FC fall-FUT NEG
 'I will not make the child fall.'
- b. Yang tuktan ba yab-ri in-ras.
 I child DEF cause-NFC cry-NEG
 'I don't/didn't make the child cry.'

In this respect, as expected, Miskitu contrasts with English, where the negative morphology is adjoined to the auxiliary of the main verb.

The behavior of negation parallels that of tense inflection perfectly. If we consider the causative construction to be the linguistic realization of a conceptual structure corresponding to a single event, grammatically speaking, despite the appearance of two verbs, then it is to be expected that just one tense will be attributed to that event. Similarly, the polarity (e.g., negative) of a sentence depicting a single causative event is expected to be realized just *once*. It should not be surprising, therefore, if languages differed in the manner in which tense and negation are realized morphosyntactically in the causative construction. English realizes these categories in the clause headed by the causative verb, while Miskitu realizes them in the clause headed by the effect verb.

1.2. Causative constructions in the infinitive.

In addition to structures of the sort represented by (1) above, Miskitu also possesses constructions which exhibit the more usual characteristics of standard complementation. Among these more standard structures are those in which the verb of the complement clause appears in the infinitive. Among the predicators taking infinitival complements are English-based verbal expressions *want k-aia* (want be-INF) 'to want' and *traí kaik-aia* (try verb-INF) 'to try', as exemplified by the sentences of (4) below. These sentences also exemplify the fact that the infinitival complement may either precede or follow the main verb:

- (4)a. Yang [Bilwi ra w-aia] want sna.
 I [Port to go-INF] want be-PRES1
 'I want to go to Port (- Puerto Cabezas).'
- b. Yang want sna [Bilwi ra w-aia].
 I want be-PRES [Port to go-INF]
 (same translation as (a))
- c. Yang [truk kum atk-aia] traí kaik-ri.
 I [car one buy-INF] try see-PAST1
 'I tried to buy a car'.
- d. Yang traí kaik-ri [truk kum atk-aia].
 I try see-PAST1 [car one buy-INF]
 (same as (c))

The main verbs in these constructions, both in Miskitu and in their English counterparts, have the property of "selecting" the infinitival morphology on their complements -- this is in concert with the "control relation", in which the subject of the complement is bound to that of the main clause. If a causative construction appears as the complement of a verb which "selects" the infinitive, then we might expect the infinitival morphology to be realized differently in Miskitu and English, given the observations we have made to this point. And this is in fact the case, as (5) illustrates:

- (5) Yang want sna [tuktan ba mun-rika kauhw-aia]
 I want be-PRES [child DEF cause-FC fall-INF]
 'I want to make the child fall.'

In English, the infinitival morphology selected by the main verb is realized on the causative verb (i.e., *make*). In Miskitu, on the other hand, it is realized on the effect verb (i.e., *fall*). This is in keeping with the pattern which has emerged in general in relation to the causative construction which, in Miskitu, gives prominence to the effect verb (as opposed to the causative verb itself) in matters having to do with realizing morphology germane to the construction as a whole.

As an aside, it should be pointed out that imposing infinitival morphology on the causative has the effect of obliterating the person marking on the effect verb, even though the person category associated with that verb is, of course, distinct from that of the main verb. This is consistent with the fact that the infinitival goes along with "control", and the subject of the causative construction is indeed controlled by the subject of the main verb. However, it is unusual in Miskitu for the infinitival morphology to be used in situations where the person category of the dependent verb is distinct from that of the main verb. It is, however, not surprising that it should happen here, since the phenomenon observed in the causative is the natural "working out" of genuine principles of Miskitu grammar -- to wit, subject control, infinitival selection, and the principle of effect-verb prominence in the causative. It is, however, possible to employ an alternative resolution of these matters according to which the future, rather than the infinitive, is used -- in fact, this is preferred over the pattern in (5), which is regarded as ungrammatical by some speakers:

- (6) Yang want sna [tuktan ba mun-rika kauhw-bia]
 I want be-PRES [child DEF cause-FC fall-FUT3]
 'I want to cause the child to fall'.

Here, the person category appropriate to the effect verb (i.e., third person) is preserved. This use of the future is usual, quite apart from the causative, in the complement of a verb of the type represented by *want k-aiia* 'to want' wherever the subject of the complement is distinct from that of the main verb. In this, the future tense and the infinitive function in a complementary pattern comparable to that of the subjunctive and the infinitive in, say, the Romance languages. Properly speaking, therefore, it should be said of the main verb in (5) and (6), and of other members of its class, that they select a bound irrealis tense in their complements, this being realized as the infinitive in the "control"

case (i.e., where the subject of the complement is bound and non-overt), and as the future or subjunctive (depending on the language) in the "obviative" case (i.e., where the subject is free, not controlled). This more accurate characterization of the selection properties of the verb of (5) explains the appearance of the FC morphology (rather than NFC morphology) on the causative verb of that sentence, incidentally.

It is perhaps relevant to point out that the use of the future, over the infinitive, is strongly preferred in purposive constructions of the type represented by (7) below:

- (7) Witin bu-an yang ra ai mun-ka kauhw-amna dukiara.
 he rise-PAST me ACC me cause-FC fall-FUT1 PURP
 'He stood up in order to make me fall'.

This is not a control construction, in the sense of (5), and the irrealis tense morphology is induced, not by a matrix verb, but rather by the purposive postposition *dukiara* (PURP) 'for'.

We have considered three morphosyntactic structures (tense, negation, and infinitival morphology) which indicate that languages (English and Miskitu in this case) may differ in the manner in which the asymmetry inherent in the relation between the verbs implicated in the causative construction may be realized. We will attempt now to give a preliminary characterization of the Miskitu construction in the context of Miskitu grammar generally.

2. The grammar of the Miskitu causative construction

In English, and in other Indo-European languages as well, the morphosyntax of the causative construction belongs for the most part to the syntactic system of complementation. Thus, the effect verb generally heads a clause which bears the complement relation to the causative verb; and, typically, the effect verb is in the infinitive, or at least a dependent tense form.

Miskitu, like English, has the infinitival complementation construction, as in (4-5). But this construction is not normally used in expressing the causative relation in Miskitu. The properties of infinitival complementation are utterly

distinct from the properties of the favorite Miskitu causative construction. In the complementation construction, in Miskuti as in English, the verb of the complement cause is clearly dependent, while that of the main clause is not (provided, of course, it is not itself subordinated within a larger structure)-- thus, the tense of the complement clause is bound, while that of the main clause is free. By contrast, in the Miskitu causative, as we have seen, the direction of the dependency asymmetry is reversed, and it is not at all clear to what extent it makes sense to speak of the effect verb as heading the complement of the causative verb.

The "effect portion" of the Miskitu causative is unlike a complement clause not only in respect to the grammatical asymmetries observed in previous sections but also in respect to linear ordering -- an infinitival complement may precede or follow the main verb, while the effect verb must always follow the causative verb.

The ordering relation just noted for the Miskitu causative, together with the morphosyntactic properties which characterize it, is directly relevant to determining its proper position within the grammar of the language. The properties of the causative are not unique to that construction in Miskitu. They are also characteristic of at least two other constructions involving "verbs in sequence" -- namely, (i) the serial verb construction, and (ii) the protasis-apodosis construction. These are exemplified, respectively, in (8a) and (8b) below:

(8)a. Yang truk-ki-i atk-ri w-an.

I car-CONST-my transact-NFC go-PAST

'I sold my car off.'

b. Tuktan ba waitla ra dim-ka, yang kik-amna.

child DEF my:house to enter-FC, I laugh-FUT1

'When(ever) the child enters my house, I'll laugh.'

In the first of these, the verbs are in close sequence, approximating the tight organization typical of verbal compounding. In fact, sequences of this type figure prominently in the lexicon of Miskitu. The second sentence represents one of several ways in which the protasis-apodosis relation is realized in Miskitu. The morphology in these sentences is identical to that of the causative

-- in particular, the first verb appears in the connective, while the final verb appears in the full tensed form. It is reasonable to argue, therefore, that the Miskitu causative belongs to this system of "verb sequencing", rather than to the complementation system.

Before continuing this line of thought, it should be mentioned that there is more to the morphology of Miskitu verb sequencing than our examples so far would suggest. Miskitu, like many Native American languages, has a "subject obviation" or "switch reference" system. In the examples so far cited, the subjects of the two verbs are distinct. This is the "obviate" subject relation, and it is in the obviative, typically, that the connective morphology (i.e., FG and NFC) is used. When the subjects of verbs in sequence are identical, i.e., in the "proximate" relation, the non-final verb appears in a participial form marked by means of the suffix *i* (called the *participio presente* in the CIDGA grammar and glossed PRP here). This participial form is purely dependent and does not vary for categories of person or tense. Proximate constructions are illustrated in (9) below (taken from the CIDGA grammar, pp. 142-4), the first representing the so-called serial verb construction, and the second representing the protasis-apodosis structure:

- (9)a. Witin aras ba alk-i wilk-an.
 he horse DEF catch-PRP tie-PAST3
 'He caught and tied the horse.'
- b. Yang baha lawan-ka aiwan-i, mahka utla ra wa-ri.
 I that song-CONST sing-PRP, imm. house to go-PAST1
 'Having sung that song, I immediatly went to the house.'

In light of its superficial morphosyntactic properties, we will assume that the Miskitu causative belongs properly to the system which defines the grammar of verbs in sequence, i.e., the system exemplified in (8) and (9).

3. The Miskitu causative as a serial verb construction

The causative construction can be viewed as involving a conceptual structure embodying two subevents, the cause and the effect. Miskitu and English agree in realizing the first of these by means of a "causative" verb (e.g., *yab-aia*, *mun-*

aia in Miskitu, *make* in English); and they agree, of course, in realizing the effect subevent by means of a predication (generally headed by a lexical verb, as Miskitu *kauhw-* or English *fall* in (1)). But the two languages differ according to their structural expression of the causal relation. In English, as in Indo-European languages generally, this is realized syntactically by means of the head-complement relation, according to which the effect portion of the conceptual structure is represented by a clause embedded as the complement of the causative verb. The syntactic constituent corresponding to the effect is thus syntactically subordinate to the causative verb -- the latter, therefore, heads a matrix clause in relation to the structure as a whole.

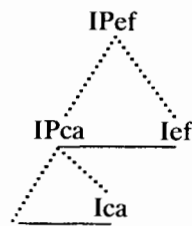
In Miskitu, by contrast, the causal relation is realized in surface syntax by means of the so-called serial verb construction, in which the causal verb appears in sequence with the predication representing the effect portion of the causative conceptual structure. It is not clear, as yet, what the syntax of serialization is, precisely, though a number of highly promising suggestions have been made in the literature (e.g. Awoyale (1987); Dechaine (1988); etc.).

On the basis of the tense inflections in the Miskitu causative, it is evident that the clause realizing the effect portion of the causative serial verb construction is not morphosyntactically subordinate in Miskitu surface structure. This follows since the tense of the effect clause is free, while that of the causative verb is bound. This is a common circumstance in the type of clausal serialization found in languages which possess fully developed subject obviation, or switch reference, systems (cf. Jeanne (1978); Finer (1985a,b)), a system which exists in Miskitu and to which the causative belongs (cf. Hale (1988); Salamanca (1988)).

In the analyses of subject obviation developed by Jeanne (1978) and Finer (1985a,b), the final clause is in a structurally superior position in relation to the prior clauses in sequence; the final complementizer, accordingly, commands all prior ones. If, in the sense relevant for the Binding Theory (Chomsky (1981)), its tense also commands all prior tenses, then the final tense can bind the prior tenses, accounting for the asymmetry observed in the Miskitu causative, as well as other clausal serialization constructions. Abstractly, this would suggest that the surface syntactic structure of the Miskitu causative, as a representative of this variant of the serial clause construction, would have a form embodying approximately the command relations present in (10) below, where IP is the

phrasal category projected by the functional head of the sentence (i.e., Infl(ection), or I), in which tense (as well as agreement) is located:

(10)



Here the causative clause (IPca) is subordinate to the effect clause (IPef). The functional head of the latter (Ief) commands that of the causative clause (Ica) and, accordingly, Ief is in the proper position to bind Ica. Assuming, then, that the connective (together with the present participle) of Miskitu is an "anaphoric" tense, its appearance as Ica in (10) is appropriate since, in that position, it can be properly bound, as required by the Binding Theory.

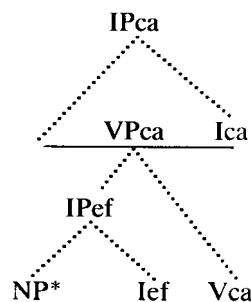
The structural relations embodied in (10), with modifications of detail to accommodate the complementizer (cf. Finer (1985)), may be correct for some subject obviation structures, perhaps for most of them, it cannot be correct for the Miskitu causative. While it would account for the observed asymmetry in tense dependencies, the structure is completely wrong in what it implies about the subject of the effect clause.

From the sentences of (1), it is evident that the subject of the effect verb (i.e., *kauhw-* 'fall' in that case) is treated as the surface object of the causative verb. While the causative does not select the subject of the effect verb, in the sense of assigning it a semantic role, it nonetheless exerts upon it the influence otherwise associated with the structural relation of government. Specifically, the causative may assign case to the subject of the effect clause, a fact which is reflected not only by overt accusative case morphology (ACC), but also by the fact that the subject may be represented by proclitic object agreement morphology in the first and second persons, and by the fact that the subject of the effect clause may appear displaced to the position before the causative verb, in conformity with the standard direction of government in this verb-final language. All of this is illustrated in (11) below:

- (11) Man yang ra taim bani ai mun-ram kauhwi-sna.
 You me ACC time all me cause-NFC2 fall-PRES1
 'You always make me fall.'

If the subject of the effect clause is governed by the causative verb, then the causative construction must, at some level of syntactic representation, have a structure in which the command relations are exactly the reverse of those obtaining in (10), and in particular, a structure in which the effect clause (IPef) is a complement of the causative verb (Vca), which therefore governs the effect clause and its subject (NP*):

(12)



In structure (10) above, the functional head of the effect clause -- i.e., the inflection associated with the effect verb (Ief) -- commands the causative verb and its inflection (Ica). In (12), this is reversed, so that Ica commands Ief. These two structures contradict one another, but each is a legitimate representation of grammatical relations -- structure (10) correctly represents the command relations required in order for Ief (containing the free tense) to bind Ica (containing the bound tense), and (12) represents the command structure required for Vca to govern the effect clause (IPef) and, therefore, its subject.

Under the grammatical assumptions just advanced, it is evident that the syntactic structure of the causative construction must partake of both command relations. It cannot do so at one and the same time, of course, but the situation represented by the causative is duplicated in an interesting way by such pairs as the following:

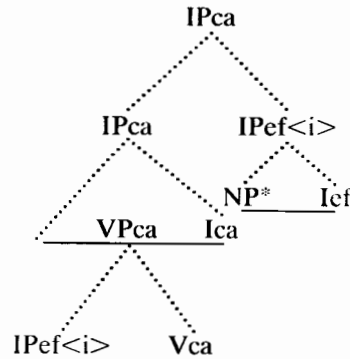
- (13)a. Yang [Ingglis lan tak-i] ta krik-ri.
 (I [English learn-PRP] start-PAST1)
 'I started learning English.'
- b. Yang ta krik-i [Ingglis lan tak-ri].
 (I start-PRP [English learn-PAST1])
 'I started learning English.'

These are alternative realizations of an inceptive conceptual structure (informally, and approximately, X start activity Y). In (13a), this conceptual structure is realized by means of a complementation construction, while in (13b), it is realized as the serial construction. That is to say, *ceteris paribus*, (13a) corresponds to (12) above, while (13b) corresponds to (10), the structure associated with the causative. In the former, the "activity clause" (bracketed) is an embedded participial, while in the latter, it is the final, and finite, clause.

It is unlikely that the two realizations of the inceptive exemplified in (13) are related transformationally, since if they were, we would expect, contrary to fact, that all serial constructions would exhibit this "alternation". But the idea is nonetheless suggestive, since a transformational relation between (10) and (12) would enable us to solve the "causative contradiction" in a straightforward manner.

The analysis would be as follows. The so-called Projection Principle (Chomsky (1981)) determines, for the causative, that the structure depicted in (12) is the initial projection from the lexicon, i.e., the d-structure. This follows, since it is in (12) that the lexical selection properties of the causative verb are represented. In particular, it is in (12) that the causative verb properly governs its complement, the effect clause. And let us assume that the effect clause is finite, not participial. The fact that (12) does not correctly represent either the observed surface ordering of verbs or the command relations required by the tenses is not a problem, if we assume, as we must, that these latter requirements are matters of derived structure, i.e., of s-structure, not d-structure. The generalized transformational rule "Move-alpha" (Chomsky (1981)) will, we propose, apply to move the effect clause I_{pef} -- i.e., the complement of the causative verb -- rightward to a raised adjunct position from which it can bind the anaphoric tense inherent in the inflection (I_{ca}) of the causative clause:

(13)



The coindexed trace (IPef<i>) is in accordance with the theory of syntactic movement. While the derived structure (13) involves adjunction to the causative clause, and therefore does not produce a structure identical to (10), it is nevertheless true in (13) that IPef (the maximal projection of the inflectional element Ief, embodying the "free" tense) commands, and therefore potentially binds, the tense of the causative clause, as required, given that the latter is anaphoric. The movement is therefore "forced" by the Binding Theory -- i.e., the free tense must be enabled to bind the anaphoric one; this is impossible at the d-structure level of representation.

Final remarks

The "complement-raising" hypothesis just outlined is, in fact, just one of several analyses which must be explored in reaching an adequate understanding of the causative constructions of Miskitu. Unfortunately, it is the only one which we will have the opportunity to examine here (but see Dechaine (1988), for a non-transformational analysis of the closely similar Haitian causative). In favor of a transformational analysis is the fact that it conforms both to the Projection Principle, requiring that the selectional properties of the causative verbs be represented at all levels of syntactic representation, and to the surface structure reality that the Miskitu causative is realized as a serial clause construction, of a type that occurs independently in the language. The causative, originating as a conventional complementation structure, assumes the surface form of a serial construction at the s-structure level of representation.

There are some technical details which must be dealt with in developing the complement-raising hypothesis. We will deal only with the most pressing of these, the first having to do with the surface syntactic position of the subject of the effect verb, the second having to do with the possibility of extraction out of the clauses of the causative construction.

Generally, as we have observed in examples given so far, the subject of the complement clause remains behind when the effect clause is moved. The derived structure (13), however, does not indicate this. The fact is that the subject may or may not remain behind. Thus, both of the following are possible causatives:

- (14)a. Witin yang ra ai swi-n skul ra wa-ri.
 he me ACC me let-NFC3 school to go-PAST1
 'He let me go to school.'
- b. Witin ai swi-n yang skul ra wa-ri
 he me let-NFC3 I school to go-PAST1
 'He let me go to school.'

In (14a), the subject of the raised effect clause remains in the position preceding the causative verb -- the latter governs it, assigns case to it, and in addition registers it in object agreement (realized by means of the proclitic first person object marker *ai*). In (14b), on the other hand, the subject of the effect clause remains internal to that clause, moving with it and, as expected, receiving nominative case as befitting its surface position. It is, however, registered in object agreement on the causative verb.

In order to account for the more common of these two possibilities, that represented by (14a), we must assume either that a projection lower than IP can be moved, thereby excluding the subject, allowing it to remain behind; or else we must assume that the subject can first move to an adjunct position peripheral to the effect clause, allowing that clause to move without necessarily taking the subject with it. The second of these possibilities seems most likely (cf. Massam (1985)), in part because there does not exist in Miskitu a pre-sentential position to which arguments can move -- this is the position occupied by the relative NP in one type of relative clause. This could be the required adjunct position to which the subject may be removed prior to extraction of the clause, provided we can guarantee -- for the causative but not for the relative -- that only the

subject is a candidate for the proposed peripheralization. We will leave this issue without taking a definite position on it, moving now on to a brief consideration of content question formation in relation to the causative construction.

It is possible to question the subject of the causative verb, as in (15):

- (15) Ya mita mai mun-an ai pruk-ram?
 who AGTyou cause-NFC3 me hit-PAST2
 'Who made you hit me?'

And it is possible also to question a constituent of the effect clause, as shown by (16) below, where the object of the effect clause is questioned:

- (16) Dia mai mun-an pi-ram?
 what you cause-NFC3 eat-PAST2
 'What did he (or they) make you eat?'

This is not surprising if we assume that question formation applies to the causative structure represented in (12), in which the effect clause appears as a complement to the causative verb. It would be surprising, however, if it applied to the derived structure (13), in which the effect clause is not governed, given well-known constraints preventing extraction from adjuncts (cf. Huang (1982); Chomsky (1986)). Although details of question formation in Miskitu remain to be investigated, we take (16) to be evidence that the effect clause, at some level of syntactic representation, is not an adjunct.

The complement-raising hypothesis outlined above succeeds in expressing the grammatical relations required by the Projection Principle, but it fails to capture what is perhaps the most important fact about the Miskitu causative constructions -- namely, the fact that their form is precisely that of the serial clause constructions which exist independently in the language within the generalized subject obviation (or switch reference) system. An adequate treatment of the Miskitu causative, and its closely similar counterpart in the sister Misumalpan language Sumu (cf. Norwood (1987), Hale (1988)), must come to grips with this basic fact.

Notes

* We are pleased to dedicate this brief essay to Wim de Geest, whose work on complementation has been so valuable to the field. We wish only that our work were more worthy of Wim and of the standards he represents in his own research.

