

Irrealis Subordinate Clauses and Related Constructions in Itza Maya
Author(s): Charles A. Hofling
Proceedings of the Tenth Annual Meeting of the Berkeley Linguistics Society (1984), pp. 596-608

Please see “How to cite” in the online sidebar for full citation information.

Please contact BLS regarding any further use of this work. BLS retains copyright for both print and screen forms of the publication. BLS may be contacted via <http://linguistics.berkeley.edu/bls/>.

The Annual Proceedings of the Berkeley Linguistics Society is published online via [eLanguage](#), the Linguistic Society of America's digital publishing platform.

Irrealis Subordinate Clauses and Related Constructions in Itza Maya

Charles A. Hofling
University of Cincinnati¹

1. Introduction.

In this paper I examine complex sentences in Itza Maya which are typically labeled as "subjunctive", and structures which are morphosyntactically and semantically related to them including imperative, unrealized perfect, and hypothetical future constructions (cf. Durbin and Ojeda 1983, and Ayres 1982 for Yucatec Maya). To consider these constructions as "subjunctive" is an oversimplification of a complex of interactions among semantic and pragmatic features involving NP reference, verbal semantics, transitivity, and speaker's empathy in discourse. Itza Maya, like its sister dialects Mopan, Lacandon, and Yucatec Maya, has a split Nominative-Accusative / Ergative-Absolutive verb agreement system. Ergative marking generally appears with the completive aspect and statives, as well as in some of the subordinate and related constructions considered here. Non-completive aspects and other types of subordination are marked by Nominative-Accusative verb agreement.² It should be pointed out, however, that there is not a simple distinction between Ergative-Absolutive vs. Nominative-Accusative classification for these structures.

Split ergative systems with ergativity in object complements and hypothetical future constructions appear to be a rare typological feature in languages of the world (Dixon 1979), as well as in Mayan languages (Larsen and Norman 1979). It is hoped that the present analysis will contribute to general linguistic theory with regard to ergativity, transitivity, and subordination. An additional focus of this paper is the function of different cross-referencing systems in subordinate verbs.

2. Subordinate Sentences: Intransitive Matrix Verbs.

The Subjects of intransitive matrix verbs are coreferential with the Subjects (S or A) of subordinate verbs in the constructions under consideration.³

2.1. Intransitive Matrix - Intransitive Subordinate.

When the matrix verb is intransitive, intransitive subordinate verbs are non-finite, with no dependent pronouns, and therefore exhibit no verb agreement. Aspect marking is also absent, as is generally the case for subordinate verbs.

- (1) In--ka'ah ti man--al.
 1sgNOM-GO sub BUY-intr
 "I'm going to shop."

The subordinator ti does occur, a marker preceding intransitive subordinate verbs whose subjects are not marked by dependent pronouns, but are fully recoverable. Matrix verbs of this construction type are generally verbs of motion or inceptive, and thus have aspectual qualities with modal implications.⁴

2.2. Intransitive Matrix - Transitive Subordinate.

Transitive subordinate verbs have complete verb agreement even when their Subjects (A) are coreferential with intransitive matrix Subjects (S). Distal/irrealis features are also marked on the verb by a Subordinate Patient Marker (SPM) which differs from the patient markers that occur on transitive verbs in unmarked matrix clauses.⁵ In subordinate sentences verb class is also reflected in patient marking when the SPM is word-final for third person Direct Objects (P). Basic transitive verbs are generally marked by a -V' suffix, with the vowel in harmony with the vowel of the preceding syllable as in (2); verbs that receive the transitivity suffix -t- receive an -eh SPM suffix as in (3); and causative verbs are marked by the -es causative allomorph as in (4). When Patient pronominal suffixes occur on a subordinate verb, the SPM is generally deleted as in (5) below.

- (2) In--ka'ah in--kon--o'.
 1sgNOM-GO 1sg-SELL-SPM
 "I'm going to sell it."
 (3) In--ka'ah in--han--t--eh.
 1sgNOM-GO 1sg-EAT-tran-SPM
 "I'm going to eat it."
 (4) In--ka'ah in--kim--es.
 1sgNOM-GO 1sg-DIE-caus/(SPM)
 "I'm going to kill it."
 (5) In--ka'ah in--wil--(a)--eech.⁶
 1sgNOM-GO 1sg-SEE-(SPM)--2sg
 "I'm going to see you."

In these constructions no subordinate markers appear other than the SPM. Aspect markers do not occur with the subordinate verb, but Agent and Patient agreement is obligatorily marked. However, it would be arbitrary to label subordinate verb agreement marking as ERG-ABS vs. NOM-ACC because the intransitive verbs with which they contrast are not marked for agreement (cf. 2.1. and Note 2).

3. Transitive (Modal) Matrix.

In these constructions, the matrix transitive verbs may be termed modal (cf. Durbin and Ojeda 1983 for Yucatec), and include such verbs as k'a't, 'want', pak', 'hope', and t'in 'tell'.⁷

3.1. Intransitive Subordinate.

3.1.1. Coreferential Subjects.

When the Subject (A) of a (modal) transitive matrix verb is coreferential with the Subject (S) of an intransitive subordinate verb, the subordinate verb is non-finite with no marking for aspect or verb agreement just as in 2.1. above, where the Subjects are also coreferential. However, these constructions differ from the type described in 2.1. in that no subordinator appears when the matrix verb is transitive, as evidenced in the following example.

- (6) In--k'a't--ih nìk--tal.⁸
 1sgNOM-WANT-3ACC SIT-intr
 "I want to sit."

The only marker of the subordinate clause is the Object Dpr on the matrix verb. In summary, intransitive subordinate verbs whose Subjects (S) are coreferential to the Subjects (S or A) of matrix verbs are not marked for verb agreement, indicating the absence of need for disambiguators.

3.1.2. Different Subjects.

When the Subject of the subordinate verb differs from the Subject of the matrix verb, two types of markers of subordination may appear reflecting different semantic and pragmatic relationships. Contrast examples (7)-(9) with (10)-(11) below.

- (7) U--k'a't--ih ka' tuk--ul---n---ak--en.
 3NOM-WANT-3ACC sub THINK-intr-detr-irreal-1sgABS
 "He wants me to think."
 (8) K--im--pak'--t--ik ka' t(al)--ak--ech.
 inc-1sgNOM-HOPE-tran-PPM sub COME-irreal-2sgABS
 "I hope that you come."
 (9) K--in--wa'l--ik tech ka' wen--ek---ech.
 inc-1sgNOM SAY-PPM 2sg sub SLEEP-irreal-2sgABS
 "I say to you that you should sleep."
 (10) K--in--tìka'--t--ik--ech ti wen--el.
 inc-1sgNOM-SEND-tran-PPM-2sgACC sub SLEEP-intr
 "I send/order you to sleep."

- (11) T--in--t'in--ah ah Hwaan ti han--al.
 com-1sgNOM-CALL-DPM masc PN sub EAT-intr
 "I called/told Juan to eat."

In sentences (7)-(9), the subordinator ka' occurs, and the irrealis suffix -Vk appears in the subordinate verb, which is marked absolutely.⁹ In (10) and (11), the subordinator ti appears and the subordinate verbs are non-finite, lacking aspectual and verb agreement marking.¹⁰ The matrix verbs in (7)-(11) do not permit DO (P) pronouns other than the third person zero marker indicating that the entire subordinate clause is the object, although wa'l 'say' takes independent Indirect Object pronouns as in (9).

The verbs in (10) and (11), however, take DO (P) pronouns which are coreferential to the actor of the subordinate clause. When the Subject of the subordinate intransitive verb is coreferential to the Patient of the matrix verb, it is raised, the subordinator ti appears and there is no subordinate verb agreement. As was seen above in 2.1., ti and a non-finite subordinate verb form also occur when the Subjects (S) of both verbs are coreferential. Thus, ti appears when the Subject of an intransitive subordinate verb is equivalent to either the Subject of an intransitive matrix or the Patient of a transitive matrix, an ergative alignment.

3.2. Transitive Subordinate.

3.2.1. Coreferential Subjects.

When the Subject (A) of a transitive subordinate verb is coreferential with the Subject (A) of the matrix verb, there are no independent markers of subordination, but A and P agreement is marked, as when the subordinate Agent is coreferential to the S of an intransitive matrix verb (cf. 2.2.).

- (12) In--k'a't--ih in--wil--(a')--eech.
 1sgNOM-WANT-3ACC 1sg-SEE--SPM---2sg
 "I want to see you."

Similarly, there is no basis for assigning ERG-ABS vs. NOM-ACC labels to subordinate verb agreement because the intransitive forms with which they contrast (3.1.1.) are non-finite.

3.2.2. Different Subjects.

Like the examples above with non-coreferential Subjects and intransitive subordinate verbs (3.1.2), there are two major classes of subordination for

transitive subordinate verbs with non-coreferential Subjects (A) marked by the presence or absence of the subordinator ka'. Contrast (13)-(15) with (16)-(17).

- (13) U--k'a't--ih ka' in--tuk--l--eh.
 3NOM-WANT-3ACC sub 1sg-THINK SPM
 "He wants me to think it."
- (14) K--im--pak'--t--ik ka' u--tal--es to'on
 inc-1sgNOM-HOPE-PPM sub 3ERG-COME-caus 1pl
 yaab meyah.
 MUCH WORK
 "I hope that it brings us a lot of work."
- (15) K--in--wa'l--ik ti'ih ka' u--ben--es.
 inc-1sgNOM-SAY-PPM 3 sub 3ERG-GO-caus
 "I say to him that he should carry it."
- (16) T--in--tika'--t--ah--ech (ka') a--kim--es.
 com-1sgERG-SEND-tran-DPM-2sgABS (sub) 2-DIE-caus
 "I sent you to kill it."
 ("I sent you for you to kill it.")
- (17) K--in--t̃in--ik--ech (ka') a--han--t--eh
 inc-1sgNOM-CALL-PPM-2sgACC (sub) 2-EAT-tran-SPM
 ixi'im
 CORN
 "I call you to eat corn."
 ("I call you for you to eat corn.")

As seen in 3.1.2., the verbs in (13)-(15) take the subordinate clause as Object and no first or second person Patient dependent pronouns occur. Subordination is marked by ka' and Agent and Patient agreement is marked on the subordinate verb. The matrix verbs in (16) and (17), however, are marked for Patient pronouns which are coreferential with the Agents of the subordinate verbs. No independent marker of subordination need appear but, again, the subordinate verb is fully marked for verb agreement. When the ka' marker does appear (indicated by parentheses in the Itza and in the translation) it marks a more distal relationship between the clauses.

4. Summary of Subordination.

In summary, several syntactic/semantic features including NP reference, matrix verb class, and transitivity are marked in subordination.

Non-finite subordinate verb marking is limited to intransitive verbs whose Subjects (S) are also marked by verb agreement on the matrix verb either as Subjects (S or A) or as Objects (P). Verb agreement is a NP referencing system (Brody 1982) which generally appears

on all verbs. When it does not appear, the referential information is recoverable from other sources, in this case, the matrix verb.

Two types of subordination marking occur with non-finite subordinate verbs: 1) zero marking; 2) the subordinator ti (see chart below). No independent marker of subordination occurs when the subordinate S is coreferential to a matrix Agent. Similarly, no subordination marker occurs when a subordinate Agent is coreferential with a matrix S, A, or P, but in those cases, the subordinate verb is finite. Thus, the zero subordination marker is neutral with regard to a NOM-ACC vs. ERG-ABS system. In contrast, the ti marker appears when the subordinate S is coreferential to a matrix S or P, and thus operates on an ergative principle.

In all cases of non-finite subordinate verb forms, the subordinate S is coreferential to a major argument of the matrix verb and thus expected, anticipated information for the hearer and information which receives speaker's empathy (Kuno 1976). This close relationship between matrix and subordinate clauses is unmarked and suggests that linguistic markedness reflects conceptual distance (Haiman 1983).

When the subordinate verb is transitive, regardless of NP coreference, it is marked with an SPM and Agent and Patient verb agreement. If the Agent of the subordinate verb is coreferential with any major argument of the matrix verb (A, S, or P), no subordination marker ordinarily appears.

The complete "subjunctive" paradigm occurs when the Subject (S or A) of the subordinate verb is not equivalent to the Subject or Object of a limited class of modal matrix verbs. Coreferentiality of matrix and subordinate verbs depends upon the speaker's choice of the matrix verb and the features it entails regarding degree of affectivity and involvement of the matrix and subordinate arguments. There is a range from k'a't 'want' or 'hope', where the matrix agent is minimally involved with the subject (S or A) of the subordinate verb and the subordinate clause as a whole always serves as an object in the "subjunctive" with the subordinator ka', to t'in 'call', where a personal Patient of the matrix verb is also an actor in the subordinate clause and where the ka' marker is generally absent.

With verbs such as k'a't 'want' and pak' 'hope', the Agent need have no control over or effect on another personal patient and no raising of the subordinate Subject (S or A) is permitted. Wa'l 'say' does not permit an animate DO (P) and similarly does not permit raising of subordinate subjects. Verbs such as tika' 'order', and t'in 'call', however, generally presuppose

human patients; subordinate Subjects (S or A) are raised, and no "subjunctive" subordination marking ordinarily appears. When the "subjunctive" ka' marker does appear, it marks a more distal teleological relationship between the actions represented in the matrix and subordinate clauses and thus may be iconic for conceptual distance (Haiman 1983).

A summary of subordination markers, subordinate verb form, and cross-reference relations between matrix and subordinate verbs is presented in the following chart.

		SUBORDINATION MARKER		
		\emptyset	<u>ti</u>	<u>ka'</u>
SUBORDINATE VERB FORM	Finite	S/A/P=A		A \neq A/S (ERG) (P=S/A)
	Non-finite	A=S	S/P=S	

5. Imperatives.

While intransitive imperatives are marked distinctly from the forms considered above, transitives are marked similarly.

- | | | | | | |
|---------|-------------|----|-------------|----|-------------|
| (18) a. | Uk-en! | b. | Lik-en! | c. | X-en! |
| | V-imp | | V-imp | | V-imp |
| | "Drink!" | | "Get up!" | | "Go!" |
| (19) a. | Uk-u'! | b. | Ben-es! | c. | Bo'-t-eeen! |
| | V-SPM | | V-caus | | V-tran-Dpr |
| | "Drink it!" | | "Carry it!" | | "Pay me!" |

As evidenced above, the Actor/Agent - information implicit in the context of the speech situation - is not marked on the verb in affirmative imperatives.

Intransitive verbs are marked with an -en suffix. Transitive verbs receive the SPM and Patient pronominal suffixes just as in the cases of subordinate transitive verbs considered above (2.2. and 2.3.), perhaps marking the irrealis nature of imperatives.

6. Other Constructions with Irrealis Marking.

Irrealis/distal marking similar to that found in modal controlled object complements also appears in certain unrealized perfect constructions and hypothetical future constructions.

6.1. Unrealized Perfect Constructions.¹¹

By unrealized perfects I mean constructions which indicate that an action has not been completed prior to the discourse situation, but that it is, or might be expected to be completed in the near future.

- (20) Tan--in--pak'--t--ik i(h) ma' t(al)--ak.
dur-1sgNOM-EXPECT-tran-PPM conj neg COME-irreal
"I'm expecting him and he hasn't come."
- (21) Ma' wen--ek--en toh.
neg SLEEP-irreal-1sgABS adv
"I haven't slept yet."
- (22) In wakax-eh ma' u-k'a't-ih han-al.
1sg COW-top neg 3NOM-WANT-3ACC EAT-intr
"My cow doesn't want to eat."
T---in---ta---s---ah su'uk i(h) ma'
com-1sgERG-COME-caus-DPM HAY conj neg
u---han---t---eh
3ERG-EAT-tran-SPM
"I brought it hay and it hasn't eaten it."
- (23) Speaker A: Ma' in--wil--a' ah Hwaan.
neg 1sgERG-SEE-SPM masc PN
"I haven't seen Juan."
Speaker B: He'-la' yan--en--eh.
dem-prox cop-1sgABS-top
"Here I am."

As may be seen in the examples above, this construction type is characterized by the negative ma' preceding verb forms which have ERG-ABS verb agreement for both transitive and intransitive verbs. ERG-ABS morphosyntax is not associated with NP cross-reference, but is associated with irrealis/distal features.

6.2. Hypothetical Future Constructions.

The final construction types considered indicate actions that may occur but are not assured of happening and in some cases should be avoided.

- (24) a. A'-ka' tal--ih--eh, bin-een.
det-adv COME-3ABS-top GO-1sgABS
"When he came, I went."
b. Kil u--tal--eh, k--im--bel.
adv 3NOM-COME-top inc-1sgNOM-GO
"When he comes, I go." (habitually)
c. A'-ka' t---ak--eh, k--im--bel.
det-adv COME-irreal-top inc-1sgNOM-GO
"When he comes, I go." (future)

- (25) Yan--a--kin--s--ik ka' a--mich--i'.
oblig-2NOM-DIE-caus-PPM adv 2ERG-GRAB-SPM
"You have to kill it when you grab it."
(26) In-ka'ah in--wil--a' a'-winik a'-ka'
1sgNOM-GO 1sgERG-SEE-SPM det-MAN det-adv
u--kim--es u--k'ek'en-eh.
3ERG-DIE-caus 3-PIG-top
"I'm going to see the man when he kills his pig."

In example (24) above, one may see contrasts of subordinate temporal adverbial expressions. The ka' marker appears for past actions (24a) or future actions (24c) with ERG-ABS verb agreement in both cases while kil appears for habitual actions (24b) with NOM-ACC marking on the subordinate verb. When a future action is indicated in the subordinate adverbial clause, the verb receives irrealis/distal marking, with the -Vk suffix on intransitives (24c) and the SPM on transitives (25)-(26).

In examples (27)-(29) below, the adverbial form biki appears, which indicates the possibility of a future action, generally one to be avoided.

- (27) In-ka'ah in--pul--u' chambel. Bik(i)
1sgNOM-GO 1sg-PUT-SPM SLOWLY adv
in--kim--es a'--pek'--eh.
1sgERG-DIE-caus det-DOG-top
"I'm going to put it (a heavy load) down slowly. I could kill the dog."
(28) Em--en chambel! Biki lub--uk--ech.
GO DOWN-imp adv adv FALL-irreal-2sgABS
"Go down slowly! You could fall!"

In these examples the verb receives the same irrealis/distal marking previously noted. Like unrealized perfects, but unlike object complements, coreferentiality of NP arguments is not a relevant feature.

7. Conclusions.

The various constructions considered above indicate a marking system that reflects complex semantic and pragmatic relations involved in discourse. Subordinate clauses are differentially marked according to the coreferentiality of NP arguments of the matrix and subordinate verb, transitivity, and verbal semantics. Verb agreement marking is shown to relate to transitivity and NP coreferentiality, with the full Ergative-Absolutive system only in a restricted class of modal controlled object complements (cf. 3.1.2. & 3.2.2).

Similarly, the marking of imperatives is neither clearly ERG-ABS nor NOM-ACC, and depends on transitivity. While it is either the Agent of a transitive verb or the actor (S) of an intransitive verb that is deleted (for the pragmatic reason that the addressee is understood), indicating a NOM-ACC system, transitive imperative morphology involves the SPM noted in subordination.

Unrealized perfects and hypothetical future constructions are consistently ERG-ABS with distal/irrealis marking, independent of verb class and NP coreference.

ERG-ABS marking is associated most closely with irrealis/distal semantics. It is fully marked in hypothetical futures and unrealized perfects, never completely marked in imperatives, which necessarily involve proximal semantics of speaker and addressee, and differentially marked in subordination. Proximal subordinate Subjects (those coreferential with an argument of the matrix verb, S or A) are deleted but fully recoverable in the case of intransitive subordinates, and raised with no subordination marker appearing in the case of transitive subordinate verbs. When the subordinate Subject (S or A) is not coreferential, that is, distal in relation to the matrix clause, subordination marking with ERG-ABS agreement appears.

1 I would like to thank Marshall E. Durbin and Joseph F. Foster for their helpful comments on this paper, an earlier version of which was presented at the 1983 AAA Meeting. This research was supported by a Fulbright Fellowship and a University of Cincinnati Taft Postdoctoral Fellowship, for which I am grateful.

2 The following paradigm indicates the split in the verb agreement system with Nominative marking in the non-completive aspect (a-c) and Ergative marking in the completive (d-f). In the incompletive aspect, the Subject of an intransitive verb (S) is marked the same as a transitive Agent (A), but in the completive aspect the Subject of an intransitive verb is marked the same as a transitive Patient (P).

a. K--a--wil--ik--en. inc-2NOM-SEE-PPM-1sgACC "You see me."	b. K--a--tal. inc-2NOM-COME "You come."	c. K--in--tal. inc-1sgNOM-COME "I come."
d. I--a--wil--ah--en. com-2ERG-SEE-DPM-1sgABS "You saw me."	e. Ial--eech. COME-2sgABS "You came."	f. Ial--een. COME-1sgABS "I came."

3 Subordinate sentences with different subjects of the type that mark purpose or goal are semantically and morphosyntactically distinct from the irrealis constructions treated in this paper. Consider the following example:

Bin--een yok' u--tal.
 GO-1sgABS sub 3NOM-COME
 "I went so that he would come."

The subordinate verb above has nominative verb agreement and irrealis/distal features are absent. The speaker highlights the reason for his/her action but the probability of the actuality of the event indicated in the subordinate clause is not marked on the verb.

4 The following are examples of this construction type with coreferential subjects of matrix verbs of motion, tal 'come', hok' 'leave', and the inceptive verb kap 'begin' and intransitive subordinate verbs.

- a. Tal-een ti han--al. b. Hok'--ih ti ts'on.
 COME-1sgABS sub EAT-intr LEAVE-3ABS sub SHOOT
 "I came to eat." "He went out to shoot."
 c. Kap--ih ti ts'on.
 BEGIN-3ABS sub SHOOT
 "He began to shoot."

5 Patient markers in Itza generally serve to mark a deictic relationship between the Agent and Patient, as Durbin and Ojeda noted for Yucatec (1982), which varies according to aspect, mood, and voice. See Note 2 for an aspectual contrast of patient marking and Hofling (1982).

6 The verb wil 'see', a basic transitive, is irregular and its SPM is -a' with no vowel harmony.

7 Constructions in which the subordinate verb is governed by non-modal matrix verbs (e.g. sensory) are not considered here. As Durbin and Ojeda (1983) have shown in Yucatec Maya, object complements of sensory verbs are marked with NOM-ACC verb agreement and the actuality of the event indicated in the subordinate clause is not marked, as may be seen in the following example where the subordinate verb is marked nominatively and for aspect, but not as irrealis.

K---in---wil--ik--ech tan--a--han--al.
 inc-1sgNOM-SEE-PPM-2sgACC dur-2NOM-EAT-intr
 "I see you eating."

8 K'a't, 'want' is an irregular verb which takes neither aspect marking nor ordinary patient marking. Rather than the PPM -ik and zero marking for third person object agreement which occur with the vast majority of non-completive transitive verbs (cf. Example 8), the suffix -ih occurs. -ih appears to be the same third person marker which occurs as an absolutive suffix on intransitive verbs in the completive aspect, e.g., bin-ih, 'he/she/it went'.

9 The term "irrealis" is used provisionally for the -Vk suffix as it may also serve other functions involving nominals (Bricker 1981). The vowel of the -Vk suffix is in harmony with the vowel of the preceding syllable, with the exception of forms with the detransitivizing suffix -n-, where the irrealis suffix is always -ak, as in example (7). The -Vk suffix only occurs with intransitive verbs, further suggesting a connection with nominals.

10 While the non-finite subordinate verb forms presented in (10-11) are by far the most common for complements of t̃aka' 'order' and t̃in 'call', irrealis forms following ka' may occur as in the following example:

T--in--t̃in--ah ah Hwaan ka' han--ak.
 com-1sgNOM-CALL-DPM masc PN sub EAT-irreal
 "I called Juan so that he would eat."

In contrast to the relatively unmarked sentence (11), the example above indicates a distal/irrealis relationship between the matrix and subordinate clauses.

11 While by far the most common usage of these constructions are negative perfects, they may also appear in affirmative perfects associated with unrealized actions as in the following example.

Hach naach a'-kol-eh. Yaab in-xi'ma'--t--eh
 adv FAR det-MILPA-top quant 1sgERG-WALK-tran-SPM
 i ma' k'och--ok--o'on.
 conj neg ARRIVE-irreal-1plABS
 The milpa is very far. I have walked a lot and we
 (still) haven't arrived.

While walking has been completed, the journey has not.

References

- Ayres, Glen
 1982 La Conjugacion de los Verbos en Maya Yucateco Moderno. Manuscript.
- Bricker, Victoria
 1981 The Source of the Ergative Split in Yucatec Maya. *Journal of Mayan Linguistics* 2(2):83-127.
- Brody, Jill
 1982 Discourse Processes of Highlighting in Tojolobal Maya. Ph.D. dissertation. Department of Anthropology, Washington University.
- Dixon, Robert
 1979 Ergativity. *Language* 55:59-138.
- Durbin, Marshall and Fernando Ojeda
 1982 Patient Deixis in Yucatec Maya. *Journal of Mayan Linguistics* 3(2):3-23.
 1983 Case Marking and Subordinate Sentences in Yucatec Maya. Manuscript.
- Haiman, John
 1983 Iconic and Economic Motivation. *Language* 59(4):781-819.
- Hofling, Charles A.
 1982 Itza Maya Morphosyntax from a Discourse Perspective. Ph.D. dissertation. Department of Anthropology, Washington University.
- Kuno, Susumu
 1976 Subject, Theme, and Speaker's Empathy: A Reexamination of Relativization Phenomena. In *Subject and Topic*. Charles N. Li, ed. pp. 417-444. New York: Academic.
- Larsen, Thomas W. and William Norman
 1979 Correlates of Ergativity in Mayan Grammar. In *Ergativity*. Frans Plank, ed. pp. 347-370. New York: Academic.