ON THE SYNTAX OF AGENT FOCUS IN K'ICHEE'[*]

JUDITH AISSEN
UC Santa Cruz

1 Introduction

As is typical for a Mayan language, K'ichee' has multiple correlates of transitivity. Some of these are morphological, others are syntactic, but in most clause types, the two align and give rise to a distinction between transitive and intransitive which is rich and, at the same time, rigid. It is against this backdrop that AGENT FOCUS (AF) clauses like (1) have generated on-going interest.[1]

(1)   Jachiin x-paxi-n   lee laq?
       who   CP-break-AF the bowl
       'Who broke the bowl?' (Mondloch, 1981:227)

(1), which involves interrogation of the external (A) argument, is like the corresponding transitive, (2), in having two obligatory, direct (i.e. non-oblique) arguments.

(2)   X-u-paxi-j   lee laq   lee achih.
       CP-A3SG-break-ACT the bowl the man
       'The man broke the bowl.'

However, the verb in (1) lacks most of morphology associated with transitive verbs, including the ergative marker (A3SG), which indexes the A argument in (2), and the active suffix *-j*.

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[1]Abbreviations in glosses: ACT: active voice suffix; AF: agent focus; AP: antipassive; CLS: classifier; CP: completive; DET: determiner; DIM: diminutive; DIR: directional; FOC: focus; ICP: incompletive; IRR: irrealis; IV: intransitive; NEG: negation; NOM: nominative; OBL: oblique; PF: perfect; PL: plural; P: preposition; PSV: passive; REFL: reflexive; SG: singular; SS: status suffix. All examples cited here are transcribed in the official orthography of the Guatemalan Mayan languages (Academia de las lenguas mayas, 1988). In this orthography, 'x' represents a voiceless alveolar fricative and 'j' a voiceless velar fricative. Otherwise, symbols have familiar values.

Based on the argument structure of AF clauses, and the fact that both arguments appear to be direct, examples like (1) are analyzed in several earlier works as syntactically transitive (Craig, 1979, Hale, 2001, Stiebels, 2006). AF clauses are seen then as morphological variants of transitive clauses, possible only when the external argument enters into an A-bar dependency, e.g. is focused, questioned, relativized, etc.

I argue against the transitive analysis of AF clauses in K'ichee'. It is true that AF clauses have the same argument structure as transitives, but there are *intransitive* constructions in K'ichee' which *also* require two arguments, i.e. certain antipassives, and I will suggest that AF clauses are more closely related to these than to syntactic transitives. Moreover, I will suggest that AF clauses are inverse in that they involve reversal of the prominence of the A and O arguments. Neither the affiliation with antipassive nor inversion is a *necessary* property of AF clauses in Mayan, as we will see from evidence in some other languages, but the proposal of this paper is that they *are* properties of AF in K'ichee'. If this is right, then there is more variation in the syntax of AF clauses in Mayan than is usually recognized.

I start by providing some background on transitivity and voice in K'ichee', leading up to a proposal for the phrase structure of AF clauses. We will then turn to evidence that in K'ichee', the prominence of A and O is reversed.

2 Background

Basic intransitive clauses in K'ichee' are headed by an intransitive verb which selects a single direct argument. That argument may be overt, as in (3a), or covert, as in (3b).

(3)　a.　K-ooq' rii chaq'ixeel.
　　　　　ICP-cry the younger.sibling
　　　　　'The younger sibling is crying.' (Mondloch, 1981:146)

　　　b.　K-in-ooq'-ik.
　　　　　ICP-B1SG-cry-SS$_{iv}$
　　　　　'I am crying.'

Like other Mayan languages, K'ichee' has an ergative agreement system, with one set of markers (Set A) indexing A's in transitive clauses, and another (Set B) indexing S's in intransitive clauses and O's in transitives. The Set B marker for 1st singular is present in (3b); there is no Set B marker for 3rd person singular, hence none in (3a). Finally, when an intransitive verb occurs in pre-pause position, it carries the so-called INTRANSITIVE STATUS SUFFIX *-ik*, as in (3b) (for a recent analysis, see Henderson (to appear)).

Basic transitive clauses are headed by a transitive verb, which takes two direct arguments. Again, either (or both) may be covert. The verb indexes A and O by markers from Sets A and B respectively.

(4)　a.　X-in-u-to'　　　　　rii achih.　　　　　　　　　　　　　　　　　RTV
　　　　　CP-B1SG-A3SG-help the man
　　　　　'The man helped me.' (Mondloch, 1981:108)

　　　b.　X-at-u-kuna-j　　　　rii ixoq.　　　　　　　　　　　　　　　　DTV
　　　　　CP-B2SG-A3SG-cure-ACT the woman
　　　　　'The woman cured you.'

Transitive verb stems in K'ichee' also carry a VOICE morpheme. Voice morphemes come in pairs which are sensitive to a distinction between root transitives (*rtv*'s) and derived transitives (*dtv*'s). *rtv*'s are monosyllabic and have the form CVC, (4a), while *dtv*'s are polysyllabic, (4b).

In active, transitive voice, *rtv*'s take the suffix *-oh*, which surfaces only when the verb occupies pre-pause position. Thus, the suffix is absent in (4a), but present in (5a). On the other hand, *dtv*'s take the suffix *-j*, regardless of prosodic position, cf. (4b, 5b).

(5) a.   X-in-u-to'-oh.   RTV
          CP-B1SG-A3SG-help-ACT
          'S/he helped me.'

     b.   X-at-u-kuna-j.   DTV
          CP-B2SG-A3SG-cure-ACT
   'S/he cured you.' (Mondloch, 1981:60)

The order of morphemes in aspect-bearing verbs is shown in (6).

(6) | ASPECT |–| SET B |–(| SET A |)-| *verb* |–| VOICE |–| STATUS |

We will see evidence below that the voice and status suffixes are distinct, and that they occur in the order indicated. In the analysis proposed here, there is no status suffix for transitive verbs, only for intransitives.[2]

The voice morphemes play an important role in what follows, as they are analyzed as the realization of a functional voice head which determines various voice-related properties of the clause. The structure I propose for basic transitive clauses is shown in (7). It contains two layers of verb phrase: an inner *tvP* headed by the *tv* stem and containing the internal (O) argument, and an outer *vP*, whose head, v_{act}, defines the voice of the clause.

(7)   ACTIVE TRANSITIVE CLAUSE

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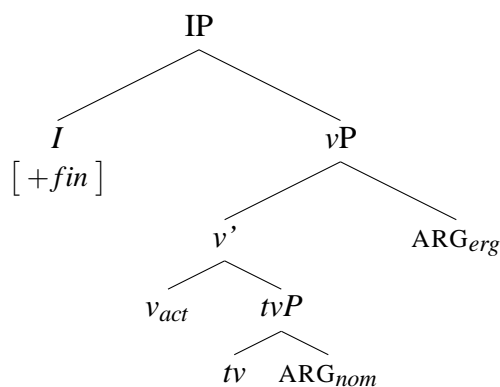
[2] In some work, *-oh* and *-j* (as in (5a,b)), are analyzed as transitive status suffixes, e.g. Kaufman (1990). We will see shortly that *-j* is a voice suffix, not a status suffix. The analysis of *-oh* is more difficult. It shares with the intransitive status suffix *-ik* the prosodic restriction to pre-pause position. But there is also motivation to analyze it as an active voice suffix for *rtv*'s, since it is in complementary distribution with the voice suffix *-j* which occurs on *dtv*'s. This is what I assume here, but nothing in this paper hinges crucially on whether *-oh* is analyzed as a voice suffix or a transitive status suffix.

v_{act} has the semantic, syntactic, and morphophonological properties listed in (8):

(8)   a.   it selects a *tvP* as complement and introduces the external (A) argument into its specifier position,

       b.   it licenses ERGATIVE Case on the argument in its specifier,

       c.   it is realized as *-oh* on *rtv*'s and as *-j* on *dtv*'s.

Transitive (active) clauses thus always contain two syntactically realized arguments: the internal argument, which is a sister of *tv*, and the external argument, which is the specifier of v_{act}. Both require Case-licensing. I assume that the external argument is Case-licensed by v_{act}, and is associated with ERGATIVE Case; further, that the internal argument is Case-licensed by finite I, and is associated with NOMINATIVE Case. The structural conditions under which each Case is licensed and the morphological realization of each Case, are specified in (9):

(9)   CASE IN K'ICHEE'

       a. v_{act} licenses ERGATIVE Case on its specifier (realized by Set A)

       b.   I[+*fin*] licenses NOMINATIVE Case on the highest nominal phrase in its domain without Case (realized by Set B).

Both clauses of (9) are relevant to transitive clauses; in intransitive clauses, only (9b) applies.

There are two other (surface) voice categories in K'ichee', passive and antipassive. These too are associated with voice morphology. Like active morphology, each morpheme has two allomorphs, one for *rtv*'s and one for *dtv*'s. The forms are shown in Table 1 (forms in parentheses are prosodically restricted). The structure of *dtv*'s, in particular, reveals that the active suffix (*-j*) is on a morphological par with the other voice suffixes, and thereby provides some evidence that the three voices are on a syntactic par, as well. In my terms, they are syntactically constructed; the voice suffix is the morphological realization of the head which defines the voice of the clause.

Table 1: Voice morphology in K'ichee'

	ch'ay 'hit' (*rtv*)	*kamsa-* 'kill' (*dtv*)
TRANSITIVE ACTIVE	ch'ay-(oh)	kamsa-j
PASSIVE	ch'aay	kamsa-x
INCORPORATIVE ANTIPASSIVE	ch'ay-ow	kamsa-n

Passive clauses need not detain us long. They contain a single obligatory syntactic argument, which corresponds to O and is indexed on the verb via Set B markers. The external argument may be realized in an oblique phrase (not shown here). Passives are relevant here primarily for what they reveal about verb morphology: the verb carries the voice morpheme shown in Table 1. In *rtv*'s, the root vowel is lengthened, while *dtv*'s suffix *-x*.

(10) PASSIVE

    a.   K-in-ch'aay-ik.   RTV
        ICP-B1SG-hit$_{psv}$-SS$_{iv}$
        'I will be hit.' (Mondloch, 1981:121)

    b.   X-kamisa-x-ik.   DTV
        CP-kill-PSV-SS$_{iv}$
        'It was killed.'

Further, when passive verbs occur in pre-pause position, they carry the intransitive status suffix *-ik*, as in (10a,b). Thus they show us that there are distinct positions for voice morphology and the status suffix, per the template in (6).

We can now turn to a third (surface) voice category in K'ichee', an incorporative antipassive construction. The surface structure of this construction consists of a manner adverb in preverbal position, then the verb, and then an obligatory bare N (Mondloch, 1981).

(11) INCORPORATIVE ANTIPASSIVE

    a.   Utz k-in-paj-ow   tzaam.   RTV
        well ICP-B1SG-measure.out-AP liquor
        'I liquor-measure well.' (Mondloch, 1981:250)

    b.   Ch'u'j   k-at-b'iinisa-n   ch'iich'.   DTV
        wrecklessly ICP-B2SG-drive-AP car
        'You car-drive wrecklessly.' (Mondloch, 1981:250)

The verb in this construction carries voice morphology we have not seen yet: *-ow* for *rtv*'s (11a), and *-n* for *dtv*'s (11b) (see Table 1).
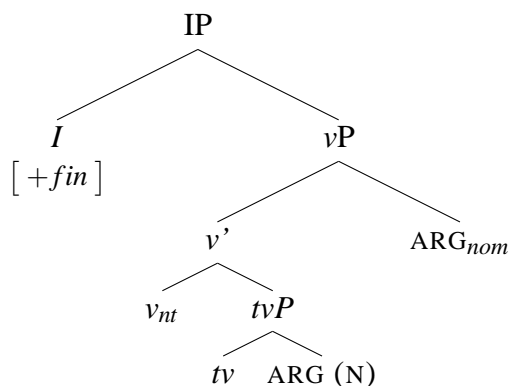
Morphosyntactically, incorporative antipassive clauses are intransitive, as the verb carries (at most) one agreement marker, a Set B marker which indexes the external argument (11a,b).[3] But like transitives, it has two obligatorily realized arguments: one corresponding to the external (A) argument and one to the internal (O) argument (the bare N).

I propose that incorporative antipassive is based on an infrastructure which I call NEUTRAL, an infrastructure that underlies several clause types in K'ichee'.[4] Neutral structures are headed by v_{nt}, which takes exactly the same arguments as v_{act}: a *tvP* as complement and a nominal phrase in its specifier.

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[3]The verb does not carry an intransitive status suffix in this construction. The reason is that it is always followed by a bare N and therefore is never pre-pausal.

[4]In the oral presentation of this paper, I referred to this infrastructure as *antipassive*. However because my claim is this infrastructure underlies a variety of structures, some of which have canonical properties of antipassive and some of which do not, a more neutral term is preferable. I explore the role of neutral infrastructure in K'ichee' (and other languages) in work that is in progress.

(12)   INCORPORATIVE ANTIPASSIVE IN K'ICHEE'

$$\begin{array}{c}
\text{IP}\\
\diagup\;\diagdown\\
\begin{array}{c}I\\ \left[\,+fin\,\right]\end{array}\qquad \begin{array}{c}v\text{P}\\ \diagup\;\diagdown\\ \begin{array}{c}v'\\ \diagup\;\diagdown\\ v_{nt}\quad \begin{array}{c}tv\text{P}\\ \diagup\;\diagdown\\ tv\;\;\text{ARG (N)}\end{array}\end{array}\qquad \text{ARG}_{nom}\end{array}
\end{array}$$

Neutral clauses are exactly like active transitives then in requiring two syntactically realized arguments, A and O. And these are associated with exactly the same structural positions as in transitives. However, the head, v_{nt}, differs from that of transitives in its morphological realization and in its Case-licensing capacity. The morphology has already been mentioned (see Table 1). Importantly, unlike v_{act}, v_{nt} does not license Case on any argument.[5]

Since v_{nt} does not license Case on its specifier, Case must be licensed in a different way. Applied to the structure in (12), the Case principles from (9) determine that finite I licenses (nominative) Case on the external argument. That argument should then be indexed by Set B markers. This is correct, as seen in (11a,b). The internal (O) argument then must somehow satisfy (or avoid) the need for Case. In incorporative antipassive, it is an N and requires no Case.

The properties of v_{nt} are summarized in (13):

(13)   a.   it selects a *tvP* as complement and introduces the external (A) argument into its specifier position,

   b.   it does *not* license Case on the argument in its specifier,

   c.   it is realized as *-ow* on *rtv*'s and as *-n* on *dtv*'s.

A comparison of (13) with (8) shows that this analysis accounts for the ways in which canonical transitive clauses and incorporative antipassive clauses are alike, and for some of the ways in which they are different. Both require two obligatorily realized arguments, A and O. This follows from the fact that both v_{act} and v_{nt} introduce an external argument and both take as complement a *tvP*, which introduces an internal argument.. However they have different voice morphology and different Case-licensing capacity. Both differences follow from properties associated with the heads that distinguish the two constructions, v_{act} and v_{nt}.

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[5]There is a distinct antipassive construction in K'ichee' (sometimes called ABSOLUTIVE) in which the internal argument is not obligatorily realized:

(i)   K-in-yoq'-on   (chee lee in-taat).   RTV
      ICP-B1SG-mock-ABS OBL   the my-father
      'I mock (my father).' (Mondloch, 1981:171)

   The morphology of this construction is distinct from that of incorporative antipassive: *all tv*'s, whether *rtv*'s or *dtv*'s, suffix *-(V)n*. Under the analysis proposed here, this construction is not built on neutral infrastructure, as it lacks both the argument structure and the morphology associated with v_{nt}.

3 Agent focus

From this perspective, the question of the transitivity of AF clauses involves (in part) asking what infrastructure they are built on. I will propose that they are built on neutral infrastructure, and are thus syntactically related more closely to incorporative antipassive clauses than they are to active transitives. This analysis raises a variety of issues not all of which can be addressed here. My goal is to make a plausible case for it, enough so that we can move on, in §4, to consider the relative prominence of A and O. First some background.

    As we saw at the outset, AF clauses contain a special verb form which is used when the external (A) argument enters into an A-bar dependency. Under this condition, the AF form is usually obligatory in K'ichee'. Thus, from a basic transitive clause like (14a), it is not possible to directly focus the A argument: (14b) is ungrammatical (on the intended reading) and what occurs instead is the form in (14c).

(14)   a.   X-u-k'ot   rii jul rii tz'i'.   RTV
             CP-A3SG-dig the hole the dog
             'The dog dug the hole.' (Mondloch, 1981:225)

        b.   * Aree rii tz'i' x-u-k'ot   rii jul.
             FOC the dog CP-A3SG-dig the hole
             ('It was the dog that dug the hole.') (adapted from Mondloch 1981:226)

        c.   Aree rii tz'i' x-k'ot-ow rii jul.
             FOC the dog CP-dig-AF the hole
             'It was the dog that dug the hole.' (adapted from Mondloch 1981:226)

    Another paradigm, this one involving interrogation of the external argument, is provided in (15). Again, when the A argument in a transitive clause like (15a) is extracted, the plain transitive verb cannot be retained (15b), but must be replaced by the form shown in (15c).

(15)   a.   X-u-paxi-j   lee laq   lee achih.   DTV
             CP-A3SG-break-ACT the bowl the man
             'The man broke the bowl.'

        b.   * Jachiin x-u-paxi-j   lee laq?
             who   CP-A3SG-break-ACT the bowl
             ('Who broke the bowl?') (Mondloch, 1981:227)

        c.   Jachiin x-paxi-n   lee laq?
             who   CP-break-AF the bowl
             'Who broke the bowl?' (Mondloch, 1981:227)

    Turning to the question of transitivity, a salient property of AF clauses is that they require two syntactically realized arguments, A and O. However, this is a property they share with *both* transitives and with incorporative antipassives in K'ichee', and therefore does not, in itself, argue for a transitive analysis. On the other hand, the voice morphology clearly aligns AF clauses with incorporative antipassive, since we find the same voice morphology in the two constructions: *-ow* for *rtv*'s and *-n* for *dtv*'s. Both the morphological and argument structural properties of AF clauses follow then directly from an analysis which builds them on neutral infrastructure.

AF verbs share another morphological property with non-transitive verbs: in pre-pause position, they carry the "intransitive" status suffix -*ik*.

(16) a.   Aree x-b'an-ow-ik.   RTV
           FOC CP-do-AF-SS$_{iv}$
           'He is the one who did it.' (Mondloch, 1981:214)

      b.   Jachiin x-k'ayi-n-ik?   DTV
           who   CP-sell-AF-SS$_{iv}$
           'Who sold it?' (Mondloch, 1981:219)

This suffix occurs on basic intransitives (3b), passives (10a,b), and on some adjectival-like predicates. Since these involve a variety of structures, -*ik* is apparently a default which occurs on any finite non-transitive verb, i.e. any finite verb not built on the v_{act} infrastructure. Under the neutral clause analysis of AF clauses, AF verbs too are non-transitive and are thus also expected to suffix -*ik* under the right prosodic conditions.

The main challenge to analyzing AF clauses as built on the same (neutral) infrastructure as incorporative antipassive is Case. At first sight, it appears that Case is licensed in much the same way. In K'ichee', the external argument in an AF clause is indexed on the verb by Set B, just as in incorporative antipassive (cf. 11a,b):

(17) a.   In   x-**in**-b'an-ow   lee chaak.   RTV
           1SG CP-**B1SG**-do-AF the work
           'I'm the one who did the work.' (Mondloch, 1981: 214)

      b.   At   k-**at**-chaaji-n   lee jah.   DTV
           2SG ICP-**B2SG**-guard-AF the house
           'You are the one who guards the house.' (Mondloch, 1981: 214)

However, while the internal argument is not Case-licensed in incorporative antipassive (recall it is restricted to N), it *is* licensed in AF clauses, where it can be a full DP. Furthermore, it is licensed by the verb (i.e. by some functional head in the verbal projection), for when it is 1st or 2nd person, it too is indexed on the verb by Set B:

(18) a.   Jachin x-**at**-to'-w-ik?
           who   CP-**B2SG**-help-AF-SS$_{iv}$
           'Who helped you?' (Mondloch, 1981:70)

      b.   Jachiin x-**in**-il-ow-ik?
           who   CP-**B1SG**-see-AF-SS$_{iv}$
   'Who saw me?' (Mondloch, 1981:114)

Thus, while antipassive clauses Case-license only one direct argument, AF clauses in K'ichee' license two.

It was facts like those in (18) which led earlier work to reject an antipassive analysis for AF clauses in K'ichee' (and some other languages) (Craig, 1979, Smith-Stark, 1978). The present analysis resurrects a version of the antipassive analysis, but it does not claim that AF clauses *are* antipassives, but rather that they are derived from the same underlying infrastructure as (some)

antipassives. This shared infrastructure determines some aspects of superficial morphosyntax, but not necessarily all of them.

To distinguish AF from other clause types based on neutral infrastructure, I propose that the head, v_{nt}, can be augmented with a focus feature (FOC), as in (19).

(19) AF IN K'ICHEE'
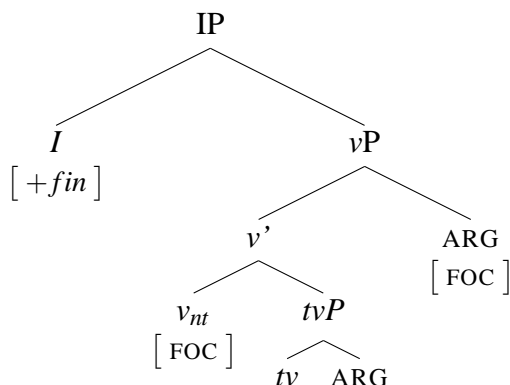
The AF verb in K'ichee' then is based on v_{nt}, augmented with FOC:

(20) v_{nt} $= v_{af}$
        $\begin{bmatrix} \text{FOC} \end{bmatrix}$

As head of an AF clause, v_{af} inherits properties from v_{nt}. In particular, it is associated with two obligatorily realized syntactic arguments, internal and external, it is spelled-out with the same neutral voice morphology that is found in incorporative antipassive clauses, and it takes the intransitive status suffix when prosodic conditions are met. Borrowing some ideas from Stiebels (2006), we can attribute certain other effects to the addition of the FOC feature. Conceived as an uninterpretable feature which must be checked by an element in its specifier, FOC will occur only when the external argument carries a matching feature, one which triggers extraction. And since it is a property of particular heads that they either do or do not license Case within some domain, we can see Case-licensing as a property of v_{af}. That is, the addition of the FOC feature can endow v_{nt} with the capacity to license Case on its specifier, a capacity which v_{nt} alone lacks.[6] The syntax of Case-licensing in AF clauses then parallels that of transitive clauses: the voice head (v_{act} or v_{nt}) licenses Case on the external argument, while I[+*fin*] licenses Case on the internal argument. This leaves some issues unresolved, but provides sufficient grounding for the questions to be raised in the next section.[7]

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[6]I say "can" because for some speakers of K'ichee', the syntax of AF clauses is essentially that of a canonical antipassive, i.e., the internal argument is oblique (Mondloch, 1981:223-225). This construction exhibits the same morphology as the AF construction under discussion here, so is derived straightforwardly from the same neutral infrastructure, without any special assumptions about Case.

[7]Two of the issues raised by making v_{af} a Case-licensor are the following: [1] is the case which v_{af} licenses to be identified with some established Case (e.g. ergative, nominative)? and [2] how to account for the morphology, in particular, the fact that the external argument is indexed by a marker from Set B, not Set A.

[1] Case-licensing involves a relation between a head and a nominal and terms like ERGATIVE and NOMINATIVE are simply traditional names for cross-linguistically recurrent relations involving particular heads (e.g. v_{act}, or I[+*fin*]) and particular nominals. Whether the relation that holds between v_{af} and its specifier is an instance of one of the traditional Cases is not a critical question for this analysis. [2] The descriptive generalization is that φ-features of the

Finally, note that it is not logically necessary that the agent focus construction be based on the same infrastructure as antipassive. [FOC] could equally well be added to v_{act}, and this may be a way to understand AF clauses in Yukatek Maya, which have been claimed to be transitive. As in K'ichee', both arguments are direct (non-oblique), but importantly, AF verbs appear to take transitive status suffixes (Bohnemeyer, 2002, Tonhauser, 2003).

With this as background, we turn to evidence that AF clauses in K'ichee' have inverse syntax.

4   K'ichee' AF clauses have inverse syntax

4.1   Two exceptions (Mondloch, 1981)

We saw earlier that AF is generally obligatory when the external argument is extracted, (14, 15). However, there are two exceptions, first discussed in detail in Mondloch (1981). The first is that the *tv* is possible when A is extracted from a reflexive clause:

(21)   REFLEXIVES
      a.   Jachiin majaa k-u-kuna-j   r-iib'   ch-iw-eh?
          who   NEG ICP-A3SG-cure-ACT A3SG-REFL P-A2PL-OBL
          'Who among you hasn't cured himself yet?' (Mondloch, 1981:233)
      b.   Aree jun kumatz u-b'aq'ati-m   r-iib'.
          FOC one snake   A3SG-roll-PF$_{tv}$ A3SG-REFL
          'It was a snake that is coiled (around the tree).' (Mondloch, 1981:233)

The second is that *tv* occurs when A is extracted from a clause is which the possessor of O is referentially dependent on A, what I term an EXTENDED REFLEXIVE clause:

(22)   a.   Aree lee Axwaan x-u-k'at   r-aqan.
          FOC the Juan   CP-A3SG-burn A3SG-foot
          'Juan is the one who$_i$ burned his$_i$ own foot.' (Mondloch, 1981:237)
      b.   X-ul   lee alii [lee x-u-tzaq   u-jastaaq].
          CP-arrive the girl who CP-A3SG-lose A3SG-things
          'The girl who$_i$ lost her$_i$ things arrived.' (Mondloch, 1981:236)

It is a general property of K'ichee' that the transitive form is possible (when A is extracted) only when the AF form is impossible. Consistent with this, the AF form is ungrammatical in reflexive and extended reflexive contexts.

(23)   a.   * Jachiin majaa ka-kuna-n   r-iib'   ch-iw-eh?
          who   NEG ICP-cure-AF A3SG-REFL P-A2PL-OBL
          'Who among you still hasn't cured himself?' (Mondloch, 1981:233)
      b.   * Aree lee Axwaan x-k'at-ow   r-aqan.
          FOC the Juan   CP-burn-AF A3SG-foot
          ('Juan is the one who$_i$ burned his$_i$ own foot.') (Mondloch, 1981:235)

DP Case-licensed by v_{act} are spelled out on the verb by Set A markers, while φ-features associated with DP's licensed by any other verbal head are spelled out by Set B markers. Formalizing this is beyond the scope of this paper. For an analysis of the morphology from a pan-Mayan perspective, see Stiebels (2006).

These exceptions are puzzling if AF clauses are just morphological variants of transitives (per Stiebels (2006), for example), used when the external (A) argument is extracted. Reflexive clauses are transitive, the A argument is extracted – why should the AF form be ungrammatical?

When A is extracted from a reflexive or extended reflexive clause, the relation between A and O is not one of co-reference, but one of binding. And binding is a relation which is usually assumed to require c-command. Hence AF is blocked precisely where A needs to c-command O, suggesting that in AF clauses, A in fact does not c-command O and therefore cannot bind (into) O. We can derive these facts by positing that in K'ichee' AF clauses, O raises to a position above A, thereby disrupting the c-command relation which is needed for the bound reading (for an alternative account of the extended reflexive facts, see Coon and Henderson (2011)). This analysis, which amounts to the claim that AF clauses in K'ichee' are inverse, is sketched in (24). The original position of A and O are struck out. O raises above A and, I assume, adjoins to the *vP*. A will undergo subsequent A-bar movement to a still higher position, but the relevant positions for determining c-command for the purposes of binding are the ones in boxes.

(24)   RAISING THE INTERNAL ARGUMENT IN K'ICHEE', AF CLAUSE
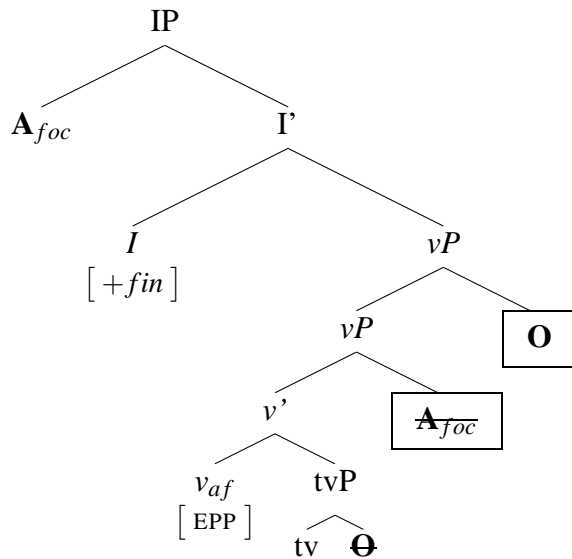
Raising of the O argument is triggered by an EPP feature, which is overlaid on v_{af}. Since this feature could just as easily be absent, there is no logical necessity that AF clauses be inverse. We will see evidence in §4.3 that Tz'utujil, a language closely related to K'ichee', forms a kind of minimal pair with respect to this property.

4.2   Non-specific indefinites

There is one further configuration in which AF is not required in K'ichee'. To my knowledge, it has not been noticed before that *tv* is systematically possible when A is extracted *if* O *is a bare (i.e. determinerless)* NP. The examples in (25) illustrate a variety of constructions in which A enters into an A-bar dependency (interrogation, negative indefinites, relativization, focus) and where O is a bare NP:

(25) a. Jachiin x-u-loq'   **uuq**?
          who   CP-A3SG-buy cloth
          'Who bought cloth?'

      b. Maj=juun k-u-loq'   **ojeer siik'**.
          no=one   ICP-A3SG-buy old   cigarette
          'No one is going to buy old cigarettes.'

      c. X-yawaj   lee achih [lee x-u-tij   **leej**].
          CP-sicken the man   DET CP-A3SG-eat tortilla
          'The man who ate tortillas got sick.'

      d. Ma jun achi taj k-e'-u-b'oq   **alaj taq chee'**.
          NEG a   man IRR ICP-B3PL-A3SG-uproot DIM PL   tree
          'It's not a man that is uprooting little trees.' (López Ixcoy, 1997:398)

The internal argument can be modified by adjectives (25b), and diminutive and plural particles (25d), so I assume these are bare NP's, not N's.

The possibility of the transitive verb in (25) crucially depends on O lacking a determiner. As soon as a determiner is added, the *tv* form becomes ungrammatical.

(26) a. * Jachiin x-u-loq'   **rii** uuq?
            who   CP-A3SG-buy the cloth
          intended: 'Who bought the cloth?'

      b. * Maj=juun k-u-loq'   **lee** ojeer siik'.
            no=one   ICP-A3SG-buy the old   cigarette
          intended: 'No one is going to buy the old cigarettes.'

      c. ?? X-yawaj   lee achih [lee x-u-tij   **lee** leej].
            CP-get.sick the man   who CP-A3SG-eat the tortilla
          intended: 'The man who ate the tortillas got sick.'

      d. * Aree rii   a B'alam x-u-loq'   **jun** laq q'oor pa k'ayb'al.
            FOC DET CLS B.   CP-A3SG-buy a   cup atole in market
          intended: 'It was B'alam that bought a cup of atole in the market.'

For each example in (26), substituting the AF verb yields the intended interpretation.

Since AF clauses are related to antipassive in K'ichee', it is in a way surprising that AF seems to be associated with internal objects which are high in specificity rather than low. The key, I believe, is that in K'ichee', AF clauses *also* involve raising of the O argument to a relatively high position.

We can approach this from the "tree-splitting" perspective of Diesing (1992) where the interpretation of an indefinite is related to its syntactic position. Diesing proposes that indefinites within *vP* (her VP) are interpreted as non-specific while ones outside *vP* are interpreted as specific. Adapting this to the structure proposed in (24), I suggest the following condition:

(27) K'ICHEE' CONDITION ON INDEFINITES
      An indefinite must be dominated by *each segment of vP* to be interpreted as non-specific.

A nominal raised to satisfy the EPP requirement of the AF verb adjoins to *vP*, and is not dominated by each segment of that *vP*. It is therefore interpreted as specific. In order to obtain

the non-specific interpretation, the bare NP must remain in situ (or at least, lower than the external agument). In that position, it fails to satisfy the EPP requirement of the AF verb and the derivation fails to converge. This eliminates the AF form, permitting the transitive form to surface.

In discussing examples like these with K'ichee' speakers, it appears that there are some cases where bare NP objects are compatible with both AF and transitive verbs, but *with a subtle difference in interpretation*. Example (28a), with a transitive verb, is a neutral assertion which requires no particular context. It is a simple denial of the proposition that cigarettes were bought and is compatible with a situation in which there were cigarettes for sale, as well as one in which there weren't. Example (28b), in contrast, implies a richer context, one in which cigarettes were for sale, and it amounts to a denial that any of them were bought.

(28)   a.   Maj=juun x-u-loq'   siik'.   TV
             no=one   CP-A3SG-buy cigarette
             'No one bought cigarettes.'

       b.   Maj=juun x-loq'-ow   siik'.   AF
             no=one   CP-buy-AF cigarette
             'No one bought (the) cigarettes.'

In the end, both (28a,b) convey that no cigarettes were bought, so the distinction is subtle. But there is a presupposition present only in (b) that there were cigarettes available for buying.

A different speaker explained the difference between (29a,b) in similar terms. She translated (29a), with the transitive verb, as a mild command, but said that (29b) would be appropriate in a context where there is a plate of tortillas and the speaker is worried that no one is going to eat any of them.

(29)   a.   Maj=juun k-u-tij   leej.   TV
             no=one   ICP-A3SG-eat tortilla
             'No one is eating tortillas!'

       b.   Maj=juun ka-tij-ow   leej.   AF
             no=one   ICP-eat-AF tortilla
             'No one is going to eat (any of these) tortillas.'

In both of these scenarios, the use of AF morphology with a bare NP object points to a discourse referent whose existence is already presupposed. Given the earlier discussion, I hypothesize that these facts reflect the interpretive effects of raising an indefinite.

4.3   K'ichee' vs. Tz'utujil

Here we have documented that K'ichee' requires the transitive construction (and precludes the AF structure) when extraction of A proceeds from:

- a reflexive clause;
- an extended reflexive clause;
- and a clause with a non-specific internal argument

All three restrictions follow if K'ichee' AF clauses involve inversion of A and O by raising O and adjoining it to *v*P. Tz'utujil contrasts sharply with K'ichee' in that the AF verb is possible in all three contexts.

(30) REFLEXIVES (TZ'UTUJIL)

   a. Naq x-ewa-n   r-ii'?
       WH CP-hide-AF A3SG-REFL
       'Who hid himself?'

   b. Nta   [x]-sil-o   r-ii'   pa q'aayiis.
       nothing CP-move-AF A3SG-REFL in bushes
       'Nothing moved in the bushes.'

(31) EXTENDED REFLEXIVES (TZ'UTUJIL)

   a. Ni   majuun k'am-o   to   ja r-xaayiil   pa nimaq'iij.
       NEG no.one bring-AF DIR the A3SG-wife to party
       'Nobody brought his (own) wife to the party.'

   b. Naq ya'-o   kaan ja r-naquun   wawa ri'?
       WH give-AF DIR   the A3SG-thing here
       'Who left his (own) things here?'

Examples (30, 31) involve semantic binding. Assuming that the structural conditions on semantic binding cannot be violated, the internal argument must remain *in situ*.[8]

Further, since the AF verb is not associated in Tz'utujil with raising the internal argument, it should be compatible with a non-specific O. This is correct – the elicited examples in (32) are fully grammatical. Indeed, the AF form is the only possibility: with *tv*'s, the intended readings are entirely inaccessible.[9]

(32) NON-SPECIFIC O (TZ'UTUJIL)

   a. Naq k'am-o   to   way?
       WH bring-AF DIR tortilla
       'Who brought tortillas?'

   b. Naq n-ya'-o   pwaq?
       WH ICP-give-AF money
       'Who's giving money?'

Dayley (1985) cites several examples of AF verbs in other syntactic contexts (relativization, focus) with non-specific internal arguments (in (33b), the argument is morphologically plural):

(33) TZ'UTUJIL (Dayley, 1985:352-353)

   a. Jar iixoq [ja x-loq'-o   ixiim] x-uu-ya'   chwe.
       the woman who CP-buy-AF corn   CP-A3SG-give to.me
       'The woman who bought corn gave it to me.'

   b. Ojoj oq   kamsa-yoon ch'ooy-aa'.
       1PL B1PL kill-PF.AF   rat-PL
       'We are the ones who have killed rats.'

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[8]The complementary distribution that we saw in K'ichee' partly holds here. In the case of extended reflexives like (31), transitive forms cannot replace the AF verb. However, in reflexive clauses like (30), speakers accept transitive verbs alongside the AF forms, e.g. *x-r-ewa-j* (CP-A3SG-hide-ACT) and *x-uu-sil* (CP-A3SG-move).

[9]Transitive forms (e.g. *x-uu-k'am* CP-A3SG-bring) yield only readings with O-extraction, e.g. the non-sensical *what did the tortillas bring?*.

These systematic contrasts between K'ichee' and Tz'utujil follow if AF clauses in K'ichee', but not Tz'utujil, involve raising the internal argument to a position higher than the external argument. If this is the correct conclusion, then inversion is not a *necessary* property of AF in Mayan, but it is a feature of AF in some languages, including K'ichee'. In terms of implementation, the difference between K'ichee' and Tz'utujil reduces to whether the agent focus head (v_{af}) has an [EPP] feature (K'ichee') or not (Tz'utujil).

5   Conclusions

The mixed properties of AF clauses in Mayan have commanded the attention of Mayanists since the early 1970's. Most recent analyses have taken them to be syntactically transitive, with their intransitive features arising only in the morphology. I have suggested here that while AF clauses in K'ichee' share properties with both transitives and with incorporative antipassive, they are more closely related to the latter.

Table 2 summarizes the various properties discussed here, properties related to transitivity: argument structure, voice morphology, relative prominence of A and O, and agreement. On balance, the affinities of AF clauses with incorporative antipassive argue for a common infrastructure. This accounts for both the morphological and the argument structural parallels between the two constructions. AF clauses in K'ichee' also appear to involve inversion. If so, they *do* involve a change in voice, contrary to what has been assumed in recent work.

Table 2: Dimensions of transitivity in K'ichee'

CLAUSE TYPE	# ARGS	VOICE	A : O	AGREEMENT
TRANSITIVE	2	*-oh ∼ -j*	A > O	Set A – Set B
INC. ANTIPASSIVE	2	*-ow ∼ -n*	A > O	Set B– ∅
AGENT FOCUS	2	*-ow ∼ -n*	O > A	Set B – Set B

Neither the affinity with antipassive, nor the inverse property, is a necessary property of AF in Mayan, as contrasts with Yukatek and Tz'utujil suggest. Variation in the morphology of AF clauses has been well-documented, but it seems to be often thought that the syntax is basically homogenous. The material discussed here suggests that this assumption is not correct and that we should be on the look-out for variation in the syntactic domain as well.

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