

The Structure of Jacaltec

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3. Case Marking

Jacalteco is an ergative language. The case markers also carry the agreement feature of person, as is discussed in Section 1. Section 2 is an analysis of the morphological shape and distributional use of the case markers. The mechanism of case assignment is discussed in Section 3, the placement of the case markers in Section 4. Section 5 is a conclusion, with remarks on the ergativity of the language.

1. PERSON MARKING

1.1. Three Persons

There are three persons in Jacalteco--first, second, and third--in the singular and the plural. In the first person plural a distinction can be made between exclusive and inclusive meanings. This is accomplished by the addition of the sentence particle an, which is further discussed in Chapter 9 A Boundary Marker.

First and second person independent pronouns and clitic markers have different morphological shapes in the singular and the plural. The third person has the same clitic marker in the singular and in the plural, is always accompanied by a noun classifier, and takes a plural morpheme in the plural. This plural marker is heb for humans and hej for non-humans:¹

- (1) x-Ø-to-pax heb naj winaj
asp-A3-go-back pl cl/the man
'the men returned'
- (2) a. ilc'anab hej te' Hah
look at pl cl/the house
'look at the houses!'

- b. ilc'anab hej no' txitam
look at pl cl/the pig
'look at the pigs!'

person is marked in surface structure by either an independent pronoun or a clitic pronoun, or in emphatic context by both.

1.2. Independent Pronouns

First and second independent pronouns are compound formations. They are formed with the particle ha' and the absolutive set of pronouns:²

- (3) a. ha' + hin = hayin 'I'
b. ha' + hach = hach 'you'
c. ha' + hofl = hayofl 'we'
d. ha' + hex = hex 'you pl'

The third person independent pronoun is a noun classifier by itself, accompanied in the plural by the plural morpheme:³

- (4) a. naj 'he/him' heb naj 'they/them'
cl(man) pl cl
b. ix 'she/her' heb ix 'they/them'
cl(woman) pl cl
c. no' 'it' hej no' 'they/them'
cl(animal) pl cl
d. ch'en 'it' hej ch'en 'they/them'
cl(rock)

In simple declarative sentences, the first and second person independent pronouns are deleted by a rule of Pronoun Drop. The rule applies only to those independent first and second persons which are inflected with a clitic pronoun on a verb, noun, or preposition:

- (5) a. *xc-ach to hach
asp-A2 go you
'you went'
- b. xc-ach to-yi -----
asp-A2 go-stem-augt Pron Drop
'you went'
- (6) a. *ch-in aʔni hayin
asp-A1 bathe I
'I bathe'
- b. ch-in aʔni ----- (an)
asp-A1 bathe Pron Drop ip
'I bathe'
- (7) a. *x-∅-w-il hayin ha-mam hach
asp-A3-E1-see I E2-father you
'I saw your father'
- b. x-∅-w-il ----- ha-mam -----
asp-A3-E1-see Pron Drop E2-father Pron Drop
'I saw your father'
- (8) a. *x-∅-colwa ix w-iH hayin
asp-A3-help cl/she E1-to me
'she gave me a hand'
- b. x-∅-colwa ix w-iH -----
asp-A3-help cl/she E1-to Pron Drop
'she gave me a hand'

When the independent pronoun is not duplicated by a clitic pronoun marker, it does not undergo the Pronoun Drop rule. This is the case with a pronoun following a conjunction:

- (9) ch-in to boj hach
asp-A1 go with you
'I go with you'

- (10) ...haca' hach
and how you
'...and what about you?'

The third person pronoun, the noun classifier, does not drop either:

- (11) x-∅-caʔalwi naj
asp-A3-dance cl/he
'he danced'
- (12) a. *x-∅-aw-il hach ix
asp-A3-E2-see you cl/her
'you saw her'
- b. x-∅-aw-il ----- ix
asp-A3-E2-see Pron Drop cl/her
'you saw her'

Pronoun Drop is therefore limited to those cases in which the deletion does not result in any loss of information of person or noun class.

In emphatic constructions the independent pronouns appear in their original position and are generally accompanied by the post-nominal demonstrative ti'/tu' 'this/that':

- (13) caw ya'taj x-∅-w-abe hayin ti'
very difficult asp-A3-E1-feel I this
lit: for my part, I feel it very difficult
'it seems very difficult to me'
- (14) toʔte ch-∅-(y)-al heb naj nan
always asp-A3-E3-say pl cl/they differently
ch-in to-j hayin ti'
asp-A1 go-fut I this
'all they do is talk; I am going my own way'

The emphatic pronoun may also be found at the head of the whole sentence in a clefted position:⁴

- (15) hayin x-∅-w-ute hun-ti'
I asp-A3-E1-do one-this

'I did this'

- (16) hach-tic'a i'ne tato ch-∅-toy
you-always depends that asp-A1pl go

'it is still up to you whether we go (or not)'

Only one element can be clefted in a sentence, but a post-verbal emphatic independent pronoun can co-occur with a clefted NP:

- (17) a. ha' tu' ch-∅-aw-a' pensar
cleft that asp-A3-E2-give to think

hach ti'
you this

'that's what you think!'

- b. *hach ti' ha' tu' ch-∅-aw-a' pensar
you this cleft that asp-A3-A2-give to think

In the third person, the clefted noun classifier is preceded by the clefting particle ha', which is an obligatory particle with a classifier alone in a pronoun form, but optional with full NPs:

- (18) a. ha' naj x-∅-__-'ute-n hun-tu'
cleft cl/he asp-A3-DEL-do-suff one-that

'it is he who did that'

- b. (ha') hune' te' mah ti' babel
(cleft) one cl house this first

x-∅-(y)-acaH naj
asp-A3-E3-build cl/he

'it is this house which is the first one that he built'

2. THE MORPHOLOGY AND USE OF CASE MARKING

2.0.

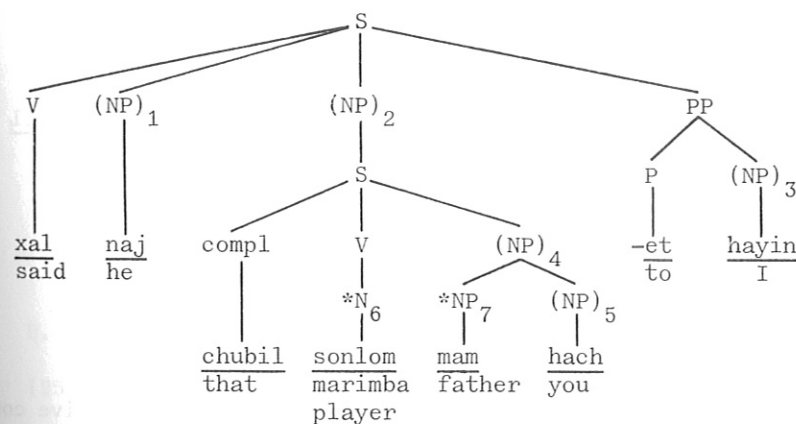
Jacalteco has two sets of case markers, an absolutive set and

an ergative set. In the morphological analysis of examples, they are referred to as A/E1,2,3--A for absolutive, E for ergative, and 1 2 3 for the persons. The following paragraphs will present the morphological shape of each set and the different constructions to which they belong.

2.1. Preliminary Remarks

Those NPs which are marked for case fulfill one of the four nominal functions--subject, object, object of preposition, possessor NP. Included are non-terminal NPs which dominate sentential subjects or objects and possessive constructions; excluded are the terminal nodes of nominal predicates and possessed NPs.⁵ In the tree diagram below the NPs marked for case are in parentheses, constituents not in nominal functions which will not inflect for case are starred:

(19)



1. subject NP
2. sentential object
3. object of preposition
4. subject NP
5. possessor NP
- *6. nominal predicate
- *7. possessed NP

The tree structure (19) corresponds to sentence (20) in which the numbers refer to the inflected NPs of the tree:

- (20) x-∅-(y)-al naj w-et an chubil
 asp-A3-E3-say cl/he E1-to 1p that
 2 1 3
- sonlom ∅ ha-mam
 marimba player A3 E2-father
 4 5
- 'he said to me that your father was a marimba player'

Case markers are not attached to their NPs but appear in different positions in the sentence. The arrowed lines in the samples below relate the case markers to their NPs:⁶

- (21) x-∅-s-mak naj y-ixal naj pel
 asp-A3-E3-hit cl/he E3-wife cl Peter
 'he hit Peter's wife'
- (22) a. *ch-ach w-il-a' hayin hach y-ul beh
 asp-A2 E1-see-fut I you E3-in trail
 'I will see you on the trail'
- b. ch-ach w-il-a' y-ul beh
 asp-A2 E1-see-fut E3-in trail
 'I will see you on the trail'

2.2. The Absolute Set

The paradigm of the absolute set is given in a stative construction with the adjectival predicate meba 'poor':

- (23) sg 1- meba hin 'I am poor'
 2- meba hach 'you are poor'
 3- meba ∅ naj 'he is poor'
 cl/he

- pl 1- meba hoh 'we are poor'
 2- meba hex 'you (pl) are poor'
 3- meba ∅ heb naj 'they are poor'
 pl cl/he

The initial h- of the first and second person drops when the morpheme boundary is lost in normal speech. It is always lost when the case marker for either the subject of an intransitive or the object of a transitive is cliticized to the aspect marker. The third person absolute is a ∅ morpheme.⁷ As mentioned earlier, it will always be accompanied by a noun classifier and will take a plural morpheme (heb/hej) in the plural.

The absolute set fulfills the following functions--

A. subject of a stative verb:

- (24) a. winaj hach
 man A2
 'you are a man'
- b. sicinaj hin
 tired A1
 'I am tired'
- c. nimejal ∅ te' Hah
 big A3 cl/the house
 'the house is big'

B. subject of an intransitive verb:

- (25) a. ch-oh wayi
 asp-A1pl sleep
 'we sleep'
- b. xc-ach toyi
 asp-A2 go
 'you want'

- c. x- \emptyset -cam no' cheh
asp-A3-die cl/the horse
'the horse died'
- d. x- \emptyset -'ayc'ay hej te' te'
asp-A3-fall down pl cl/the tree
'the trees fell down'

C. object of a transitive verb:

- (26) a. ch-in haw-ila
asp-A1 E2-see
'you see me'
- b. ch-oh s-col naj
asp-A1pl E3-help cl/he
'he helps us'
- c. x- \emptyset -s-watx'e naj te' hah
asp-A3-E3-make cl/he cl/the house
'he made the house'

D. subject of passives:

- (27) a. x- \emptyset -'il-lax naj
asp-A3-see-PASS cl/he
'he was seen'
- b. xc-ach mak-ot
asp-A2 hit-PASS
'you were hit'
- c. ch-oh tzuj-cha haw-u
asp-A1pl follow-PASS E2-by
lit: we are followed by you
'you catch up with us'

2.3. The Ergative Set

The ergative set has two variants depending on whether the following stem is consonant initial or vowel initial:

- (28)
- | | | | | |
|----|----|---------|---------|--------------------|
| | | -mam | | 'father' |
| sg | 1- | hin-mam | | 'my father' |
| | 2- | ha-mam | | 'your father' |
| | 3- | s-mam | naj | 'his father' |
| | | | cl | |
| pl | 1- | cu-mam | | 'our father' |
| | 2- | he-mam | | 'your (pl) father' |
| | 3- | s-mam | heb naj | 'their father' |
| | | | pl cl | |

The first person plural has two variants, co- and cu-.

- (29)
- | | | | | |
|----|----|----------|---------|-------------------|
| | | -atut | | 'house' |
| sg | 1- | w-atut | | 'my house' |
| | 2- | haw-atut | | 'your house' |
| | 3- | y-atut | naj | 'his house' |
| | | | cl | |
| pl | 1- | y-atut | | 'our house' |
| | 2- | hey-atut | | 'your (pl) house' |
| | 3- | y-atut | heb naj | 'their house' |
| | | | pl cl | |

As was the case with the absolutive, the ergative third person is obligatorily accompanied by a classifier and is identical in the singular and the plural. The plural of the third person is signalled by the plural morpheme heb/hej.

The functions of the ergative set are illustrated below--

A. subject of a transitive verb:⁸

- (30) a. ch-in ha-maka
asp-A1 E2-hit
'you hit me'
- b. ch-ach y-oche naj
asp-A2 E3-like cl/he
'he likes you'

B. marker of the possessor NP:⁹

(31) a. hin-xaʔtab
E1-sandal

'my sandals'

b. s-bak s-sat naj
E3-pit E3-face cl(man)

lit: the pit of his face
'his eye'

c. ay haw-uʔtaj
exist E2-brother (of a male)

'you (male) have a brother'

C. possessor NP of reflexive and reciprocal pronoun:

(32) x-∅-w-il hin-ba
asp-A3-E1-see E1-refl

'I saw myself'

(33) x-∅-a-mak ha-ba
asp-A3 E2-hit E2-refl

'you hit yourself'

(34) cu-cajyat cu-ba
E1pl-enemy E1pl-refl

'we are enemies (of each other)'

D. object of preposition:

(35) a. w-et
E1-to

'to me'

b. j-ibaʔ
E1pl-on top

'on top of us'

c. y-ul te' ʔah
E3-in cl/the house

'in the house'

d. s-wi' te' te'
E3-head cl/the tree

'at the top of the tree'

E. subject of aspectless embedded clauses:

(36) a. sab ichi cu-munlayi
early start E1pl-work

'we started working early'

b. x-∅-(y)-il naj hin ha-mak-ni
asp-A3-E3-see cl/he A1 E2-hit-suff

'he saw you hit me'

3. CASE ASSIGNMENT RULES

3.0.

The existence of two sets of rules of Case Assignment will be established in this section. One set of rules represents an ergative type of case marking and the other a nominative/accusative type.

3.1. Assignment of Case to Subjects and Objects of Main Clauses: The Ergative Type of Case Marking

A typical ergative type of case marking operates in main clauses; it assigns an ergative to the subject of a transitive verb and an absolutive to both the subject of an intransitive and the object of a transitive:

(37) xc-ach w-abe
asp-A2 E1-hear

'I heard you'

(38) xc-ach toyi
asp-A2 go

'you went'

The pattern of case assignment is:

- (39) a. Transitive clause: V NP NP
 S O
 Erg Abs
- b. Intransitive clause: V NP
 S
 Abs

The rules of Case Assignment can be formulated on the basis of the number and positions of NPs:

- (40) a. Ergative Case Assignment #1
 If the main verb is immediately followed by two NPs, mark the closest to the verb ERGATIVE.
- b. Absolutive Case Assignment #1
 Mark any other NP ABSOLUTIVE.

Since the language has a VSO word order, the rule (40a) applies specifically to the subject of a transitive verb (defined as a verb followed by two NPs). The rule (40b) applies to the two remaining NPs, either the object of a transitive or the subject of an intransitive.

The domain of application of the ergative type of case marking has to be expanded to include subordinate clauses introduced by conjunctions, complement sentences introduced by complementizers, and relative clauses. All of these types of clauses have in common the presence of a finite verb form with an aspect marker.

3.2. Stative Clauses

Although they do not carry any marker of aspect, stative clauses are also marked by the ergative type of case marking rules. Thus, the presence of an aspect marker cannot be said to be a surface structure characteristic of clauses marked ergatively.

Stative clauses never exhibit any aspect marking. There is no alternation of presence vs absence of a copula that would provide aspect information when the aspect is not predictable from the context:

(41) meba \emptyset naj
 poor A3 cl/he
 'he is/was/will be poor'

(42) sonlom hach
 marimba player A2
 'you are/were/will be a marimba player'

However, stative clauses behave as if they had an aspect marking. They are ungrammatical in the context of an aspectless embedded clause. Examples (43a) and (44a) show that the verbs cha' -wi' 'to feel like, to like' and a' tet -anma 'to enjoy' require an aspectless embedded clause. Sentences *(43b) and *(44b) show that the stative clauses cannot enter this aspectless construction. Sentences (43c) and (44) show how the stative clauses must occur in complement sentences with complementizers if they are embedded:

(43) a. x- \emptyset -s-cha' ha-wi' ha-way
 asp-A3-E3-suit E2-head E2-sleep
 sunil-bal tz'ayic
 all-extent day
 'you would like to sleep all day long'

b. *x- \emptyset -s-cha' ha-wi' ha-bakich
 asp-A3-E3-suit E2-head E2-fat
 'you would like to be fat'

c. x- \emptyset -s-cha' ha-wi' tato bakich hach
 asp-A3-E3-suit E2-head that fat A2
 'you would like to be fat'

- (44) a. ch- \emptyset -aw-a' t-(y)-et haw-anma ha-ca \bar{h} alwi
 asp-A3-E2-give aug^t-E3-to E2-heart E2-dance
 'you enjoy dancing'
- b. *ch- \emptyset -aw-a' t-(y)-et haw-anma ha-kalom
 asp-A3-E2-give aug^t-E3-to E2-heart E2-rich
 'you enjoy being rich'
- c. ch- \emptyset -aw-a' t-(y)-et haw-anma tato
 asp-A3-E2-give aug^t-E3-to E2-heart that
 kalom hach¹⁰
 rich A2
 'you enjoy being rich'

Stative clauses also behave like finite clauses in that they can be negated:

- (45) mat bakich-oj hach
 not fat-suff A2
 'you are not fat'
- (46) mat sonlom-oj \emptyset naj
 not marimba player-suff A3 cl/he
 'he is not a marimba player'

As seen in Chapter 1, Section 5. Negation, clauses with finite verbs may be negated while aspectless embedded clauses may not. This will be discussed again in Chapter 8 Complement Sentences.

Since stative clauses never appear in an aspectless environment and behave like clauses inflected for aspect with respect to embedding and negation, it could be postulated that stative clauses have an aspect marker which is never realized in surface structure and that case assignment of the ergative type applies in clauses marked for aspect. In view of the lack of further arguments to postulate a dummy aspect marker in stative clauses, the domain of the ergative type of case marking will be said to include all main clauses and

embedded finite clauses.

3.3. Assignment of Case to Subjects and Objects of Aspectless Embedded Clauses: The Nominative/Accusative Type of Case Marking

Another mechanism of case assignment applies in the environment of aspectless embedded clauses and aspectless subordinate adverbial clauses.

The use of the expression "nominative/accusative type" of case assignment refers to the type of case marking found in inflectional languages in which all subjects are marked with the nominative case and all direct objects with the accusative case.

A similar process is at work in aspectless clauses in Jacaltec in that subjects of both transitive and intransitive verbs are assigned the ergative case, while the objects of transitive verbs alone are assigned the absolutive case. In intransitive clauses therefore the subject is assigned an ergative with the nominative/accusative type, while it was assigned an absolutive with the ergative type. The nominative/accusative type of case assignment is shown in pattern (47) followed by examples (48) and (49):

- (47) a. Transitive clause: V NP NP
 V S O
 Erg Abs

- b. Intransitive clause: V NP
 V S
 Erg

- (48) x- \emptyset -w-ilwe hach hin-col-ni
 asp-A3-E1-try A2 E1-help-suff
 'I tried to help you'

- (49) x-Ø-w-il ha-cañalwi
asp-A3-E1-see E2-dance
'I saw you dance'

The case assignment rules operating on aspectless clauses can be formulated as follows:

- (50) a. Ergative Case Assignment #2
Mark the NP closest to the verb ERGATIVE

- b. Absolutive Case Assignment #2
Mark the second NP ABSOLUTIVE.

Rule (50a) marks the subject for ergative, no matter whether the verb is transitive or intransitive, and rule (50b) applies only to objects of transitives.

3.4. Assignment of Case in Verbless Constituents

Case marking is not restricted to subjects and objects of verbs. It applies also to possessor NPs and to the objects of prepositions, assigning them an ergative:

- (51) x-Ø-ul hin-mam w-atut
asp-A3-come E1-father E1-house
'my father came to my house'

- (52) ch-ach colwa y-iñ naj
asp-A2 help E3-to cl/him
'you give a hand to him'

The question arises therefore of how to treat case marking in the verbless constructions--as a separate process of case assignment or as a process to be collapsed with one of the two sets of rules established in (40) and (50).

Case assignment in possessive and prepositional phrases could be treated as a genitive type of case marking which would be independent of the verbal case marking discussed above and would then determine a third domain of case marking in Jacaltec. However, such an analysis would be missing a

generalization about case assignment in both aspectless embedded verbal clauses and possessive or prepositional phrases. Since the two sets of constructions have in common the same ergative assignment and the lack of aspect marking, they may be collapsed as shown in pattern (53):

(53) Aspectless domains of case assignment:

Transitive aspectless clauses	V	NP	NP
Intransitive aspectless clauses	V	NP	
Possessive constructions		NP	NP
Prepositional phrases		P	NP
			Erg Abs

The nature of most Jacaltec prepositions points to more similarity between these constructions than is obvious from the above pattern. Some prepositions are easily recognizable as verb stems and others as nouns:

- (54) y-ul te' ñah
E3-in cl/the house
'in the house'

-ul comes from huluj, a verb meaning 'to come'.

- (55) y-u cake
E3-by wind
'by/because of the wind'

-u comes from uhuj 'to happen, be possible'.

- (56) s-wi' te' te'
E3-head cl/the tree
'on top of the tree'

-wi' comes from wi'e 'head'.

- (57) t-in-sat-taj
aug^t-E1-front of-suff
'in front of me'

-sattaj comes from sat 'face'.

3.5. Conclusions: Case Assignment

Two domains of case marking are distinguishable in Jacaltec, each of them corresponding to a different type of case assignment.

A) Ergative type

a. case assignment: the subject of a transitive verb is ergative; the subject of an intransitive verb and the object of a transitive verb are absolutive.

b. domain:

- main clauses, both finite and stative
- complement sentences with complementizer
- subordinate clauses with conjunction
- relative clauses

B) Nominative/Accusative type

a. case assignment: all subjects are ergative; the object of a transitive verb is absolutive.

b. domain:

- embedded aspectless clauses
- aspectless time subordinate clauses
- possessive constructions
- prepositional phrases

Since the rules of Case Assignment for subject and object NPs were formulated in terms of the number of NPs immediately following the verb, Case Assignment has to apply before all rules of movement or deletion—Clefting, Relative Deletion and Noun Classifier Deletion. The deletion of the object would result otherwise in marking the subjects of transitives with an absolutive case marker.¹¹

4. CASE AGREEMENT

4.0.

The case assigned to an NP does not appear on the NP itself but rather as an agreement feature on a predicative constituent to the left of the NP. This section will describe the positions in which the case markers are found.

4.1. Position of Ergative Case Marker

Ergatives are always preposed and, as was noted earlier in this chapter (2.2.), they are sensitive to the nature of the initial phoneme of the stem to which they are preposed. They may precede verb stems, nouns, and prepositions:

(58) a. ch-ach hin-mak-a'
asp-A2 E1-hit-fut
'I will hit you'

b. ch-ach w-il-a'
asp-A2 E1-see-fut
'I will see you'

(59) a. hin-mam
E1-father
'my father'

b. w-uXtaj
E1-brother
'my brother'

(60) a. y-ul te' Hah
E3-in cl/the house
'in the house'

b. w-ibaf
E1-on top
'on top of me'

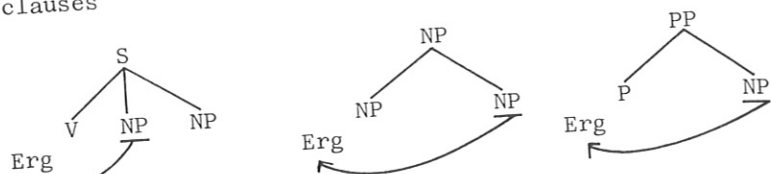
The Ergative Agreement rule is:

(61) Ergative Agreement

Place the ergative immediately before the constituent to the left of the NP.

This rule accounts for the ergative position in all domains--

- (a) main and embedded clauses (b) possessive construction (c) prepositional phrase



4.2. Positions of Absolutive Case Marker

4.2.0. Absolutives occur in two positions in surface structure, either preceding or following the predicate:¹²

- (62) a. ch-ach w-il-a'
asp-A2 E1-see-fut
'I will see you'

- b. sicinaj hach
tired A2
'you are tired'

4.2.1. Postposed Absolutives

The basic Absolutive Agreement rule positions the case marker following the predicative element. The absolutive is found postposed to the predicate in two constructions--stative clauses and transitive imperatives:

- (63) a. winaj hach
man A2

'you are/were a man'

- b. bakich hex
fat A2pl

'you (pl) are/were fat'

- c. tz'oŋan hin
sitting A1

'I am/was sitting'

- (64) a. col hin
help A1

'help me!'

- b. il hoŋ
look A1pl

'look at us!'

4.2.2. Cliticization of the Absolutive Marker

In the presence of an aspect marker in the surface structure, the absolutive moves to a clitic position and becomes attached to the aspect marker:

- (65) a. *ch-__ 'apni hach
asp-__ arrive A2

'you arrive there'

- b. ch-ach apni
asp-A2 arrive

'you arrive there'

- (66) a. *ch-__ w-il hach
asp-__ E1-see A2

'I see you'

- b. ch-ach w-il-a
asp-A2 E1-see-stem aug^t

'I see you'.

The rule which suffixes the absolutive markers to the aspect markers is as follows:

(67) Absolutive Cliticization

In the presence of an aspect marker, the absolutive case marker is cliticized to it.

There is a word boundary between the compound [aspect + absolutive] and the compound [(ergative +) verb stem (+ stem final V)] as seen in (65b) and (66b). The word boundary is lost when the absolutive is in the third person as A3:∅.

Examples (68a) and (69a) correspond to underlying forms which exhibit the inaudible third person absolutive markers, while examples (68b) and (69b) show the corresponding surface transcriptions:

(68) a. $x-\emptyset$ -haw-il naj
asp-A3-E2-see cl/him
'you saw him'

b. xawil naj
you saw cl/him
'you saw him'

(69) a. $x-\emptyset$ -to naj
asp-A3-go cl/he
'he went'

b. xto naj
went cl/he
'he went'

The completive aspect marker alternates between xc- when an audible first or second person absolutive case marker is suffixed to it and x- when the absolutive is the inaudible third person \emptyset :

(70) a. xc-in haw-il-a
asp-A1 E2-see-stem aug^t

'you saw me'

b. $x-\emptyset$ -aw-il naj
asp-A3-E2-see cl/him
'you saw him'

(71) a. xc-ach to-yi
asp-A2 go-stem aug^t
'you went'

b. $x-\emptyset$ -to naj
asp-A3-go cl/he
'he went'

4.3. A Surface Structure Constraint: $A > E$ ¹³

4.3.0.

There is a constraint in Jacalteco on the relative ordering of the case markers to the effect that the absolutive always precedes the ergative if both occur in the same constituent. This constraint will be shown to operate in three constructions.

4.3.1. Possessed Nominal Predicate

As a general rule the absolutive marker is postposed to nominal predicates. However, if the nominal predicate is itself a possessed noun with a possessive ergative marker, the absolutive of the subject must precede the whole predicate:

(72) a. mam-e hach
father-suff A2
'you are a father'

b. s-mam naj
E3-father cl
'his father'

c. *s-mam naj hach
E3-father cl A2
'you are his father'

c. hach s-mam naj
A2 E3-father cl
'you are his father'

(73) a. *haw-amigo hotl
E2-friend A1pl
'we are your friends'

- b. $\frac{\text{ho}\bar{\text{H}}}{\text{A1pl}} \frac{\text{haw-amigo}}{\text{E2-friend}}$
 'we are your friends'

The constraint on the placement of the absolutive case marker may be formulated as follows:

(74) A > E Ordering Constraint

The absolutive case marker always precedes the ergative case marker within a predicative constituent.

4.3.2. Aspectless Embedded Transitive Verb

The absolutive object marker also precedes the ergative subject marker of an aspectless embedded transitive verb:

- (75) a. $\frac{*x-\emptyset-w-ilwe}{\text{asp-A3-E1-try}} \frac{\text{hin-col-ni}}{\text{E1-help-suff}} \frac{\text{hach}}{\text{A2}}$
 'I tried to help you'

- b. $\frac{x-\emptyset-w-ilwe}{\text{asp-A3-E1-try}} \frac{\text{hach}}{\text{A2}} \frac{\text{hin-col-ni}}{\text{E1-help-suff}}$
 'I tried to help you'

The reordering of the absolutive marker in front of the ergative marker in spite of the absence of aspect marker is probably the result of an analogy with the finite transitive verb forms in which absolutives are always cliticized to the aspect marker and thus always precede the ergatives.

4.3.3. Prepositional Phrase Incorporation¹⁴

The analogical force of the A > E Ordering Constraint becomes manifest in this third construction. The prepositional phrase using the preposition -et may be incorporated in an intransitive verb form between the absolutive of the subject and the verb stem:

- (76) $\text{xc-ach} \frac{\text{w-et}}{\text{asp-A2}} \text{ca}\bar{\text{H}}\text{alwi}$
 'I dance with you'
- (77) $\text{xc-o}\bar{\text{H}} \frac{\text{haw-et}}{\text{asp-A1pl}} \text{tzoteli}$
 'you talked with us'

The translations provided under the examples (76) and (77) are the English equivalents of the Spanish translations provided by the informants. The incorporated object of preposition is taken to be the subject of the sentence. The translation provides a clear indication that an analogical process is operating in the construction. The sequence absolutive-ergative is treated as the equivalent sequence found in transitive verb forms in which the absolutive is the marker of the object and the ergative the marker of the subject.

4.4. Summary--Positions of Case Markers

The positions of the case markers are summarized below:

- | | |
|----------------------------------|--|
| (a) Possessive construction | $\frac{\text{E-noun}}$ |
| (b) Prepositional phrase: | $\frac{\text{E-prep noun}}$ |
| (c) Transitive finite verb: | $\text{asp-A} \frac{\text{E-verb}}$ |
| (d) Intransitive finite verb: | $\text{asp-A} \text{ verb}$ |
| (e) Stative predicate: | $\text{noun} \frac{\text{A}}$ |
| (f) Transitive imperative: | $\text{adj} \frac{\text{A}}$ |
| (g) Possessed nominal predicate: | $\frac{\text{A}}{\text{verb}} \frac{\text{A}}$ |
| (h) Aspectless embedded verb: | (A) E-verb |
| (i) PP-incorporation: | $\text{asp-A} \frac{\text{E-prep verb}}$ |

The ergative case marker is always in preposed position, as seen in (a), (b), (c), (g), (h), and (i). The absolutive case marker is found in three different positions: it is either postposed, (e) and (f), or cliticized on the aspect marker, (c), (d), and (i) or placed before the ergative marker under pressure for analogy, (g) and (h).

The insertion of the prepositional phrase between the absolutive marker and the intransitive verb stem in (i) also conforms to the ordering constraint that absolutive always precede the ergative.

5. CONCLUSIONS

Jacaltec marks all the NPs in nominal function for one of two cases--ergative or absolutive. The language is only superficially an ergative one. Besides the ergative type of case marking of main and finite clauses, a nominative/accusative type of case marking operates in all aspectless constituents characterizing the language as a mixed ergative type.¹⁵

The ergativity of Jacaltec is not a deep phenomenon. No rule of syntax needs to refer in its structural description to a specific case. As will be seen in Chapter 7 Disambiguation the relevant notion in the disambiguation mechanism is that of subject of transitive and not that of ergative case marking. As discussed in Chapter 11 Equi-NP Deletion, the rule of Equi-NP Deletion is restricted to the deletion of subjects of intransitive verbs but the notion of case is irrelevant since all subjects are marked ergative in aspectless embedded clauses in which deletion occurs. The same argument holds for the rule of Promotion in aspectual constructions discussed in Chapter 10 A Promotion Rule; for speakers with a restriction on which subjects may be promoted, the distinction has to be made between subjects of transitives and subjects of intransitives although they are all marked for ergative in the embedded clause.

NOTES

1. The choice of the plural morpheme depends on the presence of the noun classifier. Human beings take the non-human plural morpheme hej in the absence of a surface structure noun classifier:

- (a) x'apni heb naj wuXtaj
arrived pl cl(man) my brother
'my brothers arrived there'
- (b) x'apni hej wuXtaj
'my brothers arrived there'
- (c) *x'apni heb wuxtaj

In expressions with quantifiers, the presence of the plural morpheme is obligatory with human beings, but optional with non-humans:

- (d) hun-kahan heb naj winaj
one-few pl cl(man) man
'a few men'
- (e) hun-kahan (hej) no' txitam
one-few (pl) cl(animal) pig
'a few pigs'
- (f) hun-kahan (hej) te' Hah
one-few (pl) cl(wood) house
'a few houses'

Numerals other than hune 'one' take one of three numeral classifiers, -aH [+ human], -c'oH [+ animal], -(e)b [-human, -animal]. In the presence of the numeral classifier, the plural morpheme becomes ungrammatical for inanimates:

- (g) caw-aH heb naj winaj
two-cl[+ human] pl cl man
'two men'

- (h) ca-c'oh (hej) no' txitam
two-cl[+ animal] pl cl pig
'two pigs'
- (i) ca-b *(hej) te' Hah
two-cl[-human, -animal] pl cl house
'two houses'

2. The particle ha' is recognizable as the clefting particle which precedes clefted NPs at the head of the sentence. Sentences (17) and (18) later in the chapter demonstrate this point.
3. For a more complete discussion of the pronominal role of the noun classifier, see Chapter 4 Pronominalization. There are twenty-one noun classifiers, including a \emptyset classifier.
4. Clefting of a first or second person independent pronoun differs from clefting of a third person NP in that its corresponding case marker is not deleted from the verb form and the suffix -n(i) is not added to the transitive verb. Compare sentences (15) and (18). See Chapter 1, Section 2. Emphasis and Chapter 7 Disambiguation.
5. This is meant to also exclude the locative noun phrases which are not accompanied by a preposition. Consider the nouns -atut 'house' and txoHbal 'market place' and their locative use in the following sentences:
 - (a) chin to txoHbal
I go market
'I go to the market'
 - (b) aycoj ha mam watut
is your father my house
'your father is at my house'

6. The fact that the case marker does not appear on the noun itself will create a problem of ambiguity in transitive sentences in which either the subject or object NP will have been removed by deletion or movement. This is treated at length in Chapter 7 Disambiguation.
7. The inaudible nature of the absolutive third person was noted by Greenberg (1963) as one of the universal tendencies of ergative languages.
8. Most of the morphophonemic rules of Jacaltec apply in verb forms. Besides the dropping of the h- in suffixed case markers, the ergative markers E3 -y- and -s- are involved in two different processes.
 - I. -y- drops after the aspect marker; underlying E3 -y- is transcribed in the examples as -(y)-:
 - (a) t-(y)-et naj \longrightarrow tet naj
aug-E3-to cl/him
'to him'
 - (b) x- \emptyset -(y)-al naj \longrightarrow xal naj
asp-A3-E3-see cl/he
'he said'
 - II. both aspect markers assimilate to the manner and point of articulation of E3 -s-:
 - (c) ch- \emptyset -s-mak naj
asp-A3-E3-hit cl/he
 ↓
 x-s-mak
 ↓
 s-s-mak
 ↓
 smak naj
 'he hits it'

- (d) x-∅-s-mak naj
 asp-A3-E3-hit cl/he
 ↓
 x-s-mak
 ↓
 s-s-mak
 ↓
smak naj
 'he hit it'

9. Ergatives are also found in quantifier expressions of the type--the three of us, the three of them:

- (a) j-ox-waH-il
 E1pl-three-cl[+ human]-suffix
 'the three of us'
- (b) s-yox-c'oH-al no'
 E3-three-cl[+ animal]-suff cl(animal)
 'the three of them(animals)'

10. Another form of the sentence could be:

- (a) ch-∅-aw-a' t-(y)-et haw-anma
 asp-A3-E2-give aug^t-E3-to E2-heart
yiH ha-kalom-al
 in E2-rich-ness
 'you enjoy being rich'

11. The rule of Conjunct Splitting presented in Chapter 1, Section 6. Coordination is another rule of movement affecting subjects and objects. Three alternative hypotheses (H1, H2, H3) will be made here to account for the fact that only the first of the two conjunct NPs inflects on the verb.

H1: Conjunct Splitting precedes Case Assignment. This analysis would provide a simple account of case marking, but it would treat Conjunct Splitting

as a deep phenomenon and, in an unwarranted way, as a movement rule different from all other movement rules.

H2: Case Assignment precedes Conjunct Splitting and the rule of Case Assignment is reformulated.

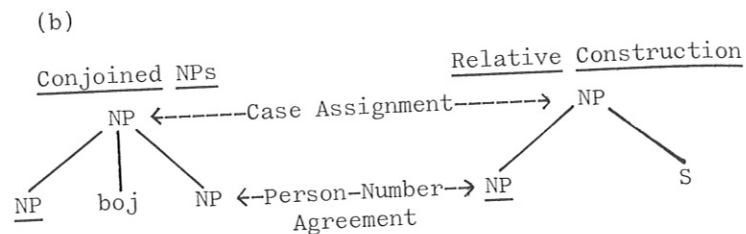
The rule of Case Assignment would have to be reformulated to ensure that only the first of the two conjoined NPs (NP₁) be marked and the second (NP₂) be skipped over:

- (a) V NP[NP₁ boj NP₂]_{NP} NP

The formulation of such a Case Assignment rule would necessitate the undesired complication--given a rule based on linear ordering--of having to refer to constituent structures.

H3: Case Assignment precedes Conjunct Splitting and a distinct rule of Person and Number Agreement is postulated.

No reformulation of the Case Assignment rule is necessary if a distinction is established between case marking and Person/Number Agreement. Case Assignment applies to major NP Constituents of a clause before Conjunct Splitting, and Person/Number Agreement is a late surface operation which operates on terminal nodes. This analysis would account for Case Marking in all complex NP constructions like the conjoined NP structure and the relative clause construction:



12. While the ergative appears as a preposed element in all Mayan languages, the place of the absolutive varies from language to language. In Yucatec Maya the absolutive is always postposed; in Tzotzil it alternates between being preposed and postposed; in Mam it is preposed to inflected verbs and postposed to nominal predicates; and in Cakchiquel and Quiché it is always preposed. See Craig and Robertson (1971) and Robertson (1976).
13. The A>E Ordering Constraint is a language specific Constraint. It does not hold for other Mayan languages, as is discussed in "Pronominal Distribution in Mayan" by Craig and Robertson (1971).
14. See Chapter 1, Note 23 for a presentation of PP-incorporation.
15. It is not uncommon for so-called ergative languages to assign case marking on the basis of both the ergative system and the nominative/accusative system. In Walbiri, NP marking is on an ergative basis, while clitic marking is done on a nominative/accusative basis (Hale, 1973). Georgian has an ergative system in the perfect tense and nominative/accusative system in the others.

4. Pronominalization

In Jacaltec the Pronominalization rule is a deletion rule which leaves a pro-form of the noun behind. The discussion of this rule is divided into the following sections: 1. the modifier system of the language from which the pronoun forms are drawn; 2. the rule of Pronominalization under identity of reference and the rule of Pronominalization under identity of sense, to show that one deletion rule accounts for both pronominalizations; and 3. the properties of the trace-leaving deletion rule of Pronominalization.

1. THE MODIFIER SYSTEM

1.1. The Status of the Noun Classifier--on the Definiteness of the Noun

A noun is always accompanied by its noun classifier. This noun classifier is like a gender marker. It attributes the nouns to one of twenty-one semantic classes. Examples (1), (2), (3), and (4) offer a sample of those classifiers:¹

- (1) a. naj sonlom
 cl(man) marimba player
 'the marimba player'
- b. ix malin
 cl(woman) Mary
 'Mary'
- c. naj yabil
 cl(man) disease
 'the disease'