ACTIVITY NOUNS, UNACCUSATIVITY, AND ARGUMENT MARKING IN YUKATEKAN

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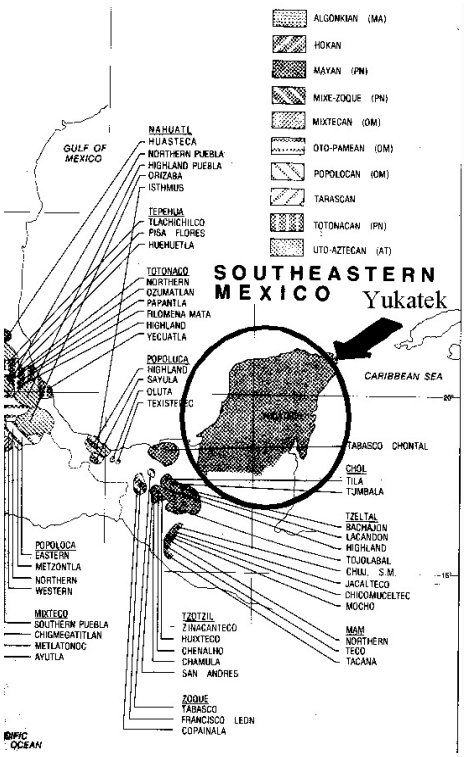
I. INTRODUCTION

- In some Mayan languages, at least a core set of activity meanings are lexicalized as 'action nouns' (Kaufman 1990).
- The aim of this presentation is to examine how such action nouns are morphosyntactically integrated in verbal predications, taking a closer look at the languages of the Yukatekan branch (Itzá, Lakandón, Mopán, and Yukatek).
- A comparison of derivational privileges across subclasses of action nouns in Yukatek suggests that reanalysis of action nouns to unergative verbs has taken place in this languages (and likewise in Itzá and Lakandón).
- In contrast, Mopán appears to preserve an older strategy of expressing certain aspectual and modal distinctions only with light verb constructions that take complements headed by the action nouns. Conservativism of this strategy is corroborated by its occurrence outside the Yukatekan branch as well, e.g. in Ch'ol.



II. BACKGROUND ON YUKATEK

- spoken by approximately 800,000 people across the Yucatán peninsula (in the Mexican states of Campeche, Quintana Roo, and Yucatán; in northern Belize; in some villages of the Petén province of Guatemala)
- forms the Yucatecan branch of Mayan, together with Itzá, Lacandón, and Mopan
- mildly polysynthetic:
  - predominantly agglutinative morphology
  - maximal word-form complexity limited, modest (derivation and incorporation non-recursive)
  - but exclusive head marking
  - rich productive incorporation of nouns and adverbs and verb compounding
- rigid VS/VOA order

Figure 1. ***The Yukatek area (based on Grimes (Ed.) 1992: 81)***

- but inverse configurations (non-human acting on human, indefinite acting on definite, possessed acting on possessor) cannot be encoded in transitive clauses
- 'fluid-S' pattern of argument marking, controlled by morphological aspect marking
- system of grammatical relations unclear; pivot seems to align with A, O, and even S, depending on the construction.

III. CLAUSE STRUCTURE AND PREDICATE CLASSES

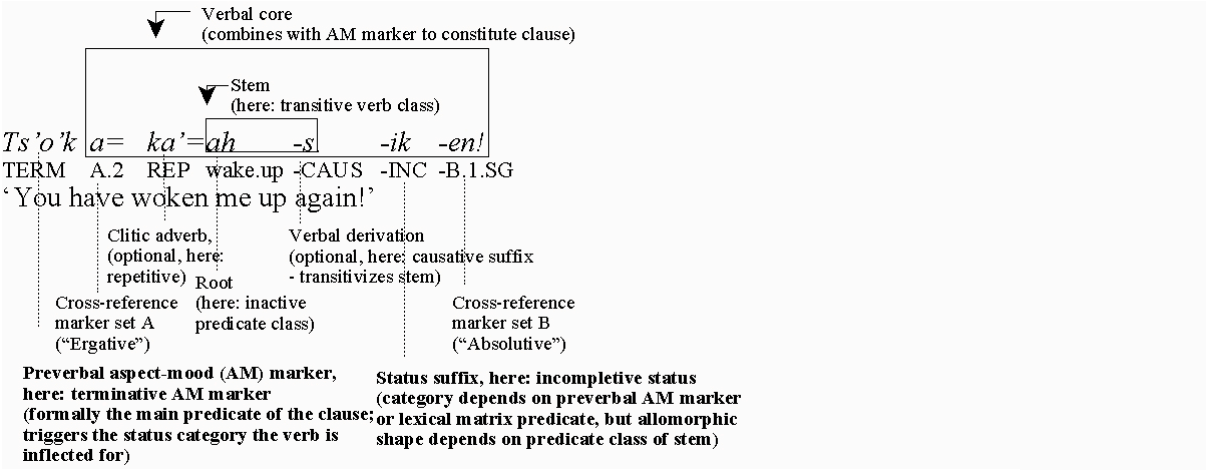


Figure 2. ***Basic verb clause structure***

- Aspectual and modal distinctions marked in two positions in main clauses:
  - by a preverbal auxiliary-like 'aspect-mood' marker (Bohnemeyer 1998)
  - and a verb suffix that expresses 'status' (Kaufman 1990).
  - 15 AM categories vis-à-vis 4 status categories in main clauses (completive, incompletive, subjunctive, imperative).
  - Status category depends on AM marker and illocutionary force in main clause verbal cores, syntactic function in embedded verbal cores.
- Analysis of the status categories in Bohnemeyer (1998) (in very broad outline):
  - completive: +bounded, +assertive
  - incompl.ve: -bounded, -assertive
  - subjunctive: +bounded, -assertive.
- S-argument marked by set-A clitics with incompletive status (1a), but by set-B suffixes with the other status categories (2a); linking of transitive A and O is independent of status inflection (compare (1b) and (2b)):[1]

(1) a. *Intransitive incompletive*
k-**u**=kim-**il**
IMPF-**A.3**=die-**INC**
'he dies'

b. *Transitive incompletive*
k-**u**=hats'-**ik-en**
IMPF-**A.3**=hit-**INC-B.1.SG**
'he hits me'

(2) a. *Intransitive completive*
h=kim-**ɪ-ih**
PRV=die**(CMP)-B.3.SG**
'he died'

b. *Transitive completive*
t-**u**=hats'-**ah-en**
PRV-**A.3**=hit-**CMP-B.1.SG**
'he hit me'

- The linking pattern of S does not depend on the lexical verb class, so Yukatek is not an

'active-stative' language: compare the state-change verb *kim* 'die' in (1a), (2a) to the activity verb *meyah* 'work' in (3a,b):

(3) a. *Intransitive incompletive (activity verb)*
k-**u**=meyah-**ɩ**
IMPF-**A.3**=work(**INC**)
'he works'
b. *Intransitive completive (activity verb)*
h=meyah-**nah-ih**
PRV=work-**CMP-B.3.SG**
'he worked'

- This instantiates a 'fluid-S' linking pattern on Dixon's (1994) typology.[2]
- However, status allomorphy constitutes a system of five verb stem classes, each class coming with it's unique set of status allomorphs:[3]

Verb class \ Status category		Incompletive	Completive	Subjunct.ve	Extrafocal
unergative	active	*-ɩ*	*-nah*	*-nak*	*-nah-ik*
unaccusative	inactive	*-Vl*	*-ɩ*	*-Vk*	*-ik*
	inchoative	*-tal*	*-chah*	*-chahak*	*-chah-ik*
	positional	*-tal*	*-lah*	*-l(ah)ak*	*-lah-ik*
transitive	(active)	*-ik*	*-ah*	*-ɩ / -eh*	*-ah-il*
	(passive)	\'/ *...-Vl* / *-a'l*	\'/ *...-ab* / *-a'b*	\'/ *...-Vk* / *-a'k*	\'/ *...-ik* / *-a'b-ik*

Table 1 . ***Yukatek status inflection according to verb classes***

- In view of the linking pattern of Yukatek and the unclear organization of grammatical relations in this language, the label's 'unergative' and 'unaccusative' should not be understood as predicting a verb's overt linking properties as assumed e.g. in Baker (1997), Grimshaw (1990), Hale & Keyser (1993), Levin & Rappaport Hovav (1995), etc. However, as argued in Bohnemeyer (2001), inactive, inchoative, and positional verb stems in Yukatek entail a 'theme' role, and this semantic property is reflected in their morphosyntactic properties. In this respect they may be compared to unaccusatives in other languages.

- 'Active' roots: equivalents of 'walk', 'sing', 'dance', 'sneeze', etc;
- 'inactive' roots: equivalents of 'be born', 'die', 'burst', 'enter', 'exit', etc.
- 'Inchoative' stems: all derived from stative roots; designate uncaused processes yielding the corresponding states;
- 'positional' stems: all derived from stative or transitive roots; designate uncaused processes yielding spatial configurations (e.g. 'sit', 'stand', 'hang', 'be between two things').
- Only active intransitives produce applicative stems in *-t*, adding an applied object:

(4) *Applicative derivation*

a. Túun meyah ich u=kòol.
PROG:A.3 work in A.3=clear\ATP
'He's working on his milpa [cornfield].'

b. Túun meyah-t-ik u=kòol.
PROG:A.3 work-APP-INC(B.3.SG) A.3=clear\ATP
'He's making his milpa.'

(5) *Applicative derivation*

a. Túun bàaxal.
PROG:A.3 play
'He's playing.'

b. Túun bàax-t-ik le=bòola=o'.
PROG:A.3 play-APP-INC(B.3.SG) DEF=ball=D2
'He's playing the ball.'

- And only inactive intransitives undergo causative derivation, adding a causer linked to the A-argument and demoting the erstwhile S-argument to O:[4]

(6) *Causative derivation*

a. Túun kim-il Pedro.
PROG:A.3 die-INC Pedro
'Pedro's dying.'

b. Juan=e' túun kim-s-ik Pedro.
Juan=TOP PROG:A.3 die-CAUS-INC(B.3.SG) Pedro
'Juan, he's killing Pedro.'

(7) *Causative derivation*

a. Túun lúub-ul le=che'=o'.
PROG:A.3 fall-INC DEF=tree=D2
'The tree is falling.'

b. Juan=e' túun lúub-s-ik le=che'=o'
Juan=TOP PROG:A.3 fall-CAUS-INC(B.3.SG) DEF=tree=D2
'Juan, he's felling the tree.'

- Systematic exception: non-causative manner-of-motion verbs like *balak'* 'roll' and *háarax* 'slide' and some emission verbs like *tsíirin* 'buzz' take applicative *-t* with causative semantics (if they transitivize at all, that is):[5]

(8) *Active* balak' *'roll' undergoing applicative derivation with causative semantics*

a. Túun balak' le=bòola=o'.
PROG:A.3 roll (INC) DEF=ball=D2
'The ball is rolling.'

b. Pedro=e' túun balak'-t-ik le=bòola=o'.
Pedro=TOP PROG:A.3 roll-APP-INC(B.3.SG) DEF=ball=D2
'Pedro, he's rolling the ball.'

(9) *Active* tsíirin *'buzz' undergoing applicative derivation with causative semantics*

a. Túun tsíirin le=tìimbre=o'.
PROG:A.3 buzz(INC) DEF=bell=D2
'The bell is buzzing.'

b. Pedro=e' túun tsíirin-t-ik le=tìimbre=o'.
Pedro=TOP PROG:A.3 buzz-APP-INC(B.3.SG) DEF=bell=D2
'Pedro, he's buzzing the bell.'

- Conversely, detransitivizing operations are also sensitive to the intransitive classification: antipassivized stems inflect like active intransitives, whereas passivized and anticausativized stems inflect like inactive intransitives:

(10) *Argument-structure/voice alternations of* p'eh *'chip'*

a. *Active transitive*
k-in=p'eh-ik
IMPF-A.1.SG=chip-INC(B.3.SG)
'I chip it'

b. *Antipassive*
k-in=p'èeh
IMPF-A.1.SG=chip\ATP(INC)
'I chip'

c. *Passive*

d. *Anticausative ('Middle')*

k-u=p'e'h-el	tumèen	tèen	k-u=p'éeh-el
IMPF-A.3=chip\PASS-INC	CAUSE	me	IMPF-A.3=chip\ACAUS-INC
'it's chipped by me'			'it gets chipped' (Bricker et al. 1998: 333)

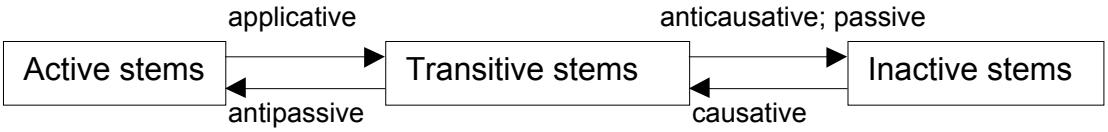


Figure 3. ***Yukatek valence-changing derivations***

- A number of possible derivations suggested by Figure 3 are infrequent or excluded. Applicative stems neither antipassivize nor (to my knowledge) do they anticausativize. Antipassivization of causativized stems is possible but infrequent. Furthermore, root-transitive stems that both antipassivize and anticausativize, as in (10), are rare.

IV. THE NOUNINESS OF ACTIVE STEMS

- In their incompletive (i.e. zero-marked) status form, all active stems can be used as nouns without overt derivation. By default, the nominal occurrences have **action noun** (cf. Comrie & Thompson 1985) readings.[6]
- Many active stems have 'argument noun' readings as well, in particular, **agentive noun** readings and **objective noun** readings under 'performance object' (Dowty 1979) interpretations:

(11) *Some active stems with non-derived 'agentive noun' and/or 'objective noun' occurrences*
bàaxal 'to play'; 'playing'; 'game', 'toy'
k'àay 'to sing'; 'singing'; 'song'; 'singer'
meyah 'to work'; 'working'; 'work'; 'worker'
óok'ot 'to dance'; 'dancing'; 'dance'; 'dancer'
pàax 'to play music'; 'playing music; 'music'; 'musician'
tùukul 'to think'; 'thinking'; 'thought', 'idea', 'reason'
tùus 'to lie'; 'lying'; 'lie'
tsikbal 'to chat', 'to converse'; 'chatting'; 'story', 'narrative', 'discourse'
ts'íib 'to write'; 'writing'; 'writing (object)'; writer
t'àan 'to speak', 'to talk'; 'speaking'; 'voice', 'word', 'speech', 'language', 'opinion'

(12) *Test frame to identify action noun readings*

T-u=nah-il	xòok-e'	**k-uy=úuch-ul**	**xòok**.
LOC-A.3=house-REL	read\ATP-TOP	**IMPF-A.3=happen-INC**	**read\ATP**

Bèey=xan	**k-uy=úuch-ul**	**ts'íib**.
thus=also	**IMPF-A.3=happen-INC**	**write**

'At the schoolhouse, **there is reading** (lit. reading happens). **There's** also **writing** (lit. writing happens).' <BVS 14.1.19>

(13) *Test frames for argument noun readings*
a. Ts'a' **hun-p'éel balak'**!

give/put(IMP)(B.3.SG) **on-CL.IN roll**
'Do **a turn**!'

b. **U=bo'l** **Juan**-e' hach hun-p'íit.
A.3=pay **Juan**-TOP really one-bit(B.3.SG)
'As for **Juan's pay**, it is very little.' <Bricker *et al.* 1998:35>

- Agentive nouns may be preceded by the agentive noun prefixes *h-*/*x-* for masculine and feminine referents, respectively, but these are optional in the dialect studied here.

(14) *The agentive noun prefixes* h-/x-
ch'èeneb 'to peek (through st.)', 'to peer (out st.)' > (*h-/x-*)*ch'éeneb* 'spy'
meyah 'to work', 'to do', 'to be busy', 'to function' > (*h-/x-*)*meyah* 'worker', 'maid'
óok'ot 'to dance' > (*x-/h-*)*óok'ot* 'dancer'
ts'íib 'to write' > (*x-/h-*)*ts'íib* 'writer', 'scribe'

- Half of the verb stems listed in (11) are antipassives derived from transitive roots. There are four classes of roots that produce active stems:

ROOT CLASS	I	II	III	IV
Description	Transitive roots (via antipassive derivation)	All intransitive roots borrowed from Spanish (regardless of their semantics)	Noun roots	Active roots proper
Examples	*k'ay* 'to sing sth. (song)' > *k'àay* 'to sing'; *pax* 'to play sth. (instrument) > *pàax* 'to play music'; *tukl* 'think/worry about sth.' > *tùukul* 'to think'; *tus* 'to lie to sb.' > *tùus* 'to lie'; *t'an* 'to call sb.' > *t'àan* 'to speak', 'to talk'	*áatrasáar* 'to become late'; *duràar* 'to last'; *gáanar* 'to win'; *kronikàar* 'to become chronic'; *kóonsistìir* 'to consist of'; *óokurìir* 'to occur'; *séegir* 'to continue'; *séerbir* 'to serve'	*e'l* 'egg', 'testicle' > 'to ovulate', 'to lay eggs'; *ich* 'fruit', 'eye', 'face' > 'to bear fruit'; *míis* 'broom' > 'to sweep'; *oxo'm* 'shelled corn' > 'to shell corn'; *pak'ach* 'tortilla' > 'make tortillas'; *síin* 'mucus' > 'to blow ones nose'	*áalkab* 'to run'; *bàab* 'to swim'; *harax* 'to slide'; *hùuk'* 'to move on one's buttoks'; *hàayab* 'to yawn', *hìink'i'* 'to wheeze', *kíilbal* 'to thunder'; *òok'ol* 'to cry'; *su'k'in* 'to fast'

Table 2. ***Yukatek root classes that produce active stems***

- Class I roots are straightforwardly identified: all roots that produce transitive stems without overt derivation belong to this class.
- Clear instances of class III roots are such that refer to concrete physical objects which are not agents in the activity.
- Clear instances of class IV roots are such whose only available nominal reading is the action noun reading.
- Unclear: non-transitive roots that produce active stems which admit agentive noun

readings and/or performance-object noun readings, but cannot refer to concrete physical objects other than agents -- class III or class IV?

(15) *Some active roots which cannot refer to objects other than agents*
áakan '(to) groan'; *àawat* '(to) cry'; *balak'* 'to roll', 'turn'; *ba'teh* '(to) fight'; *che'h* 'to laugh', 'laughter'; *chokwil* '(to) fever'; *hùum* '(to make) noise'; *kanáan* '(to) guard'; *kilim* '(to) crackle'; *k'i'nam* 'to hurt', 'pain'; *náay* '(to) dream'; *péek* 'to move', 'motion'; *se'n* 'to cough', 'catarrh'; *síit'* '(to) jump'; *tìis* '(to) spurt'; *tuk'ub* '(to) hiccup'; *tsikbal* 'to chat', 'discourse'; *wayak'* '(to) dream'; *xíimbal* '(to) walk'; *xóob* '(to) whistle'.

- Common Mayanist stand: class III *and* class IV roots, including all unclear cases, are in fact nouns (e.g. Bricker *et al.* 1998).[7]
- Empirically more adequate analysis: active stems from class-III roots are denominal verbs (see section V), while class-IV roots and probably most of the 'unclear' cases exemplified in (15) are 'ambi-categorical'.
- Henceforth, the term 'action nouns' (after Kaufman 1990) will be used indiscriminatorily for both class-III and class-IV for the sake of convenience.

V. THE 'L-SYNTAX' APPROACH AND YUKATEK ACTION NOUNS

- Hale & Keyser (1993, 1997) distinguish three classes of denominal verbs, all of which on their account involve incorporation of nouns into transitive 'light verb shells':

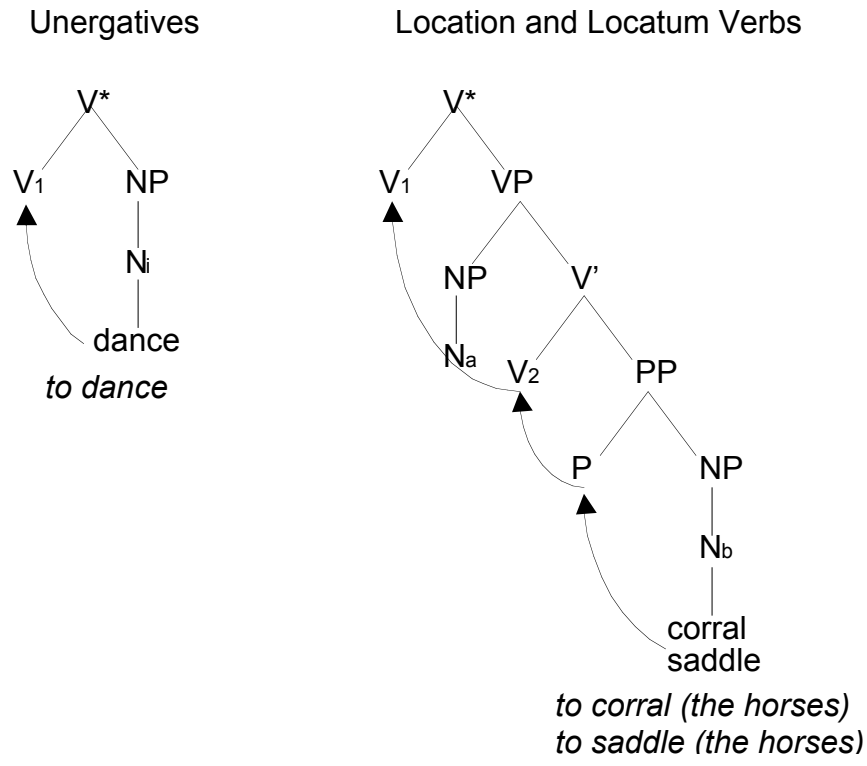


Figure 4. ***The L-syntactic approach to denominal verbs***

- Support for the L-syntactic approach: Yukatek active stems are (or correspond to) unergatives (Bohnemeyer 2001) and occur as action nouns without derivation.
- Problem: Many active stems derive from transitive roots (via antipassive derivation), not

from nouns.

- Problem: With the exception of class-III roots (see Table 2), no evidence allowing to decide whether nominal or verbal occurrences are basic.
- Location and locatum verbs may be rare; too few instances known at present to allow for generalizations. There are examples that are clearly denominal, e.g. *píib* 'pit oven' > *píib-t* pit.oven-APP 'to cook in pit oven'; *ta'b* 'salt' > *ta'b-t* salt-APP 'to salt sth.' But there are also cases that suggest transitive bases (e.g. *mak* 'to cover sth.' > *màak* cover\ATP 'cover', 'lid') or are unclear as to direction of derivation (e.g. *púuh* 'bundle', 'to carry (sth.) in skirt').

VI. ACTION NOUNS AS VERBS

- Precondition of morphosyntactic treatment of action nouns as heads of intransitive verbal complexes: assignment of paradigm of status markers with the appropriate cross-reference markers of intransitive verbs for each status category.
- The Yukatek solution:

(16) *Status paradigm of action nouns in Yukatek: incompletive triggered by progressive*

a. Táan [a=meyah-ø]$_{VCOMPL}$.
PROG A.2=work-INC
'You are working (lit. your work is in progress).'

b. *The progressive marker is the main predicate: attraction of question focus particle*[8]
Táan=wáah [a=meyah-ø]$_{VCOMPL}$?
PROG=ALT A.2=work-INC
'Are you working (lit. is your work in progress)?'

c. *The embedded verbal core in (a)-(b) has the form of a possessed nominal*
Hach ya'b [a=meyah-ø]$_{N}$.
really many/much(B.3.SG) A.2=work
'You have a lot of work (lit. your work is a lot).'

d. Hach ya'b=wáah [a=meyah-ø]$_{N}$?
really many/much(B.3.SG)=ALT A.2=work
'Do you have a lot of work (lit. is your work a lot)?'

e. *Embedded verbal cores with aspectual predicates have the same structure*
Ts'o'k u=chúun-ul [a=meyah-ø]$_{VCOMPL}$.
TERM A.3=start\ACAUS-INC A.2=work-INC
'You have already started working (lit. your work(ing) has already started).'

f. *With the imperfective aspect marker, the verbal core itself is the main predicate*
K-[a=meyah-ø]$_{VCOMPL}$=wáah?
IMPF-A.2=work-INC=ALT
'Do you work?'

- Incompletive forms of unaccusative verbs occur as nominalizations, e.g.

(17) *Incompletive forms of unaccusative forms as nominalizations*
hàan-al eat-INC 'food'
kíim-il die-INC 'death'
òok-ol enter-INC 'thief', 'to steal'
puts'-ul wíinik escape-INC man 'fugitive'
wèen-el sleep-INC 'sleep'

- (16) and (17) combined suggest that the incompletive intransitive verbal core originated in a possessed-nominal construction. Action nouns have the required form to head this construction without further operations, while unaccusative verbs require nominalization. The possessed-nominal structure explains the occurrence of the set-A ("ergative") cross-reference markers with incompletive status (cf. Dayley 1990; Kaufman 1990; Robertson 1992).
- The completive and subjunctive status suffixes of active stems bear a thematic segment /n/ which is generally assumed to be a reflex of a Common Mayan antipassive marker **-n* (cf. Dayley 1990; Kaufman 1990; Robertson 1992):

(18) a. *Completive of active stems*
h=meyah**-n**ah-en
PRV=work**-CMP-B.1.SG**
'I worked'

b. *Subjunctive of active stems*
káa=meyah**-n**ak-en
PRV=work**-CMP-B.1.SG**
'(would) that I work'

- Rationale: the forms in (18) are assumed to be originally derived from transitive applicative denominal verbs, under elision of the applicative suffix *t-*.
- It is not clear that all activity nouns have applicative counterparts. Apparent counterexamples occur with class-IV roots (e.g *bàab* '(to) swim'; *hàayab* '(to) yawn') and with the majority of the unclear roots listed under (15) (e.g. *áakan* '(to) groan'; *chokwil* '(to) fever').[9]

- The most plausible hypothesis would seem to be that the earstwhile antipassive-based completive and subjuntive suffixes have been extended by analogy to all active stems.
- Further evidence: exention of the pattern in (18) to class-II roots borrowed from Spanish.
- Together with the extension of the incompletive forms to the bound imperfective marker in (16f), where it is not obvious that they are nominal(ized) synchronically, this suggests that the activity nouns have been reanalyzed as ergative verbs in Yukatek.

VII. ACTION NOUNS ACROSS MAYAN LANGUAGES

- Lexicalization of activities in nouns appears to be common across Mayan languages:

> "In the Mayan languages in general, there is a limited set of roots in which a verbal meaning is lexicalized as a noun. This involves meanings like 'bathe', 'dance', 'laugh', 'play', 'sell', 'cry', 'talk', 'rob', 'guard', 'work', and 'write'. The roots in question are nouns. (…) This suggests that the 'action nouns' date from the Proto-Mayan era." (Kaufman 1990: 103; translation JB)

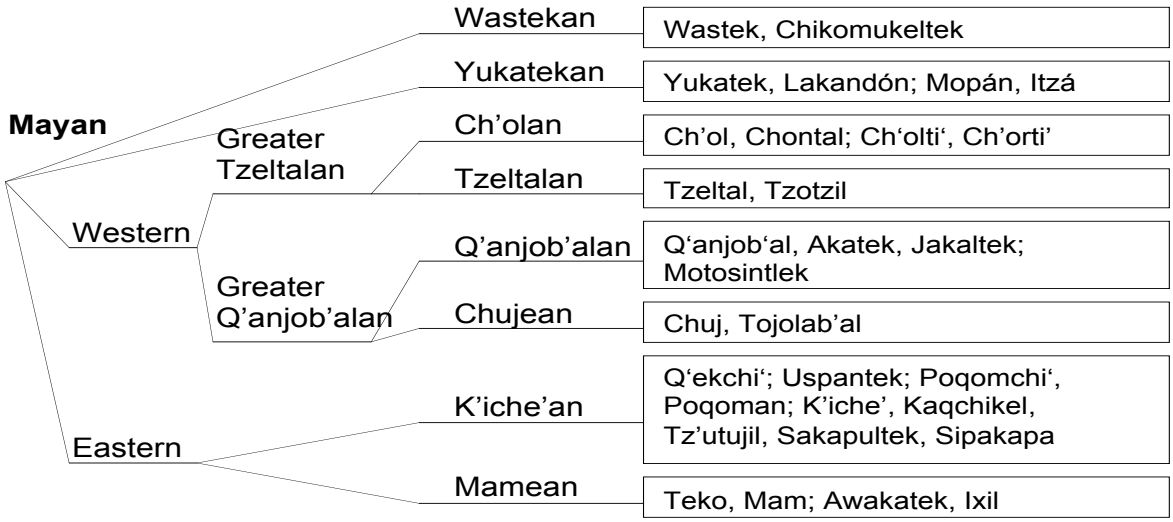


Figure 5. ***Genetic relations among Mayan languages (cf. Campbell & Kaufman 1990)***

- Among the four Yukatekan languages, Itzá (Hofling 2000) and presumably Lakandón treat action nouns as verbs like Yukatek does. Not so, however, Mopán:

c. *Mopan: Inactive incompletive (a), completive (b), and subjunctive (c)*
   a. Tan u=hok'**-ol** ti alka' a=winik-i.
      PROG A.3-exit**-INC** LOC run DEF-man-D4
      'The man is coming out at a run.'
   b. Hok'**-ø**-ih hun-tuul noxi ayin.
      exit**-CMP**-B.3.SG one-CL.AN large alligator
      'An enormous alligator came out.'
   c. Ka'=tal**-ak**-ech tukaye'.
      SR=come**-SUBJ**-B.2.SG again
      'You should come back again.' (Danziger 1996: 392-393)

(20) *Mopan: Active incompletive (a), completive (b), and subjunctive (c)*
   a. Tan u=cha'n**-ø** ich ch'e'n.
      PROG A.3=look**-INC** in hole
      'He's looking into the hole.'
   b. **Uch-ø-ih** in=lox**-ø**.
      happen-CMP-B.3.SG A.1.SG=fight**-INC**
      'I fought (lit. my fighting happened).'

   c. ka'=**uch-uk** a=siit'**-ø**
      SR=**happen-SUBJ(B.3.SG)** A.2=jump**-INC**

'that you should jump (lit. that your jumping should happen).' (Danziger 1996: 393-395)

- In Mopan, action nouns occur in incompletive verbal cores (20a), but not in completive (20b) or subjunctive (20c) verbal cores. Instead, incompletive cores headed by the action nouns are embedded under inactive light verbs like *uch* 'to happen' to express the corresponding aspectual and modal meanings (Danziger 1996).
- Question: which language(s) innovated, which (if any) are conservative?
- The evidence presented in section V suggests that the action nouns have been reanalysed as unergative verbs in Yukatek. The most straightforward conclusion from this finding is that Yukatek, Itzá, and Lakandón have innovated, whereas Mopán preserves an older state.
- Evidence in support of this conjecture comes from the fact that the Mopán strategy is also found outside the Yukatekan branch, e.g. in Ch'ol:

(20) *Ch'ol: inactive incompletive (a) and completive (b)*
  a. Chonkol k-wäy**-el**.
     PROG A.1.SG-sleep**-INC**
     'I'm sleeping.'
  b. Tyi wäy**-i**-yoñ.
     PRV sleep**-CMP**-B.1.SG
     'I slept.' (based on Vázquez Alvarez (ms.))

(21) *Ch'ol: active incompletive (a) and completive (b)*
  a. Chonkol k**-cha'len**-ø-ø alas.
     PROG A.1.SG**-make-INC-B.3.SG** jump
     'I'm jumping (lit. making jumps).'
  b. Tyi k**-cha'le**-ø alas.
     PRV A.1.SG**-make.CMP-B.3.SG** jump
     'I jumped.' (based on Vázquez Alvarez (ms.) and Warkentin & Scott 1980: 74-75)

- In Ch'ol, action nouns do not inflect for status at all. Both incompletive and completive status are expressed with the light verb *cha'len* 'to make' (there is no subjunctive).

VIII. SUMMARY

- All autochthonous 'active' verb stems of Yukatek head nominal constructions without overt derivation. A subset of these stems can be argued to be denominal, in line with Hale & Keyser (1993, 1997), while another subset is produced from 'ambi-categorical' roots.
- Both classes of 'action nouns' permit the morphological expression of all aspect-mood categories obligatorily distinguished in verb clauses. The expression of incompletive 'status' employs the bare action noun in a structure that diachronically derives from a possessed-nominal construction, while the expression of completive and subjunctive 'status' is based on an ancient antipassive form that presumably originally occurred with applicative derivatives of the action nouns.
- Many ambi-categorical action nouns do not produce applicative stems. Thus, the antipassive strategy of expressing completive and subjunctive status must have been extended to these stems by analogy. This is confirmed by the forms in question also occurring with intransitive verb stems borrowed from Spanish, which appear with active status paradigms regardless of their semantics.

- Together with the fact that the incompletive forms also occur with the bound imperfective marker (where they cannot in any obvious way be argued to be possessed nominals), this suggests that Yukatek has innovated a category of genuine unergative verb stems by reanalysis of the action nouns.
- The same appears to hold for Itzá and Lakandón, while the fourth Yukatekan language, Mopán, only permits direct expression of incompletive aspect-mood forms with the action nouns. In completive and subjunctive contexts, the action nouns are embedded under inactive light verbs on which the particular modal or aspectual distinctions are marked.
- A similar strategy occurs outside the Yukatekan branch, e.g. in Ch'ol, where aspectual and modal categories cannot be directly expressed on action nouns at all. This suggests that Mopán preserves an older treatment of the action nouns in verb clauses.

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[1] The examples in section II are simplified for expository purposes, but all verb forms shown are in evidence in elicited and/or recorded data. Examples in the other sections were elicited by me unless indicated otherwise. The orthographic representation in this paper is morphemic rather than morpho-phonemic. The orthography applied is based on Lehmann (1996). In the interlinear morpheme glosses, I'm using the following conventions: '-' for affixes; '=' for clitics; '+' for compounding; '/' for subsegmental realization or infixation. Abbreviations in the glosses include the following: 1 – 1st person; 2- 2nd person; 3 – 3rd person; A – set-A ('ergative'/possessor) clitics; ACAUS-anticausative derivation; ALL – universal quantifier; ALT – 'alternative' particle (question focus, conditional protasis, disjunctive connective); APP – applicative derivation; ATP – antipassive derivation; B – set-B ('absolutive') suffixes; CAUS – causative derivation; CAUSE – causal prepposition; CL (numeral/possessive) classifier; CMP – completive status; CON – connective particle; D1 – proximal deixis; D2 – distal/anaphoric deixis; D3 – textual deixis; D4 – negation final particle; DEF – definite determiner; EXIST – existential/locative/possessive predicate; GIV – Gerundive derivation; IMPF – Imperfective AM; IN – inanimate (classifier); INC – incompletive status; IRR – irrealis modality; LOC – generic preposition; NEG – negation; PASS – passive derivation; PROC – inchoative derivation; PROX – proximate future AM; PL – plural; PLANT – plant (classifier); PROG – progressive AM; PRV – perfective AM; REL – relational derivation (nouns); RES – resultative derivation; SG – singular; SR – subordinator; TERM – terminative AM; TOP – topic marker.

[2] This would make Yukatek and some other Mayan languages (e.g. Lakandón and Itzá of the Yukatekan branch, but also Poqomam of the K'iche'an branch and all languages of the Ch'olan branch) the only languages in evidence with an aspect-controlled fluid-S pattern. There has been much controversis around this phenomenon. Most Mayanists (e.g. Bricker 1981; Hofling 2000; Robertson 1992) consider the pattern a form of split ergativity, ignoring the fact that the split only occurs with intransive verbs (but see Kaufman 1990). In contrast, Straight 1976 argues for an 'active-inactive' pattern (cf. also Pustet 1992). Krämer & Wunderlich (1999) acknowledge the fluid-S pattern, but argue for an underlying ergative linking mechanism.

[3] /V/ represents a morphophoneme the phonological realization of which is determined by the root vowel.

[4] Inchoative and positional unaccusatives take distinct causative morphemes *-kVns*/*-kVnt* (where the vowel V depends on the stem vowel and realization of the dental as /*s*/ or /*t*/ is in free variation); however, the semantics of these processes is identical to the semantics of the *-s*-causativization of inactives.

[5] It is argued in Bohnemeyer (2001) that there is a single transitivizing operation in Yukatek that produces an applicative argument structure just in case the base is inherently causative and a causative argument structure otherwise, regardless of the overt realization of the transitivizing suffix (*–t* vs. *–s*). This explains the apparent mismatches with uncaused unergatives. Additional evidence for this analysis comes from K'iche' Maya: in K'iche', there is only a single transitization process which may have causative or applicative semantics depending on the base root or stem (Cliff Pye, p.c.).

[6] This holds with the exception of active stems of Spanish origin; cf. Table 2 in section IV below.

[7] One crucial background assumption of this analysis is that all nouns produce applicative stems in *–t* (or related 'usative' stems in *–int*). Active stems from class-III and class-IV roots are therefore treated as antipassives of denominal applicatives (or 'usatives'). The problem with this treatment is that many class-IV roots and perhaps most of the "unclear" cases do not seem to produce applicative stems (see section V). The classification of these roots as nouns therefore remains stipulative. The empirically most adequate approach would seem to treat these roots as ambi-categorical. Note that there is at least one other class of roots which are very regularly ambi-categorical across Mayan languages, namely, roots that produce both positional and transitive stems (cf. Kaufman 1990).

[8] See Bohnemeyer (1998) for details.

[9] This also argues against a synchronic treatment of the /n/ segment of the completive and subjunctive suffixes as an antipassive marker (as proposed most recently by Hofling 2000 for Itzá Maya, where all relevant facts appear to be identical to those in Yukatek).