Agent focus and voice in Yucatec Maya

Judith Tonhauser
Stanford University

One of the most discussed issues in Mayan linguistics is a verb form that is restricted to a particular set of constructions, namely relative clauses, content questions and focus constructions. Many Mayan languages feature this so-called Agent Focus (AF) verb form, which is used, roughly speaking, when the agent of a transitive verb is realized in the immediately preverbal position (e.g., Jakaltek (Craig 1979), Tzotzil (Aissen 1999), Ixil (Ayres 1983), Tz'utujil (Dayley 1985), Mam (England 1983:209ff), K'iche' (Mondloch 1981, Larsen 1987)). The following focus constructions from K'iche' illustrate the regular transitive and the AF verb form of the predicate *ch'ay* 'hit'. The focus construction in (1a) is formed on the regular transitive predicate where both arguments are cross-referenced: the agent by the prefix *aa-* '2sg.A' and the patient by the (zero) prefix *Ø-* '3sg.B'. The focus construction in (1b) is formed with the AF verb form which only cross-references one argument (here, the agent) by *at-* '2sg.B' and it is marked by the suffix *–ow*. (The examples in (1) are from Larsen 1987:44. The glosses are his.)

(1)   a. aree   ri   achii   x-<u>Ø-aa</u>-ch'ay-o.
         FOCUS   the   man   PERFV-3sg.B-2sg.A-hit-PF
         'It was the man that you hit.'
      b. aree   ri   at   x-<u>at-</u>ch'ay-**ow**
         FOCUS   the   you   PERFV-2sg.B-hit-FOC.AP
         ri   achii.
         the man
         'You were the one who hit the man.'

Although the Mayan AF verb form occurs in roughly the same constructions across the Mayan languages that have it, there exists quite some inter-language variation with respect to the particular conditions under which the AF verb form is realized. For instance, in some Mayan languages (e.g., K'iche' (Larsen 1987:49), Mam (England 1983:209ff)) the AF verb form has been argued to be an antipassive voice, comparable to the antipassive of ergative languages like Dyirbal where, according to Dixon 1972, extraction of an agent cannot proceed from a transitive predicate but requires the antipassivization (i.e., demotion of the patient argument) of the predicate (see Klaiman 1991:234ff for a similar claim). This analysis is not warranted for other Mayan languages (e.g., Ixil (Ayres

1983), Jakaltek (Craig 1979)) where the patient is not or need not be visibly demoted in AF constructions and the patient can control agreement (cf Smith-Stark 1978; Aissen 1999:451f). Person restrictions create a second type of variation. In K'iche', the AF verb occurs with non-third person participants (cf (1b)) whereas the AF verb in Tzotzil is restricted to clauses with a third-person agent and patient. Finally, whereas the AF verb in Tz'utujil cross-references a local (1st/2nd person) argument irrespective of its semantic role (Dayley 1985), the distribution of the AF verb in Tzotzil is sensitive to the obviation status of the agent and patient (Aissen 1999)[1]. The main concern of many of the aforementioned papers has been to identify the language-particular conditions under which the AF verb form occurs. However, the question why it is relative clauses, content questions and focus constructions that realize a special verb form has not been properly addressed yet. Most authors assume that these constructions are characterized by the extraction of an element to a preverbal position. This is not fully satisfying since topicalization constructions in Mayan languages also involve extraction but do not realize the AF verb form. My aim in this paper is to present an account for the AF verb form in Yucatec Maya – an account that explains why relative clauses, content questions and focus constructions (which I refer to as F-constructions) are constructions that feature a special verb form.[2]

The paper is organized as follows. In the next section, I introduce the relevant aspects of Yucatec Mayan morphosyntax. Section 2 is concerned with the Yucatec Mayan AF verb: I present evidence that the AF verb form in Yucatec Maya (YM) is morphosyntactically transitive and motivate that F-constructions uniquely realize an event participant with the discourse status 'unpredictable'. Section 3 investigates the interaction between voice and the discourse status of event participants. In section 4 I summarize the analysis and briefly discuss whether it can be extended to the AF verb form of other (Mayan) languages.

---

[1] Obviation, in the sense of Algonquian languages, involves the relative ranking of third person arguments according to prominence. Non-third person arguments are entirely irrelevant to it.

[2] Yucatec Maya is a Mayan language spoken by approximately 800 000 people on the Yucatan peninsula of Mexico and some regions in Guatemala and Belize. There exists no study of the AF verb in a Yucatec Mayan language (Lacandón, Yucatec Maya, Mopan, Itza). Bricker 1979 and Bohnemeyer 1998:189f present some of the basic facts for Yucatec Maya.

1 Relevant aspects of Yucatec Mayan morphosyntax

YM is a head-marking language: in transitive clauses, the transitive A is cross-referenced on the verbal predicate with a preverbal clitic and the transitive O is cross-referenced by a suffix. (I use 'S' for the single argument of an intransitive predicate and 'A' and 'O' for the two arguments of transitive predicates, cf. e.g., Dixon 1994.) In the verbal clause in (2), the preverbal clitic *in* '1sg' cross-references the A-argument of the transitive predicate *chuk* 'catch' and the suffix *-ech* '2sg' cross-references the O-argument. Following Bohnemeyer 1998, a 'verbal clause' (VC) is furthermore constituted by an aspect-mood (AM) marker which precedes the preverbal clitic cross-referencing the transitive A (*t-* 'perfective', in (2)) and by a status inflectional suffix (cf. Kaufmann 1990:71) which is *-ah* 'completive' in (2).

(2)   T-   in   chuk   −ah   −ech.   [verbal clause (VC)]
       PERF-   1sg   catch   -CMP   -2sg
       'I caught you.'[3]

Following the tradition among Mayanists, the two sets of cross-reference markers that identify the transitive A and O in transitive predicates are referred to as 'set A' and 'set B', respectively; e.g., 'A1sg' for the first person singular set A marker.

set A

	sg	Pl
1	in(w)	k (...-o'n)
2	a(w)	a(w)...-e'x
3	u(y)	u(y)...-o'b

set B

	sg	pl
1	-en	-o'n
2	-ech	-e'x
3	-Ø	-o'b

The cross-reference markers cannot be associated with a particular semantic role or grammatical function because both sets of cross-reference markers are used to cross-reference the single S-argument of intransitive predicates. YM is one of the few languages which exhibit a fluid-S system

---

[3] The data in this paper was collected during my fieldwork unless otherwise indicated (B: Bohnemeyer 1998, AM1/2:Andrade and Máas 1999/2000). The following glosses are used besides those explained in the text: CL=classifier; CMP=completive status; D1/2/3/4=deictic markers; DEF=definite; IMPF=imperfective aspect marker; INC=incompletive status; NEG=negation; PERF=perfective aspect marker; PL=plural; PosRes=positional resultative; PREP=preposition; PROG=progressive aspect marker; PSV=passive voice; SO=subordinator; SBJ=subjunctive status; TERM=terminative marker; TOP=topic.

that is conditioned by overt aspect (Bohnemeyer, to appear): the S-argument of intransitive predicates is cross-referenced by a set A marker when the predicate is marked with incompletive status and it is cross-referenced by a set B marker when the predicate is marked by completive or subjunctive status. For example, the intransitive verbal predicate in (3a) is marked for incompletive status (which is phonetically empty for intransitive active verbs), and therefore cross-references the S-argument by a set A marker (*in* 'A1sg'). In (3b), where the verb is marked by completive status *-nah*, the S-argument is cross-referenced by a set B marker (*-en* 'B1sg').

(3) a. K- in suut -Ø.
    IMPF A1sg return -INC
    'I return/am returning.'
   b. H- suut -nah -en.
    PERF- return -CMP -B1sg
    'I returned.'

Besides transitive predicates (such as *chuk* 'catch' in (2)) and active intransitive predicates (such as *suut* 'return' in (3)), YM has three more classes of predicates. According to Bohnemeyer 1998:217ff., these five predicate classes can be distinguished by their semantic and morphological properties. For the purposes of this paper, only the allomorphic variants of the status suffixes for the predicate classes are relevant.[4] They are given in Table 1.

---

[4] YM has a rich voice system which includes, besides the transitive active and the passive voice, at least the antipassive and the anticausative (Bricker 1979, Bohnemeyer 1998). According to Bohnemeyer 1998:218, the antipassive demotes the O-argument of transitive predicates and the anticausative demotes the A-argument of transitive predicates but differs from the passive in that the anticausative excludes a controlling agent. For reasons of clarity, the discussion in this paper is restricted to the passive and the transitive active voice.

verb class	status category		
	incompletive	completive	subjunctive
intransitive active	-Ø	-nah	-nak
inactive	-Vl	-Ø	-Vk
inchoative	-tal	-chah	-chahak
positional	-tal	-lah	-l(ah)ak
transitive active voice	-ik	-ah	-Ø/-eh
passive voice	\'/...-Vl/-a'l	\'/...-ab/-a'b	\'/...-Vk/-a'k

Table 1: status suffixes in YM (adapted from Bohnemeyer (1998:221)

2 The Agent Focus verb in Yucatec Maya

In Yucatec Maya, the AF verb form occurs in relative clauses, content questions and focus constructions. These constructions are structurally characterized by the occurrence of an element in the position that immediately precedes the VC. For illustrative purposes, I discuss the AF verb form in section 2.1 in the context of content questions only. Section 2.2 demonstrates that the AF verb form is morphosyntactically transitive. In section 2.3 I argue that the constructions in which the AF verb form occurs are characterized by unique structural and semantic/pragmatic properties.

2.1 Conditions on the realization of the AF verb form

Content questions in YM are formed with a set of bare singular nominals that are not inherently interrogative: *maax* 'person', *ba'ax* 'thing', *tu'ux* 'place', *buka'an* 'quantity' and *bix* 'manner'.[5] In content questions, these nominals are realized in the position immediately preceding the VC, where they receive an interrogative interpretation, for instance, *maax* 'person/who' in the content questions in (4). The questions in (4a) and (4b) differ with respect to the voice form in which the transitive predicate *il* 'see' is realized. In (4a), the verbal predicate *il* 'see' occurs in the AF verb form which is identified in YM by the omission of the pre-VC set A cross-reference marker and the AM marker. Compare this verb form to the one in (4b) where the verbal predicate *il* 'see' occurs in the transitive active (TA) voice: the verbal predicate is preceded by the AM marker *t-* 'PERF' and the third person set A cross-reference marker.

---

[5] Some of these bare singular nominals have alternative realizations, e.g., *ba'ax/ ba'al/ ba'an* 'thing'. See Tonhauser (to appear,b) for an analysis of content questions in Yucatec Maya.

(4)   a. Maax il   –eh -Ø   Maria?
           who see.AF -SBJ -B3sg Maria
           'Maria, who saw her?'
       b. Maax   t-   uy   il   –ah   -Ø   Maria?
           who   PERF- A3   see.TA –CMP -B3sg Maria
           'Maria, who did she see?'

It is important to note that the questions in (4a) and (4b) differ in their interpretation: in the question in (4a), the pre-VC question word *maax* 'who' is interpreted as the transitive A, while *maax* 'who' is interpreted as the transitive O in (4b). Clearly, this cannot be attributed to the order of the nominals *maax* 'who' and *Maria*, since they occur in the same position in both examples. Rather, the examples in (4) differ only with respect to the verb form in which the predicate *il* 'see' is realized, i.e., the TA versus the AF form. How do these two verb forms differ? In the next section, I provide evidence that the AF verb is a morphosyntactically transitive verb form, just like the TA verb.

2.2 The AF verb form in Yucatec Maya is a transitive verb form

At a first glance, one might assume that the AF verb in Yucatec Maya is an intransitive verb because it only cross-references a single argument, just like intransitive predicates. However, a closer look at the morphological and morpho-syntactic properties of the form reveals that it is in fact a transitive predicate, just like the TA form. First, in YM, nominal arguments that are not direct arguments of a predicate are marked with a preposition. For instance, the predicate *ts'aa* 'give' cross-references the giver (agent) and the given (theme) in (5a). The recipient *–ech* 'you', however, is cross-referenced on the multipurpose preposition *ti'* and hence identified as an oblique argument. (YM predicates cross-reference at most two arguments.) Similarly, the demoted agent of a passivized predicate is realized with the preposition *tumeen* 'CAUSE' as in (5b).

(5)   a. T   - in ts'a –ah -Ø   ti'   -ech le   pan -o'.
             PERF- A1 give -CMP -B3sg PREP –B2sg DEF bread-D2
             'I gave the bread to you.'
    b. Le   bèentanah -o' túun   he' -a'l   tuméen tèen.
             DEF window   -D2 PROG:A3 open -PSV.INC CAUSE me
             'The window, it is being opened by me.' [B1998:218, E(128a)]

Compare this to the examples in (4) where both arguments, *maax* 'who' and *Maria*, are realized as direct arguments, irrespective of the AF or the TA form. The AF form is able to license two direct arguments, just like the TA form.

For the second argument, recall from section 1 that every verbal predicate belongs to one of five classes of verbal predicates that can be distinguished by the status suffixes. The AF verb form occurs only with the status suffixes –*ik* and –*eh*. According to Bohnemeyer 1998:194, the AF verb occurs with –*eh* when the corresponding TA verb occurs with completive AM marking, as illustrated in (4). The status suffix –*ik* occurs on the AF verb when the corresponding TA verb is realized with incompletive AM marking. This is illustrated in the examples in (6).
According to Table 1 then, the AF verb form is a transitive predicate.

(6)   a. Maax   il   -ik   -ech?
             who   see   -INC   -B2sg
             'Who is seeing/sees you?'
    b. Maax   k-   aw   il   -ik   -Ø?
             who   IMPF- A2   see   -INC -B3sg
             'Who do you see/are you seeing?'

Finally, section 1 illustrated that YM has a fluid-S cross-referencing system for intransitive predicates. Thus, in questions with an intransitive predicate such as the active intransitive *siit'* 'jump' in (7a) and (7b), the S-argument is cross-referenced by a set A or a set B marker, respectively, depending on whether the predicate is marked with incompletive (zero for active intransitives) or completive status. The AF verb, however, always cross-references a set B marker, even in the incompletive aspect (as in (6)) and hence cannot belong to the class of intransitive predicates.

(7)   a. Maax k-   u   siit'   -Ø?
             who   IMPF- A3   jump -INC
             'Who is jumping/jumps?'

b. Maax h- siit' -nah -Ø?
 who PERF jump -CMP -B3sg
 'Who jumped?'

I conclude that the AF verb form is a transitive form. I assume that the AF verb is an additional transitive voice besides the transitive active (TA) voice: the two voices differ in the constraints imposed on the arguments of the predicate. A comprehensive account of voice in YM should explain why semantically transitive predications in relative clauses, content questions and focus constructions can be realized in two transitive voices (TA and AF). In terms of markedness, the AF voice is the 'more marked' of the two transitive voices because it only occurs in a restricted set of constructions and requires the pre-VC element to be cross-referenced as the transitive A. On this account, the TA voice constitutes the 'elsewhere' or unmarked voice. This is supported by the fact that the TA verb is used not only when the transitive O is questioned but also when an adjunct is questioned, such as *yeetel ba'ax* 'with what' in (8).

(8) Yeetel ba'ax t- u ch'aak -Ø che'?
  with what PERF- A3 cut.TA -B3sg wood
  'With what did he cut the wood?'

This account does not yet explain why the AF voice is restricted to this particular set of constructions. The structural and semantic/pragmatic properties of the constructions is the focus of the next section.

2.3 F-Constructions

The AF verb form occurs not just in content questions, but also in relative clauses and focus constructions (F-constructions). In a language like English, this set of constructions seems structurally and semantically/pragmatically rather heterogeneous, but this is not the case in YM as I argue in Tonhauser (to appear,a). Structurally, F-constructions are characterized by the requirement that an element is realized in the position immediately preceding the verbal clause (VC). In simple content questions, a bare singular nominal is realized in the pre-VC position; in fact, it only receives an interrogative interpretation in this position. In relative clauses (illustrated in (9)), it is the head nominal of the relative clause that is realized in the pre-VC position; in focus constructions the focused element is realized in this position as illustrated in (10). The element that is realized in the pre-VC position (bold faced below) is interpreted as the transitive A with the AF voice in (9a/10a) and as the transitive O with the TA voice as in (9b/10b).

(9) a. Le **ba'al** jaant –ik   -Ø   le   chib -o'ob –o'
        DEF thing eat   -INC.AF -B3sg DEF goat -PL -D2
        juntúul   nuxi   k'i'ix   k'éek'en.
        a.CL   big   porcupine
        'The thing that eats the goats is a big porcupine.' [AM1:109]
     b. Yaan -Ø   **ba'ax** t-   u   beet -ah   -Ø.
        EXIST –B3sg thing   PERF- A3 do   -CMP.TA-B3sg
        'There's something (bad) he did.' (lit: It exists, what he did.)
        [AM1:37]
(10) a. Leti'   le   **paal** kins -eh   le   peek   -o'.
        pron.3sg DEF child kill.AF -SBJ   DEF dog   -D2
        'It was the child that killed the dog (not somebody else).'
     b. Chéen túun **u moots che'** k-   u   jant   -ik   -Ø.
        only so A3 roots tree IMPF- A3 eat.TA –INC -B3sg
        'Only roots is what he eats.' [AM1:106]

The pre-VC position can realize only simple intransitive predicates
(nominal or verbal) or complex phrases that consist of an intransitive
predicate like *yeetel ba'ax* 'with what' in (8) or *u moots che'* 'roots (of tree)'
in (10b).[6] Crucially, definite- or topic-marked nominals cannot be realized
in the pre-VC position and they are ungrammatical with the AF voice. A
definite referent can only be focused via the cleft/copula construction as in
(10b); the definite noun phrase that refers to this entity cannot be realized
in the pre-VC position (compare (10b) to (11a)). Furthermore,
definite/topical nominals must precede an element that is realized in the
pre-VC position as illustrated in (11b) and (11c).

(11) a. *Le   paal   -o'   kins -eh   le   peek   -o'.
         DEF   child -D2   kill.AF -SBJ
         (int: It was the child who killed the dog.)
     b. Juan -e'   maax k-   uy   il   -ik   -eh?
        Juan -TOP who IMPF- A3   see.TA -INC   -TERM
        'Juan, who does he see?'
     c. *Maax   Juan -e' k-   uy   il   -ik   -eh
         who Juan -TOP   IMPF- A3   see   -INC.TA -TERM

F-constructions are structurally parallel because they realize an element in
the pre-VC position. This position, I argue in Tonhauser (to appear, a) is a
focus position in Yucatec Maya, i.e., a position in which that portion of a

---

[6] In terms of a semantic characterization, I assume that the phrase in the pre-VC
position must provide a free variable.

proposition is realized that "cannot be taken for granted at the time of speech. It is the UNPREDICTABLE [...] element in an utterance" (Lambrecht 1994:206ff). The unpredictability is due to the availability of alternatives (cf Rooth 1992). Whereas in languages like English a focused element can be realized in a number of positions (and is often prosodically prominent), a focused element in YM is realized in the pre-VC position (hence, the 'F' in F-constructions stands for focus). Thus, F-constructions realize an element in the pre-VC position because they realize an event participant with the discourse status 'unpredictable'.[7] The fact that the three kinds of F-constructions receive distinct interpretations despite the structural and semantic/pragmatic parallels is due to the lexical material involved and the presence or absence of additional semantic operators. For instance, the pre-VC position in both content questions and focus constructions is associated with alternatives, but they crucially differ in the nature of the bare nominal. In focus constructions, the bare singular involved is specific enough to identify a particular alternative. For instance, of the many alternative things that the individual in (10b) could eat, the focus construction identifies 'roots' as the one alternative that the individual did eat. The availability of alternatives for the pre-VC element and the identification of a particular alternative via the bare nominal 'roots' gives rise to the focus interpretation. 'General' bare nominals (section 2.1), on the other hand, do not give rise to a focus interpretation: they are too general to identify a particular alternative and only sortally restrict the set of alternatives. Hence, an F-construction with a 'general' bare singular denotes a set of alternative propositions and consequently gives rise to an interrogative interpretation (cf, e.g., Hamblin 1973 for the claim that questions denote sets of alternative answers). Finally, relative clauses in YM are restrictive relative clauses: the nominal in the pre-VC position is associated with alternatives, i.e., is 'unpredictable', and the embedded verbal clause serves to further restrict the possible referents of the pre-VC element. The crucial difference between relative clauses and the other two kinds of F-constructions is that in relative clauses the pre-VC element and the VC are embedded by a semantic operator. For instance, the 'general' bare nominals ba'ax/ba'al 'thing' in (9a) and (9b) do not give rise to an interrogative interpretation because of the definite marker le (9a) and the existential predicate yaan (9b) which, loosely speaking, 'bind off' the alternatives.

---

[7] My assumption that F-constructions are structurally parallel contrasts with Aissen (1992, 1996) who argues that focus is realized in SpecIP while question words are realized in SpecCP.

Summarizing, I have argued that the AF verb in Yucatec Maya is a transitive voice that in those constructions which realize an element in the pre-VC position, i.e., those constructions which realize an element that refers to an event participant whose discourse status is 'unpredictable'. The next section investigates the interaction between voice and discourse status which leads to an account of the function of the AF voice.

3 Voice in Yucatec Maya

One of the most striking differences between YM and languages like English is the role that voice plays in the organization of discourse. This section investigates the discourse constraints on voice in non-F-constructions (section 3.1) and F-constructions (section 3.2).

3.1 The interaction of voice and discourse status

Yucatec Mayan discourse is strongly organized around the most topical event participant, i.e., the event participant that the narration is about. This event participant, which I refer to as the Discourse Topic (DT), is typically human and agentive, and the discourse proceeds along with the events that the DT is involved in. The following excerpt from a YM narrative clarifies the importance of the DT for YM discourse organization. The story is about a girl whose brothers have left the house for an adventure and left her alone. In the first sentence of the part of the story given in (12), the topic-marked NP *Le iits'intsiil –e'* 'the little sister-TOP' turns the little sister into the DT and she remains the DT throughout (12) (the bold-faced cross-reference markers refer to the little sister/DT).

(12) a. Le íits'intsìil -e' ma' ki'imak uy óol -i',
        DEF little.sister –TOP NEG happy A3 soul -D4
        'The little sister wasn't happy,

     b. táan **uy** ok' –ol tumen chéen t-   u hùunal p'atal
        PROG A3 cry –INC CAUSE only PREP- A3 one   stay –
        –Ø -i'
        B3sg–D4
        she was crying because she was the only one left

     c. tu'ux kahakbal   -o'ob –o'. K-   **uy** il-ik   -Ø
        where live.PosRes   -PL -D2 IMPF- A3 see-INC -B3sg
        (in the house) where they had lived. She saw

     d. ma' súut -nah -Ø   mix huntúul u suku'un -o'ob –o'
        NEG return -CMP –B3sg NEG one.CL A3 brother   –PL – D2
        (that) none of her brothers came back

     e. ka   t-   **u**   tukult -ah   -Ø   u bin **uy** ila'ah
        SO   PERF- A3   think -CMP -B3sg A3 go A3 see
        And so she thought of going to see

     f. ba'ax úuch -Ø   ti-o'ob.
        what happen -B3sg PREP-B3pl
        what had happened to them.

     g. Ka   sáastal -e' ka h   bin-**ih**.
        SO   dawn   -TOP SO PERF- go –B3sg.TERM
        'At dawn, she left.'

     h. Chéen   p'elak u   k'uch -ul
        just   hardly A3   arrive –INC
        She had just hardly arrived

     i. t-   u háal le   múul -o' ka a'al-a'ab -Ø   ti
        PREP A3 border DEF hill   -D2 SO say–PSV –B3sg PREP
        –Ø
        –B3sg
        at the foot of the hill when it was spoken to her

     j. tumen   le   nohoch máak -o':
        CAUSE   DEF   old   person-D2
        by the old man:'   [AM2:152]

In the narrative in (12), the little sister (DT) is referred to 10 times only by
a cross-reference marker. Other discourse participants are overtly
mentioned, even if they had already been introduced to the discourse, e.g.,
u suku'uno'ob 'her brothers' in (12d) and *le nohoch máak-o'* 'the old man'
in (12j), thus giving a first indication of the prominence of the DT.
Generally, any third-person cross-reference marker that does not co-occur
with an overt nominal is interpreted as the DT, e.g., the S-argument of the

intransitive predicate *bin* 'go/leave' in (12g), the A-argument of the transitive predicate *il* 'see' in (12e), or the S-argument of the preposition *ti* in (12i). YM discourse is constructed such that the DT is the most prominent discourse participant with the consequence that the DT is the one discourse participant that is consistently referred to with a cross-reference marker. The prominence of the DT also manifests itself at the level of the individual predicates that constitute a narrative, namely in the category voice. The DT is compatible with a number of semantic roles in morpho-syntactically intransitive predications, i.e., in predications where the DT realizes the S-argument: in (12g) the DT realizes the agent role of *bin* 'go/leave'; in (12b), the DT is realized as the theme argument of the inactive intransitive predicate *p'aat* 'remain/stay'; and in (12i), the DT is the recipient of the semantic predication expressed by *a'al* 'say' (and it is realized as the S-argument of the preposition *ti'*). However, in morpho-syntactically transitive predications, the DT only realizes the agent semantic role, i.e., the DT is only ever realized as the transitive A. For instance, the transitive predicates *tukult* 'think' and *il* 'see' in (12e), where the little sister is the agent of the respective predication, are realized in the transitive active (TA) voice. Compare this to the verbal clause in (12i) where the old man is the agent of *a'al* 'say', the thing said is the theme, and the DT is the recipient, as mentioned above. I claim that the predicate *a'al* 'say' is not realized in the TA voice because this would violate the requirement of Yucatec Mayan discourse that the DT be the most prominent discourse participant: in the TA voice, a non-DT agent (the old man) would be realized in as the transitive A-argument and hence would be equally prominent as the DT. The strategy by which this is avoided in Yucatec Mayan discourse is to realize the predicate in the passive (PSV) voice, as in (12i). The passivized predicate is an intransitive predicate which realizes the theme semantic role as the S-argument and, crucially, demotes the agent and (optionally) realizes it as an oblique argument marked by the predicate *tumeen* 'CAUSE'. The demotion of the agent argument ensures the prominence of the DT in the discourse: among the oblique arguments, it is the only event participant that is referred to with a cross-reference marker only. Summarizing, a transitive predicate can be realized in the active or the passive voice: <u>the TA voice is used if it realizes the DT as the transitive A (i.e., if the DT is the agent), otherwise the passive voice is used</u>.

The observation that the transitive active voice imposes constraints on certain features of its arguments (like person (local/non-local), animacy, definiteness) is not new, especially in the functional literature (e.g. Silverstein 1976, DeLancey 1981, Givón 1983, Comrie 1989). However,

voice alternations in YM seem to be additionally sensitive to the relationship between the semantic role and the discourse status of event participants, especially the discourse topic. Definiteness and animacy alone cannot account for the observed voice alternations. For example, in (12i), the passive voice is used despite the fact that the agent (the old man) of the predication is more animate and definite than the theme (the thing said). The relevant factor here is that the agent is not the current discourse topic.

3.2 Voice in F-constructions

The aim of this section is to account for why F-constructions realize the Agent Focus (AF) voice in addition to the TA and the PSV voice. Paradoxically, the function of the AF verb form is best explained by re-examining the TA and PSV voices in the context of F-constructions. Recall from section 2.3 that F-constructions realize an event participant with the discourse status 'unpredictable', which is crucially distinct from the discourse topic. The TA voice is used only when the discourse topic is the agent of the transitive predicate, and this constraint also holds in F-constructions. Thus, in the example in (13), the topic-marked NP *Maria-e'* is interpreted as the transitive A while the pre-VC nominal *maax* 'person/who' is interpreted as the transitive O.

(13)   <u>TA voice: DT=agent</u>

Maria	–e'	maax	t-	uy	il	-ah?
Maria	-TOP	person/who	PERF-	A3	see	-CMP

'Maria, who does she see?'

The near minimal pair of F-constructions (relative clauses) in (14) and (15) illustrates that the PSV voice is used in F-construction, too, in order to prevent a non-DT agent argument from being realized as the transitive A. In the contexts of the examples in (14) and (15) (which occur in the same story as the narrative in (12)), there's a king whose wife bears him two children but the evil sisters of the wife have told the king that his wife didn't give birth to a child, but rather to a dog and a cat, respectively. The transitive predicate *a'al* 'say' occurs in the second clauses of both of (14) and (15) with the evil sisters as the agent and the thing said as the theme. *a'al* 'say' is realized in the active voice in (14), but in the passive voice in (15). The voice alternations correlate with whether the DT is the agent or not: in (14), the evil sisters are the DT, whereas in (15), the king is the DT. (For reasons of space, extensive contexts cannot be given here to illustrate which participant is the DT. However, the first clause of each example provides evidence: in (14), where the evil sisters are the DT, the king is

overtly realized, while he is referred to with a cross-reference marker only in (15), thus indicating that he is the DT.)

(14)   <u>TA voice: DT=agent=transitive A</u>
K-   uy il -ik   -Ø   le   ahaw   -o'
IMPF- A3 see -INC   -B3sg   DEF   king   -D2
'(When) the king saw
hàah -Ø   ba'ax k-   uy a'al –ik   -o'ob -o'.
true -B3sg thing IMPF- 3   say –INC -B3pl -D2
(that) it was true what they (the sisters) had said...'
[AM2:146]

(15)   <u>PSV voice: DT≠agent (thus, agent is demoted to oblique)</u>
K-   uy il -ik   -e'
IMPF- A3 see -INC   -TOP
'(When) he (the king) saw
hàah -Ø   le   ba'ax a'al -a'ab -Ø   ti'   -Ø   -o'.
true -B3sg DEF thing say -PSV -B3sg   PREP   -B3sg -D2
(that) it was true what was said to him (by the sisters)...'
[AM2:148]

So, why do F-constructions realize an additional voice besides the TA and the PSV voice? The reason, I argue, is that neither the TA nor the PSV voice can realize an 'unpredictable' agent of a transitive predication. As illustrated in (13), the TA voice requires the DT to be the agent/transitive A; hence the 'unpredictable' event participant is interpreted as the transitive O. The PSV voice is unsuitable to realize an 'unpredictable' agent event participant because it demotes the agent. Event participants that have the discourse status 'unpredictable', however, are highly relevant to the particular event and, hence, their realization in the pre-VC position is incompatible with the demotion of the passive voice. <u>Thus, the function of the AF voice is to realize A-arguments with an 'unpredictable' discourse status</u>. The following near minimal pair illustrates this contrast between the PSV and the AF voice. Both examples are taken from the same story as in (12), at point where one of brothers of the little girl has gone off for his adventure and has met the old man. The second clauses of the examples in (16) and (17) are of concern here. In (16) the transitive O of the perception verb *u'uy* 'hear' cross-references the verbal clause that contains the passivized predicate *poch'* 'insult'. In (17), the transitive O of the perception verb *il* 'see' cross-references the F-construction (relative clause) that contains the predicate *poch'* 'insult' in the AF voice. The crucial consequence of the choice of the PSV versus the AF voice for the predicate *poch'* 'insult' is that the O-argument of perception verb in (16)

cross-references a verbal clause while the O-argument in (17) cross-references a nominal element (that is further specified by a verbal clause). Note that both verbs of perception can embed verbal clauses and nominal elements – the important observation here is that the passive voice is chosen in (16) to convey that the event of insulting is relevant, not the agent. In (17), on the other hand, the agent is relevant since the brother turned around to <u>see</u> the person who has insulted him. The verbal clause only serves to further identify the agent. In this context, the PSV voice is unsuitable.

(16)   PSV voice: DT≠(transitive) agent; agent is demoted
         [Listen to the advice I give you:]
         bik   xi'ik   -ech   a   sut –Ø   –Ø   aw   ich
         NEG go.SBJ -B2sg A2 turn –SBJ -B3sg A2 eye
         le kéen aw   u'uy   -Ø   a   po'och' -ol.
         when A2   hear   -B3sg A2   insult -PSV
         'Don't turn around when you hear you are being insulted.'
         [AM2:152]

(17)   AF voice: DT≠agent; agent is 'unpredictable'
         [But he didn't do what he was told.]
         ka t-   u   sut -ah   -Ø   uy ich utia'al
         SO PERF- A3 turn -CMP -B3sg A3 eye in.order.to
         uy il -ik -Ø   máax poch'   -ik   -e'.
         A3 see –INC -B3sg person insult.AF   -INC -TERM
         'He turned around to see the person/who was insulting him.'
         [AM2:152]

Concluding, in Yucatec Maya, the PSV and the AF voice are parallel to the extent that a verbal predicate that is realized in either of these voices signals that the agent of the eventuality is not the current discourse topic. The two voices differ, however, in that the PSV voice demotes the agent and results in an intransitive predication, whereas the AF voice results in a transitive predication which emphasizes the importance of the agent for the event. The AF voice is restricted to F-constructions because only these constructions realize an event participant with the discourse status 'unpredictable'.

4 Conclusions and Discussion
I have argued that (i) voice in Yucatec Maya is sensitive to the relation between the discourse topic and its semantic role in an event, and, (ii) that F-constructions realize an event participant with the discourse status

'unpredictable'. Yucatec Mayan discourse is organized such that in transitive predications the discourse topic is typically linked to the agent. The AF verb in Yucatec Maya marks those transitive predications in which an 'unpredictable' event participant is the agent. Under the (not unlikely) hypothesis that the properties (i) and (ii) also apply to other Mayan languages, the motivation for the AF verb form presented here for Yucatec Maya explains the striking overlap across Mayan languages in the constructions that realize the AF verb form. At the same time, the account leaves room for language-particular realizations of the AF verb.

Acknowledgements

References

Aissen, Judith (1992): Topic and Focus in Mayan. Language 68, 43-80.

Aissen, Judith (1996): Pied-piping, abstract agreement, and functional projections in Tzotzil. Natural Language and Linguistic Theory 14, 447-91.

Aissen, Judith (1999): Agent Focus and Inverse in Tzotzil. Language 75, 451-485.

Andrade, Manuel and Hilaria Máas Colli (eds.) (1999): Cuentos Mayas Yucatecos. Tomo I. Ediciones de la Universidad Autonoma de Yucatán.

Andrade, Manuel and Hilaria Máas Colli (eds.) (2000): Cuentos Mayas Yucatecos. Tomo II. Ediciones de la Universidad Autonoma de Yucatán.

Ayres, Glen (1983): The antipassive "voice" in Ixil. Intnl. Journal of Am. Linguistics 49, 20-45.

Bohnemeyer, Jürgen (1998): Time relations in discourse. Evidence from a comparative approach to Yucatec Maya. PhD thesis, Catholic University Brabant, Netherlands.

Bohnemeyer, Jürgen (to appear): Split intransitivity, linking, and lexical representation: The case of Yukatek Maya. In: Linguistics 42/2004.

Bricker, Victoria R. (1979): Wh-questions, relativization, and clefting in Yucatec Maya. In L. Martin (ed.), Papers in Mayan linguistics. Columbia, Missouri: Lucas Brothers. 107-136.

Comrie, Bernard (1989): Language universals and linguistic typology. UCP, Chicago.

Craig, Colette (1979: The structure of Jacaltec. Austin: University of Texas Press.

Dayley, Jon (1985): Tzutujil Grammar. Berkeley: University of California Press.

DeLancey, Scott (1981): An Interpretation of Split Ergativity, Language 57, 626-657.

Dixon, R.M.W. (1972): The Dyirbal language of North Queensland. CUP, Cambridge.

Dixon, R.M.W. (1994): Ergativity. CUP, Cambridge.

England, Nora (1983): A grammar of Mam, a Mayan language. UTPress, Austin.

Givón, Talmy (1983): Topic continuity in discourse: an introduction. In: T. Givon (ed.), Topic continuity in discourse. A quantitative cross-language study, 1-43. Amsterdam/Philadelphia: Benjamins.

Hamblin, Charles L. (1973). Questions in Montague English. Foundations of Language 10: 41-53

Kaufmann, Terence (1990): Algunos rasgos estructurales de los idiomas Mayances. In N.C. England & S.R. Elliot (Eds.), Lecturas sobre la lingüística maya. La Antigua, Guatemala: Centro de Investicaciones Regionales de Mesoamérica, 59-114.

Klaiman, M.H. (1991): Grammatical Voice, CUP, Cambridge.

Lambrecht, Knut (1994): Information structure and sentence form. CUP, Cambridge.

Larsen, Thomas (1987): The syntactic status of ergativity in Quiché. Lingua 71, 33-59.

Mondloch, James (1981): Voice in Quiche-Maya. PhD thesis, SUNY, Albany.

Rooth, Mats (1992): A Theory of Focus Interpretation. Natural Language Semantics 1, 75-116.

Siverstein, Michael (1976): Hierarchies of features and ergativity. In: R.M.W.Dixon (ed.), Grammatical categories in Australian languages, Australian Institute of Aboriginal Studies, Canberra, pp.112-171.

Smith-Stark, Thom (1978): The Mayan antipassive: some facts and fiction. In: England, N. (ed). Papers in Mayan linguistics. University of Missouri, Columbia, 169-187.

Tonhauser, Judith (to appear,a): F-constructions in Yucatec Maya. In: Proceedings of SULA 2 (Semantics of Underrepresented Languages in the Americas), UMass. Occ.Papers, Amherst, Mass.

Tonhauser, Judith (to appear,b): On the syntax and semantics of content questions in Yucatec Maya. In: Proceedings of the 6th Workshop on America Indian Languages, UCSB.