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Grammaticalization of tense/aspect/mood marking in Yucatec Maya

Christian Lehmann

Abstract

Maybe the most pervasive among the changes analyzable as cases of grammaticalization in the languages of the Yucatecan branch of the Mayan stock is the formation of auxiliaries that allow finer tense/aspect/mood distinctions than the status suffixes inherited from Proto-Maya. It has been continually productive since colonial times. While this amounts to a replacement of the status system, it follows strictly language-internal patterns. And while the source constructions form a rather heterogeneous set, they converge onto a common TAM auxiliary pattern in Modern Yucatecan.

1   Introduction

This study is devoted to the grammaticalization of auxiliaries in Yucatec Maya, whose functional side is the formation of a complex tense/aspect/mood (TAM) system. In this, it aims at fulfilling several purposes at once. It is, in the first place, a contribution to a historical grammar of Yucatec Maya. To this end, it brings together a large set of data, contextualized in their historical situation. A side effect of this enterprise is a diachronic perspective on the system of present-day Yucatec Maya, which may, as usual, open an additional, viz. dynamic, dimension of understanding it. On the other hand, the analysis tries to systematize the facts in terms of a theory of grammaticalization so that they may become comparable with relevant facts of other languages. To secure understanding for the non-specialist, some elements of Mayan grammar will be explained in §3.

Some of the data used are actually in a diachronic relationship, viz. data from the history of Yucatec Maya. Most of the data of other Mayan languages belong to recent stages of their evolution. Following established methodology, they will be projected onto the diachronic axis and be taken to represent stages of a development.

A word is necessary on the orthography. Yucatec Maya has had distinctive vowel length and tone at least for the period of its documented history, although it does not share tone with any of its sisters. Moreover, the glottal stop and /h/ are phonemes, and both can form a syllable coda. Since all of this is alien to Spanish, the orthography of the Colonial Yucatec Mayan (CYM) sources hides important phonological information. These phonological properties have been marked consistently in the orthography only from the second half of the twentieth century on. For this reason and in order to facilitate diachronic comparison to the non-specialist, examples from Colonial Yucatec Maya are first quoted literally from the sources and then coupled with a representation in contempo-

rary scientific orthography (which is, alas, not the one adopted currently by Mexican authorities; s. Lehmann 2015).

2 Prehistory and history of Yucatec Maya

The Mayan languages of today are spoken in a culture area called Meso-America. Some of the Mayan languages are so dissimilar that they may have branched off from the common stock as early as 2000 BC. The Yucatecan branch was the second to separate from the rest of the Mayan family. This took place during preclassical times in terms of Mayan history, at the latest about 1000 BC. Both genetically and geographically, the closest neighbor is the branch of the Ch'olan languages, which are clearly mutually unintelligible with the Yucatecan languages. The Yucatecan languages are spoken on the peninsula of Yucatan and in more southern regions of the lowland in Belize, the Petén region of Guatemala and the Mexican state of Chiapas. The internal subdivision of this branch is relatively recent. It has the form shown in Diagram 1.
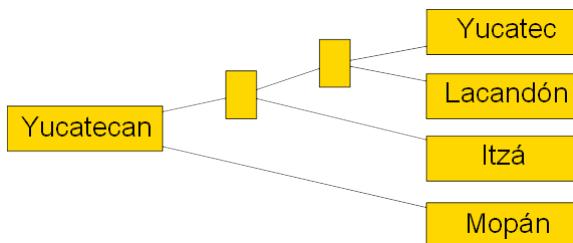

Diagram 1   The Yucatecan branch of the Mayan languages

Mopán on the one hand and the other Yucatecan varieties are hardly mutually intelligible and are commonly regarded as different languages. The latter three varieties do not differ more from each other than British and American English. The period of their separation does not exceed a few hundred years and is, thus, far shorter than the period of separation of the dialects of German, British English or Italian. They are mutually intelligible and should be regarded as dialects of one language rather than as distinct languages.

Mopán split off at the end of the first millennium AD. The Itzá people apparently emigrated from the peninsula to the Petén in the fourteenth century, although keeping contact with Yucatec Mayas. The Lacandón people, too, are Mayas of Yucatán who retreated from the peninsula into the woods of Chiapas in order to avoid contact with the Mexican civilization. The closest relative of Yucatec is (Southern) Lacandón. It is a dialect that split off the main variety in the 18th cent. and preserves some archaic traits. The periods of the history of Yucatec Maya itself may be depicted as in Diagram 2.

Diagram 2   Periods of Yucatec language history
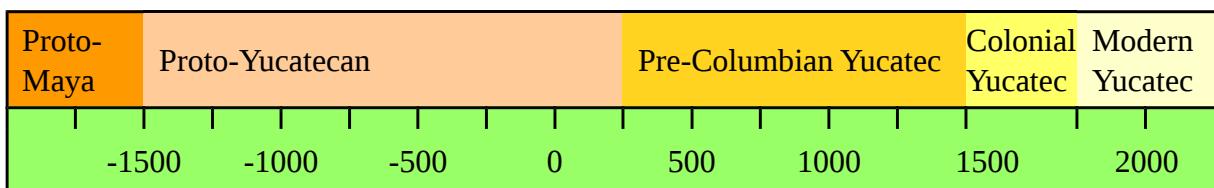
The inscriptions and codices of the Pre-Columbian Mayan culture span a period from roughly 250 to 1500 AD. They represent some Ch'olan language and are therefore relatively close to Pre-Columbian Yucatec. However, the glyphic writing as it has been deciphered up to now

does not represent the morphology of the language very well, so that for our purposes, written documentation of the language starts with the Spanish conquest.

Yucatec Maya has been historically well attested since the early times of Spanish colonization.[1] This period of the language history is called Colonial Yucatec Maya, often also Classical Yucatec Maya. Apart from having a longer documented history than most Amerindian languages, Yucatec Maya also boasts a set of early grammars and dictionaries as shown in Diagram 3.

Diagram 3   Colonial grammars and dictionaries of Yucatec Maya

Spanish conquest of 1546 Yucatan	Diccionario de Motul 1577	Coronel 1620	San Buenaventura 1684	Beltrán de Santa Rosa 1746	
1500	1550	1600	1650	1700	1750 1800
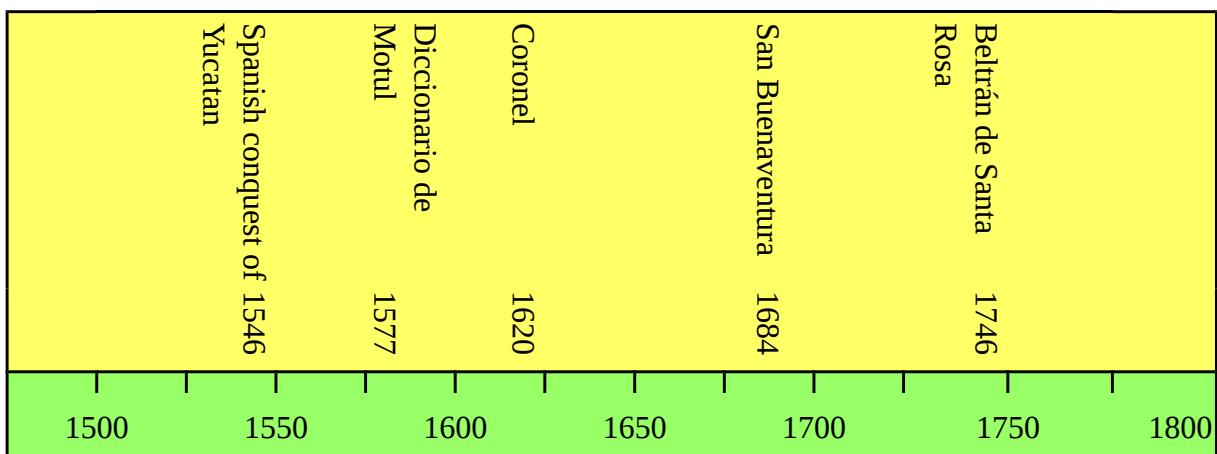
The earliest source is the *Diccionario de Motul*[2], which some assume to be compiled around 1577.[3] The earliest grammars – and still among the earliest sources of data for Yucatec Maya – are Coronel 1620[4] and San Buenaventura 1684. In the course of the eighteenth century, Colonial Yucatec Maya passed into Modern Yucatec Maya (MYM). Beltrán 1746 is assumed to mark the transition between the two stages (Smailus 1989:4).

Thus, the documented history of Yucatec Maya begins with colonial documents of the 16th century. Its prehistory is indirectly represented in Mayan hieroglyphic writing and may be accessed by internal reconstruction and historical comparison with cognate languages. Data from the other Yucatecan languages are from the second half of the 20th century. Lacandón preserves some archaic traits, lending thus additional support to reconstructions.

Given all this, reconstruction of Proto-Yucatecan is in a comparatively favorable methodological situation. Not only can we reconstruct the diachrony by comparing four languages

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[1] While most of the hieroglyphic texts appear to represent the Ch'olan branch, one or another of the surviving codices, which probably stem from the fifteenth century AD, may be in Yucatec.

[2] The *Diccionario* or *Calepino de Motul* was first published in Martínez Hernández 1929. In the examples, it is referred to as *Motul*.

[3] Since its first published edition, the manuscript of the *Diccionario de Motul* has been attributed to Fray Antonio de Ciudad Real (1551-1617) and been dated to 1577. Now he may well be the author, the more so as he is known to have worked on Mayan language and culture until his death. However, he started living in Mérida only in 1573; and in 1577 he was 26 years old. Consequently, he either is not the author (but only a compiler of material gathered by others), or the year of completion must be much later. Hanks (2010:164-168) discusses the problem extensively and essentially pleads agnostic.

[4] In quotations, I use Martínez Hernández 1929 for the page numbering, as it reproduces the pagination of the original edition; but I quote the text from the (more reliable, but unpaginated) online edition of http://www.famsi.org/reports/96072/coronelgmr.htm. (The critical edition of Coronel 1998 was not available to me.)

which are related closely enough to elucidate each other but different enough to provide variation which may be projected onto the diachronic axis. We also have 450 years of documented history in the case of Yucatec, which can substantiate or falsify our diachronic hypotheses to some extent. Thirdly, grammarians have described different stages of the history for the same period, sometimes even noting explicitly grammaticalization phenomena observable at their time. Under such circumstances, responsible diachronic analysis may reach back approx. 1,000 years, which is about the point where Proto-Yucatecan began to split up.

3 Typological sketch of Yucatecan languages[5]

All Mayan languages are very much alike in their morphological and syntactic structure, with some of the more principled differences being taken up below. The lexemes and the grammatical morphemes filling the structural slots are generally cognate within each of the subfamilies, while there are great differences among the subfamilies in this respect. Consequently, while the Yucatecan languages form a homogeneous group, this subgroup differs from other subgroups of the Mayan family chiefly in the individual lexical and grammatical morphemes and, to a lesser extent, in grammatical structure. We will here focus on the grammatical structure of the Yucatecan subfamily and mention deviations from Proto-Mayan *suo loco*.

Apart from numeral classifiers, the typologically notable features of the word-class system are limited to the subclassification of the major classes. Both nouns and verbs are subclassified according to relationality: absolute and relational nouns differ in morphology and syntax similarly as do intransitive and transitive verbs. If the valency of a stem includes a place for such an additional actant, then there is a pronominal index for it. If a clause lacks such an actant (no matter whether represented by an NP), the base must be derelationalized. And vice versa for an absolute or monovalent base. Moreover, besides pure verbs, there is a closed class of verboids which share all morphological and syntactic properties with verbs except that they do not inflect for status (§4.4) and therefore do not combine with an auxiliary (§4.5).

Mayan languages lack the category of case throughout. They do have a productive category of prepositions – most of them denominal in origin – but very few primary prepositions; and the Yucatecan languages have only one fully grammaticalized preposition, *ti'* Loc, which marks the indirect object (as in E41, E42b and E53 below), local and other concrete relations.[6] Under these conditions, structural relations of modification are underdeveloped; the syntax is characterized by government. All dependency constructions are head-marking: indices cross-reference the subject and direct object of a verb, the possessor in a nominal construction and the complement of a preposition. The index is obligatory, the nominal dependent is optional. The verb with its cross-reference indices, possibly preceded by an auxiliary (s. §4.2), constitutes a full clause. No nominal or pronominal constituents are necessary.

Alignment of fundamental syntactic relations was ergative in Proto-Mayan. Some Mayan subfamilies have preserved this alignment to a large extent. The Yucatecan languages show traces of syntactic ergativity in focus constructions (Bricker 1981); but otherwise ergativity is restricted to a split in the index paradigm of the intransitive predicate conditioned by status, to which we return in § 4.1.

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[5] A recent typological overview of the Mayan family is in Grinevald & Peake 2012.

[6] corresponding both etymologically and functionally to Ch'olan *tyi*

The morphology is characterized by a medium degree of synthesis. Most affixes are suffixes. Most of the morphology is agglutinative; still, there are, especially in Yucatec Maya, several internal modifications. While declension is comparatively simple, verbs inflect for many conjugation categories. One of these must be singled out from start as it plays an important role in subsequent sections: The first morpheme after the (simple or derived) verb stem is a so-called status suffix, which comprises the subcategories of dependent status proper, aspect and mood. It is illustrated by the dependent incomplete suffix in E3 below. Word formation includes compounding and derivation, both in the nominal and in the verbal sphere. The entire verb derivation is based on transitivity: every stem is either transitive or intransitive; and this determines the allomorphy of conjugation categories, esp. of the status morphemes.

Mayan languages lack a copula.[7] The word order must have been left-branching in some remote pre-historic epoch. This is the environment in which the morphological categories marked by verb suffixes (s. §4.4), and possibly the phrase-initial nominal determiners and modifiers, too, originated. The proto-language then switched to right-branching syntax; proto-Maya was right-branching. To this day, Mayan languages are left-branching or juxtapositive only in the nominal syntax, as shown in Table 2; the rest of the syntax is right-branching, as detailed in Table 1.

Table 1 Right-branching constructions

predicate	subject
verb	actant
verbal complex	adjunct
auxiliary	clause core
nominal group	relative clause
nominal group	nominal possessor
preposition	complement NP
conjunction	clause

Table 2 Non-right-branching constructions

short adverb	verb
adjective attribute	noun
numeral	numeral classifier
numeral complex	nominal group
determiner	nominal group

(The vague wording of the Table 2 heading reflects the fact that some dependency relations inside the NP (or DP) are less than clear.) One might add to Table 2 the clitic pronominal index preceding a verb or a possessed nominal and cross-referencing the subject or the possessor, resp. (i.e. the "Set A" index of §4.1).

Marked information structure provides for two sentence-initial positions to be occupied by main constituents, viz. the position of left-dislocated topical constituents and the focus position. The maximum configuration was dubbed LIPOC (language-independent preferred order of constituents) in Dik 1981:189ff and may be represented by Diagram 4. E1 is an example.

Diagram 4   Extended sentence structure

[left-dislocated topic   [focus   extrafocal clause]]

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[7] CYM features a suffix *-h* Cop, exemplified in E22, which verbalizes nominal predicates.

E1	le	chaan	lak	he'l=a'	
MYM	DEM	little	bowl	PRSV=R1	
	in	kiik	síih-mah-il		ten
	A.1.SG	elder.sister	give.as.present-PRF-DEP(B.3.SG)		me

'this little clay bowl, my elder sister gave it to me' (ACC_0039)

The left-dislocated constituent is marked by a referential enclitic, R1 in E1. The paradigm contains an element (R3) which functions as a topicalizer if the deixis is neutral.[8] The focus itself (*in kiik* in E1) is not marked, but the extrafocal clause is marked by a dependent status suffix, *-il* in E1 (s. § 4.4).

4 Verbal categories

In this section, we will pursue the fate of some categories in the functional domain of tense/aspect/mood in the Yucatecan languages. The starting point will be Colonial Yucatec Maya as documented in the sources enumerated in §2.

4.1 Pronominal indices

All Mayan languages have at least three sets of personal pronominal formatives. All but one of these paradigms are clitic or bound and function as cross-reference indices; the last is a set of independent personal pronouns. The main paradigms of bound indices are called Set A and Set B in Mayan linguistics. The functions of the pronominal sets are as follows:

- Indices of Set A cross-reference the possessor of a nominal group and the actor of the transitive verb. Moreover, in the split-subject marking languages including those of the Yucatecan branch, they cross-reference the subject of an intransitive verb in some verbal statuses (§4.4). Thus, the syntactic function alignment based on the distribution of set A is accusative.

- Indices of Set B cross-reference the subject of a non-verbal clause and the undergoer of the transitive verb. In the split-subject marking languages, Set B also cross-references the intransitive subject in the complementary subset of statuses. Thus, the syntactic function alignment based on the distribution of Set B is ergative.

- The free pronouns are reinforced forms of Set B forms. They appear as the complement of a preposition, as left-dislocated topic and in focus position. Some languages including Yucatec Maya have enclitic variants which function as indirect object, as does *ten* in E1.

The labels 'Set A' and 'Set B' originate in the times of American structuralism. They are deliberately obscure and mnemonically unhelpful. We will nevertheless have to use them because the functions which might provide more practical labels are heterogeneous. At any rate, it may be helpful to bear in mind the following equivalences with more familiar labels of interlinear glossing:

- A = SBJ/POSS
- B = ABS.

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[8] The Yucatecan languages differ in the details. Itzá continues Pre-Columbian grammar in allowing the topicalizer *-e'/-eh* to follow – directly or at a distance – the deictic clitics (Hofling 1991:14f). Lacandón lacks the entire paradigm of referential clitics, including the topicalizer.

Table 3 shows the Modern Yucatec forms of sets A and B. For 1ˢᵗ ps. pl., the exclusive form is given. All of these pronominal elements are free forms at the stage of Proto-Maya. The parenthesized glides are conditioned by a vowel-initial host of the pronominal index.

Table 3 Pronominal paradigms in MYM

	A	B
sg. 1	in (w-)	-en
2	a (w-)	-ech
3	u (y-)	∅
pl. 1	k(a)	-o'n
2	a (w-)… -e'x	-e'x
3	u (y-)…-o'b	-o'b

In all Mayan languages, the Set A index precedes the possessed nominal, cross-referencing the possessor. E2 provides representative examples of the indices with verbs:

E2   a.   h   bin-ech
MYM   PFV go(CMPL)-B.2.SG
           'you went'

      b.   t=u   t'an-ech
            PFV=A.3 call(CMPL)-B.2.SG
            'he called you'

The examples are in the completive status, which triggers ergative marking in all Mayan languages. The Set A index immediately precedes the transitive verb. The Set B index is a suffix to the verb.

In the Yucatecan languages, Set A forms belong to a species of enclitics which are not banned from initial position. If they follow a word in the same phrase, they form a phonological unit with it. Since they syntactically depend on what they precede, they cliticize to what is, in grammatical terms, the wrong side. In the examples, clisis of Set A forms is marked by an equal sign (although some of the sources mistakenly write them as prefixes).

4.2   Verbal clause structure

Tense, aspect and mood are verbal categories and therefore possible only in verbal clauses. Other kinds of predicates have to be verbalized if these categories are to be specified. Therefore, we can narrow down the analysis to the verbal clause. With some simplification, the verbal complex has the structure shown in Diagram 5. E3 is a transitive finite verbal complex.

Diagram 5   Transitive verbal complex

verbal complex			
	finite verb		
index A	verb stem	-status	-index B
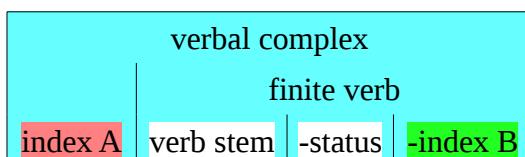
E3	u	ppaticech			
CYM	u	p'at-ik-ech			
		A.3 leave-DEP.INCMPL-B.2.SG			
		'(that) he leaves you' (Motul s.v. *Hun cħilbac*)			

The basic clause structure is 'predicate – subject'. If it is a verbal predicate, the verbal complex of Diagram 5 comes first, then follow the free complements and adjuncts. The most elementary independent verbal clause at the stage of Colonial Yucatec consists of a verbal complex in completive status and its dependents, as in E4.

E4	u	kamah	nicte	in	mehen
CYM	u	k'am-ah-∅	nikte'	in	mehen
		A.3 get-CMPL-B.3.SG	flower	A.1.SG	son
		'my son got the flower (i.e. got married)' (Motul s.v. *kamnicte*)			

Already in Colonial Yucatec, many verbal clauses are introduced by a formative which codes tense, aspect or mood and which we will call an auxiliary (s. §4.5 for discussion of the appropriateness of this term). In Modern Yucatec, this is the default for independent verbal clauses. At this stage, the verbal complex with its dependents as illustrated by E4 only forms a **clause core**, while an independent declarative verbal clause generally (except in perfect status) requires an auxiliary in front of it. Diagram 6 formalizes this construction. The second clause of E5 illustrates it with the recent past auxiliary.

Diagram 6   Verbal clause

			verbal clause			
		verbal clause core				
		verbal complex				
			finite verb			
auxiliary	index A	verb stem	-status	-index B	dependents	referential clitic
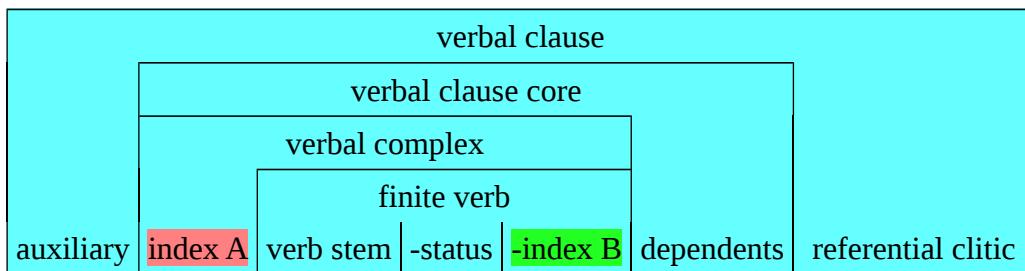
E5	In	watan=e'	mina'n	way=e';
MYM	A.1.SG	wife=TOP	NEG.EXIST(B.3.SG)	here=R3
	táant	=u	bin=e'.	
	REC.PST	=A.3	go(INCMPL)=R3	
	'My wife isn't here; she just left.' (BVS_05-01-36.2)			

The last element in Diagram 6 is the referential clitic conditioned by some of the auxiliaries, the recent past auxiliary being one of these.

4.3   Nominalization

Mayan languages generally lack an infinitive. The verb has a set of non-finite forms, some with nominal (including adjectival), some with adverbial function. Here we are concerned only with bare deverbal nouns, so-called action nouns, and with the processes which do no more than convert a verbal into a nominal constituent.

From intransitive verb bases, action nouns are formed by two such processes. For agentive intransitive verbs, the verb stem also serves as an action noun stem, as in *óok'ot* 'dance' and *meyah* 'work'. For inactive intransitive verbs, an action noun, or rather a process noun, is

formed by suffixing a morpheme *-Vl* to the verb root, where V is a copy of the root vowel, as in *wen-el* 'sleep (n.)' and *kóoh-ol* 'arrival'. Action nouns of intransitive bases are optionally possessed by their underlying subject, as in *in meyah* 'my work' and *u wenel* 'his sleep'. E6 provides examples of intransitive action nouns. E6a, with an agentive stem, lacks an index, while #b and #c show a Set A index in *genitivus subjectivus* function.

E6   a.   ti   canan
CYM   ti'   kanáan
            LOC watch
            'for watching' (San Buenaventura 1684:14v)

       b.   et hazac   ech   ti   in   hanal
            ethas-ak-ech   ti' =in   han-al
            just.in.time-past-B.2.SG LOC=A.1.SG eat-DEP
            'you arrived just in time (to meet me) at having my meal' (Beltrán 1746, §299, p. 132)

       c.   in   káti   a   benel
            in   k'áat-ih a   ben-el
            A.1.SG want-CFP   A.2   go-DEP
            'I want you to go' (Coronel 1620:51)

E7   a.   v   kin   ocçah
CYM   u   k'iin ook-s-ah
            A.3   day   enter-CAUS-INTROV
            '(it is) the sowing season' (Coronel 1620:56)

       b.   in   káti   a   cámbeçic   in   mehén
            in   k'áat-ih a   kanbes-ik-∅   in   mehen
            A.1.SG want-CFP   A.2   teach-DEP-B.3.SG A.1.SG son
            'I want you to teach my son' (Coronel 1620:50)

If the verbal base is transitive, there are two possibilities. The first consists in introverting the base, i.e. detransitivizing it by suppressing the direct object position. Once this is done, the stem is nominalized like an agentive intransitive verb stem, which means that the introversive stem also serves as an action noun. Examples based on transitive roots are *xok* 'read' – *xook* (read\Introv) 'reading, study' and *k'ay* 'sing' – *k'aay* 'singing, song'. For derived transitive stems, introversion is marked by the suffix *-ah*: *kambes* 'teach' – *kambes-ah* (teach-Introv) 'teaching' (as in E74 below), *hets'kun* 'settle' – *hets'kunah* 'settlement'. Such a form also appears in E7a. The other possibility of nominalizing a transitive base consists in providing it with the dependent status suffix *-ik* and accompanying it by the Set A and Set B indices for subject and object. This is shown in E7b.

The two nominalizing suffixes *-Vl* and *-ik* are glossed as dependent status in E6f. They will become incompletive suffixes on their way to Modern Yucatec. The appearance of the Set A index in front of the nominalized verb is conditioned by rules of syntax which will not be detailed here. It suffices to note the following: In MYM, this element is missing (under coreference) from the purpose part of the motion-cum-purpose construction if its verb is intransitive, and occasionally also if it is transitive. This will be taken up in §4.8. In Lacandón, incompletive verbal complexes without a Set A index are widely used in nominalizations, as in E8.

E8   Ten ti'   met-ik   baalche',   Yum-eh.
LACANDÓN   I   LOC make-INCMPL   honey.beer   lord-VOC
           'I am for making honey beer, my lord.' (Bruce S. 1974:28)

The subordination of the nominalized verbal construction by the all-purpose preposition *ti'*
illustrated by E6 and E8 deserves special attention. If the clause thus subordinated follows the
main clause, it may be a purpose clause. This is still so in Modern Yucatec and Lacandón, wit-
ness E9f.

E9   Meet   hum-p'éel   léech ti' =k   léech-t-ik   le haaleh=a'!
MYM   make(IMP) one-CL.INAN trap   LOC=A.1.PL trap-TRR-INCMPL DEM paca=R1
           'Make a trap for us to trap this paca!' (RMC_1993)

E10   ts'a'   ten t=in   wil-ik
LACANDÓN   give(IMP)   me LOC=A.1.SG see-INCMPL
           'give it to me for me to see' (Bruce S. 1968:63)

If, however, the subordinate clause precedes the main clause, the same preposition instead
conveys simultaneity of the situation of the main clause with the background situation of the
subordinate clause. This is illustrated by E11 with an intransitive nominalized verb. E12, with
a transitive one, shows that this reading also occurs if the nominalized clause is postposed.

E11   hach bin   t=u   t'úub-ul   k'iin=e'
MYM   really QUOT LOC=A.3 submerge\DEAG-INCMPL sun/day=TOP

           táan   y-isíins-a'l   =u   yatan yuum   ahaw
           PROG A.3-bathe-INCMPL.PASS =A.3 wife   master/father chief
           'Exactly at sunset, the chief's wife was washed' (hk'an_502)

E12   Ki'mak wáah bin   y-óol   yuum   ahaw t=u   yil-ik!
MYM   happy   INT   QUOT A.3-mind master/father chief   LOC=A.3 see-INCMPL(B.3.SG)
           'How happy was the king to see him!' (hk'an_527)

We will meet this construction again at the genesis of the progressive aspect (§4.7.3).

4.4   Status

In all Mayan languages, the verb has a suffixal slot for a category called status, which com-
prises the subcategories of dependent status proper, aspect and mood. These suffixes belong to
the earliest layer of the diachrony (they must antedate the introduction of right-branching
word order in Proto-Mayan) and are completely grammaticalized. This implies that they
mostly lack a clear semantic function and are instead conditioned by the construction. While
the category of status itself and most of its subcategories are shared among Mayan languages,
there is a great deal of heteromorphy among them, just as most statuses display a complicated
allomorphy within each language.

All of verbal morphology and syntax depends on transitivity. Every verb stem is either
transitive or intransitive, and this can only be changed by derivational means.[9] Transitivity is
the major factor in conditioning allomorphy in status morphemes. The core of the paradigm of
status morphemes for finite forms is shown in Table 4, which presents the forms in colonial
orthography. For lack of relevance to our discussion, Table 4 omits the imperative, the perfect

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[9] Already Beltrán (1746, §§107 and 150-158) is quite explicit about this (cf. E42 below), although his
orthography represents neither tone nor the glottal stop, both of which play an important role in the
morphological processes manipulating transitivity distinctions.

(only available for transitive verbs, anyway) and some intransitive conjugation classes. 'V' represents a copy of the root vowel; '/' and parentheses indicate allomorphy.

Table 4 Status conjugation of Colonial Yucatec Maya

status	stem class aspect/mood \	intransitive basic	intransitive derived	transitive basic	transitive derived
plain	subjunctive	-Vc	-n-ac	-Vb	(-e)
	completive	(-i)	-n(-ah)(-i)	-ah	
dependent	subjunctive	-ebal		-ic	
	completive	-ci	-n-ici	-(i)ci / -i[10]	
	incompletive	-Vl		-ic	

Transitive finite forms are preceded by Set A clitics and followed by Set B suffixes as shown in Diagram 5. Intransitive verbs, instead, take Set B suffixes in the plain forms, but Set A clitics in dependent forms. The finite verb forms in Table 5 illustrate the status conjugation of Table 4 for an intransitive and a transitive example verb.[11]

Table 5 Examples of finite verb complexes in Colonial Yucatec Maya

status	stem class aspect/mood \	intransitive (basic)	transitive (derived)
plain	subjunctive	*cim-ic-en* '(that) I die'	*in cambes-ech* '(that) I teach you'
	completive	*cim(-i)-en* 'I died'	*in cambes-ah-ech* 'I taught you'
dependent	subjunctive	*in cim-ebal* '(that) I may die'	*in cambes-ic-ech* '(that) I may teach you'
	completive	*in cim-ci* '(that) I died'	*in cambes-ic-i-ech* '(that) I taught you'
	incompletive	*in cim-il* '(that) I die'	*in cambes-ic-ech* '(that) I teach you'

In the Yucatecan languages, aspect plays a more important role than tense. In Colonial Yucatec, there is one grammaticalized tense, the suffixal perfect (illustrated by E1 above). Past time is optionally marked by the adverb *cuchi* (i.e. *kuchih*) 'formerly' (MYM *ka'ch-il*), but is otherwise implied by most occurrences of the completive aspect (as in E4), which is essentially perfective.[12] Future is one of the senses of subjunctive status and optionally coded by auxiliaries which we will come to in subsequent subsections.

Dependent status is used in the extrafocal clause of a cleft-sentence (as in E18 below) and in certain complement clauses, examples of which may be seen in E47f.b. Dependent status is, in fact, more frequent in the texts than plain status, especially in the incomplete. It appears every time that the full verb is preceded by another main constituent or by an auxil-

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[10] The allomorph *-i* appears if the subject is the focus constituent of a cleft-construction.

[11] The sources do not provide examples for all persons, so that some of the forms entered in Table 5 are constructed by the grammarians' rules rather than primary data.

[12] Traditional terminology in Mayan linguistics designates as completive vs. incompletive what could also be called perfective vs. imperfective, were it not for the auxiliaries to be mentioned below, which go under the latter terms. S. Vinogradov 2016 for an attempt at semantically characterizing these two values of the status category.

iary. Among the dependent statuses, the default is the incompletive. As a matter of fact, the incompletive dependent morphemes are nothing else than the nominalizers for intransitive and transitive verbs already reviewed in §4.3. These are the forms that we will meet most frequently in the periphrastic constructions to be analyzed below. The completive and subjunctive dependent forms involve a high degree of syncretism, hardly occur in the texts, and even the colonial grammarians are not sure about their form and function. Some of the forms fossilize, but the two subcategories themselves disappear as the status category reaches the stage of the modern Yucatecan languages. In other words, (apart from the perfect) the values of the status category in Modern Yucatec are 'subjunctive' and 'completive' (erstwhile: plain) and 'incompletive' (erstwhile: dependent).

There are more respects in which the paradigm of Table 4 is unstable. Its basic form, and the only form that a simple declarative sentence can be based on, is the plain completive.[13] All the other status forms occur in extended or complex or non-declarative sentences. The plain status obviously lacks the incompletive subcategory. This means that any kind of imperfective aspect – and as we shall see, much semantic differentiation is possible here – requires marking beyond the paradigm of Table 4, which entails complex constructions involving dependent statuses. The situation is similar in the other Mayan languages. All of them have an incompletive or imperfective aspect. There is, however, great heteromorphy; and mostly the syntactic conditions are as in the Yucatecan branch, viz. an auxiliary is needed in addition to the status morpheme (Vinogradov 2014).

Colonial grammars start the description of verbal morphology with a category called present which involves incompletive status. It will be analyzed extensively in §4.9. It is a rather complex periphrastic construction which is not at all basic to the system. It figures so prominently in the grammars essentially on account of a methodological mistake on the part of the grammarians (s. p. 34). The first to recognize this is Beltrán (1746, §§60, 172). He tentatively adduces as present a cleft-construction again containing the incompletive dependent status, which we must forego here.

The status paradigm is alive to this day, but given its high degree of grammaticalization, it is fragile. Several endings appear only *in pausa* and are syncopated otherwise (Beltrán 1746, §§135-147). Some of the allomorphy is utterly complicated, syncretistic and constantly exposed to variation. For instance, while the subjunctive of root transitives ends in *-Vb* for San Buenaventura 1684, Beltran 1746, §112 says that this is now out of use, and the ending is *-e* (as it used to be for derived transitives).

4.5 Periphrastic aspects

There is a small set of syntagmatic positions at the left clause boundary, i.e. following any left-dislocated topic as shown in Diagram 4 and immediately preceding the clause core. These positions may be plotted as in Diagram 7:[14]

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[13] It seems that Mayan languages are among those in which perfective aspect is the default aspect for verbal clauses. Coon (2010[C], ch.

[14] The left-dislocated topic of Diagram 4 precedes (all the positions shown in) Diagram 7. The rest of Diagram 4 is a cleft-construction. However, a focused constituent may also precede a full clause, as shown in Diagram 7.

Diagram 7   Clause-initial syntagmatic positions

a	b	c	
Conjunction	Focus	Auxiliary	Verbal Clause Core
d			
Superordinate Predicate			

a)   The Conjunction slot may be occupied by conjunctions and other sentence-initial parti-cles, as the conjunction in E16b and the negator of E20b and E41.
b)   The Focus slot may be occupied by focused constituents, as in E18.
c)   The Auxiliary slot may be occupied by grammaticalized auxiliaries, such as E28.
d)   Instead of all of this, a verbal clause core may be preceded by a superordinate predicate like the phase verb in E47, the modal verboid in E23 and one of the non-grammaticalized auxiliaries to be analyzed in §4.7. While the positional relation between any of the elements of #a – #c and the verbal clause core appears to be the same as the positional relation between such a superordinate predicate and the verbal clause core, the syntactic relation is different, since the superordinate predicate is not, of course, a constituent of the clause in question, but rather takes the clause core as a dependent, as shown in Diagram 9 below.

Distributional relations between elements of the three classes shown in Diagram 7 are complex, involving several conditions of mutual exclusion. In any case, none of the three slots is occupied obligatorily, and most frequently only one of them is occupied. As a consequence, any of the four kinds of elements mentioned in #a – #d may form a binary construction with an ensuing clause core. This is a structural pattern apparently inherited from Proto-Maya. It is an important presupposition for a reanalysis by which any such element may be reinterpreted as an auxiliary. As we will see, elements occupying slots #b – #d are, in fact, frequently so reanalyzed.[15]

Since the material ending up in the Auxiliary position of Diagram 7 is so heterogeneous, its relation to the rest of the clause differs accordingly, and consequently the constructions with slot fillers of the four above kinds are syntactically different. The differences are reflected morphologically on the full verb, which depending on the construction is in the dependent incompletive, the completive or the subjunctive status. As we will be concentrating on such constructions in which the element in question gets grammaticalized to an auxiliary, the result is that the auxiliary conditions the status. Diagram 8 takes up Diagram 6 and in addition visualizes this dependency.

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[15] In terms of Bisang 1991, esp. 511-513 and 535f, the auxiliary position of Diagram 7 is an "attractor position", that is, a position which acts as a melting-pot for material recruited from different sources and grammaticalized in this position.

Diagram 8   Syntagmatic relation between auxiliary and status
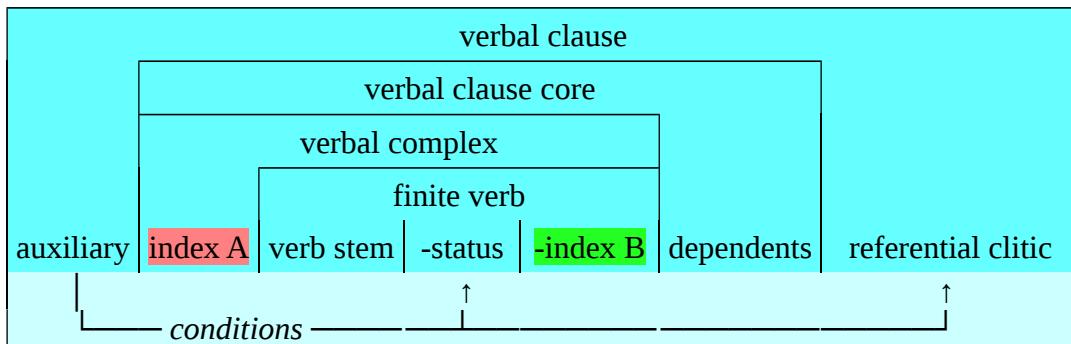
The first thing to be noted about Diagram 8 is that the full verb is finite. This is a peculiarity of Yucatecan periphrastic constructions whose diachronic explanation will become clear in the following sections. As already shown in Diagram 6, in the Yucatecan languages, the pronominal indices do not combine with the auxiliary, but with the full verb. Thus, the auxiliary deserves its name only insofar as it carries tense/aspect/mood information. Person and number, however, are marked on the full verb, and consequently it is indeed finite. The discussion of the applicability of the auxiliary concept to this class of formatives will be taken up in §4.10.2.

There is in Yucatec a large variety of tenses, aspects and moods that are coded in the initial position of Diagram 8.[16] None of the colonial grammars provides a systematic account of them. There are at least two reasons for this. Firstly, these grammars depend on the model of Latin grammar, which almost totally lacks auxiliaries, conjugation being essentially synthetic. Secondly, virtually none of the auxiliaries of CYM is inherited and, thus, firmly entrenched in the system. While the clause-initial auxiliary is a Pan-Mayan category, practically all of the extant formatives of this category emerge at the time of the first colonial grammarians. With the exception of the auxiliary described in §4.9, none of the incipient auxiliaries made its way into their conjugation paradigms; instead, they throw those that they are aware of into the basket of particles. They do, however, use them in their examples.

The following subsections will pursue the grammaticalization of the subset of the tense/aspect/mood auxiliaries of Yucatec Maya shown in Table 6.

Table 6 Some Yucatec tense/aspect/mood auxiliaries

form	function	status conditioned
t-/h-	perfective	completive
k-	imperfective	incompletive
táan	progressive	
ts'o'k	terminative	
yan	debitive/future	
bíin	predictive future	subjunctive
bin … ka'h	immediate future	incompletive/subjunctive

This is less than half of the auxiliaries actually in use. Among the ones missing from Table 6 are three past time auxiliaries (recent [illustrated by E5], relative and remote past), the obliga-

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16 An extensive list of relevant markers appears in Briceño Chel 2006, ch. 1.2f.

tive, potential and volitive moods illustrated below in E23 and a commissive or assurative future. For a subset of these, the origin is unknown. None of the auxiliaries to be discussed here triggers the final referential clitic mentioned in §4.2, so it will be left out of consideration. The last column of Table 6 indicates the status that the auxiliaries trigger on the full verb. By this criterion, there are four structural subclasses of auxiliaries and four different auxiliary constructions, each illustrated by one example in E13.

E13　a.　h　lúub-en
MYM　　　PFV fall(CMPL)-B.1.SG
　　　　　'I fell'

　　　b.　k=in　　　　lúub-ul
　　　　　IPFV=A.1.SG　fall-INCMPL
　　　　　'I fall'

　　　c.　bíin lúub-uk-en
　　　　　FUT fall-SUBJ-B.1.SG
　　　　　'I will fall'

　　　d.　bin　　　=in　　ka'h　lúub-ul
　　　　　IMM.FUT　=A.1.SG　do　　fall-INCMPL
　　　　　'I am going to fall'

From this presentation, it appears that the categories in question are coded twice, both by the introductory auxiliary and by the status morpheme. The question naturally arises why each auxiliary goes with a different status. This problem will be analyzed in the following subsections. We will see that all the auxiliation constructions come about by grammaticalization, but that they originate from different sources.

Another difference between the statuses strikes the eye: Some of them have the intransitive subject represented by a Set A index, while others have it represented by a Set B index. This is the alignment split already mentioned in §3. Although it is not the main object of the ensuing analyses, these will nevertheless contribute to its understanding.

An item of methodology in the analysis of the grammaticalization of these auxiliaries is to be introduced here. At the point when an item is recruited to fill the clause-initial syntactic position, it is a word or even a phrase. Continuing grammaticalization then reduces auxiliaries to bound morphemes (illustrated by E13a and b). There are two tests for the structural status of an auxiliary. First, as in many languages, the answer to a polar interrogative in Mayan involves repeating the main predicate with positive or negative polarity. From this we can derive a test to determine the main predicate of a sentence. In principle, in a configuration like Diagram 8, either the auxiliary or the finite full verb may be the main predicate. The auxiliary, however, can be the main predicate only if it is a word. As we shall see, at the beginning of the process, the auxiliary does indeed constitute the answer to a polar question, while with advanced grammaticalization, this is no longer possible, and a short version of the verbal clause appears instead. The second test on the status of the auxiliary involves the placement of enclitic particles. Some of them occupy Wackernagel's position. They may therefore immediately follow the auxiliary if this is a word; and otherwise they must follow the full verb. One might think that the Set A indices, which are enclitic to the auxiliary, already provide this test. However, these coalesce with the auxiliary once this forfeits its word status and therefore become useless for the test.

4.6 Auxiliation based on modification:
from hodiernal past to perfective

As explained in §4.4 and illustrated by E4, the CYM completive status is the only one that a simple independent declarative clause may be based on (i.e. without the need for an auxiliary).[17] This means, at the same time, that such clauses have little marking in comparison with all other tense/aspect/mood categories appearing in independent sentences. Moreover, the completive has zero allomorphs in several contexts. These may be the result of a phonological process, viz. syncope of the vowels appearing in the completive line of Table 4 if this suffix is followed by a vowel; or else the overt allomorphs may be grammatically restricted to the position *in pausa*.[18] Thus, the transitive completive suffix of E14 and E20b would be zero in informal speech (as it would be in a MYM version of these examples); and likewise the intransitive completive suffix appearing in E24 would normally be zero, as it is in E42 from CYM, in E13a from MYM and in E15.

E14	u	cħabtahon		Dios
CYM	u	ch'ab-t-ah-o'n		dios
	A.3	create-TRR-CMPL-B.1.PL	god
	'god created us' (Motul s.v. *cħab.tah.t*)			

E15	Ka'	lub'(-ih)		ah tikin	che'-eh ...
Itzá	then	fall-CMPL(B.3.SG)	M	dry	wood-TOP
	'Then the dry tree fell ...' (Hofling 1991, 12:30)				

Anyway, the result is that many completive verbal complexes occurring in texts reduce to verb stems provided with indices. One might expect that such a formally weak category is ripe for reinforcement or renewal. This expectation will be only partially fulfilled.

In CYM, the completive clause can be marked for hodiernal completive.[19] This is achieved by the particle *ti'* 'there' (or its prevocalic bound allomorph *t-*), which may start out in the Focus position of Diagram 7, but anyhow ends up in the auxiliary position. E16 shows the simple plain completive for an intransitive (#a) and a transitive (#b) verb. The two parts form minimal pairs with the #a and #b sentences of E17, which show the hodiernal completive.

E16	a.	Bini		Fiscal	ti	yotoch	ku,
CYM		bin-ih		fiscal	ti'	y-otoch	k'uh
		go-CMPL(B.3.SG)	inspector	LOCA.3-house	god
		'The inspector went to the church'					
	b.	ca	vhaɔah		palalob		
		káa	=u	hats'-ah	paal-alo'b		
		CONJ	=A.3	beat-CMPL	child-PL		
		'and beat the children' (San Buenaventura 1684:23r-v)					

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[17] Of course, imperative sentences lack an auxiliary, too.

[18] The completive endings are absent before a following vowel in Lacandón, too. Coon (2010[R], §3.3) reports similar facts about Ch'ol.

[19] It is hodiernal past according to Coronel 1620:41f and San Buenaventura 1684:35r, although in Smailus 1989:41 it is characterized as remote or anterior past. The treatment in Coronel is part of the section on dependent status. The first examples of hodiernal past in plain status are in San Buenaventura l.c.

E17	a.	ti	bini		padre
CYM		ti'	bin-ih		padre
		HOD	go-CMPL(B.3.SG)		father

      'the father (reverend) went today / has gone'

	b.	tin		haɔah	paal
		t=in		hats'-ah	paal
		HOD=A.1.SG		beat-CMPL	child

      'I beat the child today / have beaten the child' (San Buenaventura 1684:35r)

Two facts should be noted: First, the *ti'* functioning as auxiliary here is based on the word *ti'*, which is syntactically ambiguous between an adverb and a preposition. The adverb is a deictically neutral local demonstrative meaning 'there'. The preposition *ti'* Loc appears in E16a and is seen to subordinate a nominalized verbal complex in E6a and E8 (§3). The word occurs in both of these functions in E58 below. While the preposition governs the constituent following it and therefore presupposes dependent status on it if it is based on a verbal construction, the *ti'* presently at stake does not do this. The completive morph in the verbal clause core remains unaffected by the addition of the auxiliary in clause-initial position. Consequently, this auxiliary is based on the adverb, not on the preposition. The semantic shift from 'there' to Hodiernal is obviously a metaphor from space to time. Second, the auxiliary is the same for intransitive and transitive verbs.[20]

    The specification of hodiernal past is possible in dependent status, too:[21] the #a sentence of E18 illustrates simple completive, the #b sentence is its hodiernal counterpart. Here, too, the completive morph is the same in both cases.[22]

E18	a.	bal	v	chun	a	háɔci?
CYM		ba'l	=u	chuun	=a	hats'-k-ih
		what	=A.3	ground	=A.2	beat-DEP-CMPL(B.3.SG)

      'why did you beat her?'

	b.	bal	v	chun	ta	háɔci?
		ba'l	=u	chuun	t=a	hats'-k-ih
		what	=A.3	ground	HOD=A.2	beat-DEP-CMPL(B.3.SG)

      'why have you beaten her' (Coronel 1620:42)

The hodiernal completive is already highly grammaticalized in Colonial Yucatec Maya.[23] Already in Coronel 1620, some completive examples introduced by *ti'* are translated as simple past. For instance, E19 is translated as "Quien vino?"

E19		Macx	ti	tali?
CYM		makx	ti'	taal-ih
		who	HOD	come-CMPL(B.3.SG)

      'Who has come?' (Coronel 1620:48)

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[20] In Ch'ol, the perfective auxiliary is *tyi* (with an allomorph *tsa'*) both for transitive and intransitive verbs. It is assumed to be a Yucatecan loan in Law et al. 2006: 442.

[21] San Buenaventura 1684:17r contends that the hodiernal past may trigger dependent status, and gives two examples of it. These are probably due to conditions as obtain in E18b.

[22] Coronel (1620:41) postulates a contrast between dependent status suffixes for simple and hodiernal completive; but this finds no support elsewhere.

[23] In translating it into English, one has the choice of either rendering the specific semantics and consequently using *today* or else rendering the degree of grammaticity and thus using the perfect.

In Beltrán's (1746) examples – e.g. §§264f *(t) luben* – the completive aspect appears variously with and without the aspect auxiliary *t-*, with the same Spanish translation *caí* 'I fell' and no comment on any semantic difference. In §36, he admits that, in front of intransitive verbs, the *t* is "semipronunciada", and establishes the variation taken up below. Apparently, the hodiernal component has disappeared, and what we now have is a perfective auxiliary, reduced to the phoneme *t*, as in E63 below, and therefore regularly univerbated with the following enclitic Set A index, as evidenced by E17b and E18b. In Modern Yucatec, the perfective auxiliary has become obligatory with transitive verbs in completive status.

As for the tests for word status of this auxiliary, it cannot be host to an enclitic particle and cannot constitute the answer to a polar question. The latter may be inferred from E20, where the answer has to contain the full verb.

E20 a.
| ti | kamchijnech | | ua. | l. | ta | kamah | ua | a | chij. |

CYM
| ti' | k'am-chi'-n-ech | | wáa | o: | t=a | k'amah | wáa | =a | chi' |
| HOD | get-mouth-CMPL-B.2.SG | | INT | or: | HOD=A.2 | get-CMPL | INT | =A.2 | mouth |

'Have you had breakfast?'

b.
Ma	tin		kamah	in	chi.
ma	t=in		k'am-ah	=in	chi'
NEGHOD=A.1.SG			get-CMPL	=A.1.SG	mouth

l.	ma	ti	kamchijnen.
o:	ma'	ti'	k'am-chi'-n-en
or:	NEG	HOD	get-mouth-CMPL-B.1.SG

'I have not had breakfast' (Motul s.v. *kamchij*)

If *ti'* did start out in the Focus position of Diagram 7, anyhow it has lost focus function by the start of the documented history of Yucatec Maya, witness such examples as E18b, where it follows the focus constituent. This is, then, the only auxiliary which has already lost word status at the stage of Colonial Yucatec and become a bound morpheme.

Intransitive completive verbs get a Set B index suffixed, as seen, *i.a.*, in E19. The monophonematic auxiliary therefore hits directly on the verb, which may start with a consonant, as in E63. Yucatec has a phonological rule which converts /t/ into /h/ in front of /t/. An extended version of this rule may have applied to the perfective auxiliary. At any rate, this auxiliary has an allomorph *h* with intransitive verbs. A preconsonantal /h/, however, generally disappears in Yucatecan. The *h* to be seen in E13a is optional both in speaking and in writing, but is mostly absent, as it is in E15 and E16a. One may speculate that what manifests itself in such cases is an uninterrupted continuation of the plain completive of CYM. This may be hard to settle. At any rate, since the hodiernal feature present at the beginning disappears, the result of the entire grammaticalization process is a weak reinforcement of the inherited completive status.

The picture of the Yucatecan languages with regard to this auxiliary is heterogeneous. Mopán shows no trace of a perfective auxiliary, which may reflect the original situation illustrated by E16. Lacandón has independent declarative clauses in completive status with and without an auxiliary. The latter is illustrated by E21 (from the epic style).

E21
| K=u | yen-s-ik | =u | yok lu'm | Hachäkyum | y-a'l-ah: |

LACANDÓN
| IPFV=A.3 | lower-CAUS-INCMPL | =A.3 | foot earth | Hachäkyum | A.3-say-CMPL |

'When Hachakyum set his foot onto the land, he said:' (Bruce S. 1968:111 ~ 1974:19)

No process is known by which the perfective aspect auxiliary would reduce to zero in such a context. Consequently, this may be a functional opposition like the one illustrated by E16f. In

Itzá, the completive only appears to be used with the perfective auxiliary. In both of these latter languages, the distribution of the allomorphs is essentially the same as in Yucatec, except that the allomorph for intransitive verbs is always zero.[24]

The perfective is the only tense/aspect/mood auxiliary of the Yucatecan branch that cooccurs with completive status. The internal syntax of the hodiernal completive construction which is its source differs from all the other auxiliary constructions. The clause core does not depend on the auxiliary, but is, instead, modified by it (likewise Coon 2010[C]:38 *et pass.*). There are, of course, many more adverbs which occupy the focus position of Diagram 7 and which, being mere modifiers, do not trigger any changes on the verb. However, in a language whose syntax is heavily based on government, a modifying construction is not a productive source for the grammaticalization of auxiliaries. The perfective remains a loner as regards both the source of the auxiliary and the status conditioned (or rather, conserved) by it on the verb. However, as we shall see, the more recent grammaticalization paths converge with it into a common paradigm.

4.7   Auxiliation based on complementation

4.7.1   Basics

Given that any dependents follow the verb, the subordinate clause follows the main clause. Of importance for complex syntax and especially for auxiliation is a kind of complex construction consisting of a main clause core and a complement clause core. The main predicate may be a nominal or verbal one. It is in any case monovalent and therefore has no dependents beside the complement clause. The latter functions as the subject of a verbal, and as the ("possessive") complement of a nominal main predicate. This presupposes its nominalization, and therefore it is in incompletive dependent status. Given the categorial polymorphy of the main predicate, this is simply categorized by its destination, viz. as an auxiliary to come, in Diagram 9. This is construction #d of the set enumerated in §4.5 which shares a syntactic slot in front of the clause core. It is illustrated by E22.

Diagram 9   Subject complementation
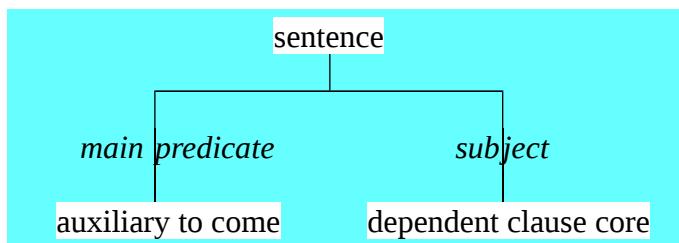
E22	çebhi	in	canic	maya	than
CYM	séeb-h-ih	=in	kan-ik	maaya	t'aan
	fast=COP-CMPL	=A.1.SG	learn-INCMPL	Maya	speech

'I learnt Maya quickly' (lit.: 'it was quick that I learnt Maya') (Coronel 1620:52)

From an SAE point of view, the full verb in the dependent clause core may appear to be the main predicate, which several SAE languages would modify by such peripheral concepts as the fastness of E22. A language like Maya, generally averse to modification, prefers the alter-

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[24] Lacandón has a subordinator combining with completive aspect, viz. *kahin* 'when' (Bruce S. 1968:100), corresponding to Yucatec (*le*) *ka'h*. While the Yucatec subordinator combines with the perfective auxiliary, the Lacandón one apparently does not.

native of having the peripheral predicate govern the central predication (cf. Lehmann 1990 for this typological relationship). E23 illustrates the construction with modal verboids.

E23 a. v   nah   a   benél

CYM   u   nah   =a   ben-el

          A.3 decorum[25]=A.2 go-INCMPL

          'you ought to go' (Coronel 1620:69)

    b. Vchuc   inbeelticlo

        uuchuk   =in   beelt-ik   =lo'

        possible =A.1.SG   make-INCMPL=R2

        'I can do that' (San Buenaventura 1684:18v)

    c. tac   in   xee

        taak   =in   xeeh

        prompted =A.1.SG   vomit\INTROV(INCMPL)

        'I have/want to vomit' (Beltrán 1746, §299, p. 146)

As already indicated in §4.5, the complement construction resembles the cleft construction in having the main constituent in the same clause-initial position. An important difference between the two constructions consists in the fact that the subordinate clause of the former is just a nominalized clause. Its status marking is the incompletive dependent status, with non-past reference. The extrafocal clause, instead, may be in any dependent status and thus have any time reference.

As the following subsections will show, this construction is the model for a number of auxiliaries. The clause-initial slot attracts not only intransitive verbs, but also verboids, nouns and denominal adverbs. The construction, however, remains essentially the same: in all the constructions of §4.7, the clause core depends on the initial element.

4.7.2   From habitual to imperfective aspect

The inherited imperfective was renewed in Colonial Yucatec Maya.[26] At the beginning of this process, there is a set of words, apparently denominal in origin, which compete for the auxiliary position. Three of these appear in E24, listed as synonymous in the colonial grammar. The first is *lic(il)*, which has a variant *lac* and must be a root with the meaning 'this time span', although it is no longer found in the texts as such. The second of these auxiliaries is *tamuk*, a preposition and conjunction meaning 'during, while'. The third is *ualac* 'this time'. Both *lik* and *walak* survive in present-day Yucatec in a form adverbialized by the suffix *-il*.[27]

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[25] lit. 'what befits you / your obligation', Span. *conviene*

[26] All Mayan languages have an imperfective auxiliary, but the forms are very different. For instance, Ch'ol has *muk'*, shortened to *mi*; Q'eqchi' has *nak-*; and so on. S. Vinogradov 2014.

[27] The form *licil* is treated extensively in Coronel 1620, and on p. 46 he does assign it a habitual meaning. Otherwise, *licil* subordinates a clause similar in function to an oblique relative clause. Modern successors are Yucatec *ka'likil* 'at the time, while' and Itzá *kil* 'when' (Hofling 1991:26). Acatec Maya has *chi < ki*.

E24	cimçabi		in	yum
CYM	kim-s-a'b-ih		=in	yuum
	die-CAUS-PASS-CMPL(B.3.SG)		=A.1.SG	master/father

	tilic	/ tamuk /	ti	válac	v	hanál
	ti' lik	/ tamuk'/	ti'	walak	=u	han-al
	LOCthis.span	/ while /	LOCthis.time		=A.3	eat-INCMPL

'my father was killed while eating' (Coronel 1620:57)

In Yucatec, the competition among the three formatives will be won by *lic*. The preposition *ti* subordinating it can already be omitted, as in E25.

E25	lic u	dzocol	a	hanal	ca	tacech	uaye
CYM	lik =u	ts'o'kol	=a	han-al	káa	tal-ak-ech	way=e'
	span =A.3	end-INCMPL	=A.2	eat-INCMPL	CONJ	come-SUBJ-B.2.SG	here=R3

'when you have eaten, you should come here' (Motul s.v. *ca*$_6$)

The clause introduced by *lic* may also be independent; then the originally temporal construction may have a habitual sense (cf. Coronel 1620:67), clearly visible in E26.

E26	lic	in	uenel	tamuk	in	hanal
CYM	lik	=in	wen-el	tamuk'	=in	han-al
	HAB	=A.1.SG	sleep-INCMPL	while	=A.1.SG	eat-INCMPL

'I usually fall asleep while eating' (Motul s.v. *lic*$_2$)

By further grammaticalization, the morpheme functions as a mere imperfective auxiliary, as in E27.

E27	lic bin	a	haɔic	a	paalil	tu men	u	tuz. −
CYM	lik=bin	=a	hats'-ik	=a	paal-il	tumen	=u	tuus
	IPFV=QUOT	=A.2	beat-INCMPL	=A.2	child-REL	because	=A.3	lie\INTROV

'They say you (habitually) beat your boy because he lies.'

lic. lici.
lik(-ih)
IPFV-CFP
'Yes.' (Motul s.v. *lici lic*)

It may be noted that the two occurrences of the particle in E27 fulfill the conditions of the two tests for word status introduced in §4.5: the particle is, at this stage, syntactically independent. However, there already exists a shortened variant *c(i)*, apparently in free variation, as in the dialogue of E28:

E28	a.	bal ca		uoktic?
CYM		ba'l k=a		wook'-t-ik
		what IPFV=A.2		weep-TRR-INCMPL

'What are you crying for?'

	b.	in	kéban lic	uoktic.
		in	k'eban lik	w-ook'-t-ik
		A.1.SG	sin IPFV	A.1.SG-weep-TRR-INCMPL

'It is for my sins that I am crying.' (Coronel 1620:67)

One and a half centuries later, *lic* is still found in the same contexts, as shown in E29f.[28]

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[28] Beltrán (1746, §299, p.140) also mentions *liclili* (*likil-ili'*) with the meaning 'customarily, so it is always', which is a reinforcement of the same particle by the identifying suffix *–ili'*.

E29   tilic   ú   tzicic   Dios   Pedroe,

CYM   ti'-lik   =u   tsik-ik   dios   Pedro=e'

         LOC-span   =A.3   obey-INCMPL   god   Peter=R3

         bin   ú   chuc   olt   dzabilah

         bíin   =u   chuk-óol-t   ts'abilah

         FUT =A.3   attain-mind-TRR(SUBJ)   grace

         'as long as Peter obeys god, he will attain grace' (Beltrán 1746, §261)

E30   Lic   ua   ú   hanal   kohane? –   Lic.

CYM   lik   wáah   =u   han-al   k'oha'n=e'   lik

         IPFV   INT   =A.3   eat-INCMPL   sick=R3   IPFV

         'Does the sick person eat? – He does.' (Beltrán 1746, §299, p.140)

As E30 proves, at this stage, *lic* still stands both of the tests of syntactic independence. However, the status of its shortened variant *c(i)*, 'very common' according to Beltrán 1746, §101, is already ambivalent.[29] It can still serve as host to a following enclitic, as in the #a version of the variants offered in E31.

E31   a.   ci   bin   in   yacuntic

CYM   ki   bin   =in   yáakunt-ik

         IPFV   QUOT   =A.1.SG   love-DEP

     b.   cin   yacuntic   bin

         k=in   yáakunt-ik   bin

         IPFV=A.1.SG   love-DEP   QUOT

         'it is said that I love him' (Beltrán 1746, §246)

On the other hand, the particle already optionally univerbates with the enclitic A index, as evidenced by the #b version (separate combinations of *ci in/a/u* in Beltrán 1746, §131). Beltrán uses the reduced auxiliary *c(i)* in his own examples when aspect is not at stake, thus, in order to choose unmarked aspect (as in E31 *et pass*.). This is already today's situation: The auxiliary only survives in its one-phoneme form *k*, obligatorily univerbates with the Set A index and carries aspectual information only in contrast with more specific auxiliaries.

     Thus, the imperfective auxiliary becomes a bound monophonematic form just like the older perfective auxiliary seen in §4.6. The opposition between perfective and imperfective aspect emerges as a minimal one both in formal and in functional terms. It becomes the core of the extensive TAM auxiliary paradigm indicated in Table 6.

     We come to the imperfective auxiliaries of the other Yucatecan languages. Both in Itzá and in Lacandón, imperfective aspect is marked by the same formative *k* as in Yucatec.[30] However, Lacandón shows more variation. On the one hand, the formative is optional (Bruce S. 1968:62), imperfective aspect then being marked only by the incompletive status suffix, as in E32. Especially in Chan K'in Viejo's terse epic style, an incompletive verbal complex often constitutes an independent sentence, as in E33.

E32   K'ayyum   =u   häts'-ik   Cham-Bol

LACANDÓN   K'ayyum   =A.3   beat-INCMPL   Chan-Bor

         'Kayum beats Chan Bor' (Bruce S. 1968:105)

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[29] Beltrán dedicates a section (95) to *lic*(*il*), attributing a habitual function to it, and another section (101) to *ci*, attributing present tense function to it, without noting any connection between the two.

[30] Its analysis as a future marker in Bruce S. 1968:61 must be due to a confusion with the future subordinator *k*(*en*).

E33	In	want-ik-ech	Yum-eh.
LACANDÓN	A.1.SG	help-INCMPL-B.2.SG	lord-VOC

'I (will) help you, my lord.' (Bruce S. 1974:26)

The most plausible analysis of this construction is that the auxiliary has been reduced to zero.[31] This is, then, an example of complete grammaticalization within half a millennium.

On the other hand, there is a formative *k(ah)* which functions as a temporal conjunction. It may be illustrated by E21, repeated here as E34.

E34	K=u	yen-s-ik	=u	yok lu'm	Hachäkyum	y-a'l-ah:
LACANDÓN	IPFV=A.3	lower-CAUS-INCMPL	=A.3	foot earth	Hachäkyum	A.3-say-CMPL

'When Hachakyum set his foot onto the land, he said:' (Bruce S. 1968:111 ~ 1974:19)

The initial *k* is glossed as 'imperfective'. It might as well be glossed as 'when'.[32] The Yucatecan languages have a rather large set of subordinating formatives which start with or at least contain a /k/. Occupying the position indicated in Diagram 7 of §4.5, some of them allow a following auxiliary. Recall that the CYM formative *lik*(*il*), which yields the Yucatec imperfective auxiliary, is first mostly found in temporal clauses. The exact relationship between the imperfective auxiliaries and these conjunctions remains to be sorted out.

In Mopán, the alternate auxiliary *walak* was chosen, which appears in E35.

E35	walak	=ti	ad-ik
MOPÁN	HAB	=A.1.PL	say-INCMPL

'we always say it' (Danziger 2011:129)

As may be seen, this is less grammaticalized, both functionally and formally, than its original competitors in the sister languages.

4.7.3 Progressive aspect

The progressive itself is a Proto-Mayan category. In Colonial Yucatec Maya, it is based on the relational noun *tan* (*táan*),[33] illustrated in E36f in its lexical meaning 'front, middle'.

E36	tan	cah
CMY	táan	kah
	middle	village

'(in) the village center' (Beltrán 1746, §299, p.147)

E37	tutan	Dios
CYM	t=u	táan dios
	LOC=A.3	front god

'in front of god' (San Buenaventura 1684:39v)

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[31] An alternative, and less plausible, account would be to assume that Lacandón uses the nominalized constructions of §4.3 as independent sentences, in which case the change would instantiate insubordination. Note that this is not analogous to the Lacandón use of the completive without auxiliary, discussed in §4.6, since the completive construction at its origin was independent without an auxiliary.

[32] This is actually the gloss provided by Bruce S. l.c.

[33] The progressive function of this morpheme may be inherited from Proto-Maya; some languages, including Kaqchiquel, have plausible cognates.

E37 shows the regular syntactic construction which is natural for a noun designating a spatial region, viz. preceded by a possessive Set A clitic[34] and governed by the default preposition *ti'* Loc. The same configuration is also at the source of its aspectual use. The full form *tután* is only mentioned in Coronel 1620:47, but not illustrated in the sources. The earliest evidence lacks the preposition. E38f illustrate the incipient progressive function for intransitive and transitive verbs, resp. E38 is obviously a variant of E24.

E38	vtán	v	hanál		in	yum,
CYM	u	táan	=u	han-al	=in	yuum
	A.3	middle	=A.3	eat-INCMPL	=A.1.SG	master/father

	ca	cimçabi
	káa	kim-s-a'b-ih
	CONJ	die-CAUS-PASS-CMPL(B.3.SG)

'my father was in the middle of eating when he was killed' or: 'while my father was eating, he was killed' (Coronel 1620:57)

E39	Vtan	incambecic		paal,
CYM	u	táan =in	kambes-ik	paal
	A.3	middle =A.1.SG	teach-DEP.INCMPL	child

	ca	xolhi	tu	pix.
	káa	xol-hih	t=u	píix
	CONJ	kneel-CMPL(B.3.SG)	LOC=A.3	knee

'While I was teaching the child, he knelt down.' (San Buenaventura 1684:9Br)

The original construction with the subordinating *ti'* and its further evolution are, at any rate, completely analogous to the imperfective *ti' lik* seen in E24: It follows the pattern of Diagram 9, where the full verb of the complement clause is in the incompletive dependent status. Initially, the new auxiliary is typically used in complex sentences, where the progressive clause provides the background for the event of the main clause, as clearly shown by E38f. However, and again like the imperfective, the progressive also appears in monoclausal sentences as E40f. E41 features, already at Coronel's time, a further reduced form of the auxiliary, where the original possessive clitic preceding *táan* is no longer there.[35]

E40	U	tan	in	beeltic
CYM	u	táan	=in	beel-t-ik
	A.3	PROG	=A.1.SG	make-TRR-DEP.INCMPL

'I am (in the middle of) doing it' (San Buenaventura 1684:37r)

E41	ma	tan	a	túbul	ten
CYM	ma'	táan	=a	tu'b-ul	ten
	NEGPROG		=A.2	escape-INCMPL	me

'I am not going to forget you' (Coronel 1620:34)

Beltrán (1746, §261) includes *utan* in the list of particles adopted from his predecessors, but in his own examples he only uses the reduced form *tan*. Seeking to render the Spanish pro-

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[34] The only Set A index ever attested in this construction is *u* A.3. This leads to the interpretation made explicit in the literal translation of E38 and to the gloss 'middle'. If the clitic could have been of first person, then the other meaning of *táan*, viz. 'front', would appear to underlie the construction: 'in front of me/us, P is happening'.

[35] Since CYM, there has been a complex form *ma'táan* of the negator *ma'*, which according to Coronel (1620:83) triggers the incompletive of intransitive and the subjunctive of transitive verbs. It is certainly present in E41. It is not clear whether it contains the morpheme *táan* presently at stake.

gressive ("gerundio") in Maya, he offers, among other alternatives, the pair of examples in E42, which illustrates, at the same time, the morphological correlates of the transitivity contrast:

E42	a.	tan	in	tzeec,		ca	lub	kuna
CYM		táan	=in	tse'k		káa	lúub	k'u-nah
		PROG	=A.1.SG	preach(INCMPL)		CONJ	fall(CMPL)	god-house

'I was preaching, there the church collapsed'

	b.	tan	in	tzeectic	ú	than	Dios	tiob,
		táan	=in	tse'k-t-ik	=u	t'aan	dios	ti'-o'b
		PROG	=A.1.SG	preach-TRR-INCMPL	=A.3	word	god	LOC-3.PL

	ca	cim	Joan
	káa	kim	Juan
	CONJ	die(CMPL)	John

'I was preaching god's word to them, there John died' (Beltrán 1746, §262)

As may be seen, this is now just a progressive aspect. E43 illustrates the test on susceptibility of serving as the host to a clitic particle, with positive result for contemporary Yucatec Maya.

E43	Táan	wáah	=a	bin?
MYM	PROG	INT	=A.2	go(INCMPL)

'Are you going (leaving)?' (Hnazario_406)

In its further development, and again in analogy with the development of the imperfective auxiliary as illustrated by E31b above, the progressive auxiliary coalesces with the Set A index which regularly follows it. The full form of the auxiliary survives essentially in writing and, in the oral mode, in cases like E43. The coalescence is a process in two phases. At first, the product of the merger of *táan* with the three singular indices *in, a, u* is *tíin, táan, túun*, as illustrated by E44.

E44	Túun	tsikbal.
MYM	PROG:A.3	tell(INCMPL)

'He was talking.' (Monforte et al. 2011:48)

This is, however, just a transitional stage rarely represented in writing. In the end, these forms are shortened to *tin, ta, tu* (cf. Briceño Chel 2006:24f), as in E45.

E45	T=u	sáas-tal
MYM	PROG=A3	dawn-FIENT.INCMPL

	káa	h	téek	líik'	y-ich	hun-túul	le	peek'=o'
	CONJ	PFV	for.a.moment	rise(CMPL)	A.3-eye	one-CL.AN	DEM	dog=R2

'It was dawning when one of the dogs suddenly rose his glance' (hts'oon_310.1)

In the syntactic configuration illustrated by E45, the progressive clause specifies a situation holding in the background simultaneously with the event described by the following clause. This is functionally equivalent with the combination described in §4.3 (cf. E6b and E11f), where a nominalized clause subordinated by *ti'* serves as background information for the main clause. In fact, since the products of the merger of the preposition and of the progressive auxiliary with the following Set A index are homonymous, the two constructions are not easily distinguished. It may be assumed that the (much older) model of the nominalized construction played a role in the rather radical reduction of the auxiliary complex.

By the same token, the reduced variant of the progressive auxiliary becomes homonymous with the perfective auxiliary. The two aspects, however, do not thereby become

homonymous, since the progressive conditions incompletive status, while the perfective conditions completive status; and these two are distinct for all verbs (cf. Lehmann 2014, §3.4.2). This convergence of two aspectual auxiliaries constitutes an important contribution to the maintenance of the status category, which otherwise might have been grammaticalized to zero (cf. §4.4).

It remains to note that the progressive with *tan* is a Pan-Yucatecan construction; s. Bruce 1968:93, 97 for Lacandón, Hofling 1991:30 for Itzá and Danziger 2011:125 for Mopán. In Itzá and Lacandón, the reduced forms are as the above-mentioned intermediate forms of Yucatec (E44). The full form *tan in wilik* is in free variation with the reduced form of E46 (Bruce S. 1968:61, 97).

E46	tin	wilik
Lacandón	tan=in	wil-ik
	PROG=A.1.SG	see-INCMPL
	"I am seeing it" (Bruce S. 1968:34)	

Thus, the progressive auxiliary becomes a bound monophonematic form just like the imperfective auxiliary seen in §4.7.2.

4.7.4   Terminative aspect

The first constituent of Diagram 9 is filled by a noun in the cases reviewed in the two preceding sections. This is, however, not the most fertile grammaticalization path for auxiliaries. Apart from modal verboids, the most important subclass of intransitive predicators to fill this position are phase verbs. The central Yucatec phase verbs are *ho'p'* 'start' and a set of verbs including *ch'en*, *ts'o'k*, *haw*, *nik* all meaning 'end'. They are normally impersonal (s. already Coronel 1620:34f). Personal use is possible with a few of them, but does not generate auxiliaries. In the impersonal construction, actancy is coded on the dependent verb; with some marginal exceptions, there is in Yucatecan no "raising".[36] E47 and E48 illustrate the construction for *ho'p'* 'start' and *ts'o'k* 'finish', respectively. Whether or not the main clause is clefted (#a vs. #b examples), the dependent verb is in the incompletive dependent status.[37]

E47	a.	hoppi		in	beeltic	
CYM		ho'p'-ih		=in	beel-t-ik	
		start-CMPL(B.3.SG)		=A.1.SG	make-TRR-DEP.INCMPL	
		'I have begun to do it' (Coronel 1620:53)				
	b.	çamal	v	hoppol	in	ɔibtic
		sáamal	=u	ho'p'-ol	=in	ts'íib-t-ik
		tomorrow	=A.3	start-INCMPL	=A.1.SG	write-TRR-DEP.INCMPL
		'tomorrow I will start writing it' (Coronel 1620:35)				

E48	a.	ɔoci		incanic	
CYM		ts'o'k-ih		=in	kan-ik
		end-CMPL(B.3.SG)		=A.1.SG	learn-DEP.INCMPL
		'I finished learning / have learnt it' (San Buenaventura 1684:17r)			

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[36] Ch'ol has the same construction; s. Aulie & Aulie 1998:239. According to Coon 2010[R], §5.2, the Ch'ol auxiliaries which trigger incompletive status do allow raising of the absolutive enclitic.

[37] Smailus (1989:89) claims it to be in the subjunctive. However, although crucial evidence, with an intransitive dependent verb, appears to be rare, Coronel 1620:35 does have *maytoh ts'o'kok in menyali'* 'I have not yet finished working', with *menyal* in the incompletive.

       b.   çamal   v   ɔócol   in   canic

               sáamal =u   ts'o'k-ol   =in   kan-ik

               tomorrow =A.3   end-INCMPL =A.1.SG learn-DEP.INCMPL

               'tomorrow I will finish learning it' (Coronel 1620:35)

The phase verb *ts'o'k* 'finish' shown in E48 combines with aspect auxiliaries just like any full lexical verb, e.g. in E25. It continues this life up to the present day. In E49, it regularly goes into the subjunctive required by the construction, and only the translation suggests its auxiliary function.

E49   le   kéen   ts'o'k-ok   =u   pa't-al=e'

MYM   DEM   when.IMPF finish-SUBJ =A.3   form\PASS-INCMPL=TOP

              k=u   ts'a'bal   píib ...

              IMPF=A.3 put/give:INCMPL.PASS underground.oven

              'When they have been formed, they are put into the earth-oven ...' (chaak_028)

E50   beey túun ts'o'k-ol   =u   kuxtal le   p'us-o'b=o'

MYM   thus   then finish-INCMPL =A.3   life   DEM hunchback-PL=R2

              'This then was the end of the life of the P'uz.' (chem_ppuzoob_011)

E50 displays a symptom of grammaticalization: the phase verb is in the incompletive, but it lacks both the introductory imperfective auxiliary and the Set A index. This suggests that even in the construction at hand, where the main clause comprises more than just the phase verb, the latter fulfills an auxiliary function, with the form *kuxtal* in its subject not just being an abstract noun, but rather the verbal predicate of the dependent clause core (a case of the zero nominalization described in §4.3).

    This grammaticalization process starts in the colonial period. The seventeenth century grammars adduce the phase verbs *ɔoc* 'finish' and *hopp* 'begin' only in order to mention their regular impersonal or personal construction as illustrated by E25 and E47f above. It is in the eighteenth century that the ongoing grammaticalization of the third person completive form *ts'o'k*[38] could no longer escape a critical linguist's ear. Beltrán, writing his grammar in Mérida in 1742, observes the expansion of the use of *ts'o'k* as auxiliary in vogue at his time (§§85f), notes that it is a partial competitor to the (firmly established) perfective, quotes some periphrastic forms which are actually in use up to today and opposes violently both to this fashion and to the idea that *ts'o'k* means 'already' (which it does in its function as terminative auxiliary). His verdict is that the perfective is formed without auxiliary or "better" with the auxiliary *t-* (of §4.6 above), while *ts'o'k* means 'finish' and nothing else.

    The form of this verb which occupies the clause-initial position, becoming, thus, a component of the grammaticalization path, is the completive form triggered by perfective aspect, as in E51 (where *meyah* – just like *kuxtal* in E50 – can be an intransitive verb with the zero allomorph of the incompletive or an abstract noun).

E51   (h) ts'o'k   =in   meyah

MYM   PFV finish(CMPL:B.3.SG) =A.1.SG work

              'my work ended = I finished working = I have already worked' (Briceño Chel

              2000[t]:84)

In the sequel, the perfective auxiliary is omitted. In fact, by the evidence of E48, the grammaticalization of *ts'o'k* probably started at a time when the completive alone could make a

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[38] The grammaticalization of *ho'p'* to an auxiliary will not be described here. Both in Yucatec and in Itzá (Hofling 1991:105), it is common in narratives and reports to mark a new situation.

perfective clause. Otherwise, however, the new auxiliary can maintain its full form even in the colloquial style. It passes the two tests on word status up to the present day, as evidenced by E52.

E52 a. Ts'o'k   wáah =in   bo'l-t-ik   =in   p'aax?
MYM   finish(CMPL:B.3.SG) INT   =A.1.SG pay-TRR-INCMPL =A.1.SG debt
         'Have I paid my debt?'

     b. Ma'   ts'o'k-ok=i'.
         NEG   finish-SUBJ=NEGF
         'No (you haven't).' (hnazario_375f)

There is, however, a reduced form in addition to the full form, although not as widely used as the reduced form of the progressive auxiliary. The auxiliary is then reduced to its initial consonant and coalesces with the Set A clitic, as shown by E53 (cf. Briceño Chel 2000[t]:87f).

E53   ts'=in   w-a'l-ik   te'x
MYM   TERM=A.1.SG 0-say-INCMPL you.all
         'I have told it to you' (muuch_340)

The terminative is a kind of perfect and therefore in partial competition with the inherited suffixal perfect. They share the semantic component that the situation designated is finished at topic time. Their semantic difference lies in the implication of this fact. The Yucatec perfect implies that the agent has the result of his action at his disposal, while the terminative focuses on the crossing of the end boundary of the situation, which may be counter to expectations.[39]

Like the progressive, *ts'o'k* is a Pan-Yucatecan auxiliary. Its Lacandón form is *ts'ok*;[40] E54 is an example.

E54   Ts'ok =u me(n)t-i(k)   k'ax, ...
Lacandón   TERM =A.3 make-INCMPL   woods
              'He had made the woods, …' (Bruce S. 1974:24)

Likewise in Itzá, *tz'o'k* is used in terminative function, as shown by E55:

E55   Tz'o'k-i(h)   =u   man   ka'-p'eel   k'in, ...
Itzá   TERM-CMPL(B.3.SG) =A.3   pass   two-CL.INAN day
              'Two days had passed, ...' (Hofling 2006, 12:39)

Besides this, Itzá has grammaticalized another phase verb to a terminative auxiliary, viz. the verb *ho'm* (Hofling 1991:25, 65), whose original meaning is 'wane, abate'.

As an aside, it may be mentioned that the phase verb *ts'o'k* in the imperfective aspect is also the grammaticalization source of a paratactic conjunction that is very widely used in the colloquial register of MYM, as witnessed by the monotonous repetition in E56.

E56   K=u   ts'o'k-ol=e'   k=in   p'o'-ik;
MYM   IPFV=A.3 finish-INCMPL=TOP IPFV=A.1.SG wash-INCMPL
         'Then I wash it;'

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[39] Terminative aspect is incompatible with a temporal adverb in the same clause; s. Briceño Chel 2000[t]:82f.

[40] According to Bruce S. 1968:81, 93, 99, the function is immediate past.

> k=u   ts'o'k-ol=e'
> IPFV=A.3   finish-INCMPL=TOP
>
> k=in   ts'a'-ik   t=eh   k'áak'=o' ...
> IPFV=A.1.SG put/give-INCMPL   LOC=DEM fire=R2
> 'then I put it on fire ...' (chakwaah_03f)

The phrase *ku ts'o'kole'* is commonly reduced to *ts'o'(h)le'*, the loss of the auxiliary complex being due to grammaticalization, while the shrinking of the verb form follows regular phonological processes.

4.7.5   From existential via debitive to future tense

The existential predicate in the Yucatecan languages during their entire documented history is the intransitive verboid *yaan*, illustrated by E57.

E57   yan   cutz
CYM   yaan   kuts
           EXIST turkey
           'there are turkeys' (Beltrán 1746, §199)

Apart from predicating sheer existence, *yaan* is also the locational copula, as in E58.

E58   tij   yan   ti   yotoch
CYM   ti'   yaan   ti'   y-otoch
           there   EXIST LOC A.3-home
           'there he is at his home' (San Buenaventura 1684:35v)

Furthermore, the canonical construction coding ascription of possession is obtained by substituting a possessed nominal for the central actant of *yaan*, as in E59.[41]

E59   yaan   =in   nah-il
MYM   EXIST =A.1.SG house-REL
           'I have got a house' (muuch_274)

Once a nominalized verbal complex is substituted for the possessum of the ascription of possession, a debitive construction results. Just as the possessum is ascribed to its possessor in E59, so the obligation is ascribed to the actor of the nominalized verbal complex in E60.

E60   ba'l=e'   yan =a   bo'l-t-ik-en
MYM   however=TOP DEB=A.2   pay-TRR-INCMPL-B.1.SG
           'however, you must pay me' (hala'ch_084)

This use is not found in the colonial sources and is documented only in the modern Yucatecan languages. In Itzá, the construction is the same as in Yucatec (Hofling 1991:25). In Lacandón, the dependent clause core is introduced by the subordinator *ti'*, as shown by E61.

E61   yan   ti' =a   kaxt-ik   =u   hel
Lacandón   DEB   LOC=A.2   search-INCMPL =A.3   replacive
           'you have to look for another one' (Bruce S. 1968:81)

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[41] Interestingly, Beltrán 1746, §199 makes the not unreasonable claim that the verboid *yaan* lacks the first and second persons in the existential and possessive uses. However, the first example offered by the *Diccionario de Motul* s.v. *yan* features just the second person in the existential use.

The most recent development, first documented in the 20th century oral register, is a pure future without debitive connotations, as in E62, where the speaker articulates what he thinks will certainly happen.

E62	yan	=u	kaxt-ik-ech		=a	taatah
MYM	DEB	=A.3	search-INCMPL-B.2.SG		=A.2	father

'your father will search you' (hnazario_402.1)

This construction is currently ousting the (much older) predictive future (§4.8), which gets pushed back into the formal register.

4.8 Auxiliation based on motion cum purpose: predictive future

The motion-cum-purpose construction is a regular syntactic construction in the Yucatecan branch. It is a complex clause core starting with an oriented motion verb followed by a verbal clause core in the subjunctive, the latter coding the purpose. As long as nothing precedes the motion verb, the core verb is in plain status subjunctive, as in E63.[42]

E63	t	binén		in	cimez	uacax
CYM	t	bin-en	=in	kim-es	wakax
	PFV	go(CMPL)-B.1.SG	=A.1.SG	die-CAUS(SUBJ)	cow

'I went to kill cows' (Beltrán 1746, §110)

The central verbs of oriented motion ('go', 'come', 'pass') become irregular in their conjugation on their way to Modern Yucatec. Specifically, they lose the *-Vl* suffix which marks their nominalization and would be expected in their incompletive status (see also E81 below). Moreover, the verb *ben* 'go' becomes *bin* in Yucatec, while in the other Yucatecan languages it becomes *bel*. The changed forms appear both with their lexical meaning 'go' and as auxiliaries.

The motion-cum-purpose construction with *bin* as motion verb is grammaticalized to a future in the Yucatecan branch. Coronel (1620) already calls it "futuro" and provides examples of it. Beltrán (1746, §299, p. 128) lists *bin* as 'partícula de futuro', giving examples E64f for the intransitive and transitive construction, resp. (E29 is another example; see Table 4 for the allomorphs).

E64	bin	bolnacén	dzedzetàc
CYM	bíin	bo'l-nak-en	ts'e'ts'etak
	FUT	pay-SUBJ-B.1.SG	little.by.little

'I shall pay little by little' (Beltrán 1746, §299, p. 149)

E65	caix	u	tancoch	in	hanale,
CYM	kayx	=u	táankoch	=in	haanal=e'
	although	=A.3	half	=A.1.SG	meal=R3

	bin	in	ziib	tech
	bíin	=in	síih-ib	tech
	FUT	=A.1.SG	present-SUBJ(B.3.SG)	you

'although it is half of my meal, I'll give it to you' (Beltrán 1746, §299, p.129)

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[42] If the future clause as introduced by *bin* is an extrafocal clause, as in E67 and E69, the full verb goes into dependent = incompletive status.

The core verb keeps the subjunctive of the source construction.[43] The motion verb complex has been reduced to the root of the motion verb. This becomes impersonal like all the other auxiliaries and, in Yucatec and Lacandón, undergoes an idiosyncratic phonological change: the vowel of the auxiliary *bin* (not of the lexical verb!) is lengthened and gets high tone in Yucatec. This may be due to analogy with the progressive auxiliary *táan*, but may also be regarded as the expression counterpart of the grammatical change. At any rate, the impersonalization and morphological impoverishment of the auxiliary comes under paradigmaticization and may be ascribed to analogical pressure from the older auxiliation constructions analyzed in §4.7.[44] E66 illustrates the construction for both an intransitive and a transitive verb.

E66	Bíin	suu-nak		yéetel	bíin	=in	wil-eh.
MYM	FUT	return-SUBJ(B.3.SG)		and	FUT	=A.1.SG	see-SUBJ(B.3.SG)

'He will come back and I will see him.' (xipaal_032)

This future construction finds its place in the tense/aspect/mood paradigm at the side of three other futures, viz. the debitive future (§4.7.5), the immediate future (§4.9) and an assurative future not analyzed here. It does not become an immediate future, as so many futures based on the motion-cum-purpose construction do in other languages. Neither does it contrast with the immediate future on the time axis, as can be inferred from examples like E65. Instead, it bears a feature of neutral, objective prediction, which may be related to the impersonality of its auxiliary and which opposes it to the other three futures. Since this semantic component matters less in what is going to happen next, time reference is often to a remote future. But this is only a favorable circumstance, not a condition for the appropriateness of a prediction.

We find the predictive future at an intermediate stage of grammaticalization. On the one hand, the reduction process mentioned above proves that it is grammaticalized to some extent already at the stage of CYM. E67 provides evidence in the same sense, as it shows that the construction is compatible with an additional, preceding focus constituent.

E67	bay	bin	v	cíbic		Dios	teex
CYM	bay	bíin	=u	kib-ik		Dios	te'x
	thus	go	=A.3	do-DEP.INCMPL		god	you.PL

'thus will god do with you' (Coronel 1620:72 = San Buenaventura 1684:24r)

On the other hand, the predictive future auxiliary stands the clitic placement test to this day:

E68	bíin	wáah	p'áat-ak-en	hun-p'éel	k'iin	he'bix-ech=a'
MYM	FUT	INT	stay-SUBJ-B.1.SG	one-CL.INAN	sun/day	ever:how-B.2.SG=R1

'will I become like you one day?' (xipaal_092)

The predictive future construction is, again, Pan-Yucatecan. Lacandón conserves a variant of it which is structurally identical to the motion-cum-purpose construction, to be seen in E69.

E69	way	k=u		bin	p'at-al	t=in		meyah
LACANDÓN	here	IPFV=A.3		go	stay-INCMPL	LOC=A.1.SG		work

'it will stay here for my work' (Bruce S. 1974:42)

However, it also has the reduced auxiliary construction like Yucatec, as in E70.

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[43] In MYM, the motion-cum-purpose construction itself diverges from its source by having the intransitive verb in the incompletive instead of the subjunctive status.

[44] Ch'orti' (a Ch'olan language, thus closely affiliated to Yucatecan) has the same impersonal construction with an etymologically unrelated verb meaning 'go'.

E70   b'ihn   a-kihn-s-∅-een
LACANDÓN   bíin   =a   kíin-s-en
            FUT   =A.2   die-CAUS(SUBJ)-B.1.SG
            'you will kill me' (Bergqvist 2011:247)

Itzá again has the full motion-cum-purpose construction with future function, to be seen in E71:

E71   way=e'   k=in   b'el =in   pak'-t-eech
ITZÁ   here=R3 IPFV=A.1.SG go=A.1.SG wait-TRR(SUBJ)-B.2.SG
            'here I'm going to await you' (Hofling 1991, 15:126)

The origin of the predictive future construction is the motion-cum-purpose construction. It differs from the other tense/aspect/mood auxiliaries analyzed in §§4.6f in that the emerging marker – the verb 'go' grammaticalized to a future marker – does not originally occupy the clause-initial position described at the beginning of §4.5 and instead is the remnant of a complete superordinate clause. However, the canonical model for an auxiliary construction is Diagram 6: the auxiliary is monomorphematic, impersonal and occupies the clause-initial position. In its grammaticalization, the motion-cum-purpose construction is forced into the Procrustean bed of the verbal clause expanded by an initial position, which is the template for the auxiliary construction. This is, thus, a clear example of grammaticalization guided by analogy.

4.9   Auxiliation based on focused progressive: immediate future

As noted in §4.5, the clause-initial position is a melting-pot for constituents of very different kinds, among them the focus. We now come to an auxiliation strategy originating in a focus construction, more specifically, in a verb-focus construction. From there, we get to the immediate future in two steps: First, on the basis of the verb 'go' in focus, a focused progressive is formed. Second, this strategy applies to the 'go' verb of the motion-cum-purpose construction to form the immediate future of its purpose component.

Putting the lexical main verb of a clause into its focus position requires filling the gap that it leaves in the extrafocal clause by a verb meaning 'do'.[45] For this purpose, CYM used a verb *cib* 'do' which is totally irregular and defective. Table 7 presents the forms adduced in Coronel 1620:71f.

Table 7 Partial paradigm of CYM cib *'do'*

category	form
[fossilized status]	cah
completive	cibah
subjunctive	cib (not *cibib*!)
incompletive dependent	cibic

Already Beltrán (1746, §§209f) doubts this paradigm and contends that the verb is defective, being reduced to a "present" form *cah*. The verb is rarely found in a simple transitive clause

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[45] S. Lehmann 2008, §4.3 for a comprehensive account of the underlying information structure and the Yucatec development.

to code the meaning 'do, make';[46] the lexicon offers other verbs with this meaning. Instead, it is used almost exclusively in focus constructions. A relatively straightforward one appears in E72.

E72	balamil	u	cah pedro		
CYM	balam-il	=u	ka'h Pedro		
	tiger-ADVR	=A.3	do Peter		

'Peter makes the tiger / Peter is like a tiger' (lit.: 'tiger-like is what Peter does'; Motul s.v. *cah₃*)

At the stage of Colonial Yucatec, the verb is indispensable as a pro-verb in the verb focus construction. The paradigm shown in Table 7 is illustrated by E73.

E73	a.	hanál	v	cah
CYM		han-al	=u	ka'h
		eat-INCMPL	=A.3	do

'he is eating'

	b.	hanál	v	cibah
		han-al	=u	kib-ah
		eat-INCMPL	=A.3	do-CMPL

'he was eating'

	c.	hanal	bin	v	cib
		han-al	bíin	=u	kib
		eat-INCMPL	go	=A.3	do(SUBJ)

'he is going to eat' (Coronel 1620:71; cf. San Buenaventura 1684:23v)

	d.	lúbul	tu	cibah
		lúub-ul	t=u	kib-ah
		fall-INCMPL	HOD=A.3	do-CMPL

'he fell (earlier today)' (Coronel 1620:71)

As suggested by the translations of E73a-c, the same construction functions as a progressive in Colonial Yucatec Maya. As a matter of fact, it figures much more prominently in colonial grammars than the simpler progressive with the auxiliary *táan* (§4.7.3). All of them start their account of the conjugation with the periphrastic construction based on *ka'h*, calling it the "presente". E74 completes the example series with a transitive verb.

E74	cámbeçah	in	cah ti	pálalob
CYM	kambes-ah	=in	ka'h ti'	paal-alo'b
	teach-INTROV(INCMPL)	=A.1.SG	do LOC	child-PL

'I am teaching the children' (Coronel 1620:72)

While all of the examples E72 – E74 are focus constructions, there are a number of peculiarities. First, if these were standard cleft sentences, the pro-verb of the extrafocal clause would have to be in dependent status. While this is hard to know for the irregular forms *ka'h* (E73a) and *bíin* (E73c), the forms of E73b and d appear to be forms of the plain status. Second, while any constituent can be focused without its form being thereby affected in any way, a finite verb cannot; it must be nominalized. Therefore, the focused verbs in E73f show the nominalizing suffixes introduced in §4.3, identical with incompletive (dependent) status. Third, the process is relatively unproblematic with intransitive verbs, as in E73, as their only actant is identical with the subject of *ka'h* and may thus safely be suppressed by the nominalization.

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[46] One of the rare examples is E67 above, featuring dependent incompletive status.

Things are more complicated with transitive focused verbs, as in E74. The purpose of the verb-focus construction is to put the verb into focus. Consequently, its dependents remain in the extrafocal clause. Therefore, the verb is detransitivized before it is nominalized. The internal syntax of the extrafocal clause is adapted, too: what was the direct object of the focused verb becomes a prepositional object (Beltrán 1746, §172). The verb focus construction is, consequently, marked with plurivalent verbs.

The progressive aspect views what the verb designates as an ongoing situation that the referent of the subject is in. Consequently, the functional locus of the progressive aspect is in intransitive verbs.[47] The verb focus construction is therefore well suited to get grammaticalized into a progressive aspect.[48] The resulting construction may be dubbed **focused progressive** (as in Lehmann 2008). Two symptoms of the grammaticalization of the focused progressive construction in CYM will be mentioned: First, its susceptibility to nominalization by coercion, i.e. by having it depend on the preposition *ti'*, as in E75.

E75   ti   cimil   in   cah
CYM   ti' kim-il   =in   ka'h
         LOC die-INCMPL   =A.1.SG   do
         'at/by my being ill' (Coronel 1620:58)

Second, since the action feature of the basic meaning of *kib* is lost, it combines even with passive verbs, as in E76:

E76   tzicil   in   cah
CYM   tsi'k-il   =in   ka'h
         obey\PASS-INCMPL   =A.1.SG   do
         'I am (being) obeyed' (San Buenaventura 1684:11v)

MYM has a verb-focus construction, too, but it is not as central to the conjugation paradigm as the focused progressive appears to be in the grammars of CYM. This has two totally unrelated reasons. The first is that the CYM construction is much more grammaticalized than is the MYM verb focus construction, which was renewed with the lexical verb *beet/meent* 'make' (seen in E40 above). The modern counterpart to E73d would consequently be E77.

E77   lúub-ul   t=u   meet-ah
MYM   fall-INCMPL   PFV=A.3   make-CMPL
         'fall was what he did' (~ 'all of a sudden, he fell')

The CYM construction is clearly a kind of progressive aspect, which the MYM construction is not; it is rather more of a thetic construction fit for all-new-utterances. The second reason for its prominence in the colonial grammars is a methodological one: The category is not nearly as frequent in the texts as it is in the grammars. The explanation is not hard to find: The grammarians needed to fill up the conjugation paradigms presupposed by Latin grammar (Hanks 2010:214f). If one looks for a present tense in CYM, the closest analog would appear to be the imperfective aspect described in §4.7.2. This, however, originates in complex sentences, whereas here an isolated verb form was needed. In a decontextualized sentence reduced to a finite verb, all of the emphasis is on the finite verb. Which provokes a verb-focus construction.

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[47] Evidence for this is provided, *inter alia*, by the documented history of the evolution of the progressive aspect in English and in substandard German; see Lehmann 1991, §3.2.

[48] The progressive aspect of other languages has a similar origin; cf., e.g., Güldemann 2003 for Bantu.

On its way into the modern Yucatecan languages, the pro-verb *cib* is further fossilized; only the form *cah/ka'h* occurs in a couple of contexts. This is ousted from its function as a pro-verb in verb-focus constructions by the lexical verb *beet/meent* illustrated in E77. *Ka'h* survives in this function only in the formulaic pattern illustrated by E78.

E78	Chéen	uk'ul		=u	ka'h.
MYM	only	drink:INTROV(INCMPL)		=A.3	do
					'drinking is all he does / he only drinks (all the time)' (Briceño Chel 1998:77)

Neither is the focused progressive with *ka'h* further grammaticalized to a plain progressive. As we have seen in §4.7.3, the progressive construction which gets established involves a different auxiliary. Instead, verb focusing is applied to the motion-cum-purpose construction analyzed in §4.8. What is put into focus position is the verb *benel/binel/bin* 'go', while the purpose part of the construction is left behind in the extrafocal clause core. The resultant specific construction is, thus, a merger of the focused progressive with the motion-cum-purpose construction. E79f illustrate it with an intransitive and transitive full verb, resp.

E79	benel	in	cah	ti	hanal
CYM	ben-el	=in	ka'h	ti'	han-al
	go-INCMPL	=A.1.SG	do	LOC	eat-INCMPL
	'I am going to eat' (Coronel 1620:50)				

E80	Binel	in	cah	incambez	palalob.
CYM	bin-el	=in	ka'h	=in	kan-bes	paal-alo'b
	go-INCMPL	=A.1.SG	do	=A.1.SG	learn-CAUS(SUBJ) child-PL
	'I am going to teach the children.' (San Buenaventura 1684:9Br)				

As already observed above (fn. 43), on its way to MYM, the motion-cum-purpose construction develops an asymmetry conditioned by the transitivity of the full verb which persists into the focused progressive: a transitive full verb (E80) is in the subjunctive motivated by the motion-cum-purpose construction, while the status of an intransitive full verb (E79) is the incompletive, which is diachronically the pure nominalized form (§4.3). This is in consonance with the latter being subordinated by the preposition *ti*.[49] Again at the stage of CYM, the binary contrast between *bin* 'go' and *tal* 'come' is yet maintained in their grammaticalization, as proved by E81. Observe, by the way, the third person on the pro-verb, obviously in analogy to the third person in the phase verb construction of §4.7.1.

E81	a.	tal(el)	v	cah	in	botic	in	ppax
CYM		tal(-el)	=u	ka'h	=in	bo't-ik	=in	p'aax
		come-INCMPL	=A.3	do	=A.1.SG	pay-INCMPL	=A.1.SG	debt
		'I would like to pay my debt' (Coronel 1620:69)						

Further reduction of the paradigm, however, leads to the consequence that the only verb possible in the MYM focused motion-cum-purpose construction is *bin*, and the construction only survives in the modern immediate future, illustrated by the intransitive and transitive sentences of E82.

E82	a.	bin	=in	ka'h	xíimbal	ti'	le	chaan	kaah	...=e'
MYM		IMM.FUT	=A.1.SG	do	walk(INCMPL)	LOCDEM	little	village	=R3
		'I am going to walk to that little village' (hts'on_016)								

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[49] The documentary situation is such that this latter change appears earlier in the focused progressive than in the motion-cum-purpose construction proper.

    b.   bin   =in   ka'h =in   xíimba-t   yuum   ahaw

          IMM.FUT   =A.1.SG do =A.1.SG walk-TRR(SUBJ)   master/father chief

          'I am going to visit the chief' (hts'on_020)

The preposition *ti'* no longer shows up in this construction in MYM. And as in the focused progressive (E76), the full verb does not need to be an agentive verb, as shown by E83f.

E83	bin	=in	ka'h kíim-il
MYM	IMM.FUT	=A.1.SG	do die-INCMPL

          'I am going to die' (FCP 395)

E84	bin	=u	ka'h-o'b suut	ba'ba'l-il-o'b
MYM	IMM.FUT	=A.3	do-3.PL turn\INTROV	demon-ADVR-PL

          'they were becoming demons' (hnazario_415.5)

By desemanticization, the semantic component of motion has disappeared, and what remains is only the direct tie between present topic time and future event time. *Bin … ka'h* is now a complex auxiliary with the value of immediate future.

    E85 can serve for the clitic placement test:

E85	Behe'la'=e' bin	=in	ka'h wáah túun	=in	kíins-ech?
MYM	today=R3 IMM.FUT	=A.1.SG do INT	then	=A.1.SG kill-B.2.SG	

          'And now I shall kill you?' (hk'an_610)

It shows that – in contrast with the *bíin* of the predictive future – the first component of the discontinuous auxiliary cannot be host to a clitic, but the second component can. This is in consonance with the reduction processes to be analyzed in a moment and argues for the structural unity of the discontinuous auxiliary.

    The structure of this auxiliation is peculiar within the grammar of Yucatec Maya in several respects. First, this is the only auxiliary which conditions different statuses on the full verb depending on the latter's transitivity, as is shown by E82. This is a reflection of the blending of two different constructions at its origin: The subjunctive on the transitive verb is a reflection of the motion-cum-purpose construction, which requires this status for the purpose verb. The incompletive on the intransitive verb is its nominalized form, which in turn is required by the preposition which originally governed this verbal core. It only remains to find out why the intransitive morphology reflects the verb-focus construction, while the transitive morphology reflects the motion-cum-purpose construction.

    Secondly, *bin … ka'h* is the only discontinuous auxiliary of the language. What is more, the real auxiliary in the construction is the component *ka'h*. This, however, does not occupy the clause-initial position taken by all the other auxiliaries of the language. This position is, instead, taken by a verb which has the role of a full verb in the source construction. Thirdly, while *bin* is impersonal like all the other auxiliaries, *ka'h* is the only one with personal inflection. As a consequence, with transitive full verbs, the subject is cross-referenced twice (Briceño Chel 1998:82), as is apparent from examples like E82b. There is, consequently, much redundancy in this auxiliation. In the colloquial register of Modern Yucatec, the full forms are rarely used. They are normally reduced in phonologically irregular ways, and there is currently much variation in this respect. Briceño Chel (1998:82, 2000[i]:88f, 2006, §§1.2, 1.3) notes the fusion of *bin in/a/u ka'h* into *nika'h/naka'h/nuka'h*, as in E86a. If the full verb is transitive and therefore preceded by a Set A index, the *ka'h* of the auxiliary coalesces with it, as in #b.

E86 a.   Ni-ka'h   meyah t=in   kool.
MYM   IMM.FUT\A.1.SG-do work   LOC=A.1.SG milpa
          'I am going to work on my cornfield.' (Briceño Chel 2000[i]:88)

     b.   Ni-k=in   hant   bak'
          IMM.FUT\A.1.SG-do=A.1.SG   eat:TRR(SUBJ) meat
          'I am going to eat meat' (Briceño Chel 2000[i]:99)

Other idiosyncratic mergers occur in a variant of the construction in which the *ka'h* compo-
nent takes Set B indices. Using this variant with a transitive verb leads to cross-referencing
the subject three times. The reduction processes applied in this context disguise this to a cer-
tain extent. Thus, the first syllable of the complex auxiliary in E87 contains the vowel of the
1ˢᵗ ps. sing. set A clitic.

E87   mi-ka'h-en   =in   wa'l   te'x ...
MYM   IMM.FUT\A.1.SG-do-B.1.SG =A.1.SG say(SUBJ) you.PL
          'I'm going to tell you ...' (FCP_043)

However, contractions with clitics of other persons may also contain an *i*, so that the interim
result of these changes is an auxiliary which takes Set B suffixes to cross-reference the subject
of the clause core. In cases like E87 it leads to doubling, quite untypical of the language. The
only comment one may make on the situation is that before a construction becomes a fixed
grammaticalized inflected form, much variation occurs.

   The other Yucatecan languages, too, have developed an immediate future on the basis of a
focused progressive of the motion-cum-purpose construction involving their cognates of
Yucatec *bin* 'go'. E88 shows the focused progressive with the defective pro-verb in Lacandón,
which here already assumes an imminent future function (Bruce S. 1968:80, 101):

E88   ok'ol   =u   kah
Lacandón weep-INCMPL   =A.3 do
          'he is about to cry' (Bruce S. 1968:80)

Applying this to the motion verb of the motion-cum-purpose construction already illustrated
by E69 yields the Lacandón immediate future. Just as in Yucatec, reduction of the immediate
future construction involves merger of the Set A index preceding the transitive full verb with
the auxiliary *kah* immediately preceding it. Thus, *kah=in/a/u* yields *kin/ka/ku* (Bruce S.
1968:95, 101), as in E89 (where *kah* must be a variant of *k=a* [do=A.2]) and E90a.

E89   Bin =a   kah päy-e   lu'um-o',
Lacandón go =A.2 do carry-SUBJ earthling-PL
          'You are going to take the earthlings with you,' (Bruce S. 1974:76)

As an alternative to the construction of E69, an intransitive purpose clause may be introduced
by the preposition *ti*, as in E90b. This may be seen as a direct continuation of the Colonial
construction represented by E79 and is furthermore in analogy with the debitive construction
illustrated by E61.

E90 a.   bin   =in   k=in   wuk'-ik
Lacandón IMM.FUT   =A.1.SG do=A.1.SG drink-INCMPL
          'I am going to drink it'

     b.   bin   =in   kah t=in   wuk'-ul
          IMM.FUT   =A.1.SG do   LOC=A.1.SG drink-INCMPL
          'I am going to drink' (Bruce S. 1968:101)

In E91 from Itzá, the verb *b'el* 'go' is the full verb occupying the focus position in a simple verb-focus construction.

E91   (B'el)   =u   ka'a   ich =u   kool.
Itzá   go(INCMPL) =A.3   do/go in   =A.3   milpa
          'He is going to his cornfield.' (Briceño Chel 2000[i]:90f)

If *b'el* is the motion verb of a motion-cum-purpose construction, an intransitive verb in the purpose clause is subordinated by the preposition *ti*, as in E92, while a transitive verb, as in E93, is in the subjunctive.

E92   (B'el) =u   ka'a   ti   han-al.
Itzá   go   =A.3   do/go LOC   eat-INCMPL
          'He is going to eat.' (Briceño Chel 2000[i]:91)

E93   U-ka'ah   =u   b'et-eh   =u   yotoch
Itzá   A.3-do/go   =A.3 make-SUBJ   =A.3   home
          'He is going to make his home' (Hofling 1991, 1:5)

The peculiarity here is that since occurrence of the defective verb *ka'a* is all but limited to the construction with *b'el* in focus,[50] it assumes the sense of 'go' by syntagmatically mediated coding (Lehmann 2014). Consequently, *b'el* becomes redundant and may be omitted. This is true not only for the immediate future developed from the motion-cum-purpose construction, but also for the simple verb-focus construction of E91.[51]

The facts of Mopán, finally, are similar. E94 illustrates the simple verb-focus construction.

E94   T'an   =in-ka'aj.
Mopan   speak =A.1.SG-do
          'I am speaking.' (Hofling 2011:154)

E95 shows the immediate future construction with an intransitive full verb in the second person (cf. Hofling 2011:153). The #a and #b examples represent the full and reduced variants, resp. The same relationship holds between E96a and b, where the pronominal enclitic preceding the transitive verb is involved in the contraction, too. As may be seen, contraction of the auxiliary with the Set A index works similarly as in the Yucatec E86. Moreover, the intransitive verb of E95 is in the incompletive status and subordinated by *ti*, while the transitive verb of E96 is in the subjunctive.

E95   a.   Bel   =a   ka'a ti   wäy-el.
Mopán   go(INCMPL)   =A.2   do   LOC sleep-INCMPL
            'You are going to sleep.'

      b.   B=a-ka'a   ti   wäy-el.
            go=A.2-do   LOC sleep-INCMPL
            'You're going to sleep.'

E96   a.   Bel   =in   ka'a =in   koykin   =a   nene'e
Mopán   IMM.FUT   =A.1.SG do   =A.1.SG lay.down(SUBJ) =DEM baby
            'I am going to lay the baby to sleep'

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[50] Hofling 1991:17 does present an example with *ka'a* as the main verb meaning 'do'. A similar construction in Ch'ol employs the cognate verb *cha'l* 'do' (Coon 2010[R], §3.1).

[51] This is mentioned in Briceño Chel 2000[i], but not in Hofling 1991.

      b.   B=i(n)-k=in   koykin   =a   nene'e
            IMM.FUT=A.1.SG-do=A.1.SG lay.down(SUBJ) =DEM baby
            'I'm going to lay the baby to sleep' (Briceño Chel 2000[i]:95)

The languages of the Yucatecan branch share all the essential properties of the immediate future auxiliation: the discontinuous auxiliary, the multiple cross-reference to the subject and the asymmetry of status marking of the full verb conditioned by its transitivity, which reflects the contamination of two different syntactic constructions operative at the origin of this auxiliation. All four languages reduce this complex auxiliary construction; but as the processes operative here are not phonologically regular, they also differ among the languages.

    The grammaticalization of the construction is a process in two main phases:
    (a) verb focus construction > focused progressive
    (b) focused progressive of auxiliary 'go' > (simple) immediate future.

More in detail, the following minimal steps compose the process:

- The motion verb *bin* 'go' is semantically bleached; the movement component disappears.

- The incompletive or subjunctive verb remaining in the extrafocal clause is reinterpreted as the main verb.

- The internal structure of the complex '*bin* set_A_index *ka'h*' is blurred. By being forced into the Procrustean bed of the initial position, it is reanalyzed as a discontinuous immediate future auxiliary with internal inflection.

- The whole sentence ceases to be complex; it is reinterpreted as a single clause.

- Whatever may have remained of the focal emphasis on the initial verb vanishes; the construction becomes open to different information structures that may be superimposed.

The model of this complex reanalysis is the structure of the simple fully finite clause of Diagram 6, in which the initial auxiliary combines with the enclitic subject pronoun and is followed by the verbal complex (as, e.g., in E17b). The result of the change conforms to that model to the extent possible for a discontinuous auxiliary.

4.10   Auxiliation in Yucatecan languages

The inherited suffixal system, where a minimum aspect system is coded as part of the status category, is renewed, in the period from Proto-Yucatecan to Modern Yucatec, by a large paradigm of aspectual auxiliaries. The sources of these auxiliaries are of different categories and form different syntactic constructions with the clause core. This explains the different status categories that they condition on the full verb. Conditioning them, they render them largely redundant. The new categories mark relatively fine distinctions not only of aspectual, but also of temporal and modal categories.

4.10.1 Syntactic relations

The new set of auxiliaries is structurally completely different from the inherited suffixal status-aspect-mood system. Since it owes its origin essentially to grammaticalization, it is based on syntactic rules operative at the time of its formation. There are four syntactic constructions at work:

a)   an adverb modifying the verbal clause (core) following it and leaving its status marking intact

b) complementation, where a relational noun, an impersonal phase verb or modal verboid takes a verbal clause core in the dependent (subsequently incompletive) status as its complement

c) the motion cum purpose construction, where a verb of directed motion is followed by its purpose complement, represented by a verbal clause core in the subjunctive

d) the verb-focus construction, which puts the main verb of the clause into focus position, leaving behind in the extrafocal clause a pro-verb with all the dependents of the focused verb.

The primary structural division of this set contrasts construction #a with constructions #b – #d. Construction #a is mono-clausal from the beginning. The auxiliary to-be bears a modifying relation to the clause core, which is syntactically independent. Constructions #b – #d transcend the simple clause; #b and #c are biclausal, #d is clefted. In these, the auxiliary to-be constitutes the main clause, while the clause core depends on it. As a consequence, auxiliation strategy #a leaves the syntactic relations in the clause core intact, while strategies #b – #d require some degree of nominalization of the clause core.

This difference has consequences for the configuration of basic syntactic relations in the clause core. These do not concern the transitive subject. Since Proto-Maya, this has been cross-referenced in all Mayan languages by the same Set A indices which also cross-reference the possessor. This produces the ergative pattern of alignment shown by the cross-reference indices. Since it appears primarily in completive status, which is semantically perfective, one may plausibly assume that assignment of possessive marking to the transitive subject stems, in its turn, from a pre-historic nominalization process. Be that as it may, the subordination of the clause core with auxiliation strategies #b – #d again requires nominalization of the clause core. Since the underlying transitive subject is already marked by a possessive relation, the intransitive subject now remains to be affected. This is why, in all tenses and aspects except the perfective, and also excepting subjunctive mood, it is marked by Set A indices. The result is a rather peculiar form of aspect-conditioned split subject marking, which occurs in intransitive, not in transitive clauses.[52]

4.10.2 Grammaticalization of the auxiliary

Although the four constructions are clearly distinct, they share a clause-initial position which becomes the melting-pot for the aspectual and modal formatives recruited from different sources. Paths #a, #c and #d have been followed only once each in history; path #b has been the most prolific one.

Since the process of renewal and grammaticalization of auxiliaries has not finished, the paradigm is open and heterogeneous both in functional and in structural terms. In contemporary Yucatec, while all of the auxiliaries occupy the same structural position, the older ones are bound while the more recent ones are independent. And although several of them stem from verbs, they share the property of leaving conjugation categories to the full verb while remaining uninflected themselves. This is true with the single exception of the immediate future auxiliary, which is idiosyncratic in many respects.

The grammaticalization of auxiliaries evidences a process of clause union: it shrinks an original biclausal construction into a monoclausal one. This is perhaps clearer in Mayan languages, with their preference for verb-initial position and for impersonal constructions, than

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[52] If the analysis proposed in Coon 2010[R], §6 is accepted for Yucatecan, the indexing pattern would be ergative throughout, because what looks like accusative marking in almost all aspects actually occurs in subordinate clauses.

in many other languages. The many auxiliary constructions of the Yucatecan languages occupy all conceivable positions on a continuum from a complex sentence consisting of a matrix and a complement clause down to a one-clause sentence. Once the matrix predicate in initial position has been grammaticalized to an auxiliary, one might think that the construction is monoclausal. However, a simple test like the form of the answer to a polar question reveals that the auxiliary keeps being the main predicate.[53] Only after the auxiliary coalesces with the subject cross-reference index is it an irremovable part of a unitary clause.

The coalescence of the auxiliary with the following enclitic subject index is especially interesting. In SAE languages, the auxiliary is an element that hosts the conjugation categories of a finite verb, the most important of these being person and number. These are just the categories that the Yucatecan auxiliary lacks. Instead of denying it auxiliary status on these grounds,[54] it is intriguing to observe that, as a consequence of purely phonological enclisis, it coalesces with the subject indices which syntactically accompany the following full verb, ending up as a morphologically complex form which codes not only tense, aspect and mood, but also person and number like an SAE auxiliary. However, the morphology – or maybe rather, the phonology – here is treacherous and not transparent to the syntax: even if merged with the preceding auxiliary, the pronominal index clearly forms a syntactic constituent not with it, but with the following verb, as shown in Diagram 6 and proved by numerous examples like E4, E6c and E32f.

Although according to available descriptions, the complex of auxiliary plus Set A index is prefixed to the full verb in other Mayan languages, this has not happened in the Yucatecan languages. First of all, the enclitic status of the Set A index does not favor its univerbation with the material following it. Moreover, given the configuration 'set_A_index X', neither X nor this binary configuration is categorially uniform, since X may either be the head of this syntagma or may be a modifier of a head which is yet to follow (an adjective in a noun phrase or an adverb in a verbal complex). Consequently, although the auxiliary forms a phonological complex with the Set A index in many cases, there are syntactic obstacles to the univerbation of this complex with the verb of the following verbal complex.[55]

The grammaticalization of TAM in Yucatecan languages is a clear example of convergence of grammaticalization paths starting from different sources. The convergence is fostered, if not forced, by a rather rigid syntactic framework that a clause must fit in: First, an element that has scope over a verbal clause core must precede it. Although there are three distinct structural positions preceding a verbal clause core, their neutralization and merger into only one position is already predestined by the structure of Diagram 7. Second, all of the operators that may occupy this position are impersonal. With these two constants to begin

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[53] While it is clear that the non-completive status suffixes are explained diachronically by the syntactic relation between the auxiliary and the full verb complex, Coon 2010[R], §2.3.3 insists that non-completive status clauses in Ch'ol are synchronically subordinate to the auxiliary. The imperfective and progressive auxiliaries, which are at stake here, do have a few more verbal properties than the Yucatecan imperfective auxiliary.

[54] Andrade (1955, §4.13) has a rather extensive discussion on the applicability of this term to the formatives in question.

[55] Some analysts (e.g. Hofling 1991:25, Pye 2009:266) claim the aspect auxiliaries to be prefixes. They are definitely not, in none of the Yucatecan languages. Hofling (1991:37) keeps this analysis up by declaring the adverbs which may occur between the pronominal clitic and the verb to be "incorporated into the verb". This, however, is not so, witness the conjugation shown by verbs preceded by such adverbs: the stems do not become complex by this combination, which shows that it is a syntactic construction.

with, practically the only variable is the syntactic relation between the initial element and the clause core. This then determines the status to be chosen on the full verb. Since this variation in status is conditioned rather than informative, it could, in principle, be leveled out with ongoing grammaticalization. However, phonological reduction has rendered a subset of aspect auxiliaries homonymous. These aspects can then only be distinguished by the different status categories that they condition. This, in turn, prevents, for the time being, the disappearance of the status category.

The methodological lesson from the above for synchronic grammatical description is the following. Although all of the auxiliaries occupy the same structural position immediately preceding the clause core and although we are dealing with periphrastic constructions, a description which aims to account for the status forms of the full verb which accompany the diverse initial aspectual "particles" has to make explicit the syntactic relations between the initial element and the clause core. This, in turn, is facilitated if the grammaticalization source of these elements is taken into account.

5 Conclusion

While many of the grammatical formatives in the Mayan languages are etymologically unrelated, their functional categories and their structural properties are often identical. For instance, Yucatecan and Ch'olan languages share a large portion of the system of TAM auxiliaries; and these appear in the same structural position in all of these languages. What is more: they share particular aspects such as the perfective, imperfective, progressive etc.; but the morphemes appearing in these functions are unrelated. One must infer from this picture that the Mayan languages have been very conservative, over the millennia, as to their grammatical structure, and have limited themselves to renewing the formatives from time to time.

In view of the fact that grammaticalization is again and again hawked as a process of linguistic change, one must emphasize again and again that it is a process of linguistic variation both on the synchronic and on the diachronic axes. Moreover, history is always more complicated than diachrony: Variants that succeed each other on a dimension of grammaticalization co-occur synchronically, both within one language and across sister languages. And what would be a unitary source of a grammaticalized construction if one had to reconstruct it, with consideration of historical data turns out to be a set of variants and competing constructions that contributed in shaping the construction in question.

Abbreviations

A	possessive/subject function	DEB	debitive
ADVR	adverbializer	DEM	demonstrative
AN	animate	DEP	dependent status
B	absolutive function	EXIST	existent
CAUS	causative	FUT	future
CFP	clause final particle	HAB	habitual
CL	classifier	HOD	hodiernal past
CMPL	completive	IMM	immediate (future)
CONJ	conjunction	INAN	inanimate
COP	copula	INCMPL	incompletive
CYM	Colonial Yucatec Maya	INT	interrogative
DEAG	deagentive	INTROV	introversive

IPFV	imperfective	RC	referential clitic
LOC	locative	R1	clitic of 1st ps. deixis
M	masculine	R2	clitic of 2nd ps. deixis
MYM	Modern Yucatec Maya	R3	non-deictic referential clitic
NEG	negator	REC.PST	recent past
NEGF	negator, final part	SG	singular
PASS	passive	SUBJ	subjunctive
PFV	perfective	TAM	tense/aspect/mood
PL	plural	TERM	terminative
PRF	perfect	TOP	topic
PROG	progressive	TRR	transitivizer
PRSV	presentative	VOC	vocative
QUOT	quotative		

References

Andrade, Manuel J. 1955, *A grammar of Modern Yucatec*. Chicago: University of Chicago Library (Microfilm Collection of Manuscripts on Middle American Cultural Anthropology, 41).

Aulie, H. Wilbur & Aulie, Evelyn W. de 1998, *Diccionario ch'ol de Tumbalá, Chiapas, con variaciones dialectales de Tila y Sabanilla.* Reeditado por Emily F. Scharfe de Stairs. Coyoacán, D.F.: Instituto Lingüístico de Verano (Serie de vocabularios y diccionarios indígenas "Mariano Silva y Aceves", 121).

Beltrán de Santa Rosa, Pedro 1746, *Arte del idioma maya, reducido a sucinctas reglas, y semilexicon yucateco*. México D.F.: Viuda de d.J. Bernardo de Hogal.

Bergqvist, Henrik 2011, "Agentivity and status in Yukatekan languages." Avelino, Heriberto (ed.), *New perspectives in Mayan linguistics.* Newcastle upon Tyne: Cambridge Scholars; 242-257.

Bisang, Walter 1991, "Verb serialization, grammaticalization and attractor positions in Chinese, Hmong, Vietnamese, Thai and Khmer." Seiler, Hansjakob & Premper, Waldfried (eds.), *Partizipation.* Tübingen: G. Narr; 509-562.

Bohnemeyer, Jürgen 2003, *The grammar of time reference in Yukatek Maya.* München & Newcastle: LINCOM Europa (LINCOM Studies in Native American Languages, 41) (2nd printing; 1st: 2002).

Briceño Chel, Fidencio 1998, "La gramaticalización del verbo *bin* ("ir") en el maya yucateco." Estrada Fernández, Zarina (ed.), *Memorias del IV encuentro internacional de lingüística en el noroeste.* 4 volúmenes. México D.F.: Instituto Nacional de Antropología e Historia (Serie Lingüística, 1); 1:69-93.

Briceño Chel, Fidencio 2000, "La gramaticalización del verbo "ir" en las lenguas mayas de la rama yukateka." Estrada Fernández, Zarina (ed.), *Memorias del V encuentro internacional de lingüística en el noroeste*. 3 volúmenes. Hermosillo, México: UniSon; 1:85-101.

Briceño Chel, Fidencio 2000, "La gramaticalización del verbo 'terminar' (*ts'o'okol*) en maya yucateco." *Lingüística Mexicana* 1:79-91.

Briceño Chel, Fidencio 2006, *Los verbos del maya yucateco actual. Investigación, clasificación y sistemas conjugacionales*. México D.F.: Instituto Nacional de Lenguas Indígenas.

Bricker, Victoria R. 1981, "The source of the ergative split in Yucatec Maya." *Journal of Mayan Linguistics* 2(2):83-127.

Bruce S., Roberto D. 1968, *Gramática del lacandón*. México D.F.: Instituto Nacional de Antropología e Historia (Departamento de Investigaciones Antropológicas, Publicaciones, 21).

Bruce S., Roberto D. 1974, *El libro de Chan K'in.* México D.F.: Instituto Nacional de Antropologia e Historia, Departamento de Lingüística (Colección Científica (Lingüística), 12).

Ciudad Real, Antonio de 1577, *Gran diccionario o Calepino de la lengua maya de Yucatán*. Motul, Yucatán: Convento Franciscano (unpublished; first printed in Martínez Hernández (ed.) 1929).

Coon, Jessica 2010, *Complementation in Chol (Mayan): A theory of split ergativity*. Unpublished PhD diss. Cambridge: MIT, Department of Linguistics & Philosophy.

Coon, Jessica 2010, "Rethinking split ergativity in Chol." *International Journal of American Linguistics* 76(2):207-253.

Coronel, Juan 1620, *Arte en lengua de maya*. México D.F.: D. Garrido. Repr.: Martínez Hernández (ed.) 1929:2-55.

Coronel, Juan 1998, *Arte en lengua de maya. Edición de René Acuña.* México D.F.: Universidad Nacional Autónoma de México, Instituto de Investigaciones Filológicas (Fuentes para el estudio de la cultura maya, 14).

Danziger, Eve 2011, "Once more with feeling: A forbidden performance of the Great Speech of the Mopan Maya." *Anthropological Quarterly* 84(1):121-140.

Dik, Simon C. 1981, *Functional grammar*. Dordrecht & Cinnaminson: Foris (Publications in Languages Sciences, 7); 3rd rev. ed.

England, Nora C. & Elliott, Stephen R. (eds.) 1990, *Lecturas sobre la lingüística maya*. South Woodstock, VT: CIRMA & Plumstock Mesoamerican Studies.

Grinevald, Colette & Peake, Marc 2012, "Ergativity in Mayan languages: a functional-typological approach." Haude, Katharina & Authier, G. (eds.), *Ergativity, valency and voice.* Berlin: Mouton de Gruyter; 15-50.

Güldemann, Tom 2003, "Present progressive vis-à-vis predication focus in Bantu. A verbal category between semantics and pragmatics." *Studies in Language* 27:323-360.

Hanks, William F. 2010, *Converting words. Maya in the age of the cross*. Berkeley etc.: University of California Press.

Hofling, Charles A. 1991, *Itzá Maya texts with a grammatical overview*. Salt Lake City: University of Utah Press.

Hofling, Charles A. 2006, "A sketch of the history of the verbal complex in Yukatekan Mayan languages." *International Journal of American Linguistics* 72(3):367-396.

Hofling, Charles A. 2011, "Voice and auxiliaries in Mopan Maya." Avelino, Heriberto (ed.), *New perspectives in Mayan linguistics*. Newcastle upon Tyne: Cambridge Scholars; 144-159.

Kaufman, Terrence 1990, "Algunos rasgos estructurales de los idiomas mayances con referencia especial al k'iche'." England & Elliott (eds.) 1990: 59-114.

Lehmann, Christian 1990, "Strategien der Situationsperspektion." *Sprachwissenschaft* 16:1-26.

Lehmann, Christian 1991, "Grammaticalization and related changes in contemporary German." Traugott, Elizabeth C. & Heine, Bernd (eds.), *Approaches to grammaticalization.* 2 vols. Amsterdam & Philadelphia: J. Benjamins (Typological Studies in Language, 19); 493-535.

Lehmann, Christian 1993, "The genesis of auxiliaries in Yucatec Maya". *Proceedings of the International Congress of Linguists* 15(1992), vol. 2:313-316.

Lehmann, Christian 2008, "Information structure and grammaticalization." Seoane, Elena & López Couso, María José (eds.), *Theoretical and empirical issues in grammaticalization*. Amsterdam & Philadelphia: J. Benjamins (Typological Studies in Language, 77); 207-229.

Lehmann, Christian 2014, "Indirect coding." Rainer, Franz & Gardani, Francesco & Luschützky, Hans Christian & Dressler, Wolfgang U. (eds.), *Morphology and meaning. Selected papers from the 15th International Morphology Meeting, Vienna, February 2012.* Amsterdam & Philadelphia: J. Benjamins (Current Issues in Linguistic Theory, 327); 97-124.

Lehmann, Christian 2015, "Variación y normalización de la lengua maya". Conferencia magistral en el II Coloquio UNAM en la Península "El maya: Entre la variación y la estandarización", Centro Peninsular en Humanidades y en Ciencias Sociales (CEPHCIS) de la Universidad Nacional Autónoma de México (UNAM), Mérida, Yucatán, del 3 al 5 de noviembre de 2015.

Martínez Hernández, Juan (ed.) 1929, *'Diccionario de Motul maya español' atribuido a Fray Antonio de Ciudad Real y 'Arte de lengua maya' por Fray Juan Coronel*. Mérida, Yucatán: Compañia Tipográfica Yucateca.

Monforte, Jorge & Dzul, Lázaro & Gutiérrez Bravo, Rodrigo (eds.) 2011, *Narraciones mayas*. México D.F.: Instituto Nacional de Lenguas Indígenas.

Pye, Clifton 2009, "Cycles of complementation in the Mayan languages." Gelderen, Elly van (ed.), *Cyclical change*. Amsterdam & Philadelphia: J. Benjamins (Linguistics Today, 146); 265-284.

San Buenaventura, Gabriel de 1684, *Arte de la lengua maya*. México D.F.: Viuda de B. Calderón.[56]

Smailus, Ortwin 1989, *Gramática del maya yucateco colonial*. Hamburg: Wayasbah (Wayasbah publication, 9).

Vinogradov, Igor 2014, "La categoría de incompletivo en las lenguas mayas: un estudio comparativo de variación semántica". *Studii de gramatică contrastivă* 21:65-82.

Vinogradov, Igor 2016, "Acerca de la semántica del completivo/incompletivo en las lenguas mayas". *Cuadernos de Lingüística de El Colegio de México* 3(1):1-44.

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[56] Pagination in this edition is in disorder, which is why references contain doubled page numbers and specification of recto (r) and verso (v).