THE ANTIPASSIVE AND JACALTEC

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In recent years, Mayan languages have been at the center of most discussions of the phenomenon of ergativity. Among Mayanists, the topic that has drawn most attention is that of the antipassive constructions. Three papers dealing with the Mayan antipassive have provided the background, framework, and impetus for this paper.

In "The Mayan Antipassive: Some Facts and Fictions," Smith-Stark (1978) summarized the then "current state of knowledge of antipassive-like phenomenon in Mayan languages" and took note of the fact that Jacaltec would deserve special attention since it did not seem to fit the pattern of other highland languages. The article placed the investigation of the antipassive in a synchronic and comparative framework and established the terminology which will be used here.

The present article was first written in response to the call for a more complete analysis of all antipassive forms found in the Mayan family, analysis without which all attempts at the reconstruction of proto Mayan syntax will remain fragile speculations.

The reconstruction of proto Mayan antipassive rules was the topic on which Norman and Campbell (1978) focused their attention in "Toward A Proto Mayan Syntax: A Comparative Perspective on Grammar." The article placed the investigation of the antipassive in a diachronic and comparative perspective and provided an incentive to speculate on the impact of the Jacaltec data on the reconstruction of a Mayan historical process.

In "¿Es el Antipasivo Siempre Una Voz?", Ayres (1977) first raised in writing the issue of the appropriateness of grouping together rather different constructions under the label of antipassive for the analysis of Ixil. This position supported similar conclusions arrived at for the analysis of Jacaltec (Craig 1975, 1977).

The purpose of this paper is primarily to establish clearly what the facts about the antipassive-like phenomenon are for Jacaltec, and to place them in a Mayan perspective in order to underline the contribution that Jacaltec can make to the general discussion of antipassive in Mayan, and ergative languages in general.

The first part consists of a description of the absolutive and incorporative antipassive constructions; the second part is devoted to the agentive construction and is aimed at establishing that the construction is not an instance of antipassive voice. A concluding section offers a comparative sketch of the agentive construction across the family to
suggest that Mayan languages can be placed on a continuum of increasing analogical "antipassivization" of the agentive construction.

I. THE ANTIPASSIVE VOICES OF JACALTEC

0. Two antipassive constructions will be considered in this section. Following Smith-Stark's terminology, they are referred to as the absolute antipassive and the incorporative antipassive.

1. The Absolutive Antipassive

1.1. The construction under consideration is that of example (2) below which is given in contrast to the transitive construction of example (1).

(1) xo-ach s-col. naj
asp.-A₂ E₃-help he
'he helped you'

(2) x-∅-col-wa naj t-aw-iM
asp.-A₃-help-suff. he aug⁷-E₂-to
'he helped you'

Example (2) is an illustration of the absolutive antipassive voice which is characterized, in Jacalte, by the inflection of the subject as an absolutive marker (A), the suffixation of the verbs with -wa, and the oblique NP with the relational noun -iM.

The label "antipassive" comes from the structural similarity of this construction to the passive one with which it shares the absolutive subject marking, the suffixation of the verb and the oblique NP, as shown in example (3):

(3) Antipassive

    xo-ach col-wa y-iM naj
    asp-A₂ help-A.P. E₃-to him

'you helped him'

Passive

    xo-ach col-lax y-u naj
    asp-A₂ help-PASS E₃-by him

'you were helped by him'

1.2. The absolutive antipassive is a voice in that it corresponds to a change in the grammatical relations of the two NPs of the transitive verb. What was a two-argument verb in a basic transitive construction has become a one-argument verb; the ergative subject has become an absolutive subject and the absolutive object has been demoted to the status of an oblique NP.
It is assumed, of course, that the switch from ergative marking to absolutive marking corresponds to a switch of grammatical relations (i.e., that the functions of subject of transitive and subject of intransitive represent distinct grammatical relations in ergative languages).

To say that the construction has changed from an active two-argument verb to an antipassive one-argument verb is to say in essence that the verb has changed from transitive to intransitive.

1.3. Three arguments can be given for the intransitivity of the verb of the absolutive antipassive construction. They consist of (a) the absolutive subject marker, (b) the -wa verbal suffixation, and (c) the application of the rule of Equi-NP deletion.

(a) The first argument speaks for itself. Only intransitive verbs take an absolutive marker to cross-reference a subject.

(b) The second argument requires more comments. The suffix -wa is a compounding of two suffixes, -w + a#. -w is an intransitive-vizing suffix found in examples of lexical derivation such as: (Day 1973:42)

(4) tul "a dice" → tul-w-i "to play at dice"
    caMal "a dance" → caMal-w-i "to dance"
    aM "a medicine" → atte "cure"
    → atte-wi "to cure" ("be a curor")

The stem-final vowel -i# found in the examples of derived intransitive verbs shown in (4) above, is also used for radical intransitive verbs (toyi "to go"), and for derived intransitive verbs, whether they are the product of lexical derivation, such as the verbs in (4) or of syntactic derivation, such as the passive verb of (5b):

(5) (a) xo-ach w-il-a
    asp.-A₂ E₁-see-TR#
    'I saw you'

(b) xo-ach il-lax-i;
    asp.-A₂ see-PASS-INTR#
    'you were seen'

However, this stem-final vowel -i#, which is characteristic of intransitive verbs, fails to appear in the absolutive antipassive construction. In its place, one finds a stem-final vowel -a#. The only other suffix to which this -a# suffix could be related in the language is the stem-final vowel of radical transitive verbs, an example of which was given in (5a) above.
Whether or not this -a# suffix which is found in the absolutive anti-passive voice is to be positively identified as a transitive marker, the fact remains that the verb fails to take the clearly intransitive marker -i#, which other intransitivized verbs acquire (such as the passive verbs).

(c) The third argument—the application of Equi-NP Deletion—requires some explanation first. Jacaltec has a rule of Equi-NP Deletion (Craig 1977:311-327) which is restricted to subjects of intransitive clauses, as shown by the ungrammaticality of *(7a):

(6) (a) \ch-oM to \ca\malw-oj
     asp.-A₁pl.-go DEL dance-suff.
   'we are going (there) to dance'

(b) *\ch-oM to cu \ca\malw-oj
     asp.-A₁pl.-go E₁pl. dance-suff.
   'we are going (there) to dance'

(7) (a) *\ch-oM to \hach \col-n-oj
     asp.-A₁pl.-go A₂ DEL help-suff.-suff.
   'we are going to help you'

(b) \ch-oM to \hach cu-\col-n-oj
     asp.-A₁pl.-go A₂ E₁pl.-help-suff.-suff.
   'we are going to help you'

The restriction has to be stated in terms of subject of intransitive because in the environment in which Equi-NP Deletion applies—which is in an aspectless embedded clause—all subjects are cross-referenced with an ergative marker, following a nominative/accusative system of case assignment. This case assignment is illustrated below with an example of a complex sentence in which the main verb does not trigger Equi-NP Deletion:

(8) (a) x-\0-aw-il-\we \hin \ha-\col-ni
     asp.-A₃-E₂-try A₁ E₂ help-suff.
   'you tried to help me'

(b) x-\0-aw-il-\we \ha \ca\malwi
     asp.-A₃-E₂-try E₂ dance
   'you tried to dance'

Following this pattern of case assignment, the subject of an absolutive antipassive verb embedded in an aspectless clause is marked ergative.
The point is that, whenever an absolutive antipassive clause is embedded under a verb which commands Equi-NP Deletion, its subject is deleted, providing an argument for analyzing the absolutive antipassive construction as an intransitive one. Example (10) shows an instance of Equi-NP Deletion in an absolutive antipassive clause:

(10) ch-ach to col-wa-l y-im naj
asp.-A₂-go DEL help-A.P.-Nom. E₃-to him

'you are going (there) to help him'

*ch-ach to ha-col-wa-l y-im naj

'you are going (there) to help him'

All instances of Equi-NP Deletion are marked with a change in the verb suffixation. The antipassive verb takes a nominalizing suffix -₁ while the active verbs take the irrealis suffix -a₂.

1.4. In the absolutive construction, the patient is expressed in an oblique NP which is characterized by (a) its obligatory presence, (b) its animacy, and (c) its non-dative relational noun.

(a) Unlike what happens in most other Mayan languages, the patient is still obligatorily expressed in Jacaltec. Its presence seems to maintain, at the semantic level, the transitivity of the construction. Both the presence of the transitive-looking -a suffix mentioned above and the obligatory use of the patient mark the antipassive construction as one which is not entirely intransitive. This is said in contrast to the passive construction in which the verb morphology is thoroughly intransitive, and the oblique NP of the agent is most commonly not used.

(b) While the oblique NP may be in any of the three persons, it is semantically restricted to animate NPs. The Jacaltec absolutive antipassive is not a freely productive process. The verbs which were found in this construction are listed in their nominalized form below:

(11) aʔwal "to accompany, put on the road"
bajwal "to insult"
colwal "to help"
cujwal "to teach"
etzwal "to mimic"
ilwal "to look at"
iptzwal "to request of"
k'anwal "to solicit, to ask"
mak'wal  "to hit"
saywal  "to look for"
tamewal  "to take care of"
tzab'wal  "to grab"

The high frequency of use of these constructions contrast with their limited productivity.

(c) The relational noun used with the oblique NP is not the dative one. Dative is expressed in Jacaltec with the relational noun −et as in:

(13) x-∅-aw-aʔ  ch'en melyu  w-et  an
    asp.-A₁-E₂-give  the money  E₁-DAT  1
    'you gave me the money'

The multi-purpose relational noun −im, which can have temporal, spatial, comitative meanings among others, is used instead.⁵

1.5.
To summarize, the absolutive antipassive of Jacaltec is a voice category which is characterized by the following change of grammatical relations:

subject: ergative → absolutive
object: absolutive → oblique NP (−im)

The construction is intransitive, although not entirely. It is intransitive in that the verb is a one-argument verb, with the subject cross-referenced with an absolutive. Furthermore, the verb takes the intransitivizing suffix −w and the subject may undergo Equi-NP Deletion, an operation restricted to subject of intransitive clauses. However, the verb also takes a transitive stem-final vowel −a#, and is obrigatory followed by the patient in an oblique NP. The syntactic demotion of the object does not therefore correspond to any semantic de-emphasizing of the patient and the construction remains at least partially transitive.⁶

This last characteristic of the Jacaltec absolutive antipassive is to be viewed in the light of definitions such as the one given by Smith-Stark (1978:170): "the absolutive antipassive is found when there is no mentioned or implied patient of transitive verbs."

2. The Incorporative Antipassive

2.1.
The construction under discussion is that of example (15) which is presented in contrast to the transitive construction of (14):

(14) ch-in ha-col-0
    asp-A1 E2-help-TR

'you help me'
The incorporative antipassive is a voice in that it represents a change of grammatical relations: the ergative subject becomes an absolutive subject while the absolutive object bears no more grammatical relation to the verb.

2.3.
The verb of the incorporative construction is thoroughly intransitive. As is the case with the verb of the absolutive antipassive, the subject is cross-referenced with an absolutive, and it undergoes Equi-NP Deletion in an aspectless embedded clause, as shown in (16):

(16) (a) xco-acht o7l k\M
    asp-A2 go DEL see-A.P. fiesta

    'you went to watch the fiesta'

(b) *xco-acht haw-07l k\M
    asp-A2 go E2 see-A.P. fiesta

    'you went to watch the fiesta'

As already discussed, the applicability of Equi-NP Deletion, a rule restricted to subjects of intransitives, is an argument for analyzing the construction as intransitive.

A side effect of the application of Equi-NP Deletion is that the verb suffix changes from -wi to -o7l. A parallel change to a form of nominalization was already observed under the same circumstances with the absolutive antipassive (see example 10 above).

The compound suffix -wi of the incorporative voice is entirely intransitive: -w- is the same intransitivizing suffix found in the absolutive antipassive, and -i\# is the stem-final vowel of intransitive verbs.

2.4.
The incorporated object must be generic. Instances of object incorporation always refer to activities routinely carried out by members of the community. The construction is therefore non-productive in the sense that only a specified number of common activities are expressed through it in Jacaltec. Examples of such activities are:

(17) il07 k'\M
    "to watch the fiesta"

il07 á\'ama
    "to watch people"

il07 txitim
    "to watch the pigs" (be a shepherd)

ptox07 txitim
    "to kill pigs" (be a butcher of pigs)

colo7 á\'ama
    "to help people"
The incorporated object immediately follows the verb.

While specific determiners such as noun classifiers, possessives, and demonstratives may not be used in the object incorporated construction, adjectives which express inherent or predictable characteristics of the incorporated object may accompany that object. This fact was first discussed by Maxwell (1976) for the incorporative antipassive construction of Chuj, a Kanjobalan language close to Jacaltec.

2.5.
To summarize, Jacaltec has an incorporative antipassive construction which is distinct from the absolute antipassive. Smith-Stark (1978:179) analyzes the opposition of the two antipassive forms in Jacaltec and Chuj as an innovation of the Kanjobalan branch of the Mayan family, and postulates that the incorporative voice is an innovation based on the proto-Mayan *(V)w absolute antipassive suffix.

The construction is considered a voice in that it exhibits the following changes of grammatical relations:

subject = ergative $\rightarrow$ absolutive
object = absolutive $\rightarrow$ no grammatical relation

Unlike the absolute antipassive construction, the incorporative antipassive is thoroughly and clearly intransitive with respect to verb morphology, at least in finite clauses. As expected, the incorporated object must be a generic noun.

3. The Jacaltec Antipassives

Jacaltec has both an absolute and an incorporative antipassive voice and exhibits more variety of form than most other Mayan languages. A characteristic of both antipassive voices of Jacaltec is their limited productivity, which is to be contrasted to the syntactic productivity of the Quichean antipassive processes, for instance. Both constructions are found in Jacaltec only with a certain set of verbs expressing daily chores and common activities. Both constructions are also partly lexicalized, with the antipassive verb exhibiting a derived meaning as shown in (18) and (19):

(18) (a) k'ana 'to ask' $\rightarrow$ k'anwal 'to solicit, to petition'
       (b) iptze 'to force' $\rightarrow$ iptzewal 'to request of'

(19) (a) x-Ø-aw-il ix / no7 txitam
       asp-Á3-E2-see her / the pig

'you saw her / the pig'
(b) xe-ach  il-wa  y-im  ix
    asp-A2 see-A.P.  E\textsubscript{3} to her

'you looked for her'

(c) xe-ach to  il-o\textsubscript{7}  ki\textsubscript{M} / txitam
    asp-A2 go see-A.P. fiesta / pig

'you went to watch the fiesta / the pigs
(or to take care of the pigs)

It is also interesting to note the mixed transitive/intransitive status of the constructions. In the absolute voice, the patient is obligatorily present and is not restricted to the third person as is the case in other Mayan languages, and there seems to be no semantic demotion of the patient to match its syntactic demotion. This does not parallel the syntactic and semantic demotion of the agent in a passive construction, agent which is restricted to third person in addition. Furthermore, a transitive-like verb stem-final \(-m\) appears on the verb, making it morphologically mixed.

Campbell and Norman (1978) attribute the morphological variations of the antipassive voices in Mayan, including the mixed transitive/intransitive morphology of the verb in several languages, to the fact that the antipassive was a process and not a set of morphological constructions in proto-Mayan. If this were the case, one should view the Jacalteca antipassive constructions as the result of processes which have lost their productivity to become morphological constructions at a stage of incomplete intransitivization.

II. THE AGENTIVE CONSTRUCTION

0. The construction under consideration is one which exhibits many variant forms across the languages of the Mayan family (Smith-Stark 1978:181). The purpose of the first part of this section is to demonstrate that the Jacalteca agentive construction is very different in nature and form from the absolute and incorporative constructions of the preceding section. The purpose of the second part is to analyze the agentive construction as the result not of a change of voice but of a syntactic process of extraction, and to place Jacalteca in perspective with other Mayan languages.

1. The following characteristics of the agentive construction of Jacalteca will be considered:

1. the syntactic environments of the construction
2. the syntactic status of the patient
3. the syntactic status of the agent
4. the verb suffixation
5. the obligatoriness of the construction
6. the word order
1.1.
The agentive construction is found in the syntactic environments of wh-question, focus, and relativization and is triggered by any operation applying to the subject of a transitive verb (Craig 1967; 1977; chapters 6 and 4).

Because of the intricate interaction of several morphophonemic rules in the verb form (involving deletion of ergative markers and verb initial glottal stops), examples are given in two levels of transcription whenever the identification of ergative and absolutive markers is necessary. Examples are first given in their surface forms (a, b, c) and then in their underlying morphemic form (a', b', c')—the parenthesis convention indicates morphophonemic deletions.

(20) wh-questions
(a) xil maj ix
   (a') x-∅-(y)-(7)il naj ix
       asp-A3-E3-see he her
   'he saw her' 
(b) mac x7ilni ix
   (b') mac x-∅-7il-ni ix
       who asp-A3-see-suff. her
   'who saw her?' 
(c) mac xil naj
   (c') mac x-∅-(y)-(7)il naj
       who asp-A3-E3-see he
   'whom did he see?'

(21) Focus
(a) xlok' ix hune7 txitam
    (a') x-∅-(s)-lok' ix hune7 txitam
       asp-A3-E3-buy she a pig
    'she bought a pig'
(b) ha7 ix xlok'ni hune7 txitam
    (b') ha7 ix x-∅-lok'-ni hune7 txitam
       Foc. she asp-A3-buy-suff. a pig
    'it is she who bought a pig.'
(c) ha7 hune7 txitam xlok'  
(c') ha7 hune7 txitam x-∅-(s)-lok' ix  
apig asp-A3-E3-buy she  

'it is a pig that she bought' 

(22) Relativization  
(a) xmak' naj ix  
(a') x-∅-(s)-mak' naj ix  
asp-A3-E3-hit he her  

'he hit her' 

(b) wohtaj naj xmak'ai x  
(b') ∅-w-ohtaj naj x-∅-mak'ni ix  
A3-E1-know him asp-A3-E3-hit-suff her  

'I know the man who hit her' 

(c) wohtaj ix xmak' naj  
(c') ∅-w-ohtaj ix x-∅-(s)-mak' naj  
A3-E1-know her asp-A3-E3-hit he  

'I know the woman that he hit' 

In the (b) examples which correspond to sentences in which the subject  
of a transitive verb has undergone either movement or deletion the verb  
form has changed. On the surface, the changes consist of the reappearance  
of the initial glottal stop of the verb roots which is due to the absence  
of ergative marker, and of the suffixation of -ni#. 

1.2.  
The patient never undergoes demotion to an oblique NP function similar to  
the demotion found in the absolutive antipassive. Instead, it is cross-  
referenced on the verb with an absolutive marker, just as it is in transi-  
tive constructions. In the pair of examples below, the absolutive  
(-ach:A2) corresponds to the second person patient, cross-referenced as an  
object: 

(23) (a) x cach yil naj  
(a') xcohach y-(7)il naj  
asp-A2 E3-see he  

'he saw you'
(a) mac xcah ilni
    (a') mac xo-ach 7il-ni
        who asp-A3 see-suff

'who saw you'

The fact that there is no restriction on the person of the patient in Jacaltec answers clearly the question of which NP is cross-referenced by the absolutive marker of the agentive construction. The absolutive marker always cross-references the object in the Jacaltec agentive construction, unlike the situation found in Quichean languages in which the absolutive marker may cross-reference either the subject or the object; or the situation found in Pocomam and Tzotzil in which the constraint that both subject and object be third person (A3=Ø) makes it impossible to tell which one is cross-referenced on the verb (Smith-Stark 1978).

1.3. Once it is established that the absolutive marker always refers to the object, it is obvious that the construction lacks any cross reference for the subject, as indicated by the absence of the ergative y- E3 in (24) above. This lack of ergative marker in agentive verbs has been analyzed as a result of a deletion process which follows the rule of case assignment in Craig (1977; chapter 7).

In addition to Jacaltec, at least two other languages exhibit the same pattern of ergative deletion with the absolutive marker cross-referencing the patient. They are Ixil and Yucatec:

(25) Ixil, Focus (Ayres, 1977)
    in kat q’os-on-axh
        I asp hit-suff-A2

'I hit you'

(26) Yucatec, wh-question (Bricker, same volume)
    maaš 7il-ө-en
        who see-subjunctive-A1

'who saw me?'

In all three languages, Jacaltec, Ixil, and Yucatec, the absolutive can be shown to cross-reference the object because unlike what happens in most other Mayan languages, the objects of such constructions are not restricted to third person.

The most common situation in Mayan languages, however, is for both agent and patient to be restricted to third person, which makes it impossible to determine whether the absolutive of the agentive verb corresponds to the agent or the patient. In this ambiguous situation, Smith-Stark (1978:182) opted for analyzing the absolutive (A3=Ø) as cross-referencing the agent.
In Jacaltec, although there is no restriction on the person of the patient, there is a restriction on the person of the agent which must be third person (as in the canonical passive constructions). If the agent is a first or second person, then no agentive construction is used, as shown in (27b):

(27) (a) xawil naj
(a') x-Ø-aw-(7)il naj
asp-A3-E2-see him

'you saw him'

(b) hach xawil naj
(b') hach x-Ø-aw-(7)il naj
you asp-A3-E2-see him

'it is you who saw him'

(c) *hach x7ilni naj
(c') *hach x-Ø-7il-nil naj
you asp-A3-see-suff him

'it is you who saw him'

1.4.
The verb takes the suffix -n-, a reflex of PM *(V)n which appears as a widespread marker of antipassive construction in the family. The presence of this cognate suffix -n- is the main reason why the Jacaltec agentive construction has often been referred to as an antipassive. It is the suffix of agentive antipassive voice in several other Mayan languages such as Kekchi, Mam, Pocomam, Quiche, Tzotzil (Smith-Stark, 1978:177-8).

The suffix -n- is followed by one of two intransitive suffixes, either the stem final vowel of intransitive verbs -i# shown in (28), or the intransitive irrealis suffix -oij# shown in (29).

(28) xcahch wayi
xcach camañwi
xcach mak'laxi
"you slept"
"you danced"
"you were hit"

(29) chach wayoj
chach to camañwij
chach mak'laxoj
"you will sleep"
"you are going to dance"
"you will be hit"

The change from transitive to intransitive suffixation (a $\rightarrow$ i; 7 $\rightarrow$ oj) in the agentive construction is illustrated below:
(30) (a) xc-ach hin-mak'-a
    asp-A2 E1-hit-TR
    'I hit you'

    (b) mac xc-ach mak'-n-i
        who asp-A2 hit-suff-INTR
        'who hit you?'

(31) (a) slok'o7 naj no7 cheh
    (a') x-ø-(s)-lok'-o-7
    asp-A3-E3-buy-TR-Tr.1rr. he the horse
    'he will buy the horse'

    (b) wohtaj naj xlok'noj no7 cheh
    (b') ø-w-ohtaj naj s-ø-lok'-n-oj
    asp-A3-1know him asp-A3-buy-suff-INTR.rr. the horse
    'I know the man who will buy the horse'

Finally, the agentive construction is therefore intransitive—it takes one pronominal marker, which is absolutive, and intransitive suffixes. However, two arguments may be advanced for the transitivity of the construction. They are the unambiguous object cross-reference of the absolutive already discussed, and the use of the -n- suffix in other syntactic environments which are clearly transitive.

One such construction is the transitive aspectless embedded clause. Aspectless embedded clauses are found in one type of complement sentences (32), in the progressive aspect (33), and in the sequential aspect (34):

(32) ch-ø-aw-oche hin ha-col-n-oj
    asp-A3-E2-like A1 E2-help-suff-suff
    'you like to help me'

(33) lattan hin s-col-n-i
    prog. A1 E3-help-suff suff he
    'he is helping me'

(34) ch-øt wa7i cat ø cu-tx'ah-n-i
    asp-A1-1 eat and A3 E1pl-wash-suff-suff E1pl-dishes
    'we eat and then we wash our dishes'

Another construction is the transitive coordinated clause common in narratives:
(35) (a) yul mohilal sonli heb' naj winaj chanicoj heb' ix ix sat meXa

(a') y-ul mohilal x-Ø-sonli heb' naj winaj E3-in wedding asp-3g-play marimba pl the man ch-Ø-(y)-(7)a-ni-o-obj heb' ix ix s-sat meXa asp-3g-E3-put-suff-INT-dir-iirr pl the woman E3-on table

'at weddings, the men play the marimba and the women set the table'

(The above type of narrative coordination has no intransitive equivalent.) In examples (32) to (35), the suffix -n- co-occurs with the ergative markers of the transitive subjects.

On one hand, the suffixation of -i/-oJ after -n- argues that -n- is an intransitivizing suffix since it determines the further choice of intransitive suffixes; on the other hand, -n- is found in several instances of transitive clauses, which argues that it has come to be neutralized in certain environments.

The combination of ergative deletion and suffixation of a reflex of PM *V) in is shared by Ixil, although Ixil differs from Jacaltec in that -n- is not followed by any intransitive suffixation (intransitive stem final vowel or intransitive irrealis).

As already noted, Yucatec exhibits the ergative deletion (Bricker: same volume) but no suffixation of a reflex of an antipassive marker, although the deletion of the ergative is accompanied by a switch from indicative to subjunctive suffixation (see example 28 above).

1.5. The operation of ergative deletion and suffixation of -n- is obligatory in Jacaltec whenever the subject of a transitive verb is the target of a rule of deletion or movement. Jacaltec seems to stand out among the Mayan languages with respect to the obligatory use of the agentive construction since it is more common for the construction to be optional, or obligatory under certain limited conditions which have not been systematically explored in the literature yet."

There are two types of exceptions to the obligatory use of the agentive construction in Jacaltec, both considered in detail in Craig (1976a; 1977:217-226). On one hand, the agentive construction cannot be used if the object or the possessor of the object is coreferential with the subject; on the other hand, it is only optionally used in embedded constructions if the selectional restriction of the verb are such that each NP can unambiguously be identified as subject or object.

It is the identification of these two types of exceptions which justifies the analysis of the disambiguating function of the agentive construction in Jacaltec: all the exceptions are cases where no possibility of ambiguous reference of NPs could arise.
1.6. The use of this agentive construction is linked to a marked word order in which the object NP directly follows the verb in a language which has an otherwise rigid VSO word order. All three syntactic environments are marked by the contiguity of verb and object:

\[
\begin{array}{c}
S \quad V \quad 0 \\
V \quad -- \quad 0 \\
S \quad V \\
\end{array}
\]

The rationale for considering the strategy of ergative deletion as a disambiguation mechanism is based on the observation that the absence of ergative is a straightforward way of signalling the absence of postverbal subject; hence the object function of the NP following the verb. It is the presence of the ergative marker that would make the construction ambiguous, and its deletion that eliminates the potential ambiguity.

The system of cross-reference operating in a transitive clause is illustrated in (37a), the problem arising from the loss of one of the post-verbal NPs in (37b), and the disambiguating role of the ergative deletion in (37c):

\[
\begin{array}{c}
(a) \, \text{asp-A-E-Verb} \quad \text{NP} \quad \text{NP} \\
(b) \, \text{asp-A-E-Verb} \quad \text{?} \quad \text{NP} \\
(c) \, \text{asp-A-X-Verb} \quad \text{X} \quad \text{NP}
\end{array}
\]

That one of the main functions of the agentive construction is a disambiguating one is generally agreed upon, although the issue of which aspect of the construction is identified as the primary source of disambiguation is not. Smith-Stark (1978:182) argues that the voice suffix -n- is what disambiguates. This is based on his assumption that the absolutive marker cross-references the agent—i.e., that there is no agentive deletion.

Norman and Campbell (1978:152) argue that the suffix is neutral and that the marked word order is what disambiguates. This is based on languages in which both agent and patient are restricted to third person or languages in which either agent or patient may be cross-referenced on the verb, in which the reference of the absolutive marker is ambiguous or variable. Neither position is satisfactory for the analysis of Jacalte as in which it is the ergative deletion which seems to carry the primary disambiguating function, not the suffix -n-, nor the word order.

2. The Agentive Extraction Rule

As stated in the introduction, the main purpose of this paper is to demonstrate that the Jacalte agentive construction is not an antipassive
voice, which is the reason why most of the data of the preceding section has already been published (Craig 1976, 1977) without ever being labelled antipassive. The following three points will be considered in this section: (1) that there is no agentive antipassive in Jacaltec, (2) that there is instead a rule of agentive extraction, and (3) that Jacaltec can be placed halfway between languages which have no special form of agentive construction and languages which use an antipassive voice in that environment.

2.1. The agentive 'antipassive' is not a voice in Jacaltec. If one works with the definition of a voice as a construction which brings about a change of grammatical relations, and if one assumes further that when the change of grammatical relation involves the basic subject and object NPs, the result is the change from a transitive form to an intransitive one, then the agentive 'antipassive' construction of Jacaltec fails on both accounts and cannot be analyzed as a voice, nor as an 'antipassive' one.

In the first place, there is no change of grammatical relations. The object is clearly still in its object function and is still cross-referenced as an absolutive. The only change that could be postulated would be to say that the old absolutive object now functions as an absolutive subject. Although this change of grammatical relation is a common one in ergative languages, it happens to characterize the formation of the passive voice, not that of the antipassive one. The change of grammatical relation of the antipassive voice consists of the change of subject marker from ergative to absolutive.

A comparative diagram of grammatical relations in all the clause types considered is given below:

(38)

<table>
<thead>
<tr>
<th>VOICE</th>
<th>AGENT</th>
<th>PATIENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Active transitive</td>
<td>ergative subject</td>
<td>ABSOLUTIVE OBJECT</td>
</tr>
<tr>
<td>Passive</td>
<td>oblique NP</td>
<td>absolutive subject</td>
</tr>
<tr>
<td>Antipassive</td>
<td>absolutive subject</td>
<td>oblique NP/Ø</td>
</tr>
<tr>
<td>Agentive</td>
<td>⊘</td>
<td>ABSOLUTIVE OBJECT</td>
</tr>
</tbody>
</table>

In the agentive construction of Jacaltec the two NPs still bear their original grammatical relations. Nothing happens to the object: it is not demoted to an oblique NP function as it is in the absolutive antipassive voice, nor does it lose its grammatical relation to the verb, as it does in the incorporative antipassive voice.

It is a crucial characteristic of Jacaltec that the object is not restricted to third person since examples with a first or second person
object refute any analysis of the agentive construction as an instance of promotional antipassive.

The expression "promotional antipassive" comes from Heath (1976) who establishes this type of antipassive as one in which the function of the voice is to render an NP more accessible to a syntactic process by advancing it on a hierarchy of NPs.10

Since there is no promotion from ergative agent to absolutive agent in Jacaltec, assigning an "agent promotion function" to the agentive construction (Smith-Stark 1978:170) is inappropriate for Jacaltec. All that happens in this language is that the ergative agent is singled out by its defective subject coding properties; in particular, its lack of ergative cross-reference on the verb.

2.2.
The agentive construction is the result of a syntactic rule of extraction rather than of a change of voice from active to antipassive.11 The process of extraction of the subject means that the verb and the object are now found in an uncommon contiguity, with the absence of ergative marker as a device signalling the absence of post verbal subject.

What all the agentive constructions have in common is their being part of a complex structure. Wh-question and Focus formation are extraction rules which create complex structures similar to that of relative clauses.12

The suffix -n- of the agentive construction is also found in other constructions characterized by their being transitive clauses in a complex structure. The use of the suffix -n- seems to have expanded from the embedded relative clauses to the embedded aspectless complement sentences—including those of the sequential and progressive aspects—to, finally, the coordinated clauses as diagrammed in (39):13

\[(\text{stage 1}) \quad \text{relative clause} \quad \text{aspectless} \quad \text{coordinated clause} \quad \text{complement sentence} \]

- complex S.
- transitive
- embedding
- coreference of NP
- NP & ergative deletion
The analogical spread of the suffixation of -n- in the language provides support to the analysis of all agentive constructions being perceived as complex structures.

2.3. The Agentive Construction in Mayan Perspective

Smith-Stark (1978:169) has shown that "there are significant differences across the family in the formal characteristic of the antipassive when appearing in agent promotion function . . . . The degree to which it resembles an intransitive verb and the method by which it receives person marking vary in interesting ways."

The purpose of this section is to bring some order to the types of variation found in that construction. Starting with the hypothesis that it was not the agent but the patient that was cross-referenced on the verb of the proto Mayan agentive construction it will be postulated that the agentive construction has evolved into an antipassive voice through various analogical steps.

One analogical step consisted of the reanalysis of all one-argument verbs as intransitive verbs; another one was to re-interpret an absolutive marker as cross-referencing the subject rather than the object when not accompanied by an ergative marker.

The progression toward the complete "antipassivization" of the agentive construction is diagrammed in (40). The four criteria considered are, from left to right:

1. The absence of ergative marker in the verb
2. The presence of a suffix cognate with a proto Mayan antipassive suffix
3. The presence of an intransitive verb final suffix (stem final vowel or irrealis)
4. The identification of the absolutive marker with the agent.

From top to bottom, the progression is from a transitive verb form to an antipassive intransitive verb form.

<table>
<thead>
<tr>
<th></th>
<th>1) ergative deletion</th>
<th>2) AP suff.</th>
<th>3) INTR#</th>
<th>4) Abs. agent</th>
</tr>
</thead>
<tbody>
<tr>
<td>transitive</td>
<td>no</td>
<td>no</td>
<td>no</td>
<td>no</td>
</tr>
<tr>
<td>active</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tzeltal/</td>
<td>no</td>
<td>no*</td>
<td>no</td>
<td>no</td>
</tr>
<tr>
<td>Tojolabal</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yucatec</td>
<td>yes</td>
<td>yes</td>
<td>no</td>
<td>no</td>
</tr>
<tr>
<td>Ixil</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Jacalteo</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
<td>no</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intransitive</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>antipassive</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
<td>yes*</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Quiche</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
<td>no/yes*</td>
</tr>
<tr>
<td>Tzotzil</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
<td>?</td>
</tr>
<tr>
<td>Kekchi</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
<td>yes*</td>
</tr>
</tbody>
</table>
(40) *Comments:


- Although Yucatec exhibits ergative deletion it does not exhibit the suffixation of an antipassive related suffix. However it is noteworthy that the agentive construction takes a subjunctive instead of an indicative suffix (Bricker – this volume).

- Ixil is the only language encountered in which the ergative deletion may apply to any of the three persons (Ayres 1977). In Ixil, too, the suffix used in the agentive construction is the same as the one used in the absolutive antipassive (–m–). In the diagram, the only difference between Ixil and Jacalteco is in the nature of the final verbal suffix which is clearly intransitive in Jacalteco.

- Quiche is the link language between the languages in which the absolutive clearly cross-references the patient, thus arguing for an agentive extraction, and the language in which the absolutive is presumable or clearly cross-referencing the agent, thus arguing for an agentive antipassive. The choice of which—of agent or patient—is to be cross-referenced with an absolutive marker is dictated by a hierarchy of phonological forms of the absolutive markers (not a hierarchy of person).

- Tzotzil is a language in which both agent and patient of the agentive construction are restricted to third person, with no oblique NP following the verb; hence the impossibility of identifying the referent of the absolutive.

- In Kekchi, it is the presence of an oblique NP referring to the patient which allows the identification of the absolutive (A3=∅) with the agent.

- The expression "ergative deletion" is actually inappropriate as a characterization of the intransitive antipassive. It is rather an instance of failure of application of the ergative assignment rule.

Conclusion:

Two proto-Mayan suffixes *(V)w and *(V)n which have been associated with rules of antipassive are found in Jacalteco. Seen from Jacalteco though the two suffixes mark two different processes: one corresponding to an antipassive voice (–w) and the other to a process of extraction (–n–). It is their apparent relatedness in other languages which has led some to overlook some of the characteristics of the Jacalteco agentive construction and consider it an antipassive construction.

Two different types of rules may have been at work in proto-Mayan with no one suffix being identified with a particular process. Norman and Campbell (1978:151) discuss this non-exclusiveness of the suffixes, noting not only how the pattern of suffixation varies for the absolutive and the agentive construction:
<table>
<thead>
<tr>
<th></th>
<th>Jacalteco</th>
<th>Quiche (T)</th>
<th>Ixil</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abs</td>
<td>w</td>
<td>n</td>
<td>n</td>
</tr>
<tr>
<td>Ag</td>
<td>n</td>
<td>w</td>
<td>n</td>
</tr>
</tbody>
</table>

(from Smith-Stark 1978:176)

but also how another function of both suffixes is to derive verb stems in some language (Quichean, Aguacatec). In fact, in Jacalteco the suffix \( -w^- \) derives intransitive verb stems and marks the absolutive and incorporative antipassive constructions. Both instances of antipassive are the result of lexical rules of limited productivity. On the other hand, the suffix \( -n^- \) which seems to have been originally used as a marker of the syntactic rule of extraction has seen its function extended to that of a marker of embedding and coordination. This innovation is limited to the Kanjobalan languages.

The sketchy comparative study of agentive constructions across the Mayan family, with its hypothesis that a process of analogical antipassivization is at work in the Mayan agentive construction, confirms Norman and Campbell's belief that the study of Mayan languages will provide a valuable contribution to a better understanding of the principles of historical syntax.

The study of the diversity of antipassive-like constructions across the Mayan family, which corroborates the wide variety of forms and functions of such constructions in other ergative languages of the world, emphasizes also the growing contribution of Mayan studies to the area of typological universals.

### Notes

1. The following Jacalteco orthography is used:

<table>
<thead>
<tr>
<th>P</th>
<th>t</th>
<th>c'</th>
<th>k'</th>
</tr>
</thead>
<tbody>
<tr>
<td>b'</td>
<td>t'</td>
<td>ch</td>
<td>tx</td>
</tr>
<tr>
<td>tz'</td>
<td>ch'</td>
<td>tx'</td>
<td></td>
</tr>
<tr>
<td>f</td>
<td>X</td>
<td>j</td>
<td>h</td>
</tr>
<tr>
<td>n</td>
<td>m</td>
<td></td>
<td></td>
</tr>
<tr>
<td>l</td>
<td>y</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The following abbreviations and notations are used:

- A: absolutive
- augs: augment
- A.P.: antipassive
- Dat: dative
- DEL: deletion
- DIR: directional
- E: ergative
- foc: focus
- INTR: intransitive
- IRR: irrealis
- NCL: noun classifier
- nom: nominalizer
- PASS: passive
- pl: plural
- Prog: progressive
- suff: suffix
- TR: transitive
- 1,2,3: persons
2. See Smith-Stark's "Antipassive in Jilotepequeño in Pocomam" (1976) three labels for the three functions:

   Agent          Subject of Transitive
   Substratum     Subject of Intransitive
   Patient        Object of Transitive

3. In Tzotzil the antipassive construction with -an is restricted to human objects (Smith-Stark 1978:185).

4. In Chuj, the oblique NP of an antipassive construction is expressed with the dative ha (Smith-Stark 1978:177).

5. Examples of the varied uses of -iM are:

   (a) ch-ach munla w-iM  an
       asp-A2 work  E1-with 1
       'you work with me'

   (b) mach ch-ach tzeb'i w-iM  an
       not asp-A2 laugh  E1-at 1
       'don't laugh at me'

   (c) xo-in munlayi y-iM  sahcalil
       asp-A1 work  E3-in morning
       'I worked in the morning'

6. In addition to the three passives in -lax, -ot, and -lo, Jacaltec has a much less productive fourth type of passive in -cha (Craig 1977:77-83). There are striking structural parallels between the -cha passive and the antipassive construction under discussion in this section. Examples of the -cha passive are:

   (a) ch-ach col-cha  w-u  an
       asp-A2 help-PASS  E1-by 1
       lit: you are helped by me
       'I help you; I give you a hand'

   (b) xo-in tzuj-cha  haw-u  an
       asp-A1 follow-Pass  E2-by 1
       lit: I was followed by you
       'you caught up with me'

The three characteristics which the -cha passive shares with the absolutive antipassive construction are: (a) the same transitive-looking -a suffix, (b) the same obligatory oblique NP which is not restricted to third person, and (c) the same limited productivity.

It is also used with animate patients only and is semantically marked. Verbs in the -cha passive express actions performed against the will or without the awareness of the patient. Bilingual native speakers always translate the sentences with -cha passives as active transitive sentences in Spanish, pointing to the semantically transitive status of the construction.
Another parallel between the two constructions is that the -w- abso-
lutive suffix and the -cha passive suffix are also both used to derive in-
transitive stems: \( (aM = N \) 'medicine' / \( aM-cha \ V \) 'to be cured'): 

(c) ch-ach aM-cha w-u an
asp-A2 medicine-PASS 51-by 1
lit: you are cured by me
'I cure you'

7. The exact nature of the suffix 07# still needs elucidating. The
antipassive construction with the -07# form is the most commonly used.
The only example of incorporative antipassive with wi# is the one given
from Day (1973). In embedded syntactic environments, 07# alternates with
the intransitive unrealis -0j#: 

(a) caMalwoj \( \overset{\text{Xw}}{\text{u}} \)
to dance I am doing
'I am dancing'

(b) poho7 \( \overset{\text{s}i}{\text{7}} \ Xw\)
to cut wood I am doing
'I am cutting wood'

(c) chin to caMalwoj
I go to dance
'I am going to dance'

(d) chin to poho7 \( \overset{\text{s}i}{\text{7}} \)
I go to cut wood
'I am going to cut wood'

In Craig (1977:245) the 7 of 07 is analyzed as a transitive unrealis suffix.

8. The agentive construction is also the only type of sentence struc-
ture used with indefinites:

(a) mach mac x7ilni naj
is not who saw him
'nobody saw him'

(b) ay mac xcolni naj
is who helps him
'somebody helps him'

(c) mach mac xcin kolni
is not who me helped
'nobody helped me'

In addition, Jacaltec instrumental NPs undergo an obligatory advance-
ment to subject whenever they are focused, questioned, or relativized, as
discussed in Craig (1973). Example (d) shows the instrument in an obli-
que NP and example (e) demonstrates how, when questioned, it has been
advanced to subject and then obligatorily fed into the agentive construction:

(d) x-Ø-in-mak' metx tx'i7 y-u hune7 te7
    asp-A3-E1-hit the dog E3-by a stick
    'I hit the dog with a stick'

(e) tzet x-Ø-mak'-ni metx tx'i7 haw-u
    what asp-A3-hit-suff the dog E2-by
    lit: what hit the dog by you?
    'what did you hit the dog with?'

9. The obligatoriness of the construction which contrasts with its
   optionality in some other languages, may be linked to the existence of two
   different rules of focus and topicalization in Jacaltec. Compare the
   focus construction with the agentive verb form in (a) below to the topi-
   calized construction with the copied subject in (b):

(a) Focus:

    ha' naj pel xmak'ni naj kuwan
    foc. NCL Peter hits NCL John
    'it is Peter who hits John'

(b) Topicalization:

    naj pel smak' naj naj kuwan
    NCL Peter hits NCL/He NCL John
    'Peter, he hits John'

Jacaltec is unique in its having a well developed system of noun
classifiers (NCL) which are systematically used as pronouns (Craig 1977:
chapter 4). Those noun classifiers provide the means for a copying process
which distinguishes formally between focus and topicalization. In langu-
ages in which the agentive construction is said to be optional, the option-
ality may be related to the absence of formal contrast between the two
processes. Furthermore, the existence of such a contrast in Jacaltec pro-
vides another argument for correlating the absence of post verbal subject
with a rule of ergative deletion:

<table>
<thead>
<tr>
<th>focus</th>
<th>subject</th>
<th>asp-A-Ø-vb-ni</th>
<th>object</th>
</tr>
</thead>
<tbody>
<tr>
<td>topicalization</td>
<td>subject</td>
<td>asp-A-E-vb</td>
<td>Subject object</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Pro-NCL</td>
<td></td>
</tr>
</tbody>
</table>

10. The hierarchy of NPs mentioned has been discussed and argued for
    by Keenan and Comrie (1977). In ergative languages, the promotion would
    have to be construed as an advancement from ergative to absolutive subject.

11. I learned the term "extraction" from J. Aissen who attributes it
    to J. Hankamer. Extraction rules are rules of movement or deletion which
    leave a hole in a structure. They do not change grammatical relations and
    are post-cyclic. In Jacaltec, agentive extraction follows case assignment.
Ayres (1977) used the term "adelanto"—the translation of which would be 'advancement' in English. However, the term may create confusion with the terminology of relational grammar in which the expressions 'advancement' and 'promotion' have been used to refer to rules which alter grammatical relations. The term 'advancement' which is adequate for the focus construction would not be as appropriate for the relative clause deletion process.

12. A similar parallel between focus (a) and relative clause (b) is found in English:

(a) it is the pig that ate it
(b) I caught the pig that ate it

Ayres (1977:14) gives one argument in Ixil for assigning a complex structure to focus construction. It consists of the optional use, in focus construction, of the clause introducer wa7, also found in relative clauses and complement sentences.

13. The link between the embedded structure of the aspectless complement sentence and the conjoined structure of the coordinated sentence is probably through the sequential aspect. Although the sequential aspect marker introduces a clause that is formally an aspectless embedding it links a variety of types of clauses, such as a main and a dependent clause, two imperative clauses, two complement sentences, two independent clauses (Craig 1977:67-68).

References

Ayres, Glenn. 1977. "¿Es el Antipasivo siempre una voz?" ms.


