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## AGENT FOCUS AND INVERSE IN TZOTZIL

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Many Mayan languages use a special verb form, the AGENT FOCUS form, when extracting the subject of a transitive clause. These verbs have a cluster of properties that have resisted satisfactory analysis. This article suggests that in Tzotzil, agent focus verbs are INVERSE, in the sense of Algonquian linguistics, and that their distribution is determined by the relative OBLIVATION status of agent and patient. Evidence for the analysis comes from syntactic constraints on agent focus verbs and on their use in discourse. The properties of these verbs provide further evidence that obviation can play a central role in languages where it is not a morphological category.\*

INTRODUCTION. Some ergative languages restrict the extraction of transitive subjects (henceforth AGENTS), requiring that the clause be first detransitivized through demotion of the object. This demotion, known as ANTIPASSIVE, allows the agent to be extracted as intransitive subject. Such a strategy is found for example in Dyrbal (Dixon 1972).<sup>1</sup> In many Mayan languages, extraction of agents cannot proceed from a clause headed by a transitive verb (TV), but requires a special verb form, the so-called AGENT FOCUS verb (AF), which is morphologically intransitive yet semantically transitive (i.e. assigns two semantic roles). This is the case in Jakaltek (Craig 1977), Tz'utujil (Dayley 1985), K'iche' (Mondloch 1981, Larsen 1988), and Ixil (Ayres 1983), languages from three different branches of the Mayan family.<sup>2</sup> Some early discussions (Larsen & Norman 1979) interpreted the AF verb as an antipassive, and explicitly equated the Mayan case with that of Dyrbal. In some Mayan languages (e.g. Q'eqchi (Pinkerton 1978, Berinstein 1985), Mam (England 1983a:209ff), some dialects of K'iche' (Mondloch 1981: 223ff)), the patient is clearly demoted, and the antipassive analysis is warranted.

But the idea that all instances of AF could be analyzed as antipassive was quickly abandoned by most Mayanists because of work such as Ayres 1977, 1983, Craig 1979, Dayley 1985:348ff, Mondloch 1981:219ff, and Smith-Stark 1978, which showed that in a number of languages across the family (e.g. Ixil, Jakaltek, Tz'utujil, K'iche'), the patient is not or need not be visibly demoted in AF constructions.<sup>3</sup> Crucially, the patient can control agreement and often does control absolute agreement in preference to

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<sup>1</sup> I use AGENT roughly in the sense of 'proto-agent' (Dowty 1991) to refer to the nominal which is subject in a transitive or antipassive clause; conversely, PATIENT is used in the sense of 'proto-patient' and refers to the primary object in a (di)transitive clause (Dryer 1986), or the demoted nominal in an antipassive clause.

<sup>2</sup> See Kaufman 1974 for a classification of Mayan languages. He posits four main branches: Yucatecan, Huastecan, Western Mayan and Eastern Mayan. Western Mayan branches into Tzeltalan (which includes Tzotzil) and Q'anjob'alan (which includes Jakaltek). Eastern Mayan branches into Mamean (which includes Ixil and Mam) and K'ichean (which includes Tz'utujil, K'iche', and Q'eqchi).

<sup>3</sup> As early as 1978, Smith-Stark declared 'the Mayan antipassive dead and buried' (1978: 169).

the agent.<sup>4</sup> AF verbs with some or all of these properties (the link to agent extraction, morphological intransitivity, semantic transitivity, possibility of agreement control by the patient) are attested in the K'ichean, Mamean, and Q'anjob'alan branches of Mayan and, as we will see below, also in Tzeltalan.

Example 1 from Tz'utujil illustrates some of the properties under discussion. In Tz'utujil, AF verbs are derived by the suffixes *-o(w)* and *-(V)n*, reflexes of the two AF suffixes reconstructed in Smith-Stark 1978 for proto-Mayan. AF verbs are limited to a set of constructions in which the agent is fronted (including notably interrogative and focus), and they are generally obligatory in such cases.<sup>5</sup>

(1) Naq x-sok-ow-i?

WH CP-hurt-AF-TERM

'Who/what hurt him?'

(Dayley 1985:352)

The question in 1 must be understood with a definite pronominal patient, as well as an extracted agent. Thus the verb is semantically transitive. But unlike transitive verbs, which show ergative agreement with a transitive subject via so-called Set A prefixes, AF verbs never do. Like intransitive verbs, they bear only absolutive markers (from so-called Set B), and can agree with at most one nominal argument.<sup>6</sup> Nonetheless, the verb in 1 appears to govern both its arguments directly without mediating prepositions or abstract relational nouns of the sort that commonly express oblique relations in Mayan. Most important, the AF verb can agree with either the agent or the patient. In 2, where the agent is focused, agreement (bold) is consistently with the first person pronoun, whether it is agent (2a) or patient (2b).

(2) a. Inin x-**in**-ch'ey-ow-i.

I CP-**B1**SG-hit-AF-TERM

'I was the one who hit him.'

b. Jaa' x-**in**-ch'ey-ow-i.

he CP-**B1**SG-hit-AF-TERM

'He was the one who hit me.'

(Dayley 1985:349)

Note that the verb forms in 2 are identical, and I know of no evidence that 2a and b are syntactically different. If they are not, control of agreement in this construction is determined not by grammatical function, but by a person hierarchy, where first and second persons outrank third and third plural outranks third singular (Dayley 1985: 348ff). Agreement is similarly controlled in K'iche' (Mondloch 1981:219ff, Larsen 1988:505ff).

Although the demotion-based antipassive analysis is problematic for many instances

<sup>4</sup> This assumes that a demoted object cannot control absolutive agreement. See Davies & Sam-Colop 1990 for an antipassive analysis of the K'iche' construction which makes different assumptions.

<sup>5</sup> The abbreviations used in this article are: A1(2, 3): Set A, 1st person (etc.) marker; AF: agent focus; AGT: agentive; AUX: auxiliary; B1(2): Set B, 1st person (etc.) marker; CL: clitic; CP: completive aspect; DIR: directional; EMPH: emphatic; ENC: enclitic; ICP: incomplete aspect; IMP: imperative; IO: ditransitive suffix; NEG: negation; NT: neutral aspect; OCK: Laughlin 1977; OP: operator; PF: perfect aspect; PL: plural; PLEXC: plural exclusive; PLINC: plural inclusive; PSV: passive; Q: interrogative particle; RN: relational noun; SUBJ: subjunctive; TERM: phrase-final particle; TOP: topic; TV: (morphologically) transitive verb; WH: indefinite root. English material enclosed in square brackets does not correspond to anything overt in the original. Separate words corresponding to a single gloss are joined with =.

<sup>6</sup> The AF verb in 1 also carries the terminal marker *-i* which occurs phrase-finally only on intransitive verbs.

of Mayan AF, no satisfactory alternative has been widely accepted.<sup>7</sup> Recently, however, the idea that Mayan AF verbs might be INVERSE verbs, in the sense of Algonquian linguistics, has surfaced from two directions. Inverse systems involve a contrast between direct and inverse verbs, the distribution of which is determined by reference to some prominence hierarchy, typically person, animacy, or discourse prominence. Roughly, direct verbs are used when the subject outranks the object; inverse verbs are used when the object outranks the subject (Klaiman 1991, Givón 1994b). Inverse systems are often paired with an agreement system in which the control of agreement and its form are determined not by grammatical function, but by rank on a relevant prominence hierarchy. This is the case in a number of Tibeto-Burman languages (DeLancey 1980, 1981), and also in Nootkan (Whistler 1985) and Cherokee (Scancarelli 1987). In all these languages, for example, a first person controls agreement over third person, regardless of grammatical function, and (except for Cherokee) the first person induces the same form of agreement whether it is subject or object. The AF verbs of Tz'utujil and K'iche' show the same behavior. Based on this morphological parallel, Hale 1996 proposes that the K'iche' AF verb is an inverse. The defining property of inverse, however, is not this characteristic agreement, but the fact that the object outranks the subject along some dimension of prominence. Interestingly, Zavala 1997 observes that the AF construction in Akatek (Q'anjob'alan) is inverse-like in that the subject and object have topicality measures that approximate those found in inverse constructions, with the object discursively more prominent than the subject (on these measures, see the works cited in Givón 1994a).

The idea that (some) Mayan AF verbs are inverse deserves, I think, to be taken very seriously, but, in languages where the AF form is essentially obligatory under agent extraction, it is difficult to establish this analysis because the AF form occurs regardless of the relative prominence of subject and object. In such languages, the function of the AF verb is to mark agent extraction.<sup>8</sup> Nonetheless, I believe that the inverse analysis can be conclusively established for AF verbs in Tzotzil (Tzeltalan), and my aim in this paper is to establish it as firmly as possible.<sup>9</sup> Tzotzil differs from some other Mayan languages in that the AF form is not obligatory under agent extraction and, as a result, agents can be extracted from both AF and TV clauses (Haviland 1981:244, 273, Aissen 1993). Since the AF form does not function solely to mark agent extraction in Tzotzil, it is free to express other functions; my claim is that it expresses the inverse function. It turns out that even in languages where the AF verb functions to mark agent extraction,

<sup>7</sup> Several alternatives have been proposed in connection with K'iche'. Davies & Sam-Colop 1990 develops an antipassive analysis in terms of relational grammar; Larsen 1988 develops an account within government binding theory; and Trechsel 1993 develops a 'reversal' account within head-driven phrase structure grammar. In Trechsel's account, agreement is determined by grammatical function, not a person hierarchy.

<sup>8</sup> Why the AF verb, with its particular morphosyntactic properties, should be used to mark agent extraction is an interesting question. One possibility is that these are special agreement forms for extracted phrases. Special agreement can include suspension of usual agreement, as in Selayarese, where extraction of the object is marked by the absence of usual object agreement (Finer 1997), or Halkomelem Salish, where extraction of the subject is marked by the absence of usual subject agreement (Gerds 1988:82ff). This suggests a scenario for the Mayan AF form in which extraction of the transitive subject requires absence of Set A agreement, which in turn determines morphological intransitivity. Morphological intransitivity in the face of syntactic transitivity is presumably related to the fact that agreement with these verbs is indifferent to grammatical function, as noted above.

<sup>9</sup> There exists no focused study of the AF construction from Tzeltalan. Haviland 1981:272ff, 290 presents some of the basic facts for Tzotzil.

there are pockets where TVs are possible, and the location of these pockets suggests possible relevance of the inverse analysis (see §4).

In this analysis of the Tzotzil AF verb as an inverse, I continue an argument begun in Aissen 1997 about the role of *OBVIATION* in Tzotzil and a number of other languages. My claim here is that the AF verb in Tzotzil is an inverse along the dimension of obviation. Obviation systems involve the obligatory ranking of third person arguments according to prominence. Obviation is meaningful only in contexts with multiple third persons, and first and second person are entirely irrelevant to it. The basic function of obviation is to track third person referents. Obviation tends to be active in languages where other devices for tracking referents—overt pronouns, for example—are sparse. In Algonquian, obviation rank is indicated morphologically on nominals, it is relevant to the form of agreement, and it determines the distribution of direct and inverse verbs when both subject and object are third person (Bloomfield 1962, Frantz 1966, Hockett 1966, Wolfart 1973, LeSourd 1976, Grafstein 1981, Goddard 1984, 1990, Rhodes 1990, Dahlstrom 1991, 1995). On the basis of gaps in the distribution of active and passive, Aissen 1997 argues that obviation plays a central role in the grammar of Tzotzil, despite the absence of any nominal marking that registers this ranking, and the absence of any obvious inverse in the language. This article revises the latter conclusion. While it is true that there is no simple inverse verb, I argue that the AF verb is an inverse along the dimension of obviation, that is, it is used only when the object outranks the subject in obviation rank. In this it contrasts with TVs, which function essentially as direct verbs and occur elsewhere. Tzotzil AF verbs are subject to the further restriction that they occur only in clauses in which the agent is extracted. Once this restriction is taken into account, AF verbs in Tzotzil show striking parallels to better-established inverse verbs in other languages. Discussions of AF verbs in Mayan have often been framed in terms of ergativity, with constraints on the extraction of transitive subjects interpreted as evidence for its deeper relevance (Larsen & Norman 1979, England 1983b, Campana 1992, Dixon 1994:172). For Tzotzil, however, I would argue that obviation plays a much more significant role in the syntax than ergativity, and the sensitivity of the AF verb to obviation, not ergativity, supports this view.

Although this analysis pertains specifically to Tzotzil, it has wider implications. If a case for obviation can be made for even one language that lacks overt obviative marking in the nominal morphology, then the relevance of obviation to other languages without obviation morphology must be seriously considered. Aissen 1997 pointed out that syntactic obviation effects parallel to those documented for Tzotzil exist in a number of other languages. The material presented here should be seen then as part of a larger argument for the relevance of obviation in syntax.

**1. TZOTZIL AF VERBS.** The AF verb in Tzotzil is derived by suffixation of *-on*, one of the reconstructed proto-Mayan suffixes. Beyond this, I identify the Tzotzil construction with the Mayan AF construction because it has the recurrent properties mentioned above: it is associated formally and functionally with agent extraction, it is morphologically intransitive, and it is semantically transitive. The AF verb is restricted in Tzotzil to about five constructions all of which involve movement of the agent to a clause-initial, nonargument (A') position.<sup>10</sup> (Basic order in Tzotzil is VOS.) Three of these

<sup>10</sup> I use the terminology of movement, e.g. *EXTRACTION*, *TRACE*. Nothing crucial hinges on this. The results in this article are compatible with a variety of techniques for describing filler-gap dependencies.

constructions involve the fronting of a WH element.<sup>11</sup> As the examples in 3 illustrate, WH can be interpreted with varying quantificational force depending on syntactic context: as interrogative, as in 3a, as indefinite, as in 3b, and as ‘free-choice’ WH-ever, as in 3c.<sup>12</sup> (In all the examples, both the AF verb and the fronted element that licenses it are boldface.)

- (3) a. **Buch’u i-kolta-on** li tzeb-e?  
 WH CP-help-AF the girl-ENC  
 ‘Who helped the girl?’
- b. Oy onox **much’u ch-kolta-on** li Xun-e.  
 ∃ CL WH ICP-help-AF the Juan-ENC  
 ‘There must be someone to help Juan.’
- c. **Much’u-[u]k** nox **kolta-on-uk** li Xun-e.  
 WH-SUBJ just help-AF-SUBJ the Juan-ENC  
 ‘Just anyone can help Juan.’

AF verbs also occur in relative clauses, which may involve a fronted WH element, but are more commonly formed with a null operator (as in 4a) or one identical to the definite article. Finally, the AF verb can occur in the focus construction (Aissen 1992), which involves a fronted nominal, as in 4b.

- (4) a. Ja’ **li vinik li’ kolta-on** li Xun-e.  
 EMPH the man here help-AF the Juan-ENC  
 ‘That’s the man that helped Juan.’
- b. **S-vixtak i-kolta-on.**  
 A3-sisters CP-help-AF  
 ‘It was her sisters who helped her.’

As in the other Mayan languages, (active) AF forms do not occur except under agent extraction.<sup>13</sup>

- (5) a. \***I-kolta-on** tzeb li Xun-e.  
 CP-help-AF girl the Juan-ENC  
 ‘Juan helped a/the girl.’
- b. ??A li Xune, **i-kolta-on** li tzeb-e.  
 TOP the Juan-ENC CP-help-AF the girl-ENC  
 ‘Juan helped the girl, the girl helped Juan.’
- c. ??**I-kolta-on** li tzeb-e.  
 CP-help-AF the girl-ENC  
 ‘The girl was helped (by him/her), he/she/someone helped the girl.’

The question why AF verbs are restricted to clauses with agent extraction in Tzotzil is an important one, but one not addressed here. For present purposes, I assume that (active) AF verbs in Tzotzil are subject to a licensing condition restricting them to clauses in which the subject position is filled by an A'-bound trace.

<sup>11</sup> There are three WH roots, distinguished by sort: *buch’u/much’u* for humans, *k’u(si)* for nonhumans, and *bu(y)* for situations.

<sup>12</sup> See Aissen 1996 for discussion of focus, interrogatives, and free-choice WH structures. In that work, I assume that interrogatives occupy spec-C, and that focus and free-choice WH occupy spec-I. In unpublished work, I have argued that WH is interpreted as indefinite when it is c-commanded by an operator like the existential *oy*, one of the negative operators, and a few others. I assume that indefinite-interpreted WH adjoins to a verbal projection.

<sup>13</sup> Verbs with the same morphological structure as AF verbs also occur in a passive construction in Tzotzil. The relation between these and AF verbs will be discussed in a separate paper.

The AF verb in Tzotzil is morphologically intransitive. Like other Mayan languages, Tzotzil is a head-marking language with an ergative agreement system. Transitive verbs differ from intransitive ones in that they always carry a Set A (ergative) prefix. As in other Mayan languages, the AF verb in Tzotzil cannot be inflected with a Set A prefix. Furthermore, AF verbs in Tzotzil form the subjunctive like other intransitive stems, with the suffix *-uk*. (Transitive stems form the subjunctive with  $\emptyset$ .) The subjunctive occurs in the auxiliary construction (Haviland 1981:330, Aissen 1994), in free-choice *WH*-ever clauses (Aissen 1996), and it expresses irrealis in some contexts. AF subjunctives occur in all these contexts under agent extraction. See examples 67, 3c and 22c, 40b and 43b below.

While Tzotzil AF verbs pattern morphologically with other intransitive stems, they differ in one important respect: they cannot be inflected with an overt Set B (absolutive) marker. An overt Set B marker would be expected in agreement with a first and second person argument (there is no overt Set B marker for third person).<sup>14</sup> The impossibility of such inflection is related to the fact that the AF construction is limited in Tzotzil to clauses with two third-person arguments (Haviland 1981:272). Consider the question in 6a. It can be answered with the focus construction in 6b using the AF verb if the agent is third person. But it cannot be answered using the AF verb if the agent is first or second person, as in 6c,d (compare with Tz'utujil 2a). This is so whether the AF verb carries the appropriate agreement or not.

- (6) a. **-Buch'u i-maj-on** li Petul-e?  
       WH CP-hit-AF the Pedro-ENC  
       'Who hit Pedro?'
- b. **-J-bankil i-maj-on.**  
       A1-eld.bro. CP-hit-AF  
       'It was my older brother that hit him.'
- c. **-\*Vo'on l-i-maj-on /i-maj-on.**  
       me CP-B1-hit-AF/CP-hit-AF  
       'It was me that hit him.'
- d. **-\*Vo'ot l-a-maj-on /i-maj-on.**  
       you CP-B2-hit-AF/CP-hit-AF  
       'It was you that hit him.'

The answers in 6c,d can be expressed by replacing the AF verb by the appropriate TV form, which always carries a Set A (ergative) prefix:

- (7) a. Vo'on i-j-maj.  
       me CP-A1-hit.  
       'It was me that hit him.'
- b. Vo'ot a-maj.  
       you CP-A2-hit  
       'It was you that hit him.'

Likewise, although the AF verb can be used with a third person object, as in 8a, it cannot be used if the object is first or second person. An AF verb inflected to agree

<sup>14</sup> In many Mayan languages, the AF verb can be inflected (via a Set B affix) to agree with a first or second person argument (cf. 2a,b from Tz'utujil). However person-based constraints on the AF construction are common (Smith-Stark 1978). Jakalteq, for example, disallows it if the agent is non-third person; K'iche' disallows it if both agent and patient are non-third person (Mondloch 1981:231).

with such an object is simply ill formed (see 8b,c and compare with Tz'utujil 2b).<sup>15</sup> The TV is used to express the desired reading (see 8b,c).<sup>16</sup>

- (8) a. Mu xa **buch'u x-mak'lan-on.**  
 NEG CL WH NT-feed-AF  
 'There's no one to support him.' (Laughlin 1975:227)
- b. Mu j-na' **much'u** l-i-y-ik' /\***l-i-'ik'-on** ech'el.  
 NEG A1-know who CP-B1-A3-carry/CP-B1-carry-AF DIR  
 'I don't know who carried me off.'
- c. Oy **much'u** ch-a-s-sa' /\***ch-a-sa'-on.**  
 ∃ WH ICP-B2-A3-see/ICP-B2-see-AF  
 'Someone is looking for you.'

I will suggest below that the absence of overt Set B (absolutive) inflection on AF verbs in Tzotzil reflects a syntactic restriction which permits AF verbs only in clauses with third person agent and patient.

Despite their morphological intransitivity, there are two reasons to think that Tzotzil AF verbs are transitive (i.e. govern two direct arguments, subject and object). The first is that both agent and patient occur without special marking, that is, unmediated by prepositions or relational nouns. In Tzotzil, subject and object (both primary and secondary) are the only arguments that are not syntactically oblique.

The second reason is control of plural agreement. Although AF verbs show no overt Set A (ergative) or Set B (absolutive) inflection, they can be inflected with the plural suffix *-ik*. This suffix is neutral to grammatical function and is found on both transitive and intransitive predicates in Tzotzil marking the plurality of transitive subjects, intransitive subjects, and transitive objects (Haviland 1981:296ff, Aissen 1987:48–49). With the exception noted in n. 18, control of plural agreement on predicates is limited to core grammatical relations, that is, subjects and primary objects (final 1s and 2s in the earlier relational analyses of Aissen 1987).<sup>17</sup> Relevant here is that either agent or patient can control plural agreement on AF verbs. Control by the patient is robust; control by the agent is more marked, but is readily available. Examples 9a and 10a show control by the agent; 9b and 10b show control by the patient. In the former case, the controller is the fronted element that licenses the AF verb; in the latter, it is not. (The controllers of plural agreement are bold in the English translation.)

- (9) a. **S-kremotik ch-'ik'-b-on-ik** ech'el.  
 A3-boys ICP-take-IO-AF-PL DIR  
 'It's **his sons** who are taking him to him [e.g. to the doctor].'
- b. Li kremotik-e<sub>i</sub> mu s-na'-ik **much'u ik'-on-ik** pro<sub>i</sub> ech'el.  
 the boys-ENC NEG A3-know-PL who take-AF-PL DIR  
 'The boys<sub>i</sub> don't know who took **them<sub>i</sub>** away.'

<sup>15</sup> The uninflected AF verb would be well formed in 8b,c, but the resulting sentences can only be understood with third person objects.

<sup>16</sup> Text examples showing the TV form in this configuration are not uncommon, e.g.:

(i) Mi o buch'u n-a-y-il, mi o buch'u n-a-s-k'el  
 Q ∃ WH CP-B2-A3-see Q ∃ WH CP-B2-A3-watch

If there were somebody who saw you, if there were somebody who watched you (OCK 287)

<sup>17</sup> John Haviland has also pointed out to me cases like *ok'ob-ik to* (tomorrow-PL CL) 'see y'all tomorrow', and *tana-ik to me* (today-PL CL CL) 'see y'all later' where adverbs not in predicate function appear to agree with a speech act participant. If the assertion in the text is restricted to predicate agreement (and with the qualifications of n. 18), I think it stands.



(10) a. **S-vixtak i-kolta-on-ik.**

A3-sisters CP-help-AF-PL

'It was **her<sub>i</sub> sisters** who helped her<sub>i</sub>.'b. A li tzebetik-e<sub>i</sub>, mu s-na' **much'u i-kolta-on-ik** pro<sub>i</sub>.

TOP the girls-ENC NEG A3-know WH CP-help-AF-PL

'The girls don't know who rescued **them**.'

The capacity of both agent and patient to control plural agreement on AF verbs suggests that they bear core syntactic relations in the clause. I assume then that Tzotzil AF verbs are syntactically transitive, but morphologically intransitive.<sup>18</sup>

Agreement is quite impoverished on AF verbs in Tzotzil. But it is sufficient to demonstrate an indifference to grammatical function like that discussed earlier in connection with inverse verbs. While plural agreement can be controlled by either the subject or the object in AF clauses, this is not the case in TV clauses when both subject and object are third person. In that case, only the subject can control plural agreement; control by the object is excluded.<sup>19</sup> Hence 9 and 10 parallel the Tz'utujil examples 2a and b, where control of agreement is determined not by grammatical function but by rank on a hierarchy of features (here: plural > singular).

In its basic properties, the AF verb in Tzotzil resembles that in other Mayan languages: it has the same defining properties, and shows variation in line with previously established parameters. With this as background, I turn to some of the differences.

The most striking one is that the AF verb is not obligatory in Tzotzil. Agent extraction can proceed from a TV clause, and thus 11 coexists with 3a (= *buch'u ikoltaon li tzebe?* 'Who helped (AF) the girl?'). Note that 11 is ambiguous since it can also be

<sup>18</sup> One might try to avoid this conclusion by analyzing AF clauses as antipassive, with a demoted patient, but this analysis is not motivated internal to Tzotzil and it would run counter to what is known about the function of antipassive. Tzotzil has some constructions with demoted patients (2-chomeurs in the earlier relational analysis of Aissen 1987), but these are all found in ditransitive clauses. In the terms of Dryer 1986, these are clauses with primary and secondary objects, with the patient functioning as secondary object. But AF clauses are generally not ditransitive (though they have ditransitive versions; see 67 and Appendix 1, ex. 5). Further, with one exception, the secondary object in ditransitive clauses does not control plural agreement (Aissen 1987:107). The exception is POSSESSOR ASCENSION, where the possessed nominal (secondary object) can, under certain circumstances, control plural agreement (Aissen 1987:131). But the patient in AF clauses is a robust controller of plural agreement, and these clauses do not usually involve possessor ascension (though they can, again see 67 and Appendix 1, ex. 5).

Analyzing AF clauses as antipassive is also implausible from a crosslinguistic functional perspective. Antipassive involves demotion of the patient, and when it is triggered by considerations of prominence, it is associated with a patient low in prominence (Heath 1976, Cooreman 1987, Givón 1994b). But it will become clear in what follows that AF clauses are used for agent extraction in Tzotzil only when the patient is more prominent than the agent along dimensions like definiteness, humanness, and topicality. Another function of antipassive is to make the subject accessible to syntactic processes which target absolutive arguments (Heath 1976, Dixon 1994:147ff). But this is clearly not the function of AF in Tzotzil, since subjects can be extracted from TV clauses. For these reasons, the antipassive analysis of Tzotzil AF clauses seems to me an un insightful way to understand the apparent mismatch between syntactic valence and morphological intransitivity that characterizes these clauses.

<sup>19</sup> The exact nature of the restriction is unclear, but it has been noted by a number of researchers. The chart of Laughlin 1975:25 suggests that third person objects never control plural agreement in Zinacantec Tzotzil. According to the charts of Bricker 1977:21–24, agreement with a third person object in the presence of a third person subject is excluded, unless the clause is in perfect aspect or subjunctive mood. Cowan 1969:69 states that third person objects control plural agreement in Huastec Tzotzil only when the subject is first person singular. Most of the speakers I have questioned about this consistently reject control of plural agreement by third person objects in transitive clauses with third person subjects.

interpreted as involving object extraction. Haviland 1981:260, 244 cites the examples in 12 as ambiguous between agent and patient extraction.

- (11) Buch'u i-s-kolta li tzeb-e?  
 WH CP-A3-help the girl-ENC  
 'Who helped the girl?' *also* 'Who did the girl help?'  
 (12) a. Buch'u i-y-ak'-be takin?  
 WH CP-A3-give-IO money  
 'Who gave him money?' *also* 'Who did he give money to?'  
 b. Buch'u i-s-mil li Petul-e?  
 WH CP-A3-kill the Pedro-ENC  
 'Who killed Pedro?' *also* 'Who did Pedro kill?'

There are also text examples showing agent extraction from transitive clauses (and see Appendix 2).

- (13) a. Pero buch'u s-tam?  
 but WH A3-take  
 'But who took it?' (OCK 353)  
 b. Na'-tik buch'u y-elk'an-oj.  
 know-1PL WH A3-steal-PF  
 'Who knows who stole it.' (*Lit.* 'we know who stole it') (OCK 215)

While some agent extractions can proceed from either construction, this is not always the case. Agent extraction is possible from the AF clause in 14a, but not the TV clause; it is possible from the TV clause in 14b, but not the AF clause.<sup>20</sup>

- (14) a. **K'usi i-ti'-on** /\*i-s-ti'/?  
 WH CP-eat-AF/CP-A3-eat  
 'What bit him?'  
 \* *version grammatical with the meaning* 'what did he eat?'  
 b. **Buch'u s-pas** /\***pas-on** mantal?  
 WH A3-make/make-AF order  
 'Who's giving the orders?'

Furthermore, even when both TV and AF verb are accepted in elicitation, there are usually clear preferences revealed in the distribution of the two forms in texts, and in the way speakers choose to translate into Tzotzil. The purpose of this article is to explicate the conditions under which each form occurs. I believe that the major factor determining the distribution of TV and AF verbs under agent extraction is the relative prominence of subject and object: the AF form requires that the object be more prominent than the subject; the TV form requires roughly the opposite (§2). In this sense, the TV and AF verbs are like the direct and inverse verbs of Algonquian. Per Aissen 1997, I believe that prominence in Tzotzil is structured through obviation; the analysis presented below is explicated in those terms, though less formally than in the earlier paper.

Obviation refers to a system of prominence that ranks third persons. The highest ranked is called the PROXIMATE and lower-ranked third persons are called OBLVIATIVES. Obviation is best known from the Algonquian languages, where rank is overtly marked both in the nominal and verbal morphology: obviatives bear an overt suffix not borne by proximates, and verb agreement distinguishes proximates from obviatives. Obviation

<sup>20</sup> The transitive stem *ti'*, which occurs in 14a and other examples, is translated 'eat' with human subjects and 'bite' with nonhuman subjects.

is also found in Kutenai (Dryer 1992, 1994, 1996), and perhaps also in Nootkan (Whistler 1985), Cherokee (Scancarelli 1987), and Athapaskan (Thompson 1989, Klaiman 1991), among others (these are all Native American languages). In most of these languages, prominence is partly determined by syntactic properties (e.g. genitives generally outrank their heads), partly by semantic properties (e.g. humans generally outrank non-humans), and partly by discourse-pragmatic properties (Givón 1994b). Aissen 1997 argues that obviation is relevant in Tzotzil as well. In Tzotzil, obviation is not overtly marked in the nominal morphology, but it is relevant to the distribution of certain verb forms. To understand how this works, consider the association between semantic roles and obviation status sketched in Figure 1.

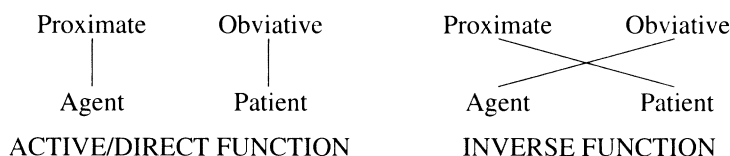


FIGURE 1. Active and inverse functions.

The unmarked association (left) links the agent to proximate and the patient to obviative; the marked association (right) links the patient to proximate and the agent to obviative. These two associations correspond to what Cooreman 1987 and Givón 1994b term the ACTIVE/DIRECT and INVERSE FUNCTIONS, applied to the dimension of obviation. (Alignment of semantic role with other dimensions like person also yields direct and inverse functions. In Tzotzil, only alignment with the dimension of obviation is relevant.) The active/direct function is realized in Tzotzil by an active, transitive verb (TV) and in Algonquian by the direct form of the verb. The inverse function has (at least) two realizations crosslinguistically, diagrammed in Figure 2:

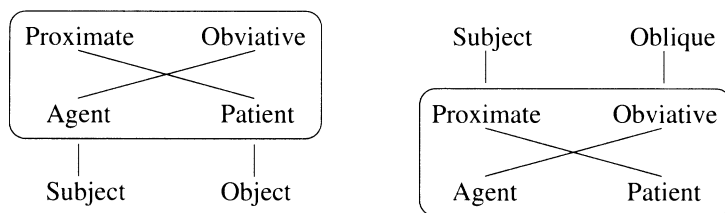


FIGURE 2. Realization of the inverse function.

Each of the two schemas in Fig. 2 shows associations among three kinds of elements: semantic roles, grammatical relations, and obviation rank.<sup>21</sup> Granted that the inverse association of semantic roles and obviation rank is marked, there are two ways to realize it in the syntax, both of which are unmarked. The agent can associate to subject and the patient to object, yielding the unmarked association between semantic roles and grammatical relations (left). The result is an active, inverse clause. Or the proximate

<sup>21</sup> In Aissen 1997:741, these associations were represented differently, with grammatical relations mediating between the other two. No theoretical significance should be attached to this graphic difference. All three sets of relations are in correspondence, and this is awkward to represent two-dimensionally. Choice of representation is determined by the point at issue. Here, the point is how inverse alignment of semantic roles with obviation rank is expressed crosslinguistically.

can link to subject and the obviative to passive agent, yielding the unmarked association between obviation rank and grammatical relations (right). The result is a passive clause. Algonquian languages like Fox and Plains Cree realize inverse function through the inverse clause (Dahlstrom 1991, 1995), while Tzotzil generally realizes it through the passive (Aissen 1997).

Although Tzotzil lacks a plain inverse verb, my claim is that the AF verb is an inverse, that is, it realizes the inverse function via active syntax, per the lefthand schema in Fig. 2. Since the AF verb occurs only under agent extraction in Tzotzil, the inverse function can be realized through inverse syntax, rather than through passive, only in clauses where the agent has been extracted. The distribution of passive and AF (inverse) clauses is shown in Table 1.<sup>22</sup>

	DIRECT/ACTIVE FUNCTION	INVERSE FUNCTION
Clauses w/o agent extraction	TV clause	Passive clause
Clauses with agent extraction	TV clause	Inverse (AF) clause

TABLE 1. Realization of direct and inverse function in Tzotzil.

2. **OBVIATION.** Following Aissen 1997, I assume that there is a dimension of linguistic representation called the **OBVIATION TIER**, which is organized into **OBVIATION SPANS**. There is a small set of relations involved in the description of an obviation span. These relations have the names proximate, obviative<sub>1</sub>, obviative<sub>2</sub>, . . . , where proximate > obviative<sub>1</sub>, obviative<sub>1</sub> > obviative<sub>2</sub>, etc. I assume that an obviation span contains at most one proximate, one obviative<sub>1</sub>, and so on. This is consistent with descriptions which claim that within a span, there is only a single proximate third person but possibly several obviatives. Multiple obviatives play no role in this article.

Important here is the assumption that each third person nominal in a sentence bears an obviation relation to an obviation span, and further that only third person nominals bear relations to obviation spans, that is, obviation is relevant only to third persons. The linkage between nominals and relations in an obviation span is represented here by association lines as in 15; obviation spans are enclosed in square brackets.

(15) [Proximate    Obviative]  
       |            |  
       she    saw    it

Restrictions on association to the obviation tier may be universal or language-particular. There are two important universal restrictions: the first is the size of an obviation span. It appears that an obviation span can be indefinitely large, covering, for example, a sentence, or a paragraph, or even several paragraphs. It cannot, however, be smaller than a clause. The second restriction is that within an obviation span, nominals that are presupposed coreferential must link to the same relation of obviation. As a result, an obviation span corresponds to a particular association of discourse referents with relations of obviation. This property makes obviation a suitable device for tracking reference, and the structuring of narrative into obviation spans has clear stylistic effects involving cohesion and point of view (Goddard 1984, 1990, Whistler 1985, Dryer 1994).

In Algonquian, transitive verbs generally have two forms, direct and inverse. The

<sup>22</sup> Table 1 is misleading in one respect: it suggests that passive and AF verbs are in complementary distribution in Tzotzil. They are not. Agent extraction is possible from passive clauses as well as from AF clauses in Tzotzil.

direct form is used when the subject outranks the object on a composite hierarchy formed by merging the person hierarchy and the obviation hierarchy. The inverse form is used when the object outranks the subject (the local persons are first and second).

- (16) PERSON/OBVIATION HIERARCHY: local person > 3rd proximate > 3rd obviative

In a clause with third person subject and first person object, for example, the inverse form is obligatory. In Tzotzil, the choice between TV and AF verbs arises only when both subject and object are third person: first and second person fall entirely outside the system in which TV and AF verb contrast. The distribution of the two forms is determined by the obviation hierarchy.

- (17) OBVIATION HIERARCHY: proximate > obviative

The AF verb occurs only when the primary object outranks the subject on the obviation hierarchy.<sup>23</sup> Since this condition can be satisfied only when both arguments are third person, the AF verb is automatically limited to clauses with two third person arguments. The TV form occurs only when the primary object does not outrank the subject on the obviation hierarchy. The TV condition is satisfied when the subject outranks the primary object and also when one or both of the two arguments is first or second person. In the latter case, the two arguments are not ranked on the hierarchy in 17, and the object cannot outrank the subject.

- (18) a. The AF verb heads clause  $\alpha$  only (i) if the primary object in  $\alpha$  outranks the subject in  $\alpha$  on the obviation hierarchy; and (ii) if the subject in  $\alpha$  is an A'-bound trace.  
 b. The TV heads clause  $\alpha$  only when the primary object in  $\alpha$  does not outrank the subject in  $\alpha$  on the obviation hierarchy.

Condition 18a(i) explains what appears at first to be a rather odd restriction on AF verbs: they can be used only when subject and object are both third-person (see 6–9 above). Condition 18a(i) does not stipulate that AF verbs be restricted by the person of its arguments. But since the object can outrank the subject in obviation only when both are ranked with respect to obviation, and since the relations of obviation are relevant only to third persons, that condition automatically limits the AF verb to clauses with two third-person arguments.

### 3. ANIMACY AND DEFINITENESS

**3.1. ASSOCIATION WITH OBVIATION RANK.** Animacy and definiteness play an important role in transitivity, and therefore in such phenomena as case marking and agreement, voice and direction, direction being the category in which direct and inverse are oppositions (Givón 1976, Keenan 1976, Silverstein 1976, Comrie 1979, Hopper & Thompson 1980, Croft 1990, and others). In general, humans are attracted to relations (or positions) of structural prominence over nonhumans, and definites over indefinites. In most languages subject is structurally more prominent than nonsubject, hence the crosslinguistic tendency, realized in various ways, for definite, human nominals to be chosen as subjects over indefinite, nonhuman ones. The relations of obviation are also structural relations, which associate similarly with animacy and definiteness. In both Fox and Kutenai, for example, humans are selected over inanimates as proximates, and usually over nonhuman animals as well (Dryer 1992, 1994, Dahlstrom 1995). In Tzotzil, at least three

<sup>23</sup> The primary object in a monotransitive clause is the direct object; the primary object in a ditransitive clause is the indirect object (Dryer 1986).

factors play a role in determining obviation status: humanness, definiteness, and individuation (I use INDIVIDUATION to pick out such properties as singular, concrete and specific as opposed to plural, mass, abstract, and nonspecific).

- (19) In Tzotzil
- a. expressions denoting humans outrank those denoting nonhumans in obviation status;
  - b. definite expressions outrank indefinite ones in obviation status;
  - c. expressions with the property of individuation outrank those without it.

In contexts with two third-person nominals, the two compete for status as proximate. Where one outranks the other on all three axes, there is no question about which will be proximate and which obviative, but where each nominal outranks the other on some axis or axes, the competition between the two has to be resolved. It is clear that neither humanness nor definiteness is sufficient by itself to guarantee proximate status. With respect to the material discussed here, the ranking in 20 provides the basis for determining proximate assignment.

- (20) definite human  
 individuated (indefinite) human  
 definite nonhuman  
 individuated (indefinite) nonhuman  
 nonindividuated (human or nonhuman)

The likelihood of being assigned proximate status over a competing coargument must be determined on a pairwise basis. Of two nominals competing for proximate status, the nominal higher in 20 is preferred. When there is significant distance between the two nominals, the choice is predetermined, and the speaker has no choice in the matter. When they are close (i.e. adjacent), the choice is less categorical, and there will generally be two options.<sup>24</sup> These ideas are stated in 21. Assume two coarguments,  $\alpha$  and  $\beta$ , and assume that  $\alpha$  outranks  $\beta$  when  $\alpha$  is higher in 20 than  $\beta$ .

- (21) a. If  $\alpha$  outranks  $\beta$  and is nonadjacent to  $\beta$ , then  $\alpha$  is assigned proximate and  $\beta$  obviative.  
 b. If  $\alpha$  outranks  $\beta$  and is adjacent to  $\beta$ , then either may be assigned proximate, but  $\alpha$  is the preferred proximate.

These principles, coupled with the ranking in 20 and the verb licensing conditions in 18, permit us to predict quite closely the distribution of TV and AF verbs under agent extraction. I will not consider all possible cases here, but will discuss some important ones, starting with cases in which agent and patient are significantly separated along the axes of both humanness and definiteness.

Since the relative definiteness of agent and patient seems to be one of the important variables here, and since the agent is always extracted in the sentences we will be looking at, these data provide evidence about the definiteness of traces left by various types of extraction. Although it is not yet possible to draw fine-grained conclusions, current data suggest that the traces bound by interrogative WH, indefinite WH, and free-choice WH are less definite than those bound by relative and focus operators. This bifurcation is in line with previous work such as Morgan 1972, Carlson 1977, Basri & Finer 1987, and Heim 1987. Accordingly, I will assume that traces of the first three

<sup>24</sup> On the idea that there are some rigid conditions on the determination of obviation rank, but that outside of these, there is a space within which obviation rank is flexible and can be used to stylistic ends, see, e.g. Goddard 1984, 1990, Dahlstrom 1991, 1995, Dryer 1994.

types are indeed indefinite as far as 20 is concerned, and that gaps of the last two types are definite.

**3.2. TV VS. AF IN AGENT EXTRACTION.** From the above discussion, it follows that agent extraction from an AF clause should be possible when the object significantly outranks the subject on the hierarchy in 20. The object will have prior claim on proximate status, and this will yield a configuration in which the licensing conditions for the AF verb are satisfied. Extraction from the TV clause should be ungrammatical under these conditions. Elicited data is discussed in this section, and textual data in the next.

RANK 4 SUBJECT/RANK 1 OBJECT

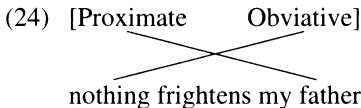
Take first the case in which the subject (agent) is nonhuman and indefinite (rank 4), and the object (patient) is human and definite (rank 1). Here humanness and definiteness have a clear effect: agent extraction is possible only from the AF clause whether the construction involves interrogative WH (see 22a), indefinite WH (see 22b), or free-choice WH (see 22c). (See also examples 7 and 15 in Appendix 1.)

- (22) a. **K'usi ti'-on?**  
 WH eat-AF  
 'What bit him?'
- b. Mu'yuk **k'usi sibtas-on** li j-tot-e.  
 NEG.∃ WH frighten-AF the A1-father-ENC  
 'Nothing frightens my father.'
- c. **K'us-uk nox tij-on-uk** li j-malal-e.  
 WH-SUBJ just shake-AF-SUBJ the A1-husband-ENC  
 'Just anything wakes my husband.'

The examples in 23 show the TV forms corresponding to 22a-c. Except for 23b, which is semantically peculiar, these are fully grammatical, but none can be interpreted with agent extraction. They all have patient extraction readings.

- (23) a. K'usi i-s-ti'?
- what CP-A3-eat  
 'What did he eat?'/\*'What bit him?'
- b. ?Mu'yuk k'usi i-s-sibtas li j-tot-e.  
 NEG.∃ WH CP-A3-frighten the A1-father-ENC  
 '?My father didn't frighten anything.'
- c. K'us-uk nox s-tij li j-malal-e.  
 WH-SUBJ just A3-play the A1-husband-ENC  
 'My husband can play anything (instrument) at all.'

These facts follow from earlier assumptions. The hierarchy in 20 and the principles in 21 require that the definite human patient be proximate and the indefinite, nonhuman agent be obviative.



Assuming active syntax, the object will outrank the subject in obviation status. Per 18, the AF should be possible and the TV impossible. The facts in 22 and 23 confirm this.

It is important to see that the distribution of AF and TV forms cannot be stated directly in terms of definiteness and humanness. In particular, a clause with nonhuman subject and human object is not excluded per se from TV clauses. Examples like those in 25 with first and second person objects are fully grammatical.

- (25) a. K'usi l-a-s-ti'?  
 what CP-B2-A3-eat  
 'What bit you?'  
 b. Te nan k'usi l-i-s-maj.  
 there CL WH CP-B1-A3-hit  
 'Something must have hit me.'

The problem arises only when both subject and object are third person. But it is a property of obviation systems that they rank only third persons. Hence, if we see the human/definiteness effects in 22–23 as mediated by obviation, we narrow the domain of these effects precisely to clauses with third person coarguments.

RANK 1 OR 2 SUBJECT/RANK 4 OR 5 OBJECT

Following the reasoning above, agent extraction from a TV clause should be possible when the subject significantly outranks the object on the hierarchy in 20. This is because the subject will be assigned proximate over the object, resulting in a configuration that satisfies the conditions for TVs, but not AF verbs.

Consider then a clause in which the subject is human and definite (rank 1), and the object nonhuman and indefinite, or nonspecific (rank 4 or 5). Exx. 26 and 27 contain relative clauses, since the requisite WH agent is definite in this case. Here, agent extraction is possible only with a TV, not an AF verb. The AF versions are completely unacceptable.

- (26) Ba jak'-b-o li vinik x-chon/\*chon-on paxak'-e!  
 go ask-IO-IMP the man A3-sell/\*sell-AF pineapple-ENC  
 'Go ask the man who's selling pineapple!'  
 (27) Li antz ta s-sa' /\*tza'-on j-mes-na-e, i-s-ta jun.  
 the woman ICP A3-see/\*ICP.see-AF AGT-sweep-house-ENC CP-A3-find one  
 'The woman who was looking for a house cleaner found one.'

This is as predicted. Assignment to the obviation tier yields the configuration in 28, one which is compatible with the TV but not the AF form.

- (28) [Proximate Obviative]  
 | |  
 the man who's selling pineapple

Even if the subject is a human-referring indefinite (rank 2) and the object is nonreferential (rank 5), the two nominals are far enough apart on the hierarchy in 20 that only the subject can be proximate. Again, the only possibility is the TV (the TV versions correspond to text examples 4, 9 in Appendix 2; the AF versions were checked with speakers).

- (29) Mu yu'unuk o buch'u tal s-k'an/?k'an-on parte.  
 NEG ∃ WH come A3-ask/ask-AF side  
 'No one came to make an accusation.'  
 (30) Buch'u s-pas /\*pas-on mantal?  
 WH A3-make/make-AF order  
 'Who's giving the orders?'

ADJACENT-RANK SUBJECT AND OBJECT

In cases where the coarguments competing for proximate status are close in rank, the distribution of TV and AF forms is less rigid. Consider 31 and 32, where prominence factors are distributed between the two arguments. The subject is human but indefinite (rank 2); the object is definite but nonhuman (rank 3). Speakers systematically translate such examples with TV forms, but readily accept AF verbs as well. Thus, extraction



from both clause types is possible. (Exx. 31 and 32 involve embedded interrogatives, where the agent is indefinite, but individuated.)

- (31) Lisjak'be **much'u** ox ch-[y]-ich'/**ch'-ich'-on** tal li kantala-e.  
 he.asked.me WH CL ICP-A3-carry/ICP-carry-AF DIR the candle-ENC  
 'He asked me who was going to bring the candles.'
- (32) Mu jna'tik **much'u** i-s-meltzan/**i-meltzan-on** li na li'-e.  
 NEG we.know WH CP-A3-make/CP-make-AF the house this-ENC  
 'We don't know who built this house.'

The possibility of either verb form means that either subject or object can be chosen as proximate, this being a function of their closeness in rank with respect to 20. Choice of the subject yields the TV; choice of the object yields the AF verb. But a preference for the TV form is predicted, since the subject outranks the object on the hierarchy in 20. This preference appears to be reflected in the behavior of speakers, whose first translations of sentences like these use the TV.

By making the subject both human and definite, the possibility of the AF form in examples like 31–32 can be entirely suppressed. By moving to a relative clause, the WH agent becomes definite and human. Now, only the TV form is possible (cf. 32).

- (33) Much'u li **vinik** i-s-meltzan/\***meltzan-on** li na li'-e?  
 WH the man CP-A3-make/\*make-AF the house this-ENC  
 'Who is the man who built this house?'

Thus, increasing the rank distance between subject (rank 1) and object (rank 3) is sufficient to force assignment of proximate status to the subject, yielding a configuration that is incompatible with the AF verb.

Earlier, I cited 3a/11 (collapsed in 34) as evidence that agent extraction could proceed in some cases from either the AF or TV clause. This example, as well as all those cited in Haviland 1981, also involves nominals at adjacent ranks: a human, indefinite subject (rank 2) and a human, definite object (rank 1). The ranking in 20 and the principles in 21 predict the possibility of both forms. Examples 35 and 36 have the same property and allow agent extraction from either the AF or the TV clause.<sup>25</sup>

- (34) **Buch'u i-kolta-on** /i-s-kolta li tzeb-e?  
 WH CP-help-AF /CP-A3-help the girl-ENC  
 'Who helped the girl?'
- (35) Mu'yuk **much'u-k x-k'el-on** /s-k'el lek li k'oxetik-e.  
 NEG.∃ WH-SUBJ NT-watch-AF/A3-watch well the children-ENC  
 'Not just anyone can take good care of children.'
- (36) Mu'yuk **much'u i-man-b-on** /i-s-man-be y-ixim li Xun-e.  
 NEG.∃ WH CP-buy-IO-AF/CP-A3-buy-IO A3-corn the Juan-ENC  
 'Nobody bought corn from Juan.'

The principles in 21 predict the possibility of both TV and AF forms here, but they also predict a preference for the AF form, which will be confirmed in the textual examples shortly.

The results are similar with nonhumans at adjacent ranks. Examples like 37–38 involve a nonhuman and indefinite subject (rank 4) and a nonhuman and definite object (rank 3). Speakers accept both TV and AF forms:

<sup>25</sup> TV versions of at least 34 and 36 are ambiguous and can also be interpreted with object extraction, 'who did the girl help?', 'Juan didn't buy corn from anyone'. Ex. 35 seems to lack the object extraction reading.

- (37) **K'usi i-vok'-on** /i-s-vok' li ventana-e?  
 WH CP-break-AF/CP-A3-break the window-ENC  
 'What broke the window?'  
 (38) **K'usi i-'ixtalan-on** /i-y-ixtalan li te'-e?  
 WH CP-wreck-AF /CP-A3-wreck the tree-ENC  
 'What wrecked the tree?'

These results are expected, since proximate status may be assigned to either subject or object by 21. Assignment of proximate to object yields the AF form; assignment to subject yields the TV form. The object however, is the preferred proximate, and this predicts a preference for the AF form. This prediction is consistent with two facts: first, the translations that speakers offer for such sentences contain the AF form, and second, the two attested textual examples both use the AF form. One example is cited as 39 (see also 9 in Appendix 1).

- (39) **K'usi xu' x-tam-on** li jbek'ettike?  
 WH can NT-take-AF the our.meat  
 'What could take our meat?' (OCK 225)

The data presented above, all collected through elicitation, suggest that the choice between AF and TV forms under agent extraction is determined by a fairly fine-grained comparison of the semantic-pragmatic features of subject and object. The ranking in 20 and the principles in 21 predict not only what choices exist, but the preference for one form over another when both are available. These preferences are generally confirmed by the way speakers choose to translate Spanish examples. They are also confirmed by textual data. Table 2 draws on a corpus of 32 examples involving agent

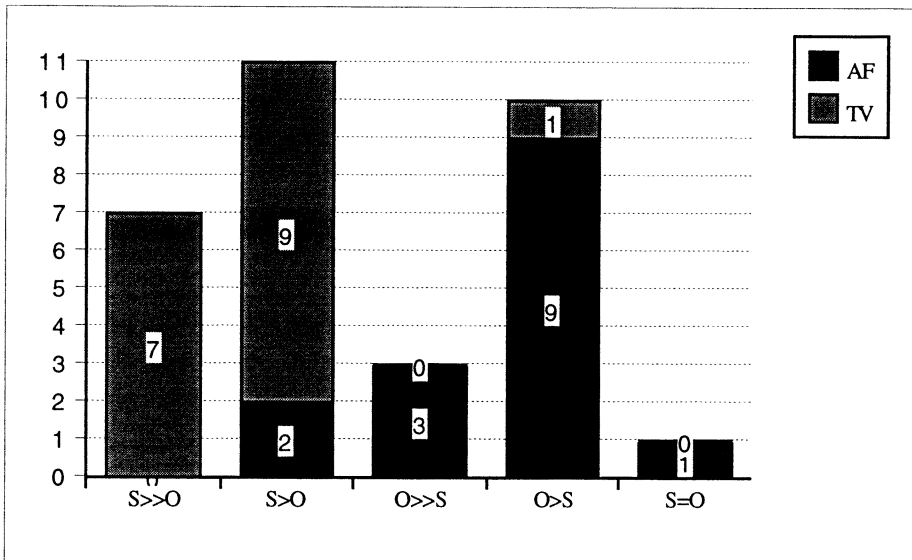


TABLE 2. AF vs. TV by relative prominence of S and O.

extraction (15 AF and 17 TV examples). The AF examples are the total number of textual examples I have located; the 17 TV examples were randomly chosen, and appear to be representative.<sup>26</sup> The full corpus is provided in the appendices. Table 2 shows

<sup>26</sup> AF verbs are not frequent in textual material. But this does not mean that they are marginal. The intuitions of native speakers about the use of these forms are robust, and are consistent with the attested

the distribution of AF and TV forms according to relative prominence of agent and patient, where  $\alpha > \beta$  means that  $\alpha$  outranks  $\beta$  on the scale in 20, and  $\alpha \gg \beta$  means that  $\alpha$  outranks  $\beta$ ,  $\alpha$  not adjacent to  $\beta$ , again, on the scale in 20. When subject and object are not adjacent in rank ( $S \gg O$ ,  $O \gg S$ ), only one form occurs: the TV form, when subject outranks object, and the AF form when object outranks subject. When subject and object are adjacent in rank ( $S > O$ ,  $O > S$ ), both TV and AF forms occur, but the numbers indicate clear preferences. When the subject outranks the object, the TV form occurs 9 times out of 11; when the object outranks the subject, the AF form occurs 9 times out of 10. The ranking in 20 and the principles in 21 are supported then by elicited data, and corroborated by textual data. Both types of data show sensitivity to the preferences predicted by the principles in 21.

In the next section the alternation of AF and TV forms is made more salient by examples showing how these forms function in textual material. Given the clear preferences for particular forms, contexts in which speakers use the dispreferred forms will be of particular interest.

**3.3. AF VS. TV VERBS IN DISCOURSE.** In languages with a well-established direct/inverse opposition, the inverse has a characteristic use in discourse: it is used when the current patient is more prominent than the current agent. Prominence is partly a function of inherent semantic features like animacy, and partly a function of discourse prominence, which involves notions like topicality.<sup>27</sup> The inverse occurs in the following excerpt from Fox, discussed in Goddard 1990, where Black Rainbow is topic. (Obviation rank of third person participants is indicated in parentheses (following Goddard), and the verb translated by an inverse is boldface.)

‘... and then another time, Black Rainbow (P) went hunting and killed a deer (O). As he (P) was butchering it (O), some Sioux (O) **rushed out at him** (P), a lot of them (O) ...’

Use of the inverse here indicates that the patient refers back to the current topic, Black Rainbow.

Table 3 shows the distribution of AF and TV forms in clauses with agent extraction according to the definiteness of the object (patient). (This is based on the same corpus as Table 2, given in the appendices.) There is no special association between the TV verb and object definiteness, but the AF verb shows a very strong association: in all 15 AF examples from texts, the object is definite. It is a null definite pronoun in 13 of the 15 examples, implying that its referent is prominent enough to be recoverable without lexical mention. Furthermore, the subject is almost always indefinite: 14 of the 15 examples involve indefinite agents (interrogatives, indefinites, or free-choice WH), agents which do not correspond to any already established discourse referent, and which in general do not persist into subsequent discourse.<sup>28</sup> Hence, the patient is almost certain to be more topical than the agent, since it is part of previous discourse, and

examples, as elaborated below. AF verbs occur exactly as often as the conditions which license them (inverse function plus agent focus) are satisfied.

<sup>27</sup> More specifically, the inverse is used when the patient is proximate and the agent obviative. Dryer 1994 shows that the factor that best predicts whether the direct or the inverse form will occur in Kutenai is the obviation status of the current patient in the immediately preceding discourse: if it is proximate, the inverse is favored; if it is obviative, the direct is favored. As long as the current patient is in the same obviation span as the previous mention, this observation follows from the assumptions made here.

<sup>28</sup> Nonpersistence of the agent is related to the fact that in texts, the AF form is frequently associated with an irrealis interpretation, which entails that no referent exists (in the actual world) which satisfies the bound variable corresponding to agent. This interpretation results when WH is in the scope of negation or the irrealis operator (the latter is realized through the subjunctive form of the verb). See examples in Appendix 1.

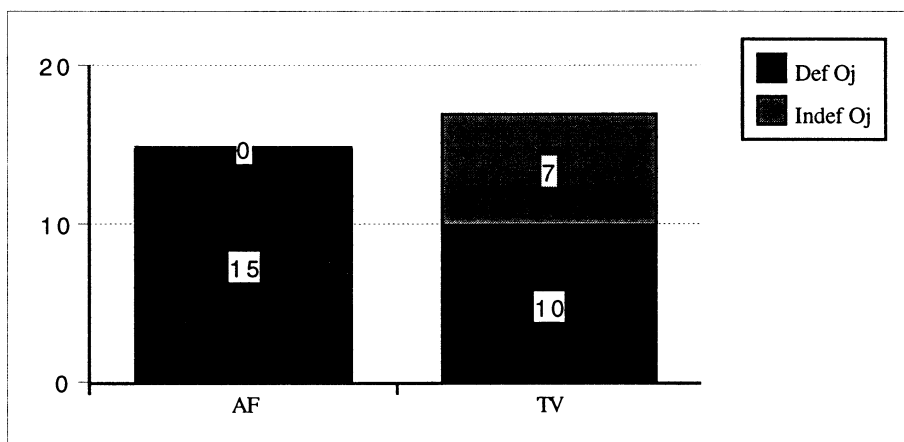


TABLE 3. AF vs. TV by definiteness of O.

may persist into subsequent discourse.<sup>29</sup> In most cases, it is clear that the patient in AF examples is not only more topical than the agent, it is also the local topic. Consider 40, about the murder of a woman:

- (40) a. ¶‘There’s a dead woman over there’, said the magistrate, ‘Because I came by, next to the barbed wire fence. A woman is lying there! She was stabbed with a knife in her throat or her chest I think’, he said. ‘But **who killed her?** We aren’t killed for doing nothing at all. There’s something wrong’, said the magistrate. (OCK 230)

- b. Pero buch’u x-mil-on?  
 but WH NT-kill-AF  
 ‘But who killed her?’

The murdered woman is one of the main characters in this narrative (which starts several pages earlier, ‘Once there was a woman’), and she is the local topic as well. As in the Fox example, use of the AF verb in 40b indicates that the object refers back to the topic, and the woman is thus unambiguously identified as patient. Use of the TV instead would indicate that the SUBJECT referred back to the topic, and 40b would be interpreted to mean, ‘but who did she kill?’, with the woman understood as agent.

While the AF form is strongly associated with a definite object, Table 3 suggests that a definite object is not strongly associated with the AF form (AF and TV forms occur in similar numbers when the object is definite). But if we neutralize the role of animacy in the choice between the two forms, the presence of a definite object strongly favors the AF form. Table 4 shows how AF and TV verbs are distributed in textual examples with definite objects sorted by the relative humanness of subject and object. The first bar shows that when subject and object are balanced in humanness ( $S = O$  @ human), definiteness of the object emerges as criterial and is almost always sufficient to guarantee the AF form (10 AF verbs to 1 TV). Most of the examples (8 of 10) involve human agent and patient, as in 40, but the same preference may hold for nonhuman agent and patient (2 examples of 10, see 39).

It is worth considering the one case in which the TV form is used with an indefinite

<sup>29</sup> This presupposes a notion of topicality like that proposed in Givón 1983, where topicality is measured by distance from previous mention and by persistence.

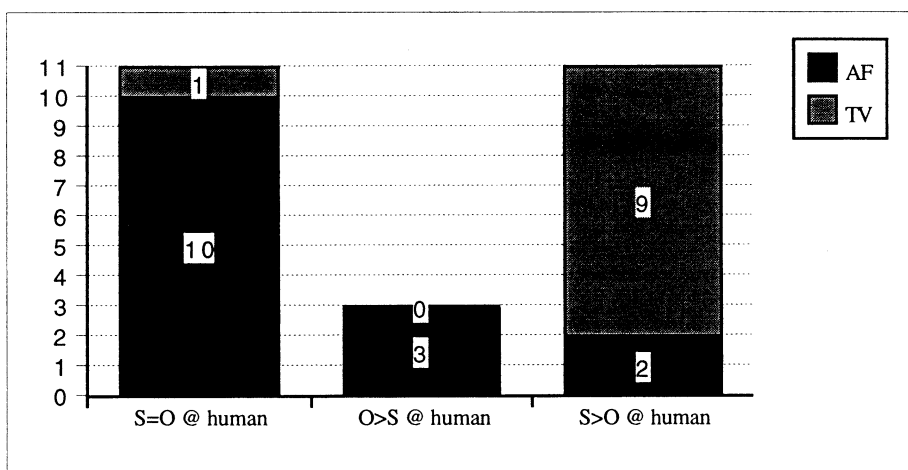


TABLE 4. AF vs. TV by humanness of S and O (definite objects only).

agent/definite patient, both human. The example occurs in a text about a man and his wife; the wife is mourning the death of her mother-in-law.

- (41) a. They were kind to her. The lady was fine now. She grew strong. She picked up and diverted her daughter-in-law's child. She carried her daughter-in-law's child for her, her first child, it seems [the child] of that boy. Because the lady's husband had died. When her husband was dead, she took the part of father and mother for her daughter-in-law and her son. When she died the girl was brokenhearted over her mother-in-law's death. **'Now there is no one to hold my child.** Now there is no one to bring up my little girl. My little girl is still so young', said the woman when her mother-in-law died. (OCK 169)

- b. Mu xa buch'u s-pet k-ol un.  
NEG CL WH A3-hold A1-child ENC

'Now there is no one to hold my child.'

Although the object in 41b (*kol* 'my child') is definite and human, the TV form is used. Clauses parallel to 41b occur in the next sentence ('now there is no one to bring up my little girl') and four more times in the next four paragraphs ('there's no one to carry my child', 'there is no one to carry them for me', 'now there is no one to hold our children for me', 'there's no one to bring them up for me'). All six examples use the TV verb.<sup>30</sup> Why? The most significant factor is probably that while *kol* 'my child' is definite, its referent is not the current topic, which is the mother-in-law. Note that in 41b, the object is not pronominal, but lexical. Beyond this, although the WH subject (*mu*) *buch'u* 'no one' is indefinite, all these formulas evoke both earlier and subsequent clauses in which expressions denoting the mother-in-law function as subject ('she picked up and diverted her daughter-in-law's child', 'she carried her daughter-in-law's child', 'she took my children for me'). Some prominence thus accrues to the indefinite in 41b by virtue of its parallelism with the actual topic, the mother-in-law. The use of the TV in 41b works then to suppress the discourse prominence of the daughter-in-

<sup>30</sup> Only the first was included in the text corpus, since inclusion of all would have skewed the results in a way that appears atypical judging from the rest of the examples.

law's child, while maintaining that of the mother-in-law. This is a case where use of the licit but marked option has clear stylistic function.

While definiteness plays an important role in determining choice of TV or AF verb in agent extraction, animacy plays a stronger role. This becomes clear when we consider examples in which subject and object are not balanced in humanness. Humans are preferred as proximates over nonhumans, regardless of definiteness. Consider the discourse in 42, where the patient is present in the preceding discourse, but the agent is not.

- (42) a. There were heaps of meat, beef, mutton, chicken left there. **As for the chicken, is there anyone who would eat it like that?** Cooked in lard in a frying pan! (OCK 171)
- b. A li kaxlan-e mi'n o buch'u yech s-ti'?  
 TOP the chicken-ENC Q ∃ WH thus A3-eat  
 'As for the chicken, is there anyone who would eat it like that?'

The chicken is highly topical here; in fact, it is the syntactic topic in 42b. And the human agent could not be less topical. Nonetheless, the nontopical (indefinite) human is chosen as proximate over the topical nonhuman, as shown by the TV form *sti'* rather

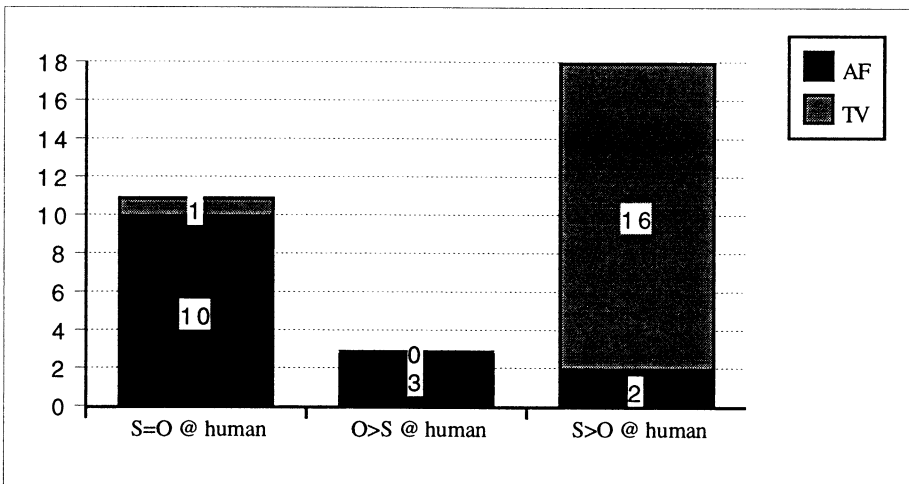


TABLE 5. AF vs. TV by humanness of S and O (all examples).

than the AF form. Table 5 shows how AF and TV verbs are distributed in all textual examples according to the relative humanness of subject and object. The rightmost bar indicates that the TV form is strongly preferred when the subject is human and the object nonhuman ( $S > O @ \text{human}$ ), regardless of definiteness (16 TV versus 2 AF). In 9 of the 16 TV examples, the patient is definite, and in all 9, it is a null pronoun, sufficiently topical to be recoverable without lexical material. Nonetheless, it loses to an indefinite human in obviation status.

What about the two examples in which the AF verb is used? I have no light to shed on one case, cited as 10 in Appendix 1. In the other case, 43, the patient refers to a woman's head:

- (43) a. [Her head] bounced. It landed and perched on his shoulder. It landed there. Now he had two heads. The man had two heads. 'Eh, but this is no good at all', he said. He prayed to Our Lord. 'My Lord, but why is

this? This is terrible. If the other one sticks on I'll have two faces!' said the man. 'One a woman's, the other a man's, it seems. That is too awful', he said. 'What can I do about this? What?' he said. 'If Our Lord would only do [me] a favor. **If there were something, if there were something, if only there were someone who would take it away**, make it go, have it thrown away', he said. (OCK 333)

b. U k'usi, u k'usi ok buch'u tam-on-uk ech'el-e.

∃ WH ∃ WH ∃.SUBJ WH take-AF-SUBJ DIR-ENC

'If there were something, if there were something, if only there were someone who would take it away.'

Two factors favor the use of the AF verb here. The first is that the referent of the patient is a human body part, hence plausibly more humanlike than an animal or inanimate. If the woman's head is assimilated to the human category, the AF verb is the preferred form. That it is so assimilated is suggested by the fact that earlier in this text, the man converses with the woman's head, with both parties speaking.<sup>31</sup> Use of the AF form here over the TV form might be seen then as reinforcing the conceptualization of the woman's head as humanlike, rather than being predetermined by it. The other factor favoring the AF verb is that 43b involves some kind of reduction, with the AF verb serving as predicate not only to the extracted human agent *buch'u* 'who, someone', but also to an extracted nonhuman agent *k'usi* 'what, something'. The AF form is the only licit form in the latter case if the woman's head is classified as human. Even if it is classified as nonhuman, the AF form would be the preferred one.

Taking into account the limitation of Tzotzil AF verbs to contexts of agent extraction, the distribution of TV and AF verbs in discourse parallels that described for direct and inverse verbs in languages like Fox (Goddard 1990, Dahlstrom 1995) and Kutenai (Dryer 1994). In all three languages, animacy is the single most important factor in determining assignment to proximate. Where the choice between inverse and direct (AF and TV) is not predetermined semantically, the choice may function stylistically to maintain or suppress the discourse prominence of the patient relative to the agent, and to convey qualities that are linked to prominence, like humanness.

4. COREFERENCE. AS noted earlier, reference tracking is an important crosslinguistic function of obviation. Within an obviation span, two nominals have the same obviation status if and only if they are presupposed coreferential. Thus, discourse can be seen as 'chunked' into obviation spans, with each obviation span corresponding to a particular association of discourse referents with relations of obviation. Between sentences, speakers always have the option of initiating a new obviation span, with this choice linked to topicality, point of view, cohesion, and so forth. But within a sentence, there are strong constraints on where one obviation span can end, and a new one begin. I proposed in Aissen 1997, and assume here, that universally, coarguments within a clause associate to the same obviation span; as do coarguments within a nominal. Further, under certain conditions (see below), arguments within a matrix clause and a complement clause must associate to the same obviation span. The combined effect of these size restrictors on obviation spans and the principle in 44 is that coreference limits the assignment of

<sup>31</sup> Hockett 1966:62 notes the possibility in Algonquian of assimilating an inanimate noun to the animate category when it 'takes on the power of speaking or of being addressed . . . or in any other way is assigned powers usually associated with people, animals, and spirits'. Thanks to Stuart Robinson for bringing this passage to my attention.

nominals to relations of obviation, and this in turn limits the distribution of AF and TV forms.

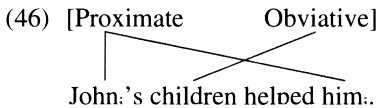
- (44) Distinct nominals bear the same relation in an obviation span if and only if they are presupposed coreferential.

Combining 44 with the analysis proposed here for TV and AF verbs in Tzotzil yields the expectation that the choice between AF and TV verbs under agent extraction may in some cases be determined by coreference relations within or across clauses. This section shows that this is correct: in some cases, the AF verb is the only possibility, while in others, only the TV verb is possible. The obviation-based analysis of AF and TV verbs extends naturally to these cases, and unifies them with cases in which the choice between AF and TV verbs is determined by definiteness and humanness.

#### 4.1. COREFERENCE WITHIN CLAUSES

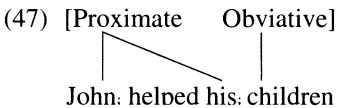
**4.1.1. GENITIVE OUTRANKS HEAD.** It is well established in Algonquian linguistics that genitives outrank their heads in obviation status (Hockett 1966). This is visible in Algonquian, where nominals are marked for obviation, and also holds in Kutenai (Dryer 1992). In Tzotzil, obviation status is not marked in the nominal morphology, but Aissen 1997 argues that the same principle is operative and can be detected through its syntactic effects. This principle is stated in 45.

(45) A third person genitive outranks its head in obviation status (Gen > Head). Together, 44 and 45 predetermine obviation rank in two configurations; the first is when the agent is possessed, and its genitive is coreferential with the patient, for example, in a clause like ‘John<sub>i</sub>’s children helped him<sub>i</sub>’.



By 45, proximate status is forced on the genitive and, by 44, on the patient as well. This leaves obviative status for the agent. Thus, 46 involves the inverse function, for the patient outranks the agent (see Fig. 1). In Algonquian, examples like these require inverse verbs (Wolfart 1973:25, Rhodes 1993); in Tzotzil, a proposition of the form 46 cannot be expressed in active voice, but must be passivized (see Aissen 1997 for discussion).

There are similar but opposite effects in clauses like ‘John<sub>i</sub> helped his<sub>i</sub> children’, where the patient is possessed, and its genitive is coreferential with the agent (I refer to this construction as EXTENDED REFLEXIVE).



Here, 45 forces proximate status on the genitive pronoun, and 44 forces it on the coreferential agent. This leaves obviative status for the object. The result involves the direct/active function. In Algonquian, propositions like 47 require DIRECT verbs (Rhodes 1993); in Tzotzil, this proposition can be expressed in the active, but not in the passive (Aissen 1997).

**4.1.2. GENITIVES AND AGENT EXTRACTION.** If it is true that the configuration in 46 is inverse, then it should be possible to realize it in Tzotzil through an AF clause, if the



agent is extracted. This is true. The focus examples 48b and 49b are felicitous replies to questions 48a and 49a.

- (48) a. **K'usi ti'-on?**  
 WH bite-AF  
 'What bit him?'  
 b. **S-tz'i' nox i-ti'-on.**  
 A3-dog just CP-bite-AF  
 'It was just his own dog that bit him.'
- (49) a. Li Maruch-e, **much'u i-kolta-on** ta s-kuch-el li si'-e?  
 the Maria-ENC WH CP-help-AF TO A3-carry-PSV the wood-ENC  
 'Maria, who helped her carry the firewood?'  
 b. **S-vixtak i-kolta-on.**  
 A3-sisters CP-help-AF  
 'It was her<sub>i</sub> sisters who helped her<sub>i</sub>.'

Since this configuration is inverse, the TV should be excluded, and this is also correct. Examples 50 and 51 are grammatical, but not with the readings of 48b and 49b:

- (50) S-tz'i' i-s-ti'.  
 A3-dog CP-A3-bite  
 'It was his<sub>i</sub> dog that he<sub>i</sub> ate.' *not* 'It was his<sub>i</sub> dog that bit him<sub>i</sub>.'
- (51) S-vixtak i-s-kolta.  
 A3-sisters CP-A3-help  
 'It was her<sub>i</sub> sisters that she<sub>i</sub> helped.' *not* 'It was her<sub>i</sub> sisters that helped her<sub>i</sub>.'

The options are reversed in extended reflexive clauses. Here, the subject necessarily outranks the object in obviation status (see 47), and this predicts that if the agent is extracted, the TV should be possible and the AF clause impossible. This prediction proves true: agent extraction is possible from a TV clause, and the AF version is completely ungrammatical. This holds for interrogatives (see 52), indefinite WH (see 53), and relative clauses (see 54).

- (52) **Buch'u i-y-ik' /\*ik'-on** s-primo?  
 WH CP-A3-marry/marry-AF A3-cousin  
 'Who married his own cousin?'  
 (53) Mu'yuk **much'u i-s-tam /\*tam-on** s-tuk'.  
 NEG.∃ WH CP-A3-grab/grab-AF A3-rifle  
 'Nobody grabbed his own rifle.'  
 (54) Much'u **li tzeb** [i-y-ut /\*i'-ut-on s-tot]-e?  
 WH the girl CP-A3-scold /CP-SCOLD-AF A3-father-ENC  
 'Who is the girl<sub>i</sub> that scolded her<sub>i</sub> father?'

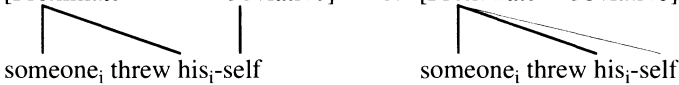
The impossibility of the AF form here is important because it shows that AF verbs are not simply unconstrained, and therefore compatible with the inverse configuration in 46. They are also incompatible with the direct configuration of 47.

**4.1.3. REFLEXIVE CLAUSES.** AF forms are also excluded under agent extraction from reflexive clauses. Only the TV form occurs, and this appears to hold for the full range of WH constructions, illustrated here for indefinite WH (55, 56), relative clauses (57), and free-choice WH (58).

- (55) Oy **much'u i-s-jip /\*i-jip-on** s-ba ta vo'.  
 ∃ WH CP-A3-throw/CP-throw-AF A3-self in water  
 'Someone threw himself into the water.'

- (56) Ch'abal **much'u** x-[y]-il /\*x-'il-on s-ba ta ak'ubaltik.  
 NEG.∃ WH NT-A3-see/NT-see-AF A3-self at night  
 'No one can see himself in the dark.'
- (57) Li maextra-e ta x-[y]-ut o **li tzeb** [i-s-bon /\*i-bon-on  
 the teacher-ENC ICP-A3-scold CL the girl CP-A3-paint/CP-paint-AF  
 s-ba]-e.  
 A3-self-ENC  
 'The teacher scolded the girl who had made herself up.'
- (58) **K'us-uk** nox **navul** s-moch /\*moch-on-uk s-ba ta j-vorxa.  
 WH-SUBJ just thread A3-tangle/tangle-AF-SUBJ A3-self in A1-pocket  
 'Any thread gets tangled in my pocket.'

Reflexive clauses (with coreference between agent and patient) are syntactically transitive in Tzotzil, with the reflexive anaphor structurally a possessed noun that functions as direct object (Aissen 1987). The head of the possessed noun is *-ba* 'head', and it is its possessor that is actually coindexed with the subject. Regardless of what assumptions one makes, it is hard to see how this configuration could ever license the AF verb, which requires that the object outrank the subject in obviation status. If the genitive and head are both assigned distinct relations on the obviation tier, as in 59a, then by Gen > Head (see 45), the genitive must be proximate and the head obviative.

- (59) a. [Proximate Obviative] b. [Proximate Obviative]  


By virtue of coreference, the subject will also be proximate, thereby outranking the object, and the conditions for the AF (inverse) will not be satisfied. Alternatively, it is plausible that the head of the reflexive nominal is not assigned a distinct obviation status since it has no referent distinct from that of its genitive. It might have no obviation status, or it might have the same obviation status as the genitive, as indicated by the thin association line in 59b. In either case, the object again fails to outrank the subject in obviation status, and the clause does not satisfy the licensing conditions for the AF verb. The inverse analysis of the AF verb thus provides an elegant account of its nonoccurrence in reflexive and extended reflexive clauses.

The impossibility of the AF form in reflexive and extended reflexive clauses in Tzotzil is reminiscent of restrictions on AF verbs in other Mayan languages, and suggests that the account proposed here might shed light on the proper analysis of those verbs. In general, the requirement that the AF verb occur under agent extraction obscures effects that could be due to obviation. Reflexive and extended reflexive clauses, however, constitute one large class of recurrent exceptions to generalizations about AF and TV verbs in Mayan. The general pattern is that even where AF is otherwise obligatory, it is excluded or optional in reflexive clauses and sometimes in extended reflexive clauses as well. My own research in Tz'utujil suggests that the AF form is optional in reflexive clauses, but obligatory everywhere else. In Jakaltek, the AF form is optional in extended reflexive clauses, excluded in reflexive clauses, but obligatory elsewhere (Craig 1977:217ff). In K'iche', it is excluded in both reflexive and extended reflexive clauses, but strongly preferred elsewhere (Mondloch 1981:232ff). In Q'eqchi, AF is excluded in reflexive clauses (Berinstein 1985:96ff) but obligatory elsewhere. Since these contexts are obligatorily direct, these exceptions might be accounted for if AF verbs in other Mayan languages also had inverse properties.<sup>32</sup> Furthermore, the obliga-

<sup>32</sup> Accounts based on different ideas are proposed in Craig 1977 and Campana 1992.

tory inverse context involving genitives (i.e. *John<sub>i</sub>'s son helped him<sub>i</sub>*) cannot, in a number of Mayan languages, be expressed in a TV clause. Some studies note that one way of expressing such propositions is to focus the subject and replace the TV by the AF. This is the case, for example, in Jakalteq (Craig 1977:178) as well as in Tz'utujil and suggests at the very least that AF verbs in these languages are compatible with the inverse configuration, and TVs incompatible. Although the inverse analysis I propose for Tzotzil cannot be applied directly to AF verbs in other Mayan languages, it may be relevant to a fuller understanding of those verbs.

The three sets of facts discussed in this section follow from the obviation-based analysis of TV and AF verbs by means of one assumption: that genitives outrank their heads in obviation status. This principle is well established and visible in Algonquian, and its applicability to Tzotzil is argued in Aissen 1997 on grounds independent of those discussed here.

**4.2. COREFERENCE ACROSS CLAUSES.** Section 3 established the possibility of both AF and TV forms in examples like 34, repeated here.

- (34) a. **Buch'u ikoltaon** li tzebe? AF form  
           'Who helped the girl?'  
       b. Buch'u iskolta li tzebe? TV form  
           'Who helped the girl?' also 'Who did the girl help?'

But the possibility of the TV version disappears entirely when the object enters into certain coreference relations outside its clause. In particular, if the interrogative clause is embedded as a complement, and the complement object is coreferential with the main clause subject, then only the AF version 60a is possible. The TV version 60b is grammatical, but not on a reading synonymous with 60a.

- (60) a. Li tzeb-e<sub>i</sub> mu s-na' [much'u i-kolta-on *pro*<sub>i</sub>].  
           the girl-ENC NEG A3-know WH CP-help-AF  
           'The girl<sub>i</sub> doesn't know who rescued her<sub>i</sub>.'  
       b. Li tzeb-e<sub>i</sub> mu s-na' [much'u i-s-kolta *pro*<sub>i</sub>].  
           the girl-ENC NEG A3-know WH CP-A3-help  
           'The girl<sub>i</sub> doesn't know who she<sub>i</sub> rescued.' not 'The girl<sub>i</sub> doesn't know who rescued her<sub>i</sub>.'

This phenomenon is not peculiar to interrogative complements. Aissen 1997 documents that TVs are quite generally excluded when a complement object is coreferential with the matrix clause subject.<sup>33</sup> Thus, neither 61a nor 61b can be understood to contain a pronominal object in the complement that refers back to the main clause subject, *li Maruche*.<sup>34</sup>

- (61) a. L-i-y-al-be li Maruch-e [ti te i-y-il ta k'in li  
           CP-B1-A3-tell-IO the M.-ENC that there CP-A3-see at fiesta the  
           Petul-e].  
           P.-ENC  
           'Maria<sub>i</sub> told me that she<sub>i</sub> saw Pedro at the fiesta.' not 'Maria<sub>i</sub> told me that Pedro saw her<sub>i</sub> at the fiesta.'

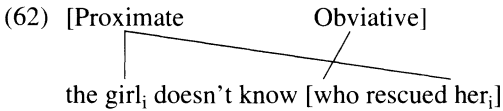
<sup>33</sup> This is true only when complement subject and object are both third person. In other cases, TV complements are well formed (Aissen 1997). This follows from the account sketched below.

<sup>34</sup> Under the blocked readings of 61a,b, the complements contain a lexical subject and pronominal object. Constraints excluding exactly such clauses are not uncommon, and have been discussed in the Mayan literature in connection with Mam (England 1983b). Tzotzil, however, permits clauses with lexical subject/pronominal

- b. Li Maruch-e i-ch'ay x-[y]-a'i [ti ch-ba ox s-vula'an li Petu'-e.]  
 the M.-ENC CP-lost NT-A3-feel that ICP-go CL A3-visit the P.-ENC  
 'Maria<sub>i</sub> forgot that she<sub>i</sub> was going to visit Petrona.' *not* 'Maria<sub>i</sub> forgot  
 that Petrona was going to visit her<sub>i</sub>.'

The blocked readings can be expressed by passivizing the complement (see Aissen 1997).

These blockages can be analyzed as obviation effects if two additional assumptions are made (Aissen 1997): first, that a matrix clause and its complement necessarily belong to the same obviation span,<sup>35</sup> and thus that all 3rd person arguments in those clauses are ranked in obviation status with one another; second, that in Tzotzil, a main clause argument outranks a complement argument in obviation status unless that of the complement clause is determined by virtue of coreference with a main clause argument.<sup>36</sup> With these assumptions, 60a has the structure in 62.



The complement object is proximate because it is coreferential with a proximate. Within the complement, then, the object outranks the subject in obviation, and the TV verb is not licensed, per 19b. In declarative complements, the complement is passivized, but interrogative complements have another option: if the interrogative involves agent extraction, then the AF verb can be used. By hypothesis, AF verbs have two conditions: they require agent extraction and they express the inverse function. Under the assumptions sketched here, exactly these conditions are satisfied in example 60a/62: it involves agent extraction, and the complement is inverse. The examples in 63 illustrate the same effects: the AF verb can be used in the complement if the complement object is understood as coreferential with the main clause subject (see 63a), but the TV verb cannot (see 63b).

- (63) a. Li Petul-e<sub>i</sub> i-ch'ay x-[y]a'i [much'u i-'ak'-b-on tak'in pro<sub>i</sub>].  
 the P.-ENC CP-lose NT-A3-feel WH CP-give-IO-AF money  
 'Pedro<sub>i</sub> forgot who had given money to him<sub>i</sub>.'
- b. Li Petul-e<sub>i</sub> i-ch'ay x-[y]a'i [much'u i-y-ak'-be tak'in pro<sub>i</sub>].  
 the P.-ENC CP-lose NT-A3-feel WH CP-A3-give-IO money  
 'Pedro<sub>i</sub> forgot who he<sub>i</sub> had given money to.' *not* 'Pedro<sub>i</sub> forgot who  
 had given money to him<sub>i</sub>.'

These patterns contrast sharply with the interpretation of the TV complement when it is not embedded: in isolation, *much'u iyak'be tak'in?* is ambiguous between 'who gave money to him?' and 'who did he give money to?' (see 12a).

It is important to see that a TV complement CAN be interpreted as involving agent extraction, as in 64b. What makes 64b grammatical is that the object in the complement (*li Manvele*) is not coreferential with an argument in the higher clause. Consequently,

object (Haviland 1981:254, 260; Aissen 1997). Thus, in isolation, the complement in 61a can mean 'Pedro saw her at the fiesta', and similarly for 61b.

<sup>35</sup> Actually I assume something weaker, namely, that main clause and complement must belong to the same obviation span if they involve argument sharing, as is the case in 60, 61.

<sup>36</sup> Dryer 1997 shows that this condition does not hold in Kutenai, hence is not universal.

its obviation status is not inherited from a coreferential higher argument, and it need not be proximate.

- (64) a. Li Petul-e mu s-na' [buch'u i-chon-b-on ixim li Manvel-e].  
 the P.-ENC NEG A3-know WH CP-sell-IO-AF corn the M.-ENC  
 'Pedro doesn't know who sold corn to Manvel.'  
 b. Li Petul-e mu s-na' [buch'u i-x-chon-be ixim li Manvel-e].  
 the P.-ENC NEG A3-know WH CP-A3-sell-IO corn the M.-ENC  
 'Pedro doesn't know who sold corn to Manvel.' *also* 'Pedro doesn't know who Manvel sold corn to.'

This construction is illustrated by the textual example in 65 (where the AF verb is doubly motivated, since the complement object outranks the subject on the hierarchy in 20 and is coreferential with the matrix subject).

- (65) Mu s-na' [k'usi ti ik'-oj-on-uk ech'el *pro*<sub>i</sub>] ti prove tzeb-e<sub>i</sub>.  
 NEG A3-know WH the carry-PF-AF-SUBJ DIR the poor girl-ENC  
 'The poor girl<sub>i</sub> didn't know what had carried her<sub>i</sub> off.' (OCK 317)

Examples like 65 raise the question of whether it is really necessary to appeal to anything beyond the hierarchy in 20 to explain the data in this section. In all the crucial examples (60, 63, 65) the complement subject is indefinite, and the complement object human and definite. The AF verb would be strongly preferred even without the special assumptions about coreference and hierarchical structure that were suggested above. This simplification may be possible, but it is not automatic. First, parallel effects are found in relative clauses where both complement subject and object are definite (and human). The AF verb is required in the relative clause if the object is to be interpreted as coreferential with matrix subject (see 66a); the TV version 66b cannot be interpreted as synonymous with 66a.

- (66) a. Li unen-e<sub>i</sub> i-s-maj li antz<sub>j</sub> [Op<sub>j</sub> x-k'el-on-e *pro*<sub>i</sub>].  
 the child-ENC CP-A3-hit the woman NT-watch-AF-ENC  
 'The child<sub>i</sub> struck the woman who was caring for him<sub>i</sub>.'  
 b. Li unen-e<sub>i</sub> i-s-maj li antz<sub>j</sub> [Op<sub>j</sub> s-k'el-e *pro*<sub>i</sub>].  
 the child-ENC CP-A3-hit the woman A3-watch-ENC  
 'The child<sub>i</sub> struck the woman who he<sub>i</sub> was watching.' *not* '... who was watching/caring for him<sub>i</sub>'

Here, complement subject and object are equally ranked on the hierarchy in 20, so it should be possible to assign proximate to either. That predicts, wrongly, the possibility of the TV relative 66b with the 66a interpretation. Example 67 is a textual example where the primary object in the relative clause is coreferential with a nominal (the subject) in the matrix; note the AF verb (the VSO order is due to the heavy object).<sup>37</sup>

- (67) Ja' la s-mil taj vinik<sub>i</sub> taj [buch'u kuch-b-on ech'el ti y-ajnil  
 EMPH CL A3-kill that man that WH carry-IO-AF DIR the A3-wife  
*pro*<sub>i</sub>].  
 'That man<sub>i</sub> killed the one who had carried off his<sub>i</sub> wife.' (OCK 305)

The other issue is that by itself, the account in §3 does not extend even to examples like 60 and 63 because the complement subject and object in those examples are adjacent in rank with respect to 20. If 20 were all that were involved, either subject or object

<sup>37</sup> Example 67 involves POSSESSOR ASCENSION, whereby the genitive functions as primary object within the clause. The primary object in 67 is thus the raised genitive, which is coreferential with the main clause subject and inherits proximate status from it.

could be assigned proximate, and speakers would accept TV versions alongside AF ones on the coreferential readings. Since they do not, something else must be involved. It is clear that the patterns in 60 and 63 are not determined by the complement clause alone. They crucially involve the coreference between complement object and a matrix argument. This coreference endows the complement object with sufficient prominence to claim proximate status over the complement subject. Whether this needs to be stipulated, as above, or can be derived, is a question I leave open. Once the prominence of the object is acknowledged, the distribution of AF and TV verbs in complex structures of the sort discussed here follows directly.

I conclude then that the inverse analysis unifies those conditions on the distribution of AF and TV verbs which refer to semantic features like definiteness and humanness, with those that involve coreference. This analysis also permits a highly unified picture of Tzotzil active, passive, and AF forms: passive and AF clauses are simply alternative ways of realizing the inverse function, with the choice dependent on whether the clause also involves agent extraction. The inverse is realized through the AF clause only under agent extraction; otherwise, it is realized through the passive (recall Table 1).

**5. CONCLUSION.** The idea that obviation rank might play a central role in Tzotzil syntax was based originally on gaps in the distribution of active and passive verbs (Aissen 1997), and not at all on properties of the AF verb. Parallels between the active-passive gaps of Tzotzil and direct-inverse gaps of languages with overt obviation morphology led directly to the conjecture that obviation was an abstract but salient category in Tzotzil.

The analysis of the AF verb presented here lends strong support to this conjecture. AF verbs represent a domain of fact independent of the passive, and thus extend the explanatory reach of the obviation-based account. From a certain perspective, the AF data provide a stronger argument for obviation than do the passive data. Passive clauses realize the inverse function along the obviation dimension in Tzotzil, but they also realize other functions. Passive can be used with first and second person patients, as well as with unspecified agents, but neither of these configurations is related to obviation since neither involves two specified, third person arguments. The distribution of the AF form, however, is restricted to precisely those clause-types in which obviation is relevant: it occurs only in clauses where both arguments are third person and both are specified. The Tzotzil AF verb is thus a purer expression of the inverse function along the obviation dimension than is the passive.

The Tzotzil AF inverse differs in two ways from the inverse of Fox or Plains Cree: first, it is restricted to clauses with agent extraction, while the Algonquian inverse is not. And second, the Tzotzil inverse expresses the inverse function only along one dimension, that of obviation, while that of Algonquian expresses it along two dimensions, obviation and person. If we abstract away from these differences, the parallels between Tzotzil and Fox/Plains Cree provide strong evidence that obviation functions as a significant dimension in syntax, one that may or may not be realized directly through the nominal morphology.

#### APPENDIX 1: TEXT EXAMPLES OF AF VERBS

All examples are from Laughlin 1977 (OCK) unless otherwise noted. Original paragraphing is indicated. Enough context is provided so that the reader can evaluate the claims made in this article about relative topicality of agent and patient. Example 8 is a dictionary example from Laughlin 1975, and it has no context. Interestingly, even this example has a null definite pronoun as object.

#### **Interrogative WH**

- (1) a. . . . it seems the man didn't have anyone, his father or his mother [who said] 'my son has

disappeared, my son was killed. Who knows where he died. He was killed by an assassin'. [There was no one] who said that, the man's mother or wife or someone, it seems. That's why I can't jail our countryman here. Forget it, **who knows who killed him**. Who knows if he went off in the river . . . (OCK 287)

- b. J-na'-tik **buch'u mil-on-uk.**

A1-know-1PLINC WH kill-AF-SUBJ

'Who knows who killed him.' *lit.* 'We know who killed him.'

(2) = 65 above

(3) = 40 above

- (4) a. ¶[After he looked over his cornfield—which was after he skinned his deer—after he looked over his cornfield, then he left his deer hung up. He set the two legs crosswise, one after another, on top of the poles by his fire. 'Eh, it's all right, what can come, **what can take our meat?**' (OCK 282)

- b. **K'usi xu' x-tam-on** li j-bek'et-tik-e?

WH can NT-take-AF the A1-meat-1PLINC-ENC

'What can take our meat?'

### Indefinite wh

- (5) a. ¶[The man touched his wife in the dark. She wasn't there, just the stump of her was there. She had no head. He looked. He lit a match. 'Where did my wife go?' he said. 'How could it be? Where did her head go? **Could someone have cut her head off?**' said her husband. 'Eh, who knows . . .'] (OCK 333)

- b. Mi'n van o **buch'u s-tuch'-b-on-uk** i s-jol-e?<sup>38</sup>

Q CL ∃ WH NT-cut-IO-AF-SUBJ the A3-head-ENC

'Could someone have cut her head off?'

(6) = 43 above

- (7) a. . . . the boy was full-grown now. The girl was full-grown now. They looked after each other. The little girl ground [the corn]. So the little boy asked for the food they were to eat. They broke their pot. It broke. **They hadn't anything to feed them anymore**. Then they got their food by themselves. (OCK 244)

- b. Mu xa **k'u x-mak'lan-on** un.

NEG CL WH NT-provide.food-AF ENC

'They hadn't anything to feed them anymore.' *lit.* 'there was nothing to feed them'

(8) = 8a above

- (9) a. ¶[When he climbed the tree, then the woman's head bounced and bounced at the foot of the pine. It bounced, but it didn't get up. It tried to climb the tree. 'God, My Lord, but what can I do about this? If there were something, **if there were something that would come and take it away**', said the man. (OCK 334)

- b. U **k'u tal-uk ech'-uk tam-on-uk-e.**

∃ WH come-SUBJ pass-SUBJ take-AF-SUBJ-ENC

'If there were something that would come and take it away.'

- (10) a. . . . I did the burying. I carried the bodies. If there was a chicken standing there, grab it yourself! Eat it! If there was a bottle standing there. Grab it! Drink it! If it was finished, pick up your hoe, go on. ¶[If there was a tortilla there, or **if there was still someone to give it [to you] eat it!** (OCK 98)

- b. Mi o to **much'u x-'ak'-on-e**

Q ∃ CL WH NT-give-AF-ENC

'If there was still someone to give it [a tortilla] [to you] . . .'

- (11) a. ¶[The boy **looked around to make sure that no one was watching him** . . .

[Pérez & de la Torre 1988:24]

- b. i-y-ak' la sat mi muk' **buch'u ta = x-k'el-on.**

CP-A3-give CL eye Q NEG WH ICP-watch-AF

'he<sub>i</sub> made sure that no one was watching him<sub>i</sub>' *lit.* 'he kept an eye out that . . .'

- (12) a. ¶[There was a man, too, who arrived, they say, at work every day, at his work. ¶[It reached midday and **he knew that he had no children, no one to come and call him.** (OCK 42)

<sup>38</sup> Like 67, this example involves possessor ascension, whereby the genitive within *sjol* 'her head' functions as primary object. This raised genitive is the proximate. See n. 37.

- b. S-na'-oj ti ch'abal x-ch'amal-e muk' buch'u x-k'ot ik'-on-uk.  
A3-know-PF that NEG.∃ A3-child-ENC NEG WH NT-arrive call-AF-SUBJ  
'He<sub>i</sub> knew that he had no children, no one to come and call him<sub>i</sub>.'
- (13) a. . . . one day, his wife prepared his tortillas, and he went out [to collect flowers]. When his merchandise was almost gathered, **he sensed that someone was watching him.**  
(Méndez et al. 1996:163)
- b. I-xi' tajmek yu'un la yech no ox oy buch'u ta x-k'el-on ya'el.  
CP-fear much that CL thus CL CL ∃ WH ICP-watch-AF seem  
'He<sub>i</sub> sensed that someone was watching him<sub>i</sub>.'

**Relative wh**

(14) = 67 above

**Free relative**

- (15) a. . . . I don't know what Our Holy Father's crime was. They went and threw him in the heavy forest to be killed by mountain lion, to be killed by coyotes, to be killed **by whatever animal would eat Our Holy Father long ago.** (OCK 235)
- b. ta k'usi chanul x-ti'-on tajmek ti vo'ne jch'ultottik une.  
by WH animal NT-eat-AF much the ago our.holy.father ENC  
'by whatever animal would eat Our Holy Father long ago'

**Without agent extraction**

- (16) a. ¶But you see, [her head] landed on the middle of [the deer's] spine. It landed and perched on that deer. It left. The deer left. It went into a cave. It was stuck in the cave. ¶The deer went in. ¶[The deer] bounded into the cave. A squirrel arrived. ¶**She thought it would take her away.** The squirrel didn't want to. It jumped. It was leaping from tree to tree now. ¶**You see, the squirrel wouldn't take her away.** Then the husband arrived who had lured her up . . . (OCK 304)
- b. X-[y]-a'-uk la x-'ik'-on-uk ech'el.  
NT-A3-suppose-SUBJ CL NT-take-AF-SUBJ DIR  
'She<sub>i</sub> thought it would take her<sub>i</sub> away.'
- c. I chuch-e, mu xa la bu ik'-on ech'el.  
the squirrel-ENC NEG CL CL WH take-AF DIR  
'The squirrel wouldn't take her away.'

## APPENDIX 2: TEXT EXAMPLES OF TV VERBS (WITH AGENT EXTRACTION)

All examples are from Laughlin 1977 (OCK). Enough context is provided so that the reader can evaluate the claims made in this article about relative topicality of agent and patient.

**Interrogative wh**

- (1) a. Before he arrived in Mexico City his ring was stolen from him. It was stolen. Oh, when the ring was lost, God, he didn't have a single penny of the money left either. ¶It happened that there was a man who went, went and swallowed it. He went and swallowed the ring so that it couldn't be discovered. "Who knows now where it went", said [the king]. **But who took it? It must be you who stole it'**, he said. (OCK 353)
- b. Pero buch'u s-tam?  
but WH A3-take  
'But who took it?'
- (2) a. They ate. They celebrated. A marimba came. A band came. It was a good fiesta! The fiesta was in full swing at the king's house. ¶**Who is giving the fiesta that's really swinging at the king's house?** (OCK 219)
- b. Buch'u y-ak'-oj taj k'in ti batz'i x-nik xa tz-na rey une.  
WH A3-give-PF that fiesta the really NT-buzz CL at/A3-house king ENC  
'Who's giving the fiesta that's really swinging at the king's house?'
- (3) a. ¶Since it [the bell] was stolen property, the Chiapanecs have their fine bell now. It isn't theirs. It's Zinacantán Center's. Just the way the Gospel Cross went. It disappeared. **Who knows who stole it.** How would you know who it was—if it was just the sacristans themselves or somebody else who stole it. (OCK 215)
- b. Na'-tik buch'u y-elk'an-oj.  
know-1PLINC WH A3-steal-PF  
'Who knows who stole it.' *lit.* 'We know who stole it.'



- (4) a. ¶‘Who said so? **Who’s giving the orders?**’ (OCK 83)  
 b. Buch’u s-pas mantal?  
 WH A3-make order  
 ‘Who’s giving the orders?’

### Indefinite WH

- (5) = 42 above
- (6) a. You’ll stay here. I’ll give you that house. You will live there with your wife. Settle down! I’ll go draw my water **when there isn’t anyone else to draw it.** (OCK 274)  
 b. k’alal mu’yuk buch’u s-pul-e.  
 when NEG.∃ WH A3-draw-ENC  
 ‘when there isn’t anyone else to draw it’
- (7) a. ¶‘Where is your land? Tell me all about where your house is, your land, then **I’ll go ask if anyone wants to buy them.** Then I’ll untie you if I’ve found an owner for it, someone who will buy it.’ (OCK 229)  
 b. Ch-ba k-al mi o buch’u s-k’an s-man.  
 ICP-go A1-ask Q ∃ WH A3-want A3-buy  
 ‘I’ll go ask if anyone wants to buy them.’
- (8) a. Now there is another sluice that was made. The former sluice was a big sluice. It used to be on the other side of the river, because I saw it myself. **It wasn’t anybody else who saw it.** (OCK 199)  
 b. Mu’nuk o buch’u i-y-il.  
 NEG ∃ WH CP-A3-see  
 ‘It wasn’t anyone else who saw it.’ *lit.* ‘Nobody else saw it.’
- (9) a. ‘Forget it son, go home, you aren’t guilty of anything. **There is no one who came to make an accusation . . .**’ (OCK 287)  
 b. Mu yu’unuk o buch’u tal s-k’an parte.  
 NEG ∃ WH come A3-request side  
 ‘There is no one who came to make an accusation.’
- (10) a. ‘The man was lost. He disappeared. And maybe he had no wife or something, or he had no mother, or the man had no woman at all. **There wasn’t anybody to complain . . .**’ (OCK 287)  
 b. Muk’ buch’u s-sa’ k’op.  
 NEG WH A3-seek grievance  
 ‘There wasn’t anybody to complain.’
- (11) = 41 above
- (12) a. He was given the money by his charm, too. Probably because he was scared that it would get lost, he tied it up in his neckerchief. He tied it around his waist. ¶He got into trouble. The king heard that that old man was celebrating a fiesta. That [man] was summoned. The first fiesta he celebrated when the child was baptised, no, there was no trouble. On the second fiesta—**he thought somebody might take it [his charm]**, so he had a fiesta. (OCK 224–25)  
 b. X-[y]-ak’ no la o-k buch’u y-ich’-oj ech’el.  
 NT-A3-suppose CL CL ∃-SUBJ WH A3-take-PF DIR  
 ‘He thought somebody might take it.’
- (13) a. ¶‘Ugh, the awful Charcoal Cruncher died. The Charcoal Cruncher’s troubles are over. The Charcoal Cruncher business is finished’, said each of the funeral guests when they arrived. ‘We are burying the awful Charcoal Cruncher. Now, the Charcoal Cruncher business is over. **Now no one’s left to eat our charcoal.** The charcoal here will just be put in our yards, but **before there used to be somebody who ate charcoal.**’ (OCK 182)  
 b. Mu xa me buch’u s-k’ux k-ak’al-tik un.  
 NEG CL CL WH A3-crunch A1-charcoal-1PLINC ENC  
 ‘Now no one’s left to eat our charcoal.’  
 c. Yan ti vo’ne oy to ox buch’u x-k’ux ak’al.  
 other the ago ∃ CL CL WH A3-crunch charcoal  
 ‘Before there used to be somebody who ate charcoal.’
- (14) a. . . . a houseful of corn. His beans [filled] half the house. He felt confident now. ‘I can’t sell either. Even if I sell it, I’ll just give it to my workers, **if someone comes to my house looking for work**’, he said. (OCK 290)

- b. ti = mi'n oy buch'u x-tal s-sa' abtel ta j-na-e.  
 if  $\exists$  WH NT-come A3-seek work at A1-house-ENC  
 'if someone comes to my house looking for work'
- (15) a. = 3a in Appendix 2  
 b. mi buch'u y-elk'an.  
 Q WH A3-steal  
 'or somebody else who stole it [the bell]'

**Headless relative**

- (16) a. = 7a in Appendix 2  
 b. ti = mi yu'un i-j-ta-be y-ajval buch'u s-man-e.  
 if CP-A1-find-IO A3-owner WH A3-buy-ENC  
 'if I've found an owner for it, someone who will buy it'

## REFERENCES

- AISSSEN, JUDITH. 1987. Tzotzil clause structure. Dordrecht: Reidel.  
 —. 1992. Topic and focus in Mayan. *Language* 68.43–80.  
 —. 1993. How ergative in Tzotzil? Paper presented at the sixth biennial Conference on Grammatical Relations, Simon Fraser University.  
 —. 1994. Tzotzil auxiliaries. *Linguistics* 32.657–90.  
 —. 1996. Pied piping, abstract agreement, and functional projections in Tzotzil. *Natural Language and Linguistic Theory* 14.447–91.  
 —. 1997. On the syntax of obviation. *Language* 73.705–50.
- AYRES, GLENN. 1977. ¿Es el antipasivo siempre una voz? Paper presented at the second Mayan workshop, San Cristobal de las Casas, Chiapas, Mexico.  
 —. 1983. The antipassive “voice” in Ixil. *International Journal of American Linguistics* 49.20–45.
- BASRI, HASAN, and DANIEL FINER. 1987. The definiteness of trace. *Linguistic Inquiry* 18.141–47.
- BERINSTEIN, AVA. 1985. Evidence for multiattachment in K'ekchi Mayan. New York: Garland.
- BLOOMFIELD, LEONARD. 1962. The Menomoni language. New Haven: Yale University Press.
- BRICKER, VICTORIA. 1977. Pronominal inflection in the Mayan languages. New Orleans: Middle American Research Institute, Tulane University.
- CAMPANA, MARK. 1992. A movement theory of ergativity. Montreal: McGill University dissertation.
- CARLSON, GREGORY. 1977. Amount relatives. *Language* 53.520–42.
- COMRIE, BERNARD. 1979. Definite and animate direct objects: A natural class. *Linguistica Silesiana* 3.13–31.
- COOREMAN, ANN. 1987. Transitivity and discourse continuity in Chamorro narratives. Berlin: Mouton de Gruyter.
- COWAN, MARION. 1969. Tzotzil grammar. Norman, OK: Summer Institute of Linguistics.
- CRAIG, COLETTE. 1977. The structure of Jacaltec. Austin: University of Texas Press.  
 —. 1979. The antipassive and Jacaltec. *Papers in Mayan linguistics*, ed. by Laura Martin, 139–65. Columbia, MO: Lucas Bros.
- CROFT, WILLIAM. 1990. *Typology and universals*. Cambridge: Cambridge University Press.
- DAHLSTROM, AMY. 1991. Plains Cree morphosyntax. New York: Garland.  
 —. 1995. Morphology and syntax of the Fox (Mesquakie) language. Chicago: University of Chicago, MS.
- DAVIES, WILLIAM, and LUIS ENRIQUE SAM-COLOP. 1990. K'iche' and the structure of antipassive. *Language* 66.522–49.
- DAYLEY, JON P. 1985. *Tz'utujil grammar*. Berkeley: University of California Press.
- DELANCEY, SCOTT. 1980. Deictic categories in the Tibeto-Burman verb. Bloomington: University of Indiana dissertation.  
 —. 1981. An interpretation of split ergativity. *Language* 57.626–57.
- DIXON, R. M. W. 1972. *The Dyirbal language of North Queensland*. Cambridge: Cambridge University Press.  
 —. 1994. *Ergativity*. Cambridge: Cambridge University Press.

- DOWTY, DAVID. 1991. Thematic proto-roles and argument selection. *Language* 67.547–619.
- DRYER, MATTHEW. 1986. Primary objects, secondary objects, and antitativity. *Language* 62.808–45.
- . 1992. A comparison of the obviation systems of Kutenai and Algonquian. *Papers of the twenty-third Algonquian conference*, ed. by William Cowan, 119–63. Ottawa: Carleton University.
- . 1994. The discourse function of the Kutenai inverse. *Voice and inversion*, ed. by Talmy Givón, 65–99. Amsterdam: John Benjamins.
- . 1996. Grammatical relations in Ktunaxa (Kutenai). *The Belcourt Lecture (1994)*. Winnipeg: Voices of Rupert's Land.
- . 1997. Obviation across clause boundaries in Kutenai. Buffalo: State University of New York, ms.
- ENGLAND, NORA. 1983a. A grammar of Mam, a Mayan language. Austin: University of Texas Press.
- . 1983b. Ergativity in Mamean (Mayan) languages. *International Journal of American Linguistics* 49.1–19.
- FINER, DANIEL. 1997. Contrasting A'-dependencies in Selayarese. *Natural Language and Linguistic Theory* 15.677–728.
- FRANTZ, DONALD. 1966. Person indexing in Blackfoot. *International Journal of American Linguistics* 32.50–58.
- GERDTS, DONNA. 1988. Object and absolutive in Halkomelem Salish. New York: Garland.
- GIVÓN, TALMY. 1976. Topic, pronoun and grammatical agreement. *Subject and topic*, ed. by Charles Li and Sandra Thompson, 149–88. New York: Academic Press.
- (ed.) 1983. *Topic continuity in discourse*. Amsterdam: John Benjamins.
- (ed.) 1994a. *Voice and inversion*. Amsterdam: John Benjamins.
- . 1994b. The pragmatics of de-transitive voice. *Voice and inversion*, ed. by T. Givón, 3–44. Amsterdam: John Benjamins.
- GODDARD, IVES. 1984. The obviative in Fox narrative discourse. *Papers of the fifteenth Algonquian conference*, ed. by William Cowan, 273–86. Ottawa: Carleton University.
- . 1990. Aspects of the topic structure of Fox narratives: Proximate shifts and the use of overt and inflectional NPs. *International Journal of American Linguistics* 56.317–40.
- GRAFSTEIN, ANN. 1981. Obviation in Ojibwa. *Linguistique Amérindienne II, Études Algonquiennes*, ed. by Lynn Drapeau, 83–134. Montreal: Montreal Working Papers in Linguistics.
- HALE, KENNETH. 1996. El antipasivo de enfoque del K'ichee y el inverso del Chukchi: un estudio de la concordancia excéntrica. Cambridge, MA: MIT, ms.
- HAVILAND, JOHN. 1981. *Sk'op sotz'leb: El Tzotzil de San Lorenzo Zinacantán*. Mexico City: Universidad Nacional Autónoma de México.
- HEATH, JEFFREY. 1976. Antipassivization: A functional typology. *Berkeley Linguistics Society* 2.202–11.
- HEIM, IRENE. 1987. Where does the definiteness restriction apply? Evidence from the definiteness of variables. *The representation of indefiniteness*, ed. by Eric Reuland and Alice ter Meulen, 21–42. Cambridge, MA: MIT Press.
- HOCKETT, CHARLES. 1966. What Algonquian is really like. *International Journal of American Linguistics* 32.59–73.
- HOPPER, PAUL, and SANDRA THOMPSON. 1980. Transitivity in grammar and discourse. *Language* 56.251–99.
- KAUFMAN, TERRENCE. 1974. Meso-American Indian languages. *Encyclopaedia Britannica*, 22:767–74.
- KEENAN, EDWARD. 1976. Towards a universal definition of "subject". *Subject and topic*, ed. by Charles Li and Sandra Thompson, 303–33. New York: Academic Press.
- KLAIMAN, M. H. 1991. *Grammatical voice*. Cambridge: Cambridge University Press.
- LARSEN, THOMAS. 1988. Manifestations of ergativity in Quiché grammar. Berkeley: University of California dissertation.
- , and WILLIAM NORMAN. 1979. Correlates of ergativity in Mayan grammar. *Ergativity: Towards a theory of grammatical relations*, ed. by Frans Plank, 347–70. New York: Academic Press.
- LAUGHLIN, ROBERT. 1975. *The great Tzotzil dictionary of San Lorenzo Zinacantán*. Washington, DC: Smithsonian Institution Press.

- . 1977. *Of cabbages and kings*. Washington, DC: Smithsonian Institution Press.
- LESOURD, PHILIP. 1976. Verb agreement in Fox. *Harvard studies in syntax and semantics* 2, ed. by Judith Aissen and Jorge Hankamer, 445–528. Cambridge: Harvard University Linguistics Department.
- MÉNDEZ, DIEGO GUZMÁN; ANSELMO PÉREZ PÉREZ; JUAN DE LA TORRE LÓPEZ; and MARIANO LÓPEZ DE LA CRUZ. 1996. *Lo'il Maxil, relatos tseltales y tzotziles*. San Cristobal de las Casas, Mexico: Sna Jtz'ibajom.
- MONDLOCH, JAMES. 1981. *Voice in Quiche-Maya*. Albany: SUNY Albany dissertation.
- MORGAN, J. L. 1972. Some aspects of relative clauses in English and Albanian. *The Chicago Which Hunt*, 63–72. Chicago: Chicago Linguistic Society.
- PÉREZ, ANSELMO PÉREZ, and JUAN DE LA TORRE LÓPEZ. 1988. *Jitz'il bak (el esqueleto volador)*. San Cristobal de las Casas, Mexico: Sna Jtz'ibajom.
- PINKERTON, SANDRA. 1978. Word order and the antipassive in K'ekchi. *Papers in Mayan Linguistics*, ed. by Nora England, 169–87. Columbia: University of Missouri.
- RHODES, RICHARD. 1990. Obviation, inversion, and topic rank in Ojibwa. *Berkeley Linguistics Society* 16(2).101–15.
- . 1993. The possessor constraint. Paper presented at the twenty-fifth Algonquian conference, Montreal.
- SCANCARELLI, JANINE. 1987. *Grammatical relations and verb agreement in Cherokee*. Los Angeles: UCLA dissertation.
- SILVERSTEIN, MICHAEL. 1976. Hierarchy of features and ergativity. *Grammatical categories in Australian languages*, ed. by R. M. W. Dixon, 112–71. Canberra: Australian Institute of Aboriginal Studies.
- SMITH-STARK, THOM. 1978. The Mayan antipassive: Some facts and fictions. *Papers in Mayan linguistics*, ed. by Nora C. England, 169–87. Columbia: University of Missouri.
- THOMPSON, CHAD. 1989. *Voice and obviation in Athabaskan and other languages*. Eugene: University of Oregon dissertation.
- TRECHSEL, FRANK. 1993. Quiche focus constructions. *Lingua* 91.33–78.
- WHISTLER, KENNETH. 1985. Focus, perspective, and inverse person marking in Nootkan. *Grammar inside and outside the clause*, ed. by Johanna Nichols and Anthony Woodbury, 227–65. Cambridge: Cambridge University Press.
- WOLFART, H. CHRISTOPH. 1973. *Plains Cree: A grammatical study*. *Transactions of the American Philosophical Society* N.S. 63, Part 5.
- ZAVALA, ROBERTO. 1997. Functional analysis of Akatek voice constructions. *International Journal of American Linguistics* 63.439–74.

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