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ANTIPASSIVE CONSTRUCTIONS IN YUCATEC MAYA¹

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Yucatec Maya is a split ergative language. In incompletive aspect and conjunct constructions, the transitive agent [A] and the intransitive subject [S] are marked by the ergative pronouns, while the transitive object [O], or patient, is marked by the objective pronouns. In completive aspect and subordinate constructions, the transitive agent [A] is marked by the ergative pronouns, while the intransitive subject [S] and the transitive object [O] are marked by the objective, or absolutive, pronouns. The former is a nominative-accusative pattern of pronominal inflection; the latter is an ergative-absolutive pattern of pronominal inflection (cf. Dixon 1972:129; Silverstein 1973; Smith-Stark 1976). The differences between the two patterns of pronominal inflection in Yucatec Maya are illustrated below:

Nominative-Accusative

<u>English</u>			<u>Yucatec</u>		
I	kill	you	k	in	kíin-s-ik-eč
you	kill	me	k	a	kíin-s-ik-en
you	die		k	a	kíim-il
I	die		k	in	kíim-il

Ergative-Absolutive

<u>English</u>			<u>Yucatec</u>		
I	killed	you	t	in	kíin-s-ah-eč
you	killed	me	t	a	kíin-s-ah-en
you	died		h		kíim-∅-eč
I	died		h		kíim-∅-en

There are two sets of pronominal affixes² in Yucatec Maya:

	<u>Set A</u>		<u>Set B</u>	
	<u>Sing.</u>	<u>Plur.</u>	<u>Sing.</u>	<u>Plur.</u>
1st	?iN(w)- ³	k-	-en	-ó?on
2nd	?a(w)-	?a(w)-...-é?eš	-eč	-é?eš
3rd	?u(y)-	?u(y)-...-ó?ob'	-∅	-ó?ob'

The first set [A] marks the agents of transitive verbs in both the nominative-accusative and the ergative-absolutive pattern and marks the subjects of intransitive verbs in the nominative-accusative pattern only. The second set [B] marks the objects of transitive verbs in both the nominative-accusative and the ergative-absolutive pattern and marks the subjects of intransitive verbs in the ergative-absolutive pattern only. The pronouns of set A also mark the possessors of nouns, while the pronouns of set B also mark the subjects of stative verbs. The pronouns of set A are prefixed to noun and verb stems; the pronouns of set B are suffixed to noun and verb stems. The plural forms of the set B pronouns mark not only plural objects of transitive verbs and plural subjects of intransitive and stative verbs but also, in combination with set A pronouns, the plurals of agents of transitive verbs and possessors of nouns (cf. Nida and Romero C. 1950:193).

In the ergative-absolutive pattern, the subjects of intransitive verbs are inflected with the absolutive, or objective, set of pronouns [B]. Thus *h kiiim-∅-en* literally means 'died me' rather than 'I died,' in contrast with *k in kiiim-il* 'I die' in the nominative-accusative pattern.

-s is a causative suffix which derives transitive verb stems from intransitive roots or stems (see 2.2. below). *k-* marks incompletive aspect for both transitive and intransitive constructions, and *t-* and *h-* mark completive aspect for transitive and intransitive constructions, respectively.

1. Object Deletion and Antipassivization

In the nominative-accusative pattern in Yucatec Maya, the suffix -Vl (V = a, e, i, o, u) marks intransitive stems, and the obligatory-object suffix -ik marks transitive stems, except in object-deleted constructions:

<u>Transitive (+ object)</u>	<u>Transitive (- object)</u>
<i>k in kiiin-s-ik-eč</i> 'I kill you'	<i>k in kiiin-s-ah-∅</i> 'I kill'
<i>k a šok-∅-ik-∅</i> 'you study it'	<i>k a šòok-∅-∅-∅</i> 'you study'
<i>k u miiis-t-ik-∅</i> 'he sweeps it'	<i>k u miiis-∅-∅-∅</i> 'he sweeps'

In the ergative-absolutive pattern in Yucatec Maya, the suffix -ah marks transitive stems;⁴ root intransitives are not marked by any suffix. The ergative-absolutive analogue of transitive constructions with object deletion is the antipassive:

<u>Transitive (+ object)</u>	<u>Antipassive</u>
<i>t in kiiin-s-ah-eč</i> 'I killed you'	<i>kiiin-s-ah-n-ah-en</i> 'I killed'
<i>t a šok-∅-ah-∅</i> 'you studied it'	<i>šòok-∅-n-ah-eč</i> 'you studied'
<i>t u miiis-t-ah-∅</i> 'he swept it'	<i>miiis-∅-n-ah-∅</i> 'he swept'

Antipassive constructions differ from object-deleted constructions in that not only is the object deleted, but, in the former, the agent is moved out of the ergative case and into the absolutive case, while, in the latter, the agent remains in the nominative case. Another difference is that a suffix -n derives antipassives from transitive verb stems, but there is no derivational suffix in object-deleted constructions (the obligatory-object suffix -ik is simply deleted).

All antipassive constructions retain the -ah suffix, which marks them as underlying transitive verb stems, even though they are inflected like intransitive verbs.

Antipassives, like root intransitives, take the -Vk (V = a, e, i, o, u) suffix for the subjunctive mood:⁵

<u>Antipassive</u>	<u>Intransitive</u>
kíin-s-ah-n-ah-ak-en 'that I kill'	kíim-ik-en 'that I die'
šòok-Ø-n-ah-ak-eč 'that you study'	lúub'-uk-eč 'that you fall'
míis-Ø-n-ah-ak-ó?on 'that we sweep'	hóok-ok-ó?on 'that we leave'

In antipassive constructions, however, the vowel in the subordinating suffix does not echo the root vowel, as in root intransitive constructions, but echoes the immediately preceding stem vowel, which is /a/. Thus, in antipassive constructions, the subordinating suffix -Vk is always realized as -ak.

2. Voice

2.1. Root Transitives. There is evidence that the antipassive constitutes a separate voice in Yucatec Maya. The majority of transitive roots in the language have four forms, which are distinguished in terms of vowel length and/or tone, as follows:

- (1) Active: CVC
- (2) Passive: CV?VC
- (3) Middle: CVVC
- (4) Antipassive: CVVC

The first three forms have already been identified as voices (cf. Owen 1969:37-39). The fact that the fourth form, the antipassive, is a member of a set of forms which differ from each other only in terms of voice implies that the antipassive is also a voice in Yucatec

Maya.⁶ The following are examples of transitive roots with four voices:

<u>Active</u>	<u>Passive</u>	<u>Middle</u>	<u>Antipassive</u>	<u>Root Meaning</u>
b'ah	b'á?ah	b'áah	b'àah	'nail'
b'on	b'ó?on	b'óon	b'òon	'paint'
æh	æé?eh	æéeh	æèeh	'break'
øol	øó?ol	øóol	øòol	'order, advise'
č'ak	č'á?ak	č'áak	č'àak	'cut'
hat	há?at	háat	hàat	'tear, scratch'
hek'	hé?ek'	héek'	hèek'	'break'
huč'	hú?uč'	húuč'	hùuč'	'grind'
kop	kó?op	kóop	kòop	'screw'
k'ub'	k'ú?ub'	k'úub'	k'ùub'	'deliver'
lam	lá?am	láam	làam	'submerge'
mak	má?ak	máak	màak	'close up'
muk	mú?uk	múuk	mùuk	'bury'
nup	nú?up	núup	nùup	'join'
pak	pá?ak	páak	pàak	'fold'
p'it	p'í?it	p'íit	p'ìit	'jump'
šot	šó?ot	šóot	šòot	'cut'
tiø'	tí?iø'	tíiø'	tìiø'	'splash'
t'oš	t'ó?oš	t'óoš	t'òoš	'share'
wač'	wá?ač'	wáač'	wàač'	'untie'

Their use in the nominative-accusative and ergative-absolutive patterns is exemplified on the next page:

Nominative-Accusative

	<u>Active (+ object)</u>	<u>Active (- object)</u>	<u>Passive</u>	<u>Middle</u>
I	k in hek'- β -ik- β	k in hæk'- β - β	k u hé?ek'- β -el	k u héek'-el
N	'I break it'	'I break'	'it is broken	'it is breaking'
C			t u méen téen by me'	

Ergative-Absolutive

	<u>Active</u>	<u>Antipassive</u>	<u>Passive</u>	<u>Middle</u>
C	t in hek'- β -ah- β	hèk'- β -n-ah-en	hé?ek'- β - β	héek'- β
O	'I broke it'	'I broke'	'it was broken	'it was breaking'
M			t u méen téen by me'	
S	in hek'- β - β	hèk'- β -n-ah-ak-en	hé?ek'- β -ek	héek'-ek
U	'that I break it'	'that I break'	'that it is	'that it is
B			t u méen téen broken by me'	breaking'
J				

It is clear from these examples that passive and middle voice constructions are inflected like root intransitives in both the nominative-accusative and ergative-absolutive patterns. Both voices take the -Vl suffix for incompletive aspect, no suffix (- β) for completive aspect, and the subordinating -Vk suffix.

A certain number of root transitives have only three forms, which correspond to the voices: active (CVC), passive (CV?VC), and antipassive (CVVC). The following are examples of transitive roots with these voices:

<u>Active</u>	<u>Passive</u>	<u>Antipassive</u>	<u>Root Meaning</u>
b'i \emptyset	b'í?i \emptyset	b'ii \emptyset	'squeeze'
\emptyset el	\emptyset é?el	\emptyset èel	'remove'
\emptyset ik	\emptyset í?ik	\emptyset iik	'obey, respect'
\emptyset ol	\emptyset ó?ol	\emptyset òol	'explain'
\emptyset 'ak	\emptyset 'á?ak	\emptyset 'àak	'cure, heal'
\emptyset 'on	\emptyset 'ó?on	\emptyset 'òon	'shoot'
čak	čá?ak	čàak	'boil'
čuk	čú?uk	čùuk	'catch'
čup	čú?up	čùup	'fill'
č'ul	č'ú?ul	č'ùul	'wetten'
ket	ké?et	kèet	'match, compare'
koh	kó?oh	kòoh	'hit'
kon	kó?on	kòon	'sell'
k'ay	k'á?ay	k'àay	'sing'
k'ey	k'é?ey	k'èey	'scold'
k'op	k'ó?op	k'òop	'thump'
lah	lá?ah	làah	'slap'

But this is equally true of the passive and middle voices in the ergative-absolutive pattern. If object-deleted transitives cannot represent a voice in the nominative-accusative pattern because they lack a derivational suffix, then, for the same reason, passive and middle voice constructions cannot represent separate voices in the ergative-absolutive pattern. On the other hand, it can be argued that the variations in the root vowel are derivational in function, in which case object deletion would represent a separate voice.

2.2. Derived Transitives. The causative suffix -s derives transitive stems from intransitive roots or stems:

<u>Intransitive Root</u>	<u>Root Meaning</u>	<u>Transitive Stem</u>	<u>Stem Meaning</u>
ʔah	'wake up'	ʔah-s	'waken someone'
b'in	'go'	b'i(n)-s	'take'
ʔ'óʔok	'finish'	ʔ'óʔok-s	'finish something'
č'één	'stop'	č'één-s	'stop something'
č'íih	'grow up'	č'íih-s	'raise'
ʔéem	'descend'	ʔéem-s	'lower'
héʔel	'rest'	héʔel-s	'rest something'
hóok'	'leave'	hóʔo(k)-s	'remove'
hóʔop'	'begin'	hóʔop'-s	'begin something'
káah	'begin'	káah-s	'begin something'
kíim	'die'	kíin-s	'kill'
k'áʔah	'remember'	k'áʔah-s	'remind'
líik'	'rise'	lí'i(k')-s	'raise'
lúub'	'fall'	lúub'-s	'fell'
tàal	'come'	tàa(l)-s	'bring'

Transitive stems are derived from nominal roots or stems by means of the suffix -t:

<u>Noun</u>	<u>Meaning</u>	<u>Transitive Stem</u>	<u>Stem Meaning</u>
b'áaš	'toy'	b'áaš-t	'toy with'
b'óʔol	'payment'	b'óʔo(l)-t	'pay for'
ʔ'íib'	'writing'	ʔ'íib'-t	'write'
č'éʔeh	'laughter'	č'éʔeh-t	'laugh at'
k'áab'aʔ	'name'	k'áab'aʔ-t	'appoint'
k'áak'	'fire'	k'a(k)-t	'roast something'
k'uh	'god'	k'ul-t	'worship'
mèen	'account'	mèen-t	'do, make'
meyah	'work'	meyah-t	'serve'
míis	'broom'	míis-t	'sweep'
náay	'dream'	náay-t	'dream'
néen	'mirror'	néen-t	'mirror something'
nóʔoš	'cradle'	nóʔoš-t	'cradle something'
núʔuk	'explanation'	núʔuk-t	'explain'
ʔóol	'heart, mind'	ʔóo(l)-t	'want, desire'
síin	'mucous'	síin-t	'blow nose'
šóob'	'whistle'	šóob'-t	'whistle'
táʔab'	'salt'	táʔab'-t	'salt something'
tohol	'price'	tohol-t	'cost something'
wáay	'apparition'	wáay-t	'cast a spell'

Derived transitives lack the middle voice characteristic of many root transitives, and they do not form passives based on a change in the root vowel. Both classes of

derived transitives seem to form passives with a suffix -á?al in the nominative-accusative pattern:

<u>Active</u>	<u>Passive</u>
k u kíin-s-ik-en 'he kills me'	k in kíin-s-á?al t u mèn leti? 'I am killed by him'
k a ø'íib'-t-ik-ø 'you write it'	k u ø'íib'-t-á?al t u mèn tèeč 'it is written by you'

However, in Classical Yucatec, the suffix was usually -abal (McQuown 1967:236), which can be analyzed as consisting of three elements: (1) the -ah suffix which marks an underlying transitive stem, (2) the passivizing morpheme -b', and (3) the -Vl suffix which marks intransitive stems in the nominative-accusative pattern. The vowel in the intransitive suffix echoes the immediately antecedent vowel, which is /a/.

The -b' suffix also marks the passive of derived transitives in the ergative-absolutive pattern:

<u>Active</u>	<u>Passive</u>
t u kíin-s-ah-en 'he killed me'	kíin-s-á?a-b'-en t u mèn leti? 'I was killed by him'
t a ø'íib'-t-ah-ø 'you wrote it'	ø'íib'-t-á?a-b'-ø t u mèn tèeč 'it was written by you'

In this case it is not clear how the intervocalic glottal stop in the suffix -á?a should be interpreted. It is followed by a -b' suffix, so it seems unlikely that the glottal stop represents a reduction of -b' also. It is possible that the intervocalic glottal stop has the same function as the glottal stop in the passive form of root transitives (CV?VC), only, in this case, it is the stem vowel, rather than the root vowel, that has undergone change.

The subjunctive mood of the passive of derived transitives is formed with the suffix -á?ak. In Classical Yucatec the suffix was usually -abak (McQuown 1967:232, 235), which can be analyzed as consisting of

three elements: -ah, -b', and -Vk, with the vowel in the first suffix echoed in the third.

2.3. Noun Incorporation. In some antipassive constructions the nominal object is not deleted but is incorporated into the verb stem:

<u>Transitive (+ object)</u>	<u>Antipassive</u>
t in č'ak-ø-ah če? 'I chopped a tree'	č'ak-če?-n-ah-en 'I chopped wood/trees'
ičil in kðol in my cornfield'	ičil in kðol in my cornfield'
t in wek-ø-ah ha? 'I spilled the water'	wek-ha?-n-ah-en 'I spilled water'
t in p'o?-ø-ah nðok 'I washed the clothes'	p'o?-nðok-n-ah-en 'I washed clothes'

Noun incorporation is less obvious in the nominative-accusative pattern:

<u>Transitive (+ object)</u>	<u>Transitive (- object)</u>
k in č'ak-ø-ik če? 'I chop a tree'	k in č'ak-če?-ø 'I chop wood/trees'
ičil in kðol in my cornfield'	ičil in kðol in my cornfield'
k in wek-ø-ik ha? 'I spill the water'	k in wek-ha?-ø 'I spill water'
k in p'o?-ø-ik nðok 'I wash the clothes'	k in p'o?-nðok-ø 'I wash clothes'

Since the object-deleted stem has no suffixes, there is no way of determining if the object has actually been incorporated into it.

The semantic effect of noun incorporation is to give the object a generic sense. Note that the root form in the antipassive and object-deleted examples is CVC, not CVVC. Perhaps this is because the object is not really deleted, but is moved into the verb. In other words, the CVVC form may indicate the complete absence of an object.

Verb stems with incorporated nouns may be "retransitivized" with the -t suffix:

<u>Root Transitive</u>	<u>Derived Transitive</u>
k in č'ak-∅-ik če?	k in č'ak-če?-t-ik
'I chop the tree	'I chop wood/trees
ičil in kòol	in kòol
in my cornfield'	in my cornfield'
k in wek-∅-ik ha?	k in wek-há?a-t-ik
'I spill water'	'I throw water [at him]'

In the first example, the empty slot resulting from noun incorporation has been filled by the oblique object, which functions as the grammatical direct object of the "retransitivized" verb. The second example implies an unspecified, but obligatory, oblique object functioning as a direct object.

3. Passivization and Antipassivization

There are at least two kinds of passives in Yucatec Maya: those which imply an agent and those which do not. Agentless passives are derived from transitive roots or stems by the suffixes -p and -k'. The difference between the two suffixes seems to be that -k' has a celeritive meaning. Agentless passives are inflected like intransitive verbs, although they retain the -ah suffix which marks an underlying transitive verb.

In agentive passive constructions, the agent may be optionally expressed as a noun or independent pronoun after t u mèn 'by.' In the agentless passive transformation, the agent is simply deleted, rather than

being moved outside the nuclear verb phrase into a prepositional phrase.

I have found several examples of object deletion and antipassivization in which the object is moved into a prepositional phrase outside the nuclear verb phrase. One example comes from Modern Yucatec (Blair and Vermont Salas 1965:50):

má?alob' ?a t'áan ?ič màayah
'you speak Maya well' (literally,
'well you speak in Maya').

This contrasts with:

má?alob' ?a t'anik màayah
'you speak Maya well' (literally,
'well you speak Maya').

Note that, in the object-deleted version, the noun object has not been deleted but has been moved into an oblique construction headed by ?ič 'in.' Another difference between the two versions is that the object-deleted form of the verb root is CVVC, while the root form with object is CVC.

Another example comes from Classical Yucatec (Roys 1933:39):

ximbalnahci y u chiich y u cenaa y u mim y u muu

which can be represented in the orthography used in this paper as:

šíimb'al-n-ah-(a)k-ih y éetel u čiič y éetel
'that he walks with his maternal grandmother,
u ø'ena? y éetel u mím y éetel u mu?
with his maternal aunt, with his paternal
grandmother, with his sister-in-law.'

The nuclear verb phrase, šíimb'al-n-ah-(a)k-ih, is the antipassive of t u šíimb'a(l)-t-∅. In Modern Yucatec the active form of the complete phrase would be:

t u šíimb'a(1)-t-∅ u číič u ø'ena? u mím u mu?
 'that he visits his maternal grandmother, his
 maternal aunt, his paternal grandmother, his
 sister-in-law,'

without the preposition y éetel 'with.'

These examples suggest that antipassivization is exactly the reverse of passivization. In the passive transformation, it is the agent which is moved outside the nuclear verb phrase, whereas in the antipassive transformation, it is the object which is moved outside the nuclear verb phrase.

The symmetry of the relationship between passivization and antipassivization is complicated by the fact that the passive transformation does not have the same meaning in the ergative-absolutive pattern as it does in the nominative-accusative pattern. In the nominative-accusative pattern, the passive transformation moves an underlying object into the subject position, and the underlying agent is moved out of the nuclear verb phrase. This is not the case in the ergative-absolutive pattern, where the underlying object is already in the subject position, so that the passive transformation merely involves moving the underlying agent out of the nuclear verb phrase. Similarly, in the ergative-absolutive pattern, the antipassive transformation moves an underlying agent into the object position and moves the underlying object out of the nuclear verb phrase. This contrasts with object deletion in the nominative-accusative pattern, where the underlying agent remains in the agent position, and the underlying object is simply deleted or moved outside the nuclear verb phrase.

This suggests that the exact opposite of antipassivization is not passivization in general, but passivization in the nominative-accusative pattern. Antipassivization and nominative-accusative passivization are "two-step" transformations, in contrast with object deletion and ergative-absolutive passivization, which are only "one-step" transformations. By this reasoning, the exact opposite of the ergative-absolutive type of passivization is object deletion, not antipassivization.

It is clear that passivization as a transformational process does not have the same meaning in an ergative-absolutive system that it has in a nominative-accusative system, even though the same semantic interpretation may be appropriate for the result of this process in both systems. Similarly, object deletion in a nominative-accusative system does not have the same significance as antipassivization in an ergative-absolutive system; the use of separate terms for these processes avoids the confusion which results from using the term "passive" in both systems. However, this is not to say that it is impossible to form passive constructions in ergative-absolutive languages but, rather, that the relationship between the active and passive voices is different in the two systems. The passive transformation requires more steps in a nominative-accusative language than in an ergative-absolutive language, which is just another way of saying that there is a greater difference between the active and passive voices in nominative-accusative languages than in ergative-absolutive languages. By functionally equating the subjects of intransitive verbs with the objects of transitive verbs, ergative-absolutive languages have brought the active voice closer to the passive voice rather than vice versa. Antipassivization is a movement in the same direction in the sense that it treats the active element in a transitive construction as an object. This may explain why some linguists have regarded nominative-accusative languages as somehow more "active" than ergative-absolutive languages (e.g., Kurylowicz 1949:86, 89; cf. Jacobsen 1969:2).

Footnotes

1. The data on which this paper is based were provided by Eleuterio Póot Yah of Hocabá, Yucatán, México. I am grateful to the Center for Latin American Studies at Tulane University for making Mr. Póot Yah available for this work. Francesca Merlan, Karen Dakin, Thom Smith-Stark, and Munro S. Edmonson helped me formulate the interpretation of Yucatec Maya verb morphology expressed in this paper.

2. There is also a set of independent pronouns, but they are not marked for case and therefore will not be treated in this paper.

3. The prefixes, w- and y-, occur with glottal-stop initial stems. N- represents a nasal which is realized as m- before labial stops (b', p, p'), as n- before dental stops (t, t'), affricates (č, č', č, č'), fricatives (s, š), or semi-vowels (y), and as ŋ- before velars (h, k, k'), labiovelars (w), and other nasals (m, n) (Blair and Vermont Salas 1965:444).

4. -ah also functions as a transitive stem marker in the nominative-accusative pattern for object-deleted causatives derived from root intransitives, as in the case of k in kiin-s-ah-∅ 'I kill' above. The same is true for some transitive stems derived from noun roots by the desubstantivizing suffix -t. In addition, a few apparent root transitives have the -ah suffix in their object-deleted state: compare k in w il-∅-ik-eč 'I see you' with k in w il-∅-ah-∅ 'I see' and k a w á?al-∅-ik-∅ 'you say it' with k a w á?al-∅-ah-∅ 'you speak.'

5. This seems to be a recent development. In Classical Yucatec, object-deleted verbs formed the subjunctive with a -Vb' suffix (V = a, e, i, o, u) and were inflected like transitive verbs with set A pronouns (cf. Coronel 1620:15, 23; McQuown 1967:232, 236). The -Vb' suffix has been replaced by the -Vk suffix in Modern Yucatec, and semantically equivalent constructions use the antipassive, rather than the object-deleted form of the verb.

6. Colonial grammarians and lexicographers regarded the object-deleted form of the transitive verb as its infinitive (cf. Coronel 1620:13, 15, 16). In the Motul Dictionary (Ciudad Real 1929), root transitives are cited as CVC. Each entry also gives the past tense suffix -ah and the future tense suffix -Vb'. Presumably, the CVC form represents both the infinitive and the present tense, or incompletive aspect, which does not take any suffix in object-deleted constructions. Vowel length and tone are not marked in the colonial dictionaries, but, in a recent paper, Fisher (1976) has made a convincing argument for the existence of tones in Proto-Yucatec. It therefore seems likely that Classical Yucatec also differentiated between voices in terms of this feature.

7. Approximately 74 percent of the root transitives in my sample (N = 365) have either three or four forms. The remainder have either one form (21 percent), which may be CVC, CVVC, or CV?VC, but never CVVC, or two forms (6 percent), which are CVC and CV?VC.

8. The fact that the passivizing morpheme /b'/ has clearly been reduced to a glottal stop in the -á?al and -á?ak suffixes of Modern Yucatec raises the question of whether the glottal stop in the passive form of root transitives (CV?VC) was not formerly also /b'/. In addition to the fact that /b'/ is imploded and involves glottalization, there are a number of examples of alternation between /ʔ/ and /b'/ in both Classical and Modern Yucatec. First of all, there are a number of root transitives for which the active form is CV? and the passive form is CV?Vb':

<u>Active</u>	<u>Passive</u>	<u>Root Meaning</u>
č'a? *	č'á?ab'	'give'
ča?	čá?ab'	'release'
č'a? *	č'á?ab'	'take'
či?	čí?ib'	'bite'
čo?	čó?ob'	'clean'
ha? *	há?ab'	'sharpen'
he? *	hé?eb'	'open'
hi?	hí?ib'	'rub'
le? *	lé?eb'	'unite, join'
pa? *	pá?ab'	'break'
pe?	pé?eb'	'seize a gourd'
p'o?	p'ó?ob'	'wash'
to?	tó?ob'	'wrap'

Coronel (1620:32) made the same observation for Classical Yucatec, including, as examples, the starred items listed above.

In Modern Yucatec, *kan* and *káʔan* are the active and passive forms, respectively, of the root transitive with the meaning 'to learn.' The antipassive form of this root is *kàamb'al*. From the passive stem a causative transitive stem may be derived, which has the meaning 'to teach' (i.e. 'to cause to learn'). This derived transitive may, in turn, be passivized, with the meaning 'to be taught.' There are, then, five verbal stem forms based on the root meaning 'to learn':

<u>Active</u>	k u kan-Ø-ik	'he learns it'
<u>Antipassive</u>	k u kàam-b'-al	'he learns'
<u>Passive</u>	k u káʔan-al	'it is learned'
<u>Causative</u>	k u káʔan-s-ik	'he teaches him'
<u>Causative-Passive</u>	k u káʔan-s-áʔal	'he is taught'

In Classical Yucatec, the causative form of this verb was cambesic, not *caansic (Coronel 1620:9-13). The /b'/ in cambesic is undoubtedly the passivizing morpheme, to which the final consonant in the root has assimilated progressively (in Classical Yucatec, the causative suffix was either -s or -es [McQuown 1967:234-235]). This suggests to me that the passive form of the root transitive was formerly *kan-b'-al* and that, through metathesis, the passivizing /b'/ became infix in the root, where it was ultimately reduced to a glottal stop. By this argument, *kàamb'al* (Classical *cambal* [Ciudad Real 1929:171]), which is now an antipassive stem, was formerly a passive stem.

9. I am grateful to Karen Dakin for drawing this type of antipassive construction to my attention.

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QUICHEAN PREHISTORY: LINGUISTIC CONTRIBUTIONS

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0. Introduction. The primary purpose of this paper is to present some results from recent research in Quichean linguistic prehistory; however, I have an ulterior motive: to promote the cause of the linguistic contribution to prehistory generally. Typically anthropologists studying prehistory have devoted their attention and trust to archaeological evidence, taking ethno-historical and ethnographic information as secondary evidence. Too often linguistic evidence is either neglected or misused. In this paper I present some linguistic contributions to Quichean prehistory, which, as a case study, are calculated to emphasize the role linguistics should play in studies of prehistory. If anthropology is to have a component of prehistory (culture history), we cannot lend allegiance to archaeological evidence alone, nor merely "triangulate" from archaeological, ethnohistorical, and ethnographic information. Rather, we must exploit all potential sources of information; we must seriously seek all the linguistic help possible.

Watkins (1969:1498) puts it this way:

When we have reconstructed a protolanguage, we have also necessarily established the existence of a prehistoric society ... the contents of the Indo-European lexicon provide a remarkably clear view of the whole culture of an otherwise unknown prehistoric society. ... Archaeology, archaeological evidence, is limited to material remains. But human culture is not confined to material artifacts alone. The reconstruction of vocabulary can offer a fuller, more interesting view of the culture of a prehistoric people than archaeology precisely because it includes nonmaterial culture.

From a less linguistically biased source we have, "an ounce of documents is worth more than a peck of artifacts" (Thompson, 1970:xiii).

The aspects of Quichean linguistic prehistory to be considered here are 1) classification, 2) correlation of linguistics and ethnohistory, 3) diversification and migrations, 4) contact history, and 5) linguistic-ethnic identifications.

Linguistic prehistory involves varied methods and sources of information, e.g., the comparative method, migration theory, dialectology, classification, philology, loan words, linguistic homeland, cultural inventory of proto lexicon,