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PASSIVE AND VOICE

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Mam voice

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Mam is an Eastern Mayan language of the Mamean branch, spoken by over 450,000 people in Western Guatemala and Chiapas, Mexico (Kaufman, 1974).[1] Like other Mayan languages it has an ergative pattern of agreement between NP's and verbs, morphologically marked on the verb. It also has syntactic rules which are responsive to the ergative system (England, 1983a). Changes in voice occur through the use of an *antipassive*, with several different functions, or through the use of four (or possibly five) different *passives*, several with primarily lexical rather than syntactic functions (England, 1983b).

1. ERGATIVITY

Mam cross-references the principal arguments of the sentence (transitive subject, herein called A; transitive object (patient), herein called O; intransitive subject, herein called S) on the verb through two sets of prefixed person markers. One of these, the ergative, functions as A and also, when prefixed to nouns, marks noun possession. The other set, the absolutive, marks S and O functions on the verb. There are additionally two similar sets of person markers which function with nonverbal predicates (statives and locative/existentials) and which closely resemble the absolutive person markers. Mam only distinguishes four persons through the prefixes, but these in combination with person enclitics define a seven-way person system:[2]

	Ergative prefix	Absolutive prefix	Enclitic	Statives	Locative/ existentials
1sg	n-/w-	chin-	-(y)a	-qiin-a	-iin-a
2sg	t-	Ø-/tz-/tz'-/k-	-(y)a	-(y)a	-(a7-y)a
3sg	t-	Ø-/tz-/tz'-/k-		-Ø	-(a7)
1pl ex	q-	qo-	-(y)a	qo7-ya	-o7-ya
1pl in	q-	qo-		qo7	-o7
2pl	ky-	chi-	-(y)a	-qa-ya	-e7-ya
3pl	ky-	chi-		-qa	-e7

The order of elements on the verb is:

aspect + absolutive + (directional auxiliary) + (ergative) + stem + enclitic

Examples are:[3]

(1)   transitive verb, 1sg to 2sg
       ma   tz'-ok   n-tzeeq'a-n-a
       REC 2SG ABS-DIR   1SG ERG-hit-DS-1SG/2SG
       'I hit you.'

(2)   transitive verb, 2sg to 1sg
       ma   chin   ok   t-tzeeq'a-n-a
       REC 1SG ABS DIR 2SG ERG-hit-DS-2SG/1SG
       'You hit me.'

(3)   intransitive verb, 1sg
       ma   chin   b'eet-a
       REC 1SG ABS walk-1SG
       'I walked.'

(4)   intransitive verb, 2sg
       ma   Ø-b'eet-a
       REC 2SG ABS-walk-2SG
       'You walked.'

1.1. Split ergativity

As for most ergative languages (Dixon 1979; Silverstein 1976), there are circumstances in which Mam does not follow strictly ergative agreement principles. The major clause types in which this occurs are 'when' clauses and purpose and result clauses. Several minor constructions also trigger a change in the agreement pattern; these include clauses introduced by

focused adverbials, by several specific adverbs, by focused generic qualifiers, and relative clauses with completive (stative) verbs.

When ergative agreement principles are not followed, *all* direct arguments are cross-referenced on the verb with ergative markers:

(5)   intransitive
       *n-chi   ooq'   **t**-poon   ky-txuu7*
       PROG-3PL ABS cry   3SG ERG-arrive   3PL-mother
       'They were crying when their mother arrived.'

(6)   transitive
       *ok qo   tzaalaj-al   ok   **t-q**-il   u7j*
       FUT 1PL ABS be happy-POT   when 3SG ERG-1PL ERG-see book
       t-e   yool t-e   I7tzal
       3SG-RN/POSS word 3SG-RN/POSS Ixtahuacan
       'We will be happy when we see the Ixtahuacan dictionary.'

In sentence (5) *t-* '3SG ERG' cross-references the S ergatively, while in (6) *t-* '3SG ERG' and *q-* '1PL ERG' cross-reference both the O and the A ergatively. Normally, of course, only the A function takes ergative cross-referencing. Thus the distinction between different types of arguments is completely neutralized in certain clause types. Nowhere is there an accusative agreement pattern. Either the A function is differentiated from the S and O functions (ergative pattern), or all functions are marked the same.

1.2. Syntactic ergativity

There are several syntactic rules which can best be analyzed as responsive to a distinction between ergative and absolutive. One type of rule has to do with the extraction of an argument for focus, negation, or question. Unmarked word order in Mam is an invariable V-ERG-ABS:

(7)   *ma   chi   kub'   t-tx'ee7ma-n   xiinaq tzee7*
       REC 3PL ABS DIR   3SG ERG-cut-DS man   tree
                     V   ERG   ABS
       'The man cut the trees.'

Other orders are ungrammatical:

(8)   a. **xiinaq ma chi kub' ttx'ee7man tzee7*
       b. **tzee7 ma chi kub' ttx'ee7man xiinaq*
       c. **xiinaq tzee7 ma chi kub' ttx'ee7man*
       d. **tzee7 xiinaq ma chi kub' ttx'ee7man*

All nominal constituents except A, S, or O are indicated by oblique NP's introduced by relational nouns. Relational nouns are a set of nouns which function to mark case and locative relationships. They are always possessed, and the possessive prefix cross-references the person involved in the relationship. For example, the relational noun for dative is *-e(e)*:

(9) a. *ma Ø-txi   t-q'o-7n   Cheep pwaq **t-e**   Mal*
    REC 3SG ABS-DIR 3SG ERG-give-DS Jose money 3SG-RN/DAT Maria
    'Jose gave the money **to Maria**.'

    b. *ma Ø-txi t-q'o-7n Cheep pwaq **ky-ee-ya***
                                 2PL-RN/DAT-2PL
      'Jose gave the money **to you-all**.'

A and O function nominals can also occur in oblique NP's introduced by relational nouns under certain circumstances. For instance, the agent of a passive verb, if expressed, appears in an oblique NP, while the patient of an antipassive verb, if expressed, appears in an oblique NP.

Focused, negated, or questioned NP's precede the verb. If the NP is oblique, the entire NP with its relational noun precedes the verb. Direct NP's in S function are simply preposed to the verb. Direct NP's in O function are preposed to the verb, usually with a demonstrative or other qualifier. With all of these types of NP's the verb, if in the past or recent past aspect, is optionally marked with dependent forms of the past or recent past aspects, but no other changes occur.

(10) preposed oblique NP
t-uk'   maachit ma Ø-kub   t-tx'ee7ma-n Kyel   tzee7
3SG-RN/INSTR machete REC 3SG ABS-DIR 3SG ERG-cut-DS Miguel tree
'Miguel cut the tree **with a machete**.'

(11) preposed O
aa   cheej ma Ø-kub' ky-tzyu-7n   xiinaq
DEM horse REC 3SG ABS-DIR 3PL ERG-grab-DS man
'The men grabbed **the horses**.'

(12) preposed S
xiinaq s-uul
       x-tz-uul[4]
MAN   REC DEP-3SG ABS-arrive here
'**The man** arrived here.'

NP's in A function cannot be so easily focused, negated, or questioned. It is ungrammatical to prepose them to a transitive verb:

(13) **xiinaq ma Ø-kub' ky-tzyu-7n   cheej*
    man   REC 3SG ABS-DIR 3PL ERG-grab-DS horse
    '**The men** grabbed the horse.'

Instead, the NP in A function can be preposed as an oblique NP introduced by the relational noun *-u7n*:

(14) *ky-u7n   xiinaq ma Ø-kub'   ky-tzyu-7n   cheej*
    3PL-RN/AG man   REC 3SG ABS-DIR 3PL ERG-grab-DS horse
    '**The men** grabbed the horse.'

Note in (14) that the A function noun is still cross-referenced on the verb. Or, the verb can be made intransitive through the antipassive suffix *-n*:

(15) *xiinaq xhi   kub' tzyuu-n t-e   cheej*
       x-chi[4]
    man   REC DEP-3PL ABS DIR grab-AP 3SG-RN/PAT horse
    '**The men** grabbed the horse.'

In (15) the verb only cross-references one argument, so the original A (ergative) is in S function (absolutive) and can be preposed for focus, negation, or question.

A second type of syntactic rule which recognizes the difference between ergatives and absolutives involves the control of deletion operations. The complements of certain verbs or of some statives are true infinitives, marked for neither aspect nor person/number:

(16) *ma chin   uul-a   *⎡*aq'naa-l*⎤
    REC 1SG ABS come-1SG ⎣*work-INF*⎦
    'I came [to work].'

Typically, the verbs which control such deletion are: (i) intransitive verbs of motion, such as in (16), in which the absolutive S in the main clause controls deletion in the subordinate clause, and (ii) transitive verbs of forcing or causation, in which the absolutive O in the main clause controls deletion in the subordinate clause:

(17) *ma tz'-ok   t-lajo-7n   Kyel *⎡*tx'eema-l sii7*⎤
    REC 3SG ABS-DIR 3SG ERG-obligate-DS Miguel ⎣*cut-INF*   wood⎦
    'Miguel obliged him [to cut wood].'

Additionally, statives (absolutive) can control deletion in the subordinate clause:

(18) *mejoor qiina* [*txako-l yaa7yj*]
     better STAT/1SG ABS call-INF grandmother
   'I better [call grandmother].'

However, agents (ergative) of transitive verbs never control deletion operations in a complement clause. Verbs such as want, think, etc., require their complements to be marked for person:

(19) a. *Ø-w-ajb'el-a* [*chin   aq'naa-n-a*]
      3SG ABS-1SG ERG-want-DS 1SG ABS work-AP-1SG
      'I want [to work].'

    b. **wajb'ela aq'naal*

(20) a. *n-Ø-b'aj   n-xii7ma-n-a* [*t-u7n   w-aq'naa-n-a*]
      PROG-3SG ABS-DIR 1SG ERG-think-DS-1SG 3SG-RN/that 1SG ERG-work-AP-1SG
      'I think [I'll work].'

    b. **nb'aj nxii7mana aq'naal*

Thus, while any absolutive argument can control NP deletion in a complement clause, an ergative argument never does.

2. VOICE

There are two types of constructions which involve detransitivization of transitive verbs and the consequent cross-referencing of only one argument on the verb. In both constructions the single argument of the detransitivized verb is cross-referenced absolutively as an S. The *antipassive* cross-references only the original agent (A) on the detransitivized verb, while the *passive* cross-references only the original object or patient (O) on the detransitivized verb. There are circumstances when the remaining argument can occur in the sentence, but it is then always oblique, in an NP headed by a relational noun. Both types of construction involve a change in verb/argument relations, in that the verb changes from a two-argument verb to a one-argument verb and one of the original direct arguments must be expressed obliquely if at all. It is only with the antipassive that there is an actual change in the type of cross-referencing of the argument on the verb:
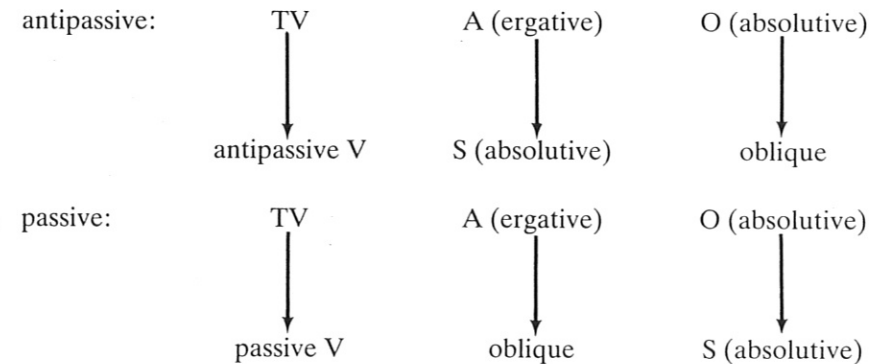
It is only the passive, however, that changes grammatical relations, if grammatical relations are defined as relations between the verb and its subject (A or S) and object (O). Here the distinction between grammatical relations and cross-referencing is important. Discussing voice in terms of grammatical relations neutralizes the distinction between A and S and defines Mam passives as PASSIVE. If, however, we consider that cross-referencing defines voice categories then Mam antipassive is PASSIVE. The data offer no compelling argument for choosing between these analyses. It should be pointed out, however, that the use of the antipassive is motivated by purely syntactic considerations in one of its functions (the agent promotion function, see Section 2.1. below), while the use of the passive derives more from discourse considerations such as agent demotion, answering a question about the patient, and so on. In the sense that antipassive is used obligatorily to perform certain syntactic operations on the agent it may be more like PASSIVE in accusative languages.

The antipassive verb is derived morphologically by suffixing -*n* to the verb stem. While its two principal functions are syntactic in nature it also has lexical functions. The passive is derived morphologically by affixing one of four different suffixes to the verb stem. In addition there is an 'agentless' construction which involves no morphological derivation and which could be analyzed as a passive. Of the different passive constructions only one is truly syntactic, two are primarily lexical, and one combines syntactic and lexical properties. The agentless construction is primarily syntactic. The lexical functions of the antipassive and of the several passives are nevertheless related to the more usual syntactic functions.

2.1. The antipassive

The antipassive in Mam has four separate functions. The most purely syntactic of these is the agent promotion function (Smith-Stark, 1978), which is used obligatorily for interrogation, negation, or focus of an A, for answering a question about an A, and to express certain temporal sequences in relative clauses formed on an A. Interrogation, negation, or focus of an A require the A to precede the verb. Such a change in word order (from the unmarked V-ERG-ABS) invites ambiguity. Mam, like many other ergative languages, disambiguates arguments in focus (preverbal) position by treating the A function NP in a special way. Either it is oblique (as in (14) above) or the verb is made antipassive, thereby unambiguously cross-referencing its agent, now in S function.

(21)   a.   transitive
       o   chi   tzaj   t-tzyu-7n   *Xwan xiinaq*
       PAST 3PL ABS DIR   3SG ERG-grab-DS Juan man
       'Juan grabbed the men.'

      b.   agent question
       alkyee Ø-Ø-tzyuu-n   *ky-e   xiinaq*
       who   PAST DEP-3SG ABS-grab-AP 3PL-RN/PAT man
       'Who grabbed the men?'

      c.   agent negation
       miyaa7 Xwan Ø-Ø-tzyuu-n ky-e xiinaq
       NEG
       'It wasn't Juan who grabbed the men.'

      d.   agent focus
       Xwan Ø-Ø-tzyuu-n ky-e xiinaq
       '**Juan** grabbed the men.'

In (21a) the plural absolutive marker, *chi*, cross-references the patient, while the singular ergative marker, *t-*, cross-references the agent. In (21b-d) the verb cross-references only one argument through the singular absolutive marker. That argument corresponds to the original agent, while the patient appears in an oblique phrase introduced by a plural relational noun. Any of these sentences is ungrammatical with a transitive verb:

      e.   **alkyee o chi tzaj t-tzyu-7n xiinaq*

The antipassive is also used to answer a question about the agent:

(22)   a.   *tii   t-se7*   *Cheep*
       what 3SG ERG-do Jose
       'What did Jose do?'

      b.   *ma Ø-k'aaya-n   Cheep t-i7j*   *t-cheej*
       REC 3SG ABS-sell-AP Jose   3SG-RN/PAT 3SG-horse
       'Jose sold his horse.'

The use of the antipassive in relative clauses on the agent only occurs to show that the action in the relative clause takes place before the action in the main clause. If the action in the two clauses takes place simultaneously, then an active transitive verb is used in the main clause.

(23)   a.   antipassive
       aj   xiinaq Ø-Ø-ku7-x   *awaa-n ky-e   laanch*
       DEM man   PAST DEP-3SG ABS-DIR-DIR plant-AP 3PL-RN/PAT orange
       ma Ø-tzaj   t-q'o-7n   *kab' wi7   q-ee-ky'*
       REC 3SG ABS-DIR 3SG ERG-give-DS two plant 1PL-RN/DAT-1PL
       'The man who planted the orange trees gave us some plants.'
       (after he planted)

      b.   transitive
       aj   xiinaq i   *ku7-x t-awa-7n*   *laanch*
                         Ø-chi
       dem man   PAST DEP-3PL ABS DIR-DIR 3SG ERG-plant-DS orange
       ma Ø-tzaj   t-q'o-7n   *kab' wi7   q-ee-ky'*
       REC 3SG ABS-DIR 3SG ERG-give-DS two plant 1PL-RN/DAT-1PL
       'The man who planted the orange trees gave us some plants.'
       (while he was planting)

A second function of the antipassive is the absolutive function (Smith-Stark, 1978). In this function a transitive verb has no known or implied patient, requiring a voice change.

(24)   a.   transitive
       ma Ø-w-aq'na-7n-a
       REC 3SG ABS-1SG ERG-work-DS-1SG
       'I worked it.' (something)

      b.   antipassive
       ma chin   aq'naa-n-a
       REC 1SG ABS work-AP-1SG
       'I worked.' (no implication about what was worked)

The third function of the antipassive is the incorporative function (Smith-Stark, 1978; Craig, 1979), in which the antipassive is required by certain verbs with a limited set of generic patients. Here the patient is always expressed in a direct noun phrase, and the verb cross-references the agent absolutely. No cross-referencing of the patient is possible.

(25) *ma Ø-b'iincha-n   qa-jaa*
       REC 3SG ABS-make-AP PL-house
       'He constructed houses.'

Although syntactically different, sentences such as these are similar semantically to the English 'He was a house-builder.' The object incorporation function of the antipassive involves the lexicalization of V + O.

A final function of the antipassive is purely lexical. It is used to derive verbs from nouns. The verbs thus derived semantically include the nouns as patients, and there is no evidence that there are corresponding active transitive sentences to the antipassive forms. For example, the noun *makaax* 'a type of edible grub' can be used as a verb with the antipassive suffix meaning 'look for grubs'.

(26) *ma qo   makaaxa-n   t-uj   t-tx'otx' Toono*
       REC 1PL ABS look for grubs-AP 3SG-RN/in 3SG-land Antonio
       'We grubbed on Antonio's land.'

2.2. Passives

Mam has four passives marked by different suffixes on the verb, and an agentless transitive construction which behaves in some ways like a passive. The regular syntactic passive is formed with the suffix *-eet*. Almost all transitive verb stems can take this passive, which then functions to create an intransitive verb which cross-references the original patient and demotes the agent to an oblique phrase. Certain transitive stems in their *-eet* passive forms permit an oblique agent of any person while others do not permit an oblique agent at all. The distribution of which stems do or do not permit oblique agents depends largely on derivational processes in Mam. Certain types of derived stems do not permit oblique agents in the passive.

(27) a. transitive
           ma Ø-jaw   ky-tx'ee7ma-n xiinaq tzee7
           REC 3SG ABS-DIR 3PL ERG-cut-DS man tree
           'The men cut the tree.'

       b. passive
           ma Ø-tx'eem-at   tzee7 ky-u7n   xiinaq
           REC 3SG ABS-cut-PASS tree 3PL-RN/AG man
           'The tree was cut by the men.'

(27a) cross-references the object absolutively with the singular Ø, and the agent ergatively with the plural *ky-*. The (b) sentence cross-references the original object with Ø, while the agent is in an oblique phrase introduced by the plural relational noun.

There are several transitive verb stems which are never used transitively, but instead are always used in the passive or antipassive. Among them are some very commonly occurring verbs, such as *kan-* 'meet/find', which occurs either as the passive *kaneet* or the antipassive *kaanan*. These lexical peculiarities of Mam skew the distribution of clause types that occur in discourse.

The other passives are less purely syntactic and much more restricted in occurrence or distribution. Two passives are quite similar in meaning and have lexical functions. These are formed by suffixing *-njtz* or *-j* (which is *-l* with CVC roots) to the transitive verb stem. Both indicate that the agent has lost or fails to have control over the action. The two suffixes are only semi-productive; there are some stems which take only one, stems which take both with apparently no difference in meaning, and stems which take neither. *-njtz* restricts an agent in an oblique phrase to third person while *-j* can take an agent of any person.

(28) a. *-njtz* passive
           ma Ø-juusa-njtz   chib'aj t-u7n   Mal
           REC 3SG ABS-burn-PASS food   3SG-RN/AG Maria
           'The food was burned by Maria.' (by accident)

       b. *-j* passive
           ma Ø-juus-j   chib'aj t-u7n Mal
                  -PASS
           'The food was burned by Maria.' (by accident)

       c. *-eet* passive
           ma Ø-juus-at   chib'aj t-u7n Mal
                  -PASS
           'The food was cooked well-done by Maria.' (on purpose, therefore not burned because no one burns food on purpose)

The *-njtz* passive has one use it does not share with the *-j* passive. It occurs in generic statements of the form 'it is good/bad to do X'. Here it does not permit an agent, since the statement is of the general truth sort. The verb cross-references its argument with an ergative rather than absolutive marker, in one of the more specialized occurrences of 'split ergativity':

(29) *naach t-k'aa-njtz   a7*
      bad   3SG ERG-drink-PASS   water
      'It's bad to drink water.' or 'It's bad that water is drunk.'

A fourth passive is syntactic and productive but includes the idea of process; that is, the action described by the verb happens because someone goes to do it. The suffix for this passive is *-b'aj*, and it forms a set with two other processive suffixes, one of which indicates an active transitive processive and the other of which indicates an imperative processive. The *-b'aj* passive can take an oblique agent of third person only and requires the use of a directional on the verb. The three suffixes together create processives in any mode or voice (except antipassive):

(30) a. active transitive processive: *-kj*
          chi   x-el   ky-i-7kj-a   eky'
          3PL ABS DIR-FUT 2PL ERG-bring/take-PROC-2PL hen
          'You-all will go and bring the hens.'

      b. imperative processive: *-7tz*
          chi   ky-i-7tz-a   eky'
          3PL ABS 2PL ERG-bring/take-PROC IMP-2PL hen
          'You-all go and bring the hens!'

      c. passive processive: *-b'aj*
          chi   x-el   q'i-b'aj   eky'
          3PL ABS DIR-FUT bring/take-PASS   hen
          'The hens will be brought.'

The agentless transitive construction has partly transitive morphology and partly passive syntax. The ergative marking is omitted from a transitive verb with no other changes in form, but third person agents can be expressed in oblique NP's. The verb usually takes a directional (almost all transitive verbs take directionals), and is marked with the directional suffix *-7n*, which accompanies other transitive verbs with directionals, but does not co-occur with intransitives or other passives with directionals. The verb cross-references one argument (the O) absolutely, like other passives, and per-

mits an oblique agent, also like other passives. The construction is used when the agent is unknown or to answer a question about the patient.

(31) *ma ch-ok   b'iyo-7n kab' xiinaq (t-u7n   Cheep)*
      REC 3PL ABS-DIR hit-DS   two man   (3SG-RN/AG   Jose)
      'The men were hit (by Jose).'

The construction is fully productive. It corresponds rather closely to the absolutive antipassive, for unknown or unmentioned agents rather than unknown patients.

2.3. Syntactic and lexical functions of voice

The principal functions of both the antipassive and passive voices are syntactic. Both voices change relations between NP's and verbs, although in different ways. Antipassive involves a change in cross-referencing: the agent changes from ergative cross-reference on a two-argument verb to absolutive cross-reference on a one-argument verb. Passive involves a change in argument relations without a change in cross-referencing: the O, absolutively cross-referenced on a two-argument verb, becomes the S, still absolutively cross-referenced but on a one-argument verb.

The agent promotion function of the antipassive is purely syntactically motivated. Certain syntactic operations cannot be performed on NP's in A function so they must be in S (subject of an *intransitive* verb) function before the application of rules such as question, negation, or focus. Other functions of antipassive and passive are motivated more by discourse considerations. They result from factors such as whether an agent or patient is known or unknown, whether a sentence answers a question about one argument or another, and so on. Several uses of antipassive or passive only permit the lexical expression of the cross-referenced argument; others permit the second argument as well, in an oblique NP. Thus all uses of voice involve the rearrangement of arguments with respect to the verb, and several uses additionally involve the omission of one of the arguments.

Several uses of the antipassive or passive are primarily lexical. The lexical antipassives are the incorporative antipassive, where the patient is implied by the verb, and the lexical antipassive, where the patient is included in the verb. Both, like the absolutive antipassive, omit the patient, although from different motivations. Lexical semantic considerations result in a syntactic construction which closely parallels that of the absolutive antipassive.

The two passive constructions which have lexical functions (*-njtz* and *-j*) imply loss of agent control. Arguments are rearranged with respect to a transitive verb as a result of such loss of control. This involves syntactic agent demotion to parallel the lexical agent demotion, and results syntactically in a construction similar to the *-eet* (syntactic) passive.

The lexical functions of the antipassive and passive are explainable in terms or being expansions of the more usual syntactic functions. Arguments are rearranged with respect to the verb as a result of lexical agent or patient demotion.

3. DISCOURSE

In an analysis of narrative discourse the single most salient characteristic to emerge is that the overwhelming majority of clause types are limited to those with absolutive constituents. In an analysis of two narratives with 377 clauses, only 18% of the clauses were found to be active transitives, and only 3% of the clauses had lexical ergators. Antipassive and passive clauses are not, however, very prevalent, only accounting for 7% and 5% of the clause types respectively. The clause breakdown is as follows:

Clause type	Percent occurrence
stative	13
locative	10
intransitive	25
transitive	18
antipassive	7
passive	5
quotative	9
other (complex, minor)	13

The two texts are highly consistent as well; one uses quotatives less than the other but has more minor clause types; one has a somewhat lower percentage of transitive clauses (15% vs 19%) but compensates with a higher percentage of antipassives (9% vs 5%). Other clause types are equal between the two.

What can be concluded from the analysis of clause types is that there are fairly strong constraints against transitive clauses. These may be gener-

ated both by discourse and by language specific syntactic preference. Antipassive and passive clauses add, but not overwhelmingly, to the already strong preference for one-argument predicates. If the purely lexical uses of the antipassive and passive are removed from consideration, then only 7% of the clause types are nonlexical antipassive or passive.

An analysis of the introduction of new characters in narrative shows an even stronger constraint against ergators for this purpose. The two texts introduce new characters a total of 39 times. Of these, only one (2%) is introduced as the agent of a transitive verb. All other absolutive possibilities, as well as subject of a relational noun phrase, are used more frequently:

Argument	Clause type	Number	Percent occurrence
S	antipassive	3	8
S	passive	2	5
A	transitive	1	2
O	transitive	11	28
S	intransitive	8	21
S	locative	6	15
S	stative	5	15
S	relational noun	3	8

Comparing these figures with the clause type breakdown shows new characters introduced as the subject of antipassive or passive in almost the same proportion as there are clauses of these types. The major disproportion is that new characters are introduced as objects of transitive verbs more frequently than is expected from clause type percentages.
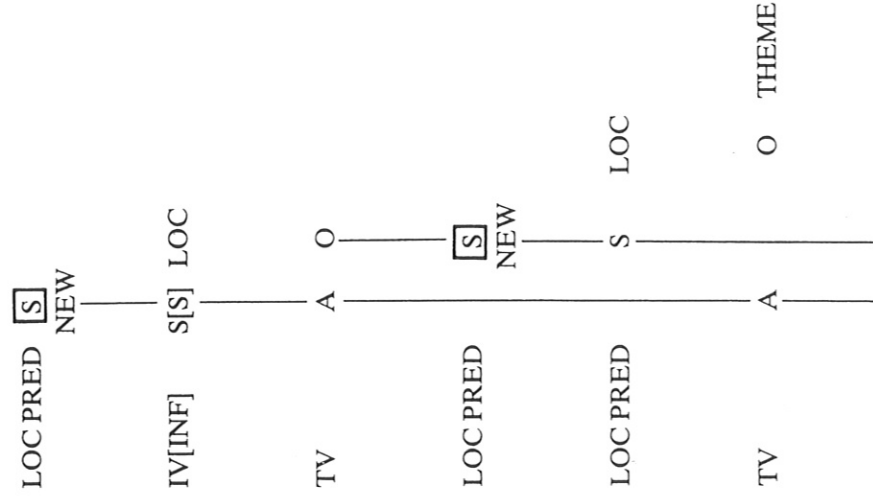
Although the syntactic functions of the antipassive and passive were described in Section 2 as the more usual, or defining, functions of these voices, in fact only slightly more than half of the actual occurrences of the antipassive and passive were syntactic. The lexical functions of voice are used with measurable frequency, perhaps because several very commonly occurring verbs have transitive stems but are obligatorily used in one of the detransitivizing voices. The syntactic uses of passive and antipassive, while not negligible, are relatively low, certainly lower than any other intransitive clause type. Although Mam narrative discourse shows a strong preference for intransitive clauses and an even stronger preference for introducing new characters absolutively, there seems to be no overwhelming pressure to

meet these preferences through overexploitation of antipassive and passive voices.

4. TEXT FRAGMENT

The following segment of one of the narratives used for the frequency analysis illustrates some of the clause types found in Mam discourse and how they interact. The accompanying diagram traces the characters from clause to clause. A box around A, S, or O indicates that the argument is lexically expressed. All arguments except A, S, or O are oblique and lexically expressed. 'NEW' under an argument indicates the introduction of a new character.

1. kye at-Ø   jun   meeb'a
    that LOC PRED-3SGA   one   orphan
         LOC PRED   S
    'There was an orphan,'

2. n-Ø-xi7   pasyaa7ra-l   t-uj   t-zii7   maar
    PROG-3SGA-go spend time-INF 3SG-RN/in 3SG-mouth   sea
    IV   INF/IV   LOC
    'who went to spend time by the sea,'

3. entoons n-Ø-xi7   t-ki-7n
    then   PROG-3SG ABS-DIR 3SG ERG-see-DS
                        TV
    'and then he saw it,'

4. at-Ø   jun tal alemaj per masaat t-b'ii
    LOC PRED-3SG ABS one small animal but deer 3SG-name
    LOC PRED   S
    'that there was a small animal called a deer,'

5. ta7-Ø   t-uj   xjaaw
    LOC PRED-3SG ABS 3SG-RN/in moon
    LOC PRED   LOC
    'that was in the moon,'

6. entoons despwees n-Ø-ku7   t-pensaa7ra-n t-i7j
    then   after   PROG-3SG ABS-DIR 3SG ERG-think-DS 3SG-RN/THEME
                     TV   THEME
   'so he began to think about it,'

Diagram (character tracing):

LOC PRED [S] NEW

IV[INF] S[S] LOC

TV   A —— O

LOC PRED [S] NEW

LOC PRED S LOC

TV   A   O   THEME

7. entoons n-Ø-xi7-tzan
   then PROG-3SG ABS-go-well
   IV
   'and he went,'

8. n-Ø-xi7 uub'a-l t-e-t-ee tal masaat t-uj xjaaw
   PROG-3SG ABS-go shoot-INF 3SG-RN-3SG-RN/PAT small deer 3SG-RN/in moon
   IV[INF]   INF/TV   O   LOC

   S — O (LOC) ; S[A] — S ; IV

9. kabaal Ø-Ø-kaamb'a-n meeb'a
   exactly PAST DEP-3SG ABS-win-AP orphan
   AP   S
   'the orphan was successful,'

   AP

10. n-Ø-ku7-tz t-uub'a-n jun ajlaaj
    PROG-3SG ABS-DIR-DIR 3SG ERG-shoot-DS one reed
    TV   INSTR
    'he killed it with a reed,'

    A — O (INST) ; TV

11. Ø-chi-tzan Ø-q'uun-j
    3SG ABS-say-well 3SG ABS-say-PASS
    QUOTE
    'they say,'

    QUOTE

12. entoons txuk Ø-Ø-xi7 masaat t-uj maar
    then directly PAST DEP-3SG ABS-go deer 3SG-RN/in sea
    IV   S   LOC
    'then the deer fell in the sea,'

    S — LOC ; IV

13. entoons n-chi tzaaj kab'a k'o7xh aj maayan ky-b'ii
    then PROG-3PL ABS come two buzzard DEM buzzard 3PL-name
    IV   STAT
    'then two buzzards, called red-headed buzzards, came,'

    S[NEW] — O (LOC) ; S — s ; IV ; STAT

14. aj aa-Ø-qa-ya amiiwo
    DEM DEM-2SG ABS-PL-2SG friend
    STAT   s
    'you, friends,'

15. b'a7n-wt ky-ook-ky-a t-e w-amiiw-ya
    good-COND 2PL ERG-enter-2PL-2PL 3SG-RN 1SG-friend-1SG
    IV   S
    'couldn't you be my friends?'

16. nlaay ch-ook-a t-e n-maajan-a
    not possible 2PL ABS-enter-2PL 3SG-RN 1SG-worker-1SG
    IV   S
    'couldn't you be my workers?'

17. nlaay Ø-tzaj ky-ii-7n-a juun n-kaamb'-a
    not possible 3SG ABS-DIR 2PL ERG-bring/take-DS-2PL one 1SG-prize-1SG
    TV   O
    'couldn't you bring my prize?'

    A — O (LOC) ; TV

18. maa7 Ø-txi7 t-uj a7
    REC 3SG ABS-go 3SG-RN/in water
    IV   LOC
    'that fell in the water,'

    s — LOC ; IV

IV

OBL A

S

| S[S] |

IV[INF]

THEME

19. pera nlaay-x   tz-iky'-tz   w-w-u7n
    but   not possible-even   3SG ABS-PASS-DIR   1SG-1SG-RN/AG
                                     IV   OBL A
    'I can't get it out,'

20. nn-Ø-ok   teen   meeb'a   ooq'a-l   t-i7j
    PROG-3SG ABS-DIR   exist orphan   cry-INF   3SG-RN/THEME
        IV   S   INF/IV   THEME
    'and he started to cry about it.'
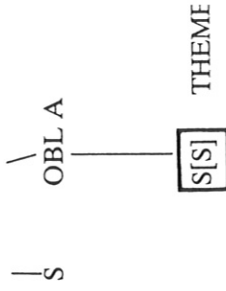
NOTES

1. Data presented here are from San Ildefonso Ixtahuacan, one of the towns in the northern Mam region. I am deeply indebted to Juan Maldonado Andres, Juan Ordoñez Domingo, and Juan Ortiz Domingo for teaching me about their language. I am also indebted to Bill Ladusaw and Tom Larsen for comments on previous drafts of this paper.

2. The alphabet used here was designed for Mayan languages by Terrence Kaufman. Symbols correspond to their usual phonetic representations, except that tz = ¢, ch, = č, tx = č, ky = ḳ, 7 = ?, xh = š, x = š, j = x, C' = glottalized C, and VV = V:. The variants of the person markers are mostly phonologically conditioned.

3. Abbreviations used in the examples are: cond = conditional, dep = dependent aspect, dir = directional, ds = directional suffix, LOC PRED = locative predicate, pot = potential mode, proc = processive, prog = progressive, rec = recent past, RN = relational noun, stat = stative. For further abbreviations, see list on p. vii.

4. The form in the first line of the example represents the spoken form after morphophonemic rules have been applied. The second line presents the actual morphemes before the application of morphophonemic rules.

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