AGENT FOCUS AND PASSIVE IN TSOTSIL[*]

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Earlier work identified parallels in the function and distribution of AGENT FOCUS and PASSIVE in Tsotsil. This paper argues that AGENT FOCUS in Tsotsil has in fact been reanalyzed as a type of passive, with the option (in some dialects) of WH-AGREEMENT with the agent. Evidence comes in part from its syntactic properties. But most compelling is the syncretism of passive and AF morphology which is a pervasive feature of the language.

1.   Introduction

The Mayan languages fall into two classes with respect to A-bar extraction of ergatives (subjects of transitive clauses). One group generally disallows it, while the other permits it. Intimately related to what I will call the ERGATIVE EXTRACTION CONSTRAINT (EEC) is the AGENT FOCUS (AF) construction, whose sole function is to remedy the EEC. That is, it provides the means to express extraction of the agent, when extraction from a canonical transitive clause is precluded by the EEC. Languages which are subject to the EEC have an AF construction while languages which are not lack one.

The EEC itself has been interpreted in several ways. One line of thinking attributes it to syntactic ergativity (Larsen and Norman 1979, Campana 1992, Ordoñez 1995, Coon et al. 2014), seeing languages not subject to the EEC as (just) morphologically ergative. A recent alternative sees it as the consequence of an anti-locality condition on extraction (Erlewine 2016). A third account views it as the consequence of a preference in some languages for the specialized AF construction when the agent is extracted (Stiebels 2006). In Stiebels' analysis, languages not subject to the EEC do not have this preference. See Aissen (2017) for discussion of some of these approaches.

Tsotsil occupies a sort of intermediate position between the two groups of languages. Ergative extraction is permitted and common, so the language is not subject to any general EEC. However, ergative extraction is precluded in one corner of the grammar and in that corner, we find AF. Thus the complementary relation between ergative extraction and AF is maintained, but the domain in which AF occurs is much smaller than in the other Mayan languages.

In Aissen (1999), I argued that the distribution of AF in Tsotsil was not related to syntactic ergativity, but to the same factors that determine PASSIVE. One of the functions of passive in Tsotsil is to realize clauses in which the external argument (A) is low in topicality and the internal argument (P) is high. When both arguments are 3rd person, active voice is excluded and some

intransitive paraphrase is required. Passive is not the only remedy, but it is a systematically available one (Aissen 1997). AF has the same function in Tsotsil, but in clauses in which A is extracted. The relation between passive and AF is schematized in Table 1, x = low topicality; X = high topicality.

	CLAUSES WITHOUT AGENT EXTRACTION	CLAUSES WITH AGENT EXTRACTION
Ap, ap	transitive	transitive
aP	passive	AF

Table 1: Distribution of voice in Tsotsil

These generalizations and the parallel functions of passive and AF in Tsotsil were established in Aissen (1997, 1999).

This paper considers in more detail the *structure* of AF clauses in Tsotsil. I will suggest that not only do AF clauses have much the same function and distribution as passives, they have been reanalyzed as passive. In some dialects, passive has entirely replaced AF (i.e., AF has been lost). Other dialects have a distinctive AF construction which differs from canonical passive only in two respects: [i] the agent is obligatory (not optional), and [ii] the agent is syntactically licensed by the passive head, permitting it to surface as direct (not oblique). Since this relation involves morphology linked to extraction and Case, I refer to it as *WH-agreement* (Watanabe 1996, Chung 1998). (1) summarizes the proposal.

(1)   In Tsotsil, AF is a passive construction endowed with the possibility of WH-agreement with the agent.

The evidence that AF clauses are passive comes in part from their syntactic properties and in part from the relation between passive and AF morphology. In one dialect, historic AF morphology occurs now in what is transparently a passive; in other dialects, passive morphology has replaced historic AF morphology in AF clauses. These developments begin to make sense if AF itself is analyzed as passive. Tsotsil is not unique in showing syncretism of the morphology associated with passive and WH-agreement. It is found also in Chamorro, where the infix *-in-* realizes both passive morphology and WH-agreement with the internal argument. Chung (1998) argues that this is not syntactically significant in Chamorro, that clauses in which *-in* marks WH-agreement are *not* passive. I will suggest that the Tsotsil situation is different, that the appearance of the same morphology in passive and AF clauses reflects the fact that AF clauses *are* passive.

2.   Agent Focus in Mayan

There is a large descriptive literature on the morphosyntax of AF constructions in Mayan, going back to the 1970's (see references in Aissen 1999, Stiebels 2006, and Coon 2016). To begin with, consider (2), from Berinstein (1985), which illustrates the situation in Q'eqchi'. (2) is a canonical transitive clause, with two direct 3rd person arguments. It illustrates some of the typological properties common to Mayan: verb-initiality, head-marking, and morphological ergativity. Neither argument is case-marked (the pronominal object is not realized as an independent noun phrase),

but both are indexed on the verb, the subject (A) by an ERG(ATIVE) prefix and the object (P) by an ABS(OLUTIVE) prefix. If A is extracted from such a clause, the expected result is (2). However, (2) is ungrammatical and A–extraction is expressed instead by (2), the AF construction in this language.[1]

(2)   a.   X-in-x-sak'   li   wiinq.
Q'EQ   REC-ABS1S-ERG3S-hit DET   man
               'The man hit me.'   {Berinstein 1985:162}

        b.   *Ha' li   wiinq   k-in-ix-sak'.
               FOC DET man   PAST-ABS1S-ERG3S-hit
               ('That's the man who hit me.')   {Berinstein 1985:164}

        c.   Ha' li   wiinq   ki-sak'-o-k   w-e.
               FOC DET man   PAST-hit-AF-IV GEN1S-OBL
               'That's the man who hit me.'   {Berinstein 1985:164}

The details of the AF construction vary across the family, but there are several constant features, visible in (2). One is that the AF verb is detransitivized by an overt suffix (glossed AF).[2] The intransitivity of AF verbs is signalled by the absence of an ERG prefix and often by the presence of an intransitive 'status suffix' (-*k* in (2)). Another is that AF clauses require two syntactically realized arguments. In Q'eqchi' (also Mam) (Berinstein 1985, England 1983), AF clauses have the syntax of canonical antipassives, with demotion of the internal argument. This is also an option in Tz'utujil and for some dialects/speakers of K'ichee' (Dayley 1985, Mondloch 1981).

In another set of languages, both arguments in AF clauses remain 'direct'. This is the situation in all the Q'anjob'alan languages (Craig 1977, Zavala 1992, Pascual 2007), and is an option in some K'ichean languages (Tz'utujil and some dialects of K'ichee') (Dayley 1985, Mondloch 1981). (3a) from Akatek (Q'anjob'alan), is a basic transitive clause, with VSO order. Extraction of A from such a clause should produce (3b). (3b) is not ungrammatical, but it can only be interpreted as involving extraction of P. The AF construction in (3c) expresses the A-extraction reading. (Examples (3a,c,d) are from Zavala (1992:279); (3b) is thanks to Roberto Zavala (p.c.).)

(3)   a.   [X]-s-ma'   ix malin naj xhunik.
AKA   ASP-ERG3-hit CLS Maria   CLS   Juan
               'Maria hit Juan.'

        b.   Maj [x]-s-ma'   naj xhunik?
               who ASP-ERG3-hit CLS   Juan
               'Who did Juan hit?' (*not* 'Who hit Juan?')

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[1] Abbreviations in glosses: ABS: absolutive, AF: agent focus, APPL: applicative, ASP: aspect, CL: clitic, CLS: classifier, CP: completive, DET: determiner, DIR:directional, ENC: enclitic, ERG: ergative, FOC: focus, GEN: genitive, ICP: incompletive, INCL: inclusive, IV: intransitive status suffix, NEG: negation, OBL: oblique, OCK: Laughlin 1977, PF: perfect, PL: plural, PRO: pronoun, PSV: passive, PT: particle, REC: recent past, RR: reflexive, S: singular, TOP:topic.

[2] The one exception is Yucatec Maya, where the AF verb is not derived via an overt suffix, but through the absence of ergative marking and neutralization of certain TAM distinctions. Further, the general consensus is that AF verbs in Yucatec are transitive (Tonhauser 2003, Bohnemeyer 2009, Gutiérrez Bravo 2015).

c. Maj [x]-ma'-on naj xhunik?
    who ASP-hit-AF CLS Juan
    'Who hit Juan?'

d. Maj x-in-ma'-on-i?
    who ASP-ABS1S-hit-AF-IV
    'Who hit me?'

The verb in (3c) is again intransitive (it carries no ERG prefix) but, unlike (2) in Q'eqchi', neither argument is oblique. Although we should consider the possibility that P is a 'covert' oblique, this is not tenable since, if it is 1st or 2nd person, it inflects on the verb, (3d), an observation first made in Craig (1979) for Jakaltek (on Q'anjob'al, see Pascual 2007). l refer to the construction in (3c,d) as *direct* AF. See Stiebels (2006) and Coon et al. (2014) for different views on how direct AF clauses might be analyzed, and Aissen (2017) for discussion.

Examples (2) and (3c,d) illustrate the two suffixes that are found throughout the family for deriving AF verbs, suffixes that Smith-Stark (1978) reconstructed as *-(V)w* and *-(V)n*. In the K'ichean languages these are allomorphs, with *-(V)w* restricted to root transitive stems (with form CVC) and *-(V)n* to derived transitives. The Q'anjob'alan and Mamean languages use *-(V)n* for all stems.

Given that AF verbs are intransitive, yet require two arguments, it follows that they share core properties with passive. Passive verbs are also derived intransitives throughout Mayan and they are associated with two arguments, though the agent may be syntactically suppressed. It is clear though that in most Mayan languages, AF clauses do not have passive syntax: in languages like Q'eqchi', where AF is a syntactic antipassive, this is obvious. In languages with direct AF, like Q'anjob'al, this is less obvious, but the burden of proof would presumably fall on anyone arguing that they *are* passive.

However, in Tsotsil, the features shared by passive and AF clauses go significantly beyond the two already mentioned. These fall into three classes: [1] as noted above, the distribution of AF is very similar to that of passive, (§3.1); [2] there is evidence that the internal argument (P), not the external argument, is the 'subject' in AF clauses, (§3.2); and [3] the various dialects show syncretism of passive and AF morphology (§3.3).

3. Agent focus in Tsotsil
3.1 The distribution of AF

Zinacantec (Z) Tsotsil has an AF construction which looks very much like the AF construction of Q'anjob'al. The AF verb is formed with the same suffix, *-on* and both arguments (*k'usi* 'what' and *li jbek'ettike* 'our meat') are direct (compare with 3c):[3]

(4)   K'usi xu'   x-tam-on   li   jbek'ettik-e?
Z TSO   what   can   ASP-take-AF DET   our.meat-ENC
        'What could have taken our meat?'   {OCK 282}

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[3] All Tsotsil examples cited without a source come from my own fieldnotes.

With two non-oblique arguments, AF in Z Tsotsil resembles a transitive clause. However, as in other Mayan languages, AF verbs inflect as intransitives: they carry no ERG marker and in relevant contexts (here, in construction with an auxiliary), they carry the intransitive status suffix *-ik~-uk* (underlined in (5)):

 (5)   Muk'   buch'u   x-k'ot   ik'-on-<u>uk</u>.
Z TSO   NEG   who   ASP-arrive_{AUX}   call-AF-IV
         'There was no one to come and call him.'   {OCK 42}

        Unlike Q'anjob'al and the other Mayan languages, however, extraction of the ergative from a transitive clause is possible in Z Tsotsil and is in fact far more frequent than agent extraction from the AF construction. In contrast to (2) (Q'eqchi'), (6) is grammatical, and in contrast to (3b) (Q'anjob'al), it has an A-extraction reading (as well as the P-extraction reading, i.e., it is ambiguous). (7) is a representative text example; hundreds more could be cited.

(6)   Buch'u   i-s-kolta   ti   vinik-e?
Z TSO   who   CP-ERG3-help   DET   man-ENC
         'Who helped the man?' (*also* 'Who did the man help?')

(7)   Pero   buch'u   s-tam?
Z TSO   but   who   ERG3-take
         'But who took it (the ring)?'   {OCK 353}

        Ergative extraction is not always possible though. As documented in Aissen (1999), there are two contexts in which agent extraction from a transitive clause is blocked in Z Tsotsil and where AF constructions are used instead. Both involve clauses in which P is more salient than A (*aP* settings), where 'salience' involves topicality, either the inherent topicality associated with animacy or the pragmatic topicality associated with the discourse topic. The effect of *animacy* in licensing AF is illustrated by (8). In both cases, P in the relevant clause is human-referring, while A is non-human (compare (7), where A is human and P is inanimate).

(8)   a.   Mu   s-na'   [k'usi ti   ik'-oj-on-uk   ech'el] ti   prove tseb-e.
Z TSO   NEG ERG3-know   what DET carry-PF-AF-IV   away DET poor   girl-ENC
               'The poor girl didn't know what had carried her away.' {OCK 317}

      b.   k'usi chanul x-ti'-on   tajmek ti   vo'ne jch'ultottik un-e.
             what animal ASP-eat-AF very   DET ago   our.Lord   PT-ENC
             'whatever animal would eat our Lord long ago.' {OCK 235}

The effect of *discourse topicality* is illustrated by (9a,b). In both cases, P is the local discourse topic, as suggested by the fact that it is realized by a null pronoun, and A is non-referential.

(9)   a.   Muk' buch'u x-k'ot   ik'-on-uk.
Z TSO   NEG who   ASP-arrive call-AF-IV
                  'There was no one to come and call him.'   {OCK 42}

         b.   Pero   buch'u x-mil-on?
                 but   who   ASP-kill-AF
                 'But who killed her?'   {OCK 230}

In a sense, the use of AF in these contexts can be seen as a device for deflecting what would be the wrong interpretation if A-extraction proceeded from a *transitive* clause. Replacing the AF verbs in these examples with transitive verbs yields only P-extraction readings:

(10)   Mu s-na'   [k'usi y-ik'   ech'el] ti   tseb-e.
Z TSO NEG ERG3-know what ERG3-carry away   DET girl-ENC
        'The poor girl didn't know what s/he had carried away.'

(11)   Pero   buch'u i-s-mil?
Z TSO but   who   CP-ERG3-kill
        'But who did s/he kill?' (s/he = local topic)

The role of the local context in determining topicality is crucial here. (11) is not ambiguous in its context, but an example like (6) – when presented out of context in an elicitation situation – is. The reason is that (6) has no local topic, and therefore topicality plays no role in its interpretation.
      Crucially though, and unlike (2) and (3b), the interpretations of (10) and (11) with P-extraction do not reflect a constraint on ergative extraction. They reflect instead a more general constraint on the interpretation of transitive clauses with two 3rd person arguments (*3–3 clauses*). This constraint forces readings in which the more salient argument is interpreted as the external argument (A) and the less salient one as the internal argument (P) (Aissen 1997).[4]

(12)   Obviation Principle: In a transitive 3–3 clause, the more salient argument aligns with A and the less salient argument with P.

The functional motivation for (12) is the fact that when A and P are both 3rd person, they are not formally distinguished in transitive clauses in Tsotsil: they are not case-marked nor can they be distinguished by agreement since they do not differ in grammatical person. Thus the default alignment of topicality with grammatical function serves as a guide to interpretation. To express clauses in which P is more salient than A, Z Tsotsil resorts to various grammatical devices. In the context of agent extraction, that device is the AF construction.
      Evidence that the distribution of AF clauses in Z Tsotsil is determined by (12) is the fact that they are possible only when both arguments are 3rd person (Haviland 1981:272; Aissen 1999).

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[4] Whether this is a grammatical principle or a heuristic used by speakers to aid in interpretation is not crucial to present concerns. See Zavala (2007), Curiel (2007), Bohnemeyer (2009), and Polian (2013) for discussion of related effects in other Mayan languages.

There simply are no forms with the absolutive morphology that would be required if A (13a) or P (13b) were 1st or 2nd person.

(13)   a.   *Vo'on l-i-maj-on.
Z TSO   PRO.1S CP-ABS1-hit-AF
                  ('It was me that hit him/her/it/them.')

       b.   *K'usi l-a-tij-on?
               what CP-ABS2-awaken-AF
               ('What woke you up?')

If AF occurs only when the corresponding transitive cannot be interpreted correctly, there is no motivation for it in (13): there is no ambiguity as to grammatical function in transitive clauses where one argument or the other is 1st or 2nd person since these are fully disambiguated by the agreement morphology.

Rather than build these person restrictions into the formal account of AF clauses, I assume that they *emerge* as a consequence of the fact that the relation between AF and TV clauses involves *competition*, a view also espoused in Aissen (2003), Stiebels (2006), and Erlewine (2016). Various constraints can determine the distribution of the two constructions across Mayan, including both pragmatic ones (like the Obviation Principle (12)) and morphological ones (Stiebels 2006, Aissen 2017). The competition between the two in Tsotsil is informally schematized in Tableau 1, OBVIATION refers to (12); *AF is a markedness constraint penalizing the AF construction; TV and AF refer to clauses headed by transitive and AF verbs, respectively:

a=3rd, P=3rd	OBVIATION	*AF
TV	*!	
⟹AF		*

Tableau 1

If the TV candidate is faithful to the input, it violates (12). But if P (or A) is a local person (1st or 2nd person), (12) is irrelevant, since it only references 3–3 clauses. In that case, the AF candidate is excluded by *AF.

a=3rd, P=local	OBVIATION	*AF
⟹ TV		
AF		*!

Tableau 2

In their restriction to *aP* settings, the distribution of AF clauses resembles that of passive, which plays a parallel function in clauses *not* involving agent extraction (see Aissen 1997 for discussion and examples).[5]

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[5] Passive has a somewhat wider distribution than does AF (even leaving aside the requirement of A-extraction in AF clauses): it is possible with P's of any person, and the agent may be syntactically suppressed. See §3.3.1 below.

3.2   Object raising

Besides sharing the distribution of passive clauses, AF clauses in Z Tsotsil share some syntactic features with passive. In particular, the internal argument is the 'subject', i.e., it occupies the highest argument position in the clause. Tsotsil does not, to my knowledge, have raising and control constructions that can serve to identify the subject, but agreement morphology provides a useful probe: in AF clauses, the only argument that can be indexed by agreement morphology is P.

        Agreement in AF clauses is highly limited since both arguments are 3rd person, and there is no ABSOLUTIVE 3rd person marker. However, the 3rd person plural suffix, *-ik,* does occur in AF clauses. The important observation is that it can index only the internal argument.[6] Consequently, (14a) can only be interpreted with a plural P; the number of A is unspecified. To clarify that A is plural, a plural suffix can be added to the interrogative pronoun, (14b):

(14)   a.   Buch'u   ch-'ik'-on-*ik*   ech'el   ta   poxtael?
Z TSO   who   ICP-take-AF-PL   DIR   to   be.cured
               'Who (sg/pl) is going to take them to the clinic?'

        b.   Buch'u-tik   ch-'ik'-on   ech'el   ta   poxtael?
                who-PL   ICP-take-AF DIR   to   be.cured
                'Who all will take him/her to the clinic?'

Combining the two plural markers yields (14c) which is interpreted only with both a plural A and a plural P:

        c.   Buch'u-tik ch-'ik'-on-*ik*   ech'el   ta poxtael?
                who-PL   ICP-take-AF-PL   DIR   to be.cured
                'Who all took them to the clinic?'

        In passive clauses, plural suffixes also index the internal argument, as do ABS markers (P is not restricted to 3rd person in passive clauses).

(15)   a.   . . . x-i-mil-e-otik . . .
Z TSO   . . . ASP-ABS1-kill-PSV-ABS.1PL.INCL
               'we are[n't] killed [for doing nothing at all]' {OCK 230}

        b.   Ta   la x-'ak'-b-at-ik   trago.
                ICP CL ASP-give-APPL-PSV-PL cane.liquor
                'They were given cane liquor.' {OCK 21}

Further, the interpretation of the plural suffix in AF clauses provides evidence that P raises to a position where it c-commands A. This follows from two properties of *-ik.* The first is that it is

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[6] This corrects Aissen (1999) where I said that *-ik* could index either A or P in AF clauses, though with a preference for indexing P.

underspecified for CASE and can therefore index ergatives (16a) as well as absolutives, whether P (16b) or S (16c) (the indexed plural is italicized in the translation; no emphasis is implied):

(16) a. I-s-maj-<u>ik</u>   (ergative)
Z TSO   CP-ERG3-strike-PL
          '*They* struck him/her/it/them.'

      b.   I-j-maj-<u>ik</u>.   (absolutive P)
           CP-ERG1-strike-PL
           'I hit *them*.'

      c. I-bat-<u>ik</u>.   (absolutive S)
           CP-go-PL
          '*They* went.'

The second is that while -*ik* is unspecified for Case, it can only index the highest direct 3rd person argument in a clause. -*ik* indexes P in (16b), but this is possible only because the subject is not 3rd person. When both A and P are 3rd person, -*ik* can only index A (Bricker 1977 and confirmed through elicitation). Hence (16a) must have a plural A; the plurality of P is under-determined. I assume then the generalization in (17) for Z Tsotsil:[7]

(17)   -*ik* indexes the highest non-oblique 3rd person argument in the clause.

(17) accounts for (16a-c) and is consistent with (15). It also accounts for plural marking in AF clauses like (14), but only if P raises to a position from which it asymmetrically c-commands A. Since it is likely that P in canonical passives likewise raises, this is another property that the two constructions share.

Raising of P in AF clauses is consistent with the fact that A cannot bind P or into P in AF clauses, as A does not c-command P. If A binds P, then extraction of A must proceed from a transitive clause (where A does c-command P), (18a); i.e., there are no reflexive AF clauses, (18b).

(18) a. Oy much'u i-s-jip   s-ba   ta vo'.
Z TSO   ∃   who   CP-ERG3-throw GEN3-RR in water
          'Someone threw himself into the water.'

      b. *Oy much'u i-jip-on   s-ba   ta vo'.
          ∃   who   CP-throw-AF   GEN3-RR in water
          ('Someone threw himself into the water.') {Aissen1999:474}

Further, if A binds *into* P, then extraction of A must again proceed from a transitive clause, (19a). (19b) is ungrammatical.

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[7] Under some morphological conditions, -*ik* can also index a 2nd person plural.

(19)   a.   Mu'yuk much'u i-s-tam   s-tuk'.
Z TSO   NEG   who   CP-ERG3-grab GEN3-rifle
               'No one grabbed his rifle.'

       b.   *Mu'yuk much'u i-tam-on   s-tuk'.
                 NEG   who   CP-grab-AF GEN3-rifle
               ('No one grabbed his rifle.')   {Aissen 1999:474}

Although raising of the internal argument is shared in Z Tsotsil by AF and passive, that does not entail, of course, that AF clauses *are* passive. There are still salient differences in properties of the agent: in canonical passive clauses, the agent is optional and when it occurs it must be oblique; in AF clauses, the agent is obligatory and is not oblique. Furthermore, in AF clauses, by definition, the agent is extracted, while in canonical passives, it need not be. (20a, b) show some passive clauses in Z Tsotsil. The agent is realized in one of two ways in Z Tsotsil: individuated agents are presented by the relational noun *yu'un*, (20a), and relatively unindividuated ones by the preposition *ta*, (20b).

(20)   a.   Te   la ch-mak-e   ta be   yu'un li   vakax un-e.
Z TSO   there CL ICP-stop-PSV on road OBL   DET cow   PT-ENC
               'He was stopped there on the road by a cow.' {OCK 227}

       b.   . . . ti   x-ti'-at   ta   chon   un-e.
               . . . that ASP-eat-PSV OBL animal PT-ENC
               '[it was known] that he would be eaten by animals' {OCK 81}

What makes a passive analysis of AF clauses compelling in Tsotsil is the fact that AF morphology and passive morphology show significant syncretism: as noted earlier, in one dialect, AF morphology has been extended to passive clauses, and in others, passive morphology has replaced the AF suffix. We document these two developments below, starting with the extension of AF -*on* to passive clauses in Z Tsotsil.

3.3   Voice suffixes

The historic passive and AF suffixes for Tsotsil are listed in Table 2. The passive suffix -*e* is restricted: it attaches only to to monosyllabic (i.e., root) transitive stems and, to my knowledge, it occurs only in Z Tsotsil. The AF suffix, as seen above, is -*on*. This suffix is only found in Z Tsotsil.

PASSIVE	-*at*, -*e*	-*e* only in Z Tsotsil and only on CVC STEMS
AF	-*on*	-*on* only in Z Tsotsil, not restricted to CVC stems.

Table 2: Historic passive and AF suffixes in Tsotsil

3.3.1   Zinacantec Tsotsil *-on*

The first observation is that while the agent is not oblique in AF clauses like (21a), it is possible to add in the oblique marker (underlined), as in (21b). This is possible for all speakers I have consulted and for some, it is strongly preferred (anticipating the passive analysis for (21b), I gloss *-on* as PSV).

(21)   a.   A   li   kremotike$_i$ mu   s-na'   [much'u$_i$ ta   sa'-on-ik].
Z TSO   TOP DET boys   NEG   ERG3-know who   ICP seek-AF-PL
                     'The boys$_i$ don't know who is looking for them$_i$.'

          b.   A   li   kremotike$_i$ mu   s-na'   [much'u$_i$ ta   sa'-on-ik   yu'un t$_i$].
                     TOP DET boys   NEG   ERG3-know who   ICP seek-PSV-PL by
                     'The boys$_i$ don't know who is looking for them$_i$.'
                     (lit: 'The boys don't know who they are being sought by.')

There are two analytical possibilities for (21b). One is that it is an AF clause and that AF clauses come in two varieties, one in which the agent is direct and one in which it is oblique. In this analysis, *-on* is always associated with A-extraction and there is some flexibility in how the arguments are licensed. The other is that it is a passive clause, i.e., that *-on* has been reanalyzed as a passive suffix, disassociated from A-extraction. In this analysis, (21b) is a passive, with extraction of the oblique agent.

The second analysis appears in fact to be the correct one, as *-on* has been extended to passive functions in Z Tsotsil and is no longer restricted to contexts of A-extraction. It occurs in plain passives:

(22)   a.   Ta sa'-on   *(yu'un) yajnil   li   Manvel-e.
Z TSO   ICP seek-PSV   OBL   his.wife DET   Manuel-ENC
                     'Manuel$_i$'s wife is looking for him$_i$' (lit: 'Manuel$_i$ is being looked for by his wife.')

          b.   I-ts'ites-on   *(yu'un) Petu'   li   Maruch-e.
                     CP-raise-PSV   OBL   Petrona   DET   Maria-ENC
                     'Petrona raised Maria' (lit: 'Maria was raised by Petrona.')

And it occurs in passives involving extraction of a non-agent ((23c) is a text example):

(23)   a.   Yu'un   chopol li   pox   i-'ak'-b-on   *(yu'un) li   Pablo-e.
Z TSO   because bad   DET liquor CP-give-APPL-PSV OBL   DET Pablo-ENC
                     'Because the corn liquor Pedro gave him was bad' = '...that he was given by Pedro...'

          b.   Li Maruch-e s-jak'   k'usi ora i-'il-on   *(yu'un) li   Petul-e.
                     DET Maria-ENC ERG3-ask what hour CP-see-PSV   OBL   DET Petul-ENC
                     'Maria$_i$ asked when Petul had seen her$_i$' = '... when she had been seen by Pedro.'

c.   ...ti   much'u vayem   ta=x-ta-on   yu'un ti   j'elek'-e.
        ...DET who   asleep ICP-find-PSV OBL   DET thief-ENC
        '[You are not like] the one who is found asleep by the thief.'
         (But you, brothers, are not in darkness, that this day should overtake you
        as a thief would.) {1 Thessalonians 5, 4}

In (22a,b) and (23a-c), the agent is not extracted and must be presented as oblique. Given the wide distribution of *-on* as a (pure) passive marker, there is no reason to think then that (21b) involves anything other than extraction of the oblique agent from a passive clause.

In Z Tsotsil then, *-on* occurs in two surface structures which share several core properties: morphosyntactic intransitivity, two arguments, and raising of the internal argument. They are distinct in their realization of the agent: in passives, the agent is realized as an oblique, but in AF it is realized as direct and obligatorily extracted. These features are summarized in Table 3:

	PASSIVE	AF
TRANSITIVITY	intransitive	intransitive
INTERNAL ARG	subject	subject
EXTERNAL ARG	oblique	direct, extracted
SUFFIX	*-on*	*-on*

Table 3: Properties of *-on* clauses in Z Tsotsil

Table 3 suggests the analysis I propose here: that AF clauses are a type of passive,[8] one which has the means to Case-license the external argument, but only if it is extracted. This could be implemented in a feature-checking framework by positing that the head which defines a passive clause optionally carries an unchecked feature associated with extraction. Following Stiebels (2006), whose analysis I build on here, I refer to this feature as [FOC]. This feature is *selectional* in the sense that that it requires that its specifier, the position of the external argument, be filled by a DP with a valued version of the same feature. The head and its specifier enter into an Agree relation which checks the feature on the head and in return Case-licenses the argument. In this respect, the FOC feature functions like a phi-feature. The [FOC] feature on the agent itself either directly or indirectly insures that it will be extracted; being Case-licensed through WH-agreement insures that it will surface as a direct argument. In Z Tsotsil, the head spells out as *-on*, as in (24):

(24) v_{PSV} => *-on*
        ([*u*FOC])

A plausible historical scenario is that the restricted distribution of AF clauses in Tsotsil triggered their reanalysis as passive. In order to reconcile the surface form of AF clauses with the passive analysis, special provision was required to account for the appearance of the extracted agent as a

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[8] An antecedent for this analysis is Laughlin (1975), which identifies *-on* as 'passive (3rd person subject and object)' (p. 26). Laughlin provides no examples or discussion, so it is unclear whether he has in mind AF clauses, transparent passives like (22)-(23), or both.

direct argument, rather than oblique. That provision is the capacity of the [FOC] feature to Case-license the agent.

What gives rise to the transparently passive structures in (21b), (22), and (23) is the fact that the [FOC] feature is only *optionally* associated with *-on* in the contemporary language. Consequently, *-on* is also the spell-out of a passive head without that feature. In that case, the clause is not limited to contexts of agent extraction and, correspondingly, the agent is not Case-licensed by the verbal head. It therefore requires oblique marking.

In identifying AF in Tsotsil with the *-on* passive, I am assuming then that there is a single passive suffix *-on* which occurs in two related structures, one which involves WH-agreement (AF clauses) and one which does not. Evidence for unifying the analysis of the two constructions comes from the fact that they are subject to the same restrictions, restrictions which in fact distinguish them from other passives in the language. In this respect, the situation is crucially different from that of Chamorro, where Chung (1998) shows that despite the use of the same morphology to mark passive and WH-agreement (with the internal argument), the two constructions are subject to different restrictions and are therefore syntactically distinct.

First, in contrast to canonical passives where the agent is an optional adjunct, the agent in *-on* passives is obligatory. Thus, agentless passives with *-e, -at* are standard and unproblematic, but speakers consistently reject or judge as degraded agentless passives in *-on*:[9]

(25) I-maj- $\left\{ \begin{matrix} \text{at} \\ \text{-e} \\ \text{*-on} \end{matrix} \right\}$ li Manvel-e.

ZTSO

   CP-hit-PSV   DET Manuel-ENC
   'Manuel was hit.'

This property is shared with AF clauses, where the agent must (by definition) be syntactically realized. Second, *-on* passives are restricted to clauses in which both arguments are 3rd person, just as AF clauses are. That the person of the agent is restricted is not surprising since this is true of all passives in the language (Aissen 1997). But the restriction of the internal argument to 3rd person is a feature which distinguishes *-on* passives from passives formed with *-e* and *-at*. As with AF verbs, *-on* passives cannot carry the absolutive markers that would be required if the internal argument were 1st or 2nd person.

(26)   L-i-tsak- $\left\{ \begin{matrix} \text{at} \\ \text{-e} \\ \text{*-on} \end{matrix} \right\}$ ta j'ik'al.

ZTSO

   CP-ABS1-grab-PSV   OBL spook
   'I was grabbed by a spook.'

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[9] I have identified a few text examples of agentless *-on* passives (cited in Aissen 1999:481). Such examples suggest there may be speaker variation on this point and that *-on* passives may be evolving to canonical ones.

These two properties then – the obligatory agent and the restriction to 3–3 clauses – support an analysis which unifies the two surface structures in which *-on* appears.

It remains to account for these properties and for the differences between passives formed with *-on* and those formed with the other suffixes. Here I can only sketch a possible approach. Starting with the fact that the agent in *-on* passives is obligatory, I assume, following others, that the external argument in canonical passives (those formed in Tsotsil with *-e, -at*) is existentially bound and that the optional agent phrase is an adjunct which serves to identify that argument. Then the distinction between canonical passives and *-on* passives is one of logical form: in *-on* passives, the external argument is not existentially bound, and therefore must be realized syntactically. This is independently necessary for AF. Hence if AF clauses are a special instance of *-on* passive, per (24), it follows that the agent must be obligatory in *-on* passives as well.

Locating the difference between passives formed with *-on* and those formed with the other suffixes in their logical form provides a way to approach the 3–3 restriction in *-on* passives. I suggested earlier that the person restriction in AF clauses emerges as a consequence of the fact that they compete with active transitives and are optimal only when the Obviation Principle (12) is violated by the corresponding transitive (Tableau 1). If we generalize this approach to all clauses involving *-on*, then *-on* passives too will be limited to clauses in which both arguments are 3rd person. This implies that *-on* clauses of both types exist only to remedy violations of (12), a prediction which needs further exploring, but seems to be on the right track. The fact that other passives are not similarly constrained must then be due to the fact that they do not compete directly with active transitives and would simply be close paraphrases of the corresponding actives. This would follow in a principled way from the assumption that only candidates with the same logical form belong to the same candidate set (Grimshaw 1997, Heck et al. 2002). Per the above discussion, *-on* passives (and AF clauses) are like active transitives in that they do not involve existential binding of the external argument, while passives formed with the other suffixes do.

3.3.2 AF in other dialects

In addition to Z Tsotsil, there are several other major dialect areas, including Chamula, Venustiano Carranza, Chenalho', and Huixtán. As noted earlier, *-on* does not appear to exist as an AF suffix (or a passive suffix) outside of Z Tsotsil. All other dialects use the historic passive suffix *-at* in contexts where Z Tsotsil uses the AF suffix *-on*. In some dialects (or for some speakers of some dialects), extraction of the external argument in an *aP* setting simply proceeds from a canonical passive clause, with the agent marked as oblique.

I have interviewed three Chamulan (C) speakers (from several different towns), and none of them uses the historic AF construction with *-on*.[10] Some say they recognize the construction, but they associate it with other dialects or with the neighboring language Tseltal (which is incorrect), others do not recognize it at all. These speakers instead use the passive suffix *-at* in AF contexts and they require the presence of the oblique enclitic *'o in* such cases:[11]

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[10] This is consistent with Robertson (1977), which reports that AF is not used in Chamulan Tsotsil.

[11] *'o* is used widely in Tsotsil to mark extracted obliques, generally ones interpreted as instrument, cause, or agent (Haviland 1981:132).

(27)   Buch'u i-tij-at   'o   a-me'-e?
C TSO who   CP-awaken-PSV OBL GEN2.mother-ENC
         'Who woke up your mother?' (lit: 'By whom was your mother awakened?')

The enclitic *'o* is obligatory in (27), indicating that the agent extracts as an oblique, not as a direct argument, i.e., (27) is a passive clause. It appears that these speakers have lost both the historic AF suffix *-on* and WH-Agreement, and the agent is realized as oblique.

      I have interviewed one speaker from Venustiano Carranza (V). For him, the agent in an *aP* setting extracts as an oblique flagged by the relational noun *yu'un*. Further, this speaker requires pied piping (with inversion) of *yu'un* (Aissen 1996).

(28)   Much'u   yu'un   maj-ot   te   tseb-e?
V TSO who   OBL   strike-PSV DET girl-ENC
         "Who hit the girl?' (lit: 'By whom was the girl hit?')

      However, in several other dialects, the characteristic features of AF persist, though they are found now in clauses headed by the historic passive suffix *-at*, not *-on*. Both Chenalhó (CH) Tsotsil and Huixtec (H) Tsotsil show this pattern.[12] These dialects all have the single passive suffix (*-at*) and when the agent is not extracted, it is realized as an oblique with *yu'un*.

(29)   I-mil-at   yu'un ti   Herodes-e
H TSO CP-kill-PSV OBL   DET   Herod-ENC
         'they were killed by Herod' {Matthew 2,15}

      When the agent *is* extracted, there are two patterns. When A is as topical as P (*Ap* and *ap* settings), extraction of A proceeds from a transitive clause. In (30a), A is human and P is inanimate (=*Ap*); in (30b), both A and P are human, but P is not-topical (=*Ap* or *ap*).

(30)   a.   Mu'yuk xa much'u ts-tij   arpa...
H TSO   NEG   CL who   ICP.ERG3-play harp
             'There will be none who play the harp...'   {Revelation 18,22}

        b.   ...ti   much'u-tik ch-k'uxubin-ik   yantik-e.
             DET who-PL   ICP.ERG3-pity-PL others-ENC
             '[blessed are] the merciful (lit: those who pity others).'   {Matthew 5,7 }

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[12] The Chenalho' data are from an on-line translation of the New Testament (NT). Data from Huixtec Tsotsil comes from work with two speakers and from the on-line translation of the NT. One could ask whether a translation of the NT is a reliable representation of Tsotsil (in any genre). In some respects, it is quite different. E.g., there are more instances of agent extraction in the translation than otherwise occur in Tsotsil (e.g. *he who, they who, those who* are all translated as headless relatives, with extraction). But this does not make the material irrelevant. What is relevant is this: once the agent is extracted, what morphosyntax is associated with that extraction? In fact, the morphosyntax varies between the AF form and the transitive form just as in forms of Tsotsil which are more authentic and this variation is conditioned by the same factors.

When P is more topical than A, i.e., in *aP* settings, extraction proceeds from a clause in which the verb is suffixed with *-at*. In (31a,b), A and P are both human, but P is the local topic (=*aP*).

(31) a. Mu'yuk boch'o ta=x-contrain-at tey.
CH TSO   NEG   who   ICP-join-AF   there
          'Nobody joined him there.'   {John 4, 44}

      b. . . . mu'yuk boch'o   xu' ch-poj-b-at.
          . . . NEG   who   can ICP-remove-APPL-AF
          '[Maria_i has chosen that good part], thus no one shall take it away from her_i.'
          {Luke 10,42}

At first glance, it looks like Chenalhó and Huixtec Tsotsil have simply lost AF, replacing it with passive, as in Chamula and Venustiano Carranza. It is true that these dialects have lost the historic AF formative *-on*, but they have retained the syntax associated with *-on*, i.e., WH-agreement with the agent, associating it now though with the historic passive suffix, *-at*. Thus, (32) from Z Tsotsil and (33) from Huixtec Tsotsil are equivalents:

(32) K'usi i-tij-on   ame'?
Z TSO what   CP-awaken-AF   your.mother
       'What woke your mother up?'

(33) K'usi i-tij-at   ame'?
H TSO what   CP-awaken-AF   your.mother
       'What woke your mother up?'

First, the agent in (31a,b) and (33) is extracted as a *direct* argument, not as an oblique (there is no oblique marker, e.g. *yu'un* or *'o* in those examples). This is only possible because the agent is extracted. When it is not extracted, as in (29), the agent must (if expressed) be oblique. Further, under this analysis, (31a,b) and (33) *are* AF clauses. Since AF clauses only arise through competition with transitives when the transitive would violate the Obviation Principle (Tableau 1), this construction should be possible only when both arguments are 3rd person. Again, the person of A is not at issue since passives in Tsotsil only permit 3rd person agents in any case. But since canonical passives occur with P's of any person, it is significant that in the Tsotsil of Chenalhó and Huixtán, realization of A as a direct argument in a passive clause is possible only if it is extracted and only if P is 3rd person. If P is 1st or 2nd person, the agent must be realized as oblique; omitting the oblique marker in (34) results in ungrammaticality.

(34) K'usi n-a-tij-at   *(yu'un)?
H TSO what   CP-ABS2-awaken-PSV   OBL
       'What woke you up?' (Lit: 'What were you woken up by?')

In short, in Chenalhó and Huixtec Tsotsil, the historic passive suffix *-at* has replaced *-on* in AF clauses.

(35) v_{PSV} => -*at*   (CH, H Tsotsil)
         ([FOC])

There are two features then which define AF clauses in Tsotsil: they have all the features of passive except that [i] the agent is an obligatory argument and [ii] it enters into WH-agreement with the voice head. The various dialects of Tsotsil differ along two dimensions: [1] whether they have retained WH-agreement in passive clauses; and [2] how the passive head with WH-agreement is pronounced. In Z Tsotsil it is spelled out by -*on*, in the other dialects, by -*at*. The extension of -*on* to passive clauses without agent extraction and the extension of -*at* to AF clauses suggests strongly that speakers identify AF with passive in this language.

4.   Conclusion

The loss of AF in some dialects of Tsotsil appears to have resulted from the reanalysis of AF as passive + WH-agreement, followed by loss of the WH-agreement option. The reanalysis of AF as passive in the first place presumably resulted from the fact that AF has close to the same distribution in clauses with agent extraction that passive has in clauses without it. This evolutionary scenario is shown in Table 4.

Stage 1	Restriction of AF to *aP* settings	all dialects of Tsotsil
Stage 2	Reanalysis of AF as passive + WH-agreement	all dialects of Tsotsil
Stage 3	Loss of WH-agreement (and therefore of AF)	Chamula, Venustiano Carranza, some speakers of Z Tsotsil.

Table 4: Evolution of AF in Tsotsil

Having lost AF in most contexts, but not all (Stage 1), Tsotsil is transitional between the Mayan languages that have AF constructions and those which do not. Some dialects retain an AF construction (those still at Stage 2), while others do not (those which have progressed to Stage 3). Given this variation, the language provides a model of how reanalysis of AF as passive can lead to its loss and as such, it might shed light on how AF was lost more widely in Mayan.

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