

A TEST AND FALSIFICATION OF THE
“CLASSIC CH’OLTI’AN” HYPOTHESIS:
A STUDY OF THREE PROTO-CH’OLAN MARKERS¹

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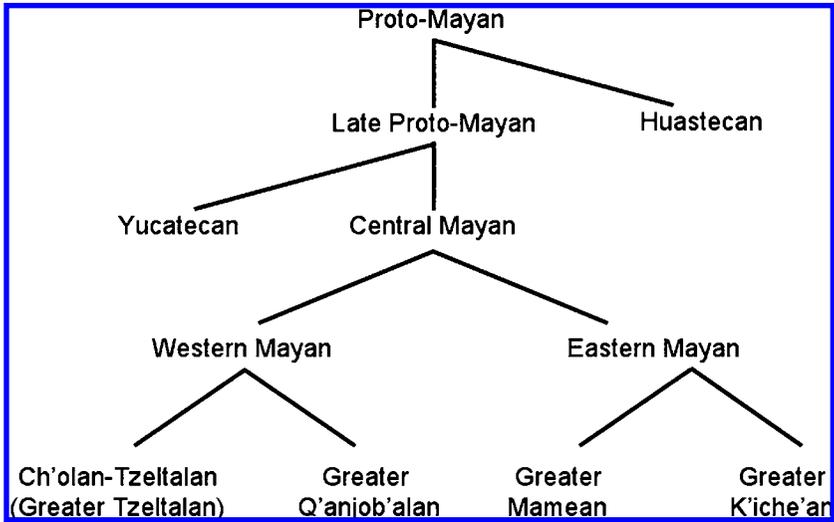
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This paper constitutes a test of the Classic Ch’olti’an (Pre-Eastern Ch’olan) hypothesis for the linguistic affiliation of the standard language of Classic Lowland Mayan hieroglyphic texts from ca. A.D. 200–900 proposed by Houston et al. (2000). Newly assessed linguistic evidence suggests that the proposed Eastern Ch’olan innovations supporting the Classic Ch’olti’an hypothesis may in fact be shared retentions from Proto-Ch’olan-Tzeltalan and Proto-Ch’olan. This paper also reviews the proposals for the identification of Eastern Ch’olan and Western Ch’olan vernacular markers at a variety of ancient cities by Justeson and Fox (1989) and Lacadena and Wichmann (2002), among others, and suggests that the late and geographically circumscribed appearance of these traits indicates that Proto-Ch’olan had not fully diversified—into distinct languages—by the end of the Classic period. It is concluded that it was a form of Pre-Ch’olan or Proto-Ch’olan that served as the basis for the standardization of Classic Lowland Mayan writing during the Late Preclassic period, by A.D. 200, and that the diversification of Proto-Ch’olan was more likely a Postclassic (A.D. 900–1521) phenomenon, one exacerbated by the political and demographic collapse at the end of the Classic period.

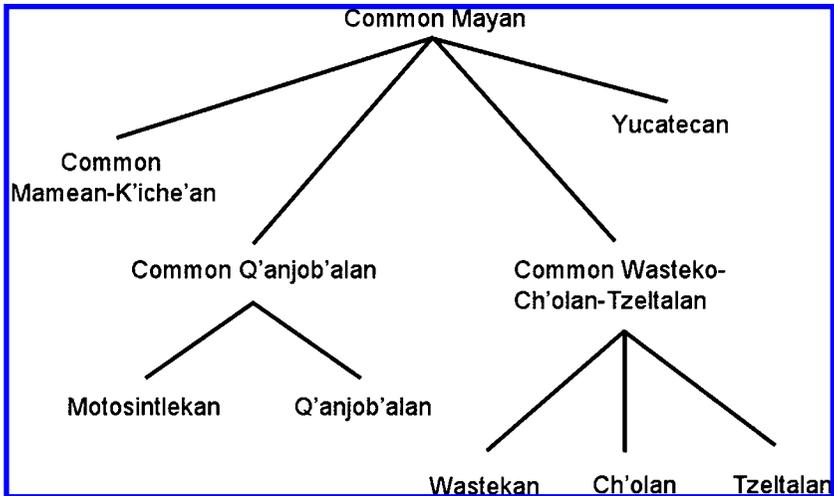
[KEYWORDS: Mayan historical linguistics, Mayan epigraphy, Ch’olan-Tzeltalan]

1. Introduction. This paper is a test of the “Classic Ch’olti’an” Hypothesis by Houston et al. (2000), a hypothesis that proposes that the standard written language of Classic Lowland Mayan texts was based on a form of Ch’olan, one of the subgroups of the Mayan language family (fig. 1), that was more closely related to Colonial Ch’olti’ and Modern Ch’orti’ than to either Modern Ch’ol or Modern Chontal. The “Classic Ch’olti’an” Hypothesis is based on what Houston et al. (2000) argue to be three exclusive innovations of the ancestor of Colonial Ch’olti, a language that they also argue is the direct ancestor of Modern Ch’orti’. These innovations are found frequently in Classic Lowland Mayan texts and throughout the Classic Lowland Mayan

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(a)



(b)

FIG. 1.—Two alternative phylogenetic classifications of Mayan languages. (a) is model based on Kaufman (1976; 1990); (b) is model based on Robertson (1992; 1998).

region, and thus constitute primary evidence for standard traits of the script. As a result, whatever language innovated such traits could be argued to be the language that was used as the basis for the standard of Classic Lowland Mayan texts. Before I discuss the data, and present an alternative analysis argued here to be simpler and more likely to be historically correct, it is necessary to describe some of the research that has been conducted to date on the issue of the linguistic affiliation of the standard and vernacular traits of Classic Lowland Mayan texts.

1.1. Background to the problem. Houston et al. (2000) propose that it was the speakers of a language they dub “Classic Ch’olti’an” who standardized Classic Lowland Mayan (CLM) writing and whose languages acquired the prestige of a ritual language in the Maya lowlands, particularly during the Classic period. Thus, this Classic Ch’olti’an Hypothesis (CCH) proposes a refinement over previous proposals that securely established the primacy of Ch’olan speech in the standard and conservative features of the script, but which did not find evidence for a specific variety of Ch’olan as more widely attested in CLM texts over any other (e.g., Campbell 1984, Justeson 1985; 1989, Justeson et al. 1985, Justeson and Fox 1989, and Justeson and Campbell 1997). Such models assumed a diversification model for the Ch’olan languages based on what eventually became Kaufman and Norman’s (1984) model (fig. 2a): a model in which Proto-Ch’olan, the ancestor of all the Ch’olan languages attested since the arrival of the Spanish, split up initially into two groups, an Eastern Ch’olan branch, which eventually split up into distinct Ch’olti’ and Ch’orti’ varieties, and a Western Ch’olan branch, which eventually split up into distinct Chontal and Ch’ol varieties. Justeson and Fox (1989), in an unpublished paper which remained the most detailed discussion of the standard and vernacular traits of CLM writing for more than a decade afterward, found some hints of Western Ch’olan vernacular traits, but no evidence for Eastern Ch’olan vernacular traits, and concluded that—by and large—the evidence suggested that Proto-Ch’olan had not yet fully diversified by ca. A.D. 600–700, prior to the attestation of what they considered to be evidence for exclusive Western Ch’olan innovations. More recently, Lacadena and Wichmann’s (2002) discussion of vernacular traits and linguistic geography during the Classic period provided additional evidence for geographically differentiated orthographic and linguistic traits in CLM texts, which they attribute to the division between Eastern Ch’olan and Western Ch’olan (along the lines of the model in fig. 2a) but assuming the model by Houston et al. (2000) that proposes that the ancestor of the Ch’olan languages had already split up by ca. A.D. 200 and, in fact, that CLM texts were written primarily in “Classic Ch’olti’an,” an ancestor of Colonial Ch’olti’, which belongs to the Eastern Ch’olan branch in Kaufman and Norman’s (1984) model. In the Ch’olan diversification model by Houston et al. (2000)

(shown in fig. 2*b*), Common Ch'olan underwent a tripartite differentiation into Ch'ol, Acalan, and Classic Ch'olti'; Acalan developed into what is referred to as Modern Chontal, itself composed of several dialects, and Classic Ch'olti' developed into Colonial Ch'olti' and, later, into Modern Ch'orti'.

This model thus differs in several points from that by Kaufman and Norman (1984): (1) It sees a three-way split, instead of a two-way split, stemming from the ancestor of the Ch'olan languages. (2) It assumes that Colonial Ch'olti' is the ancestor of Modern Ch'orti', rather than siblings within a single branch. (3) It assumes that Ch'ol and Chontal represent separate branches of Ch'olan, rather than siblings within a single branch.

Classic Ch'olti'an is, in their view, a direct—Classic-period—ancestor of Colonial Ch'olti', attested in the Morán (1695) manuscript, which they in turn argue to be a direct ancestor of Modern Ch'orti' (see also Robertson 1998). Thus, they propose that CLM texts were written in "Classic Ch'olti'an," which they also propose to be the Classic-period ancestor of Colonial Ch'olti'. (In Kaufman and Norman's 1984 model, Classic Ch'olti'an would be classifiable as either Pre-Ch'olti' or [more accurately] Pre-Eastern Ch'olan.) Houston et al.'s (2000) proposal is based primarily on three linguistic innovations which they attribute exclusively to Ch'olti' and Ch'orti': *-h-* . . . *-aj* 'passivizer', *-b'u* 'transitivizer of positionals', and *-V₁y* 'mediopassivizer'. There are two alternatives to this model: (1) a model in which the standard written language of CLM texts is based on a Ch'olan language that preceded the breakup of Proto-Ch'olan into distinct Eastern Ch'olan and Western Ch'olan languages; or (2) a model in which the standard written language of CLM texts is based on a Western Ch'olan language rather than an Eastern Ch'olan language.

The implications of any of these three alternatives for the sociopolitical and sociolinguistic history of the Maya lowlands, not to mention for the history of the script and the continuing work on its decipherment, linguistic analysis, and interpretation, are potentially numerous and substantial.

In addition, both Justeson and Fox (1989) and Lacadena and Wichmann (2002) have found evidence for Yucatecan vernacular traits in CLM texts, especially those present at ancient sites in the northern Yucatan region. However, those traits are not systematically represented throughout that region, and sometimes they appear mainly as departures or deviations from standard traits within otherwise Ch'olan-style texts. Justeson and Fox (1989) used such evidence to argue that such sites were in fact communities of Yucatecan speech whose scribes wrote, for the most part, in a standard Ch'olan language. Consequently, the history of both Ch'olan and Yucatecan ethnic groups is implicated, particularly since texts from the northern Yucatan region are generally as early as those from the central Maya lowlands—appearing already by ca. 300 B.C.–A.D. 200, during the so-called Late Pre-classic period.

This last point brings us to another facet of the discussion by Houston et al. (2000:325), who state that the positional suffixes *-l-aj* and *-w-an* had been exclusively analyzed as distinguishing Yucatecan from Ch'olan speakers (e.g., MacLeod 1984), respectively, despite the often overlapping geographic distribution exhibited by such markers, and who also imply that this was the common wisdom well into the 1980s and early 1990s, after which work by several authors, including Houston et al., came together to show that both markers were present in the Ch'olan languages. The fact is that Justeson (1985), in an article published in the same issue as an article by Robertson (1985), makes the point that *-l-aj* and *-w-an* were probably not evidence for distinct Yucatecan and Ch'olan cities but, instead, for distinct Pre-Ch'olan and Proto-Ch'olan forms, respectively, following Kaufman and Norman's (1984) proposal of a Pre-Ch'olan form **-l-aj(-i)* 'completive status of positionals' that was replaced by a Proto-Ch'olan form **-w-an(-i)* 'completive status of positionals'. In fact, Campbell and Kaufman (1985) describe as a consensus the view that most Classic Mayan texts were written in a form of Ch'olan. Consequently, the groundwork of Houston et al. (2000) and others such as Lacadena and Wichmann (2002) was laid down by a variety of scholars two or three decades ago, and Ch'olan had already been established as the null hypothesis for linguistic affiliation of the standard language of CLM texts by the early 1980s. The approach by Houston et al. (2000) constitutes an attempt at a major revision and refinement of the general approach by Fox and Justeson (1982) and Justeson and Fox (1989), one that starts out from a Ch'olan hypothesis as the null hypothesis.

1.2. Goal and organization of this paper. This paper has a simple goal: to test the validity of the proposal that the three morphological markers analyzed by Houston et al. (2000) are in fact exclusive innovations of Eastern Ch'olan (Ch'olti', Ch'orti'). It also addresses the viability of a Western Ch'olan (Ch'ol, Chontal) model. This paper, then, has as a goal to determine whether the CCH fares any better than the null hypothesis—a Pre-Ch'olan or Proto-Ch'olan model—after more careful scrutiny. If it fails to do so, then the null hypothesis would remain intact. Its goal is not to describe the history of CLM writing or of the languages of the Maya lowlands; nor is it to discuss in detail information about the earliest Mayan texts from the Maya lowlands that has come to light in recent years (e.g., Saturno et al. 2005). Those objectives are definitely valid but not possible to address in a single article that already addresses a complicated historical linguistic analysis.

Section 2 offers a few terminological clarifications as well as a summary of the historical linguistic assumptions and methods applied in this paper, including a review of the evidence for the internal differentiation of Ch'olan and the presentation of additional evidence. Section 3 addresses the data for each of the three morphological markers in the following order: *-b'u* 'tran-

sitivizer of positionals’, *-h- . . . -aj* ‘passivizer’, and *-V₁y* ‘mediopassivizer’. It is argued that *-b’u* is attested in Tzeltalan with the same function and meaning as in Ch’olti’ and, therefore, that a Proto-Ch’olan-Tzeltalan reconstruction is possible. Also, it is noted that it is possible to argue for a different analysis of the spellings that Houston et al. (2000) assume to represent verbs inflected with a bipartite morpheme of the form *-h- . . . -aj*, and that a different etymology of the *-aj* marker is also possible. And last, it is proposed that the *-V₁y* ‘mediopassivizer’ marker should be defined instead as an ‘inchoative’ or ‘versive’ in CLM texts, and that this marker is attested with the same intransitivizing function and inchoative or versive meaning not only in Modern Ch’ol but also in Tzeltal, suggesting a Proto-Ch’olan-Tzeltalan reconstruction as probable. Section 4 discusses the implications of the evidence for Mayan historical linguistics and Maya archaeology. Section 5 presents conclusions—methodological, empirical, and analytical—derived from this study and suggestions for future research.

2. Preliminaries.

2.1. Some basic assumptions. First of all, it is important that the reader be aware of the partial equivalence between “Classic Ch’olti’an” and “Pre-Eastern Ch’olan.” This partial equivalence is due to the fact that the Ch’olan diversification models discussed above simply do not match. Second, as already explained, the CCH implies that CLM writing had already been standardized, and that Proto-Ch’olan had already diversified into its two or three distinct branches, by the beginning of the Classic period (ca. A.D. 200). These implications are not, in and of themselves, problematic but simply derived from the hypothesis itself, and they can and should be tested empirically. In 4, I provide some limited information pertaining to the linguistic affiliation of the earliest Mayan texts as analyzed in Mora-Marín (2001), in order to try to assess what the Late Preclassic situation, prior to ca. A.D. 200, might have been like. Third, and something that is more important, is the fact that there are other implications of the CCH that are problematic from the point of view of empirical data already known to specialists. In order to assess such implications, therefore, it is necessary to apply the notion of simplicity. For example, Kaufman and Norman (1984) reconstruct the innovation of split ergativity to Proto-Ch’olan. If the CCH is correct, one would expect that CLM texts, from ca. A.D. 200 on, would exhibit evidence of split ergativity.² But this is not the case; the earliest hints of split ergativity date to A.D. 783 and A.D. 820, and they are both confined to the same site, Copan. If the CCH

² However, Law et al. (2006) have recently argued for a different scenario: they propose that Common Ch’olan (Proto-Ch’olan) did not have split ergativity. Pending a thorough analysis of their argument, however, I prefer simply to delay discussion of split ergativity.

were correct, and determined thus on other grounds, one would have to argue either that Eastern Ch'olan and Western Ch'olan innovated split ergativity independently of one another subsequent to the split of Proto-Ch'olan, or that one of the two branches innovated split ergativity and the other borrowed it. While either one of these scenarios is certainly feasible, a scenario in which split ergativity was innovated by Proto-Ch'olan, and was subsequently inherited by both branches during the diversification process, is simpler and, therefore, more desirable, all other things being equal.

The key in applying simplicity as a criterion for analysis is knowing what "all other things being equal" means, and this relates to the level of analysis at which simplicity is more desirable, for, in fact, applying simplicity at one level of analysis may very well complicate matters at another level.³ Hence, the following proviso: If it is found that a certain morphological marker claimed by Houston et al. (2000) to be exclusive to Eastern Ch'olan (Ch'olti', Ch'orti') is actually attested also in Western Ch'olan (Ch'ol, Chontal) or for that matter in Tzeltalan (Tzeltal, Tzotzil), then I assume that it is reconstructible to the common ancestor of the respective languages involved—whether Proto-Ch'olan or Proto-Ch'olan-Tzeltalan, for example—unless there is a possibility for contact diffusion or for independent (but convergent) development of said marker. In other words, the number of independent innovations—whether it be new traits or the loss of traits—is the analytical entity that will be minimized in this paper (Fox 1999). The problem then becomes how to distinguish between shared innovations, independent innovations, and contact diffusion of a trait. Geographic distribution is a potentially useful factor: If two languages, such as Ch'ol and Tzeltal, are found to exhibit the same trait and such languages are geographically contiguous, then contact diffusion cannot be discounted; but if two languages, such as Ch'orti' and Tzeltal, are found to exhibit the same trait and such languages are not geographically contiguous, then shared innovation or independent innovation is probably at work. Finally, the question of how to distinguish between shared innovation and independent innovation must be addressed. This is no simple matter—and at times it may not be possible at all to tell the two apart. For the purposes of this paper, shared innovation is assumed as likely once contact diffusion has been discounted, and as long as the shared traits are very similar in phonological and morphonemic form

³ Occam's Razor states: "Do not multiply entities beyond necessity." This refers of course to theoretical entities or theoretical machinery. Culicover and Jackendoff (2005:4) have very insightfully discussed that the really difficult question is: "Which entities should not be multiplied?" In the discussion of different theories of syntax, they note that different approaches attempt to simplify different things: some the "distinct components of grammar," others the "class of possible grammars," others still "the distinct principles of grammar," and finally others "the amount of structure generated by the grammar." Simplification at any one of these levels can easily lead to multiplication of entities at another.

rather than merely structurally. Thus, independent innovation will be determined as likely on the basis of a combination of factors, such as geographic distribution and, more importantly, the degree of similarities in the phenomena being compared.

2.2. Epigraphic conventions and linguistic background. The Lowland Mayan script, in use from ca. 400 B.C.–A.D. 1700, utilizes CVC and CVCVC logograms (e.g., T544 **K’IN** for Proto-Ch’olan **k’in* ‘sun, day’, T762 **B’ALAM** for Proto-Ch’olan **b’ahläm* ‘jaguar’), as well as CV syllabograms (e.g., T501 **b’a** as in **’u-b’a-hi-li** for *u b’ah-il* ‘his/her’its image’).⁴ It also utilizes semantograms (semantic signs): semantic determinatives to disambiguate between possible readings of a single sign (e.g., T710 **ye**, SPHERULES T710 **CHOK** ‘to throw (down)’), and semantic classifiers to categorize entities into culturally salient domains (e.g., STONE markings inside signs depicting objects made of stone, such as T528 **TUN** for Pre-Ch’olan **tuun* ‘stone’ and T529 **WITS** for Proto-Ch’olan **wits* ‘mountain’).⁵ Roots of any sort could be spelled either logographically or syllabographically; quite often a combined, logosyllabic approach was used (e.g., **CHOK-ka-ja** for *chok-aj* throw-PASS or *cho[h]k-aj* throw[PASS]-PASS ‘it is/was thrown (down)’), and was much more common than the purely syllabographic approach (e.g., **cho-ka-ja** for *chok-aj* or *cho[h]k-aj*).

Most (inflectional) prefixes are of the shape CV- (e.g., **’u-** for *’u-3SERG*’), and most (inflectional or derivational) suffixes were of the shape -V(C) (e.g., **hu-li** for *hul-i*), -VC (e.g., **TUN-ni-li** for *tu(:)n-il*), or -CVC (e.g., **CHUM-wa-ni** for *chum-wan-i*). A recent proposal suggests that affixes could be spelled logographically through the use of syllabograms as “morphosyllables” (Houston et al. 2000). If so, a spelling like **TUN-li** would be read **TUN-IL**. Other authors have suggested this in the past, starting with Knorozov’s (1967) suggestions of T181 **ja** as a syllabogram that could also represent the Yucatec suffix *-aj* ‘completive status’ when it was used after a verbal logogram, and later suggestions by a variety of authors (e.g., Kelley 1976, Justeson 1978, MacLeod 1984, Fox and Justeson 1984, and Mathews and Justeson 1984) that certain syllabographic signs used to spell affixes were essentially logograms in certain contexts (e.g., T1 **U-**, T24 **-IL**, T181

⁴ Signs are conventionally TRANSCRIBED with catalog numbers; there are several catalogs, including Thompson’s (1962) and a more recent and comprehensive one by Macri andLooper (2003), both of which I employ here. Logograms are conventionally transliterated in boldface capital letters, while syllabograms are conventionally transliterated in boldface small letters. Further notation rules or guidelines are found in Thompson (1962) and Fox and Justeson (1984).

⁵ For identification of semantic classifiers, see Hopkins and Josserand (1999), and for discussion of semantic classifiers and semantic determinatives, see Mora-Marín (2004b). Zender (1999) argues against the existence of semantic determinatives in Mayan writing; however, his definition is too narrow and overlooks the broad range of functions of semantic signs that is possible in scripts of the same type as Mayan.

-AJ, etc.). However, this is still a hypothesis (see Mora-Marín 2001), and for that reason I rely on fully syllabographic spellings of affixes for the data set used in this paper.

Lowland Mayan writing represents a typically agglutinating, head-marking, head-initial, morphologically ergative-absolutive language with CVC root shapes and VOA basic word order (Schele 1982, Bricker 1986; 2004, Justeson 1986; 1989, and Mora-Marín 2001; 2004*b*). The language exhibits the use of several types of voice-changing and role-reorganizing constructions (e.g., passives, mediopassives, antipassives, causatives, applicatives), some of these signaled by markers that I discuss in more detail below.⁶ Basic grammatical word order is VOA and VS (Schele 1982 and Bricker 1986), with various types of pragmatic word order attested, such as AVO and OVA (Mora-Marín 2001; 2004*b*). The ergative agreement markers are prefixes or proclitics that precede the transitive verb stem (ERG-TV); these markers also function as possessive agreement markers that precede the possessed noun (ERG-N). The absolutive markers are suffixes or enclitics that follow the intransitive verb stem (IV-ABS, ERG-TV-ABS) or the nonverbal stem of a stative predicate (ADJ-ABS, ADV-ABS, N-ABS). There are several status (ST) markers (e.g., completive, incompletive, subjunctive, imperative) that occur as suffixes, as well as aspect (ASP) markers (e.g., terminative, continuative, durative, obligative, assurative, inceptive) that generally occur as prefixes (ASP-(ERG-)V-ST-ABS); thus, a verb stem can be in the incompletive status but be either ‘terminative’, ‘continuative’, ‘durative’, etc., depending on the aspect marker it takes. While all Ch’olan and all Yucatecan languages exhibit split ergativity, there are only hints of split ergative agreement marking in CLM texts; some epigraphers support the hypothesis that CLM texts probably do not reflect

⁶I use the following abbreviations: 1 = first-person marker, 2 = second-person marker, 3 = third-person marker; ABS = absolutive marker/case, ABSTR = abstractive, AJ = adjective, APASS = antipassive, APL = applicative marker, ASP = aspect, CAUS = causative, CLS = noun classifier, CMP = completive, DEIC = deictic, DEMS = demonstrative, DEP = depositive, DET = determiner, DIM = diminutive, DO = direct object, DUR = durative, ENCL = enclitic, ERG = ergative marker/case, EXT = existential particle, INC = incompletive, INS = instrumental suffix, IO = indirect object, IV = intransitive, IVZR = intransitivizer, MPASS = mediopassive, NOM = nominal suffix, NMLZR = nominalizer, P = plural, P = positional root, PARTC = participle, PASS = passive, PAST = past tense, PL.IV = plain/indicative of intransitives, PL.TV = plain/indicative of transitives, POS = positional (root), PREP = preposition, PERF = perfective, PROCL = proclitic, PROG = progressive, S = singular, SUB = subordinator, ST = status (marker), TERM = terminative, THM = theme vowel, TOP = topicalizer, TV = transitive, TVZR = transitivizer. I use square brackets to set off infixes in interlineal glosses, angled brackets to set off a linguistic form cited from a manuscript using conventional orthography, and parentheses to set off omissible or phonologically conditioned segments. I use *ch* for IPA [tʃ], *j* for IPA [x], *x* for IPA [ʃ], *b'* for IPA [β], and ' for IPA [ʔ]. IPA [ts] is conventionally spelled by most Mayanists as *tz*, and so I use *tz*. I leave unchanged <*b*> for *b'* in examples from colonial manuscripts using conventional orthography.

split ergativity, though this is not yet proven (see Bricker 2004).⁷ The most common genre of CLM texts (i.e., historical narrative) may not be the most conducive to the use of incomplete clauses, which constitute the primary trigger for split ergative agreement marking in Lowland Mayan languages. Rather, other extant genres (e.g., dedicatory, quotative) may provide more amenable contexts for such constructions.

2.3. Ch'olan differentiation. Before I proceed with a review of the CCH, a few words about the data in support of the Ch'olan differentiation scenarios are required. The seminal treatment is that by Kaufman and Norman (1984). Robertson (1998) is mainly concerned with the evidence for the hypothesis that Colonial Ch'olti' was really a direct ancestor to Modern Ch'orti', rather than an extinct sibling, and despite the elaboration of a tree diagram exhibiting a tripartite split of Common Ch'olan into Ch'ol, Acalan (later Chontal), and Ch'olti' (later Ch'orti'), no supporting evidence is provided for the differentiation between Ch'ol and Chontal. Other authors have discussed Ch'olan differentiation through the application of glottochronology, a technique that is generally ill-suited for determining phylolinguistic classifications.

The most widely accepted classifications of Mayan languages, such as that followed by Kaufman and Norman (1984) and others (e.g., Justeson et al. 1985 and England 1990), regard the Tzeltalan subgroup as the immediate sibling to the Ch'olan subgroup. Houston et al. (2000), in contrast, argue for a larger subgroup they call Common Wasteko-Ch'olan-Tzeltalan, a proposed common ancestor of the Huastecan, Ch'olan, and Tzeltalan subgroups. Following most scholars who have looked at the issue, I hereby assume that Huastecan is in fact the most differentiated of all the Mayan subgroups—and certainly not closely related to Ch'olan-Tzeltalan. Together they form a larger Ch'olan-Tzeltalan subgroup, which is itself a sibling to the Greater Q'anjob'alan subgroup. Tables 1 and 2 show some of the linguistic features that differentiate the Ch'olan and Tzeltalan languages, based largely on Kaufman and Norman (1984:82, table 2), with a few features reconsidered below based on new evidence.

Before I proceed, it is necessary to offer an update on the first trait—the first-person singular ergative pronominal. Kaufman (personal communication, 1999) has suggested that the use of T116 *ni* in CLM to represent this marker, as *ni-*, could be indicative of a Proto-Ch'olan form **ni-*, given that the Proto-Mayan form can be reconstructed as **nu-* and, consequently, that **ni-* would be a close retention that has undergone fronting of the vowel. Earlier, Kaufman (1989:part C) had reconstructed **nV-* to Proto-Western

⁷ Once again, Law et al. (2006) have recently challenged this scenario, arguing that Proto-Ch'olan lacked split ergativity.

TABLE 1
CH'OLAN-TZELTALAN MORPHOLOGICAL DIFFERENTIATION

Morphological Traits	Ch'olan	Tzeltalan
1. 1s		
a. 1SERG		
b. 1SABS	*in- (*ni- [Kaufman, p.c., 1999])	*j-
2. 3SERG	*-en	*-on
3. 1p	*u-	*s-
a. ERG		
b. ABS	*kã-	*j- . . . -tik
4. 2p	*-on	*-otik
a. ERG		
b. ABS	*i-	*a- . . . -ik
5. Plain status of TV roots	*-ox	*-ex/*-ox
6. Plain status of IV roots	*-V _I (~ *-I [Kaufman 1989])	No (lost)
7. Incomplete status of IV roots	*-i 'completive'	No (lost)
	*-el (formerly 'dependent')	*-el (formerly 'dependent')

TABLE 2
CH'OLAN-TZELTALAN PHONOLOGICAL DIFFERENTIATION

Phonological Traits	Ch'olan	Tzeltalan
1. Proto-Mayan (PM) *j		
2. PM *h	j	j
3. PM *b'	h (> j) b', p' (Ch'orti' merger > b')	h b', p' (Tzo merger > b')
4. PM *oo		
5. PM *ee	some *oo > uu > u some *ee > ii > i	*oo > *o *ee > *e

Ch'olan and *n- to Proto-Ch'olan. This was prior to his reviewing the data from CLM texts.

Last, for now, the major linguistic features that internally differentiate the Ch'olan languages, according to Kaufman and Norman (1984), are given in tables 3 and 4. Kaufman and Norman (1984) observed that, for table 3, the data for the morphological traits #7 and #8 are not consistent with the pattern evident with the other traits. It is possible to offer additional evidence to refine and revise the data above. First, Kaufman (1989:C36) has opted to reconstruct two markers to Proto-Ch'olan for trait #7: *-V_I ~ *-i. He suggests that they were probably contextually differentiated—the former

phrase-medially, the latter phrase-finally—but not etymologically related, arguing that $*-V_I$ descends from Proto-Mayan $*-o(w)$ ‘plain status of root transitives’ and $*-i$ from Proto-Mayan $*-i(k)$ ‘plain status of intransitives’. Second, regarding trait #8, Ch’orti’ in fact preserves evidence for *ti* in idiomatic expressions (Pérez Martínez 1994:78, 203–5): *tichan* ‘arriba (up)’, *tinoj mis* ‘[name of] mountain north of Jocotán’, *tixixij* ‘[name of] conical mountain near Jocotán, to the north’, *tikajam* ‘in-between us’, the last example analyzable as *ti-ka-jam* (PREP-1PERG-between). More than likely, Proto-Ch’olan had both $*t\ddot{a}$ and $*ti$, probably differentiated by construction type or by both sociolinguistic factors and construction types. Third, regarding trait #5, Kaufman and Norman (1984:81) state that “Cholti and Chorti” innovated “the use of *-es* as a causative suffix.” Those authors further state that the presence of *-es* and *-tes* in Tzeltalan, which Kaufman (1974:142) reconstructs as $*-es$ and $*-tes$ to Proto-Tzeltalan, could suggest that $*-es$ should in fact be reconstructed to Proto-Ch’olan. However, the authors prefer not to reconstruct it as such, for they also note that Yucatecan languages have *-s*, which could indicate that *-es* and *-s* causatives could be “an areal feature that spread through Lowland Mayan and Tzeltalan at an early date” (Kaufman and Norman 1984:100). More recently, however, Kaufman (1989:C6–40) has reconstructed $*-i-sa$ ‘causative’ to Proto-Mayan, $*-(e)s$ ‘causative’ to Proto-Yucatecan, $*-i-sa$ ‘causative’ to Proto-Western Mayan, $*-es$ ‘causative’ to Proto-Greater Tzeltalan (Proto-Ch’olan-Tzeltalan), $*-es(\ddot{a})$ ‘causative’ to Proto-Ch’olan, and $*-es$ ‘causative’ to Proto-Tzeltalan. In addition, though Kaufman (1989) does not provide specific details, it can be noted that Modern Ch’ol does in fact have evidence for this marker (Aulie and Aulie 1998:276–77): *-es*, *-s*, *-tes*. So does Modern Chontal (Keller and Luciano 1997:402): *-es*, *-s*. Finally, Mora-Marín (2006) has recently shown that Proto-Ch’olan can be reconstructed as having a determiner $*ha(‘)in$ ‘the’, based on a grammaticalized use of the Proto-Ch’olan independent pronoun base $*ha’in$ (Kaufman and Norman 1984:139), a pronoun base that was followed by two enclitics: first, the absolutive person agreement marker and then, typically, a deictic enclitic such as $*+e$ ‘relatively far from speaker’ or $*+i$ ‘relatively near to speaker’, also reconstructed by Kaufman and Norman (1984:139) to Proto-Ch’olan. Mora-Marín (2006) also notes that Proto-Western Ch’olan can be reconstructed with the determiner $*hini$ (ultimately from Proto-Ch’olan $*ha’in+i$ ‘the one relatively near’), attested in Ch’ol as *hini* and in Chontal as *ni*, while Proto-Eastern Ch’olan can be reconstructed with the determiner $*haine \sim *ne$ (ultimately from Proto-Ch’olan $*ha’in+e$ ‘the one relatively far’), attested in Ch’olti’ as $\langle haine \rangle \sim \langle ne \rangle \sim \langle e \rangle$ and in Ch’orti’ as $\langle e \rangle$. Thus, this determiner also provides evidence for Ch’olan differentiation, consistent with several of the traits adduced by Kaufman and Norman (1984).

TABLE 3
CH'OLAN MORPHOLOGICAL DIFFERENTIATION

Phonological Traits	Ch'ol	Chontal	Ch'olti'	Ch'orti'
1. *CVhC	CVjC	C'VC	<CV(h)(V)C>	CVjC
2. *h / __V	j	j	<h>	j
3. *CVjVC	CVjVC	CVjVC	<CVhVC>	CV'C
4. *l	l	l	<l>	r
5. *ä	ä, a / __ {#, j}	ä	<a>	a
6. *p' (< **b'>)	p'	p'	<p>	b'

TABLE 4
CH'OLAN PHONOLOGICAL DIFFERENTIATION

Feature	Ch'ol	Chontal	Ch'olti'	Ch'orti'
Morphological				
1. 1s				
a. ERG	<i>k-</i>	<i>ka-/k-</i>	<i>in-/inw-</i>	<i>ni-/niw-/inw-</i>
b. ABS	<i>-on</i>	<i>-on</i>	<i>-en</i>	<i>-en</i>
2. 2p				
a. ERG	<i>la'-</i>	<i>a- . . . la'</i>	<i>i-</i>	<i>i-</i>
b. ABS	<i>-etla</i>	<i>-etla</i>	<i>-ox</i>	<i>ox</i>
3. Passive of derived transitives	<i>-nt</i>	<i>-nt</i>	<i>-na</i>	<i>-na</i>
4. Thematic suffixes of intransitives	No	No	Yes	Yes
5. <i>-es</i> causatives	No	No	Yes	Yes
6. Inchoative suffix	<i>-'an</i>	?	<i>-l</i>	<i>-r</i>
7. *Plain of TV roots	<i>-V_l</i>	<i>-i</i>	<i>-V_l</i>	<i>-i/-e</i>
8. *Preposition	<i>ti</i>	<i>ta/ti</i>	<i>ti</i>	<i>ta</i>

A revised data set is presented in table 5. Further research will likely yield a much larger suite of features, including additional morphosyntactic ones (cf. Mora-Marín 2003a; 2003b; 2004b), which will serve to distinguish between Western Ch'olan and Eastern Ch'olan. Also, future research should be carried out to systematically isolate features that distinguish each of the Ch'olan languages from all the rest.

3. The morphological markers.

3.1. The *-b'u* 'transitivizer of positionals' marker. Houston et al. (2000:331) argue that the suffix *-b'u* 'transitivizer of positionals', which is attested in CLM texts (e.g., '**u-TZ'AK-b'u**'), is an Eastern Ch'olan innovation. The data pertaining to the allomorphs of this marker, and its cognates elsewhere, make up a complex set, and a detailed analysis cannot be undertaken here. For now, there are only a few facts about this marker that are relevant to this paper. This marker has two or three allomorphs in Eastern Ch'olan: Ch'olti' attests to <-bi> ~ <-ba> ~ <-bu>, while Ch'orti' attests only

TABLE 5
REVISED DATA SET FOR CH'OLAN MORPHOLOGICAL DIFFERENTIATION

Feature	Ch'ol	Chontal	Ch'olti'	Ch'orti'
Morphological				
1. 1s				
a. ERG	<i>k-</i>	<i>ka-/k-</i>	<i>in-/inw-</i>	<i>ni-/niw-/inw-</i>
b. ABS	<i>-on</i>	<i>-on</i>	<i>-en</i>	<i>-en</i>
2. 2p				
a. ERG	<i>la'-</i>	<i>a- . . . la'</i>	<i>i-</i>	<i>i-</i>
b. ABS	<i>-etla</i>	<i>-etla</i>	<i>-ox</i>	<i>-ox</i>
3. Passive of derived transitives	<i>-nt</i>	<i>-nt</i>	<i>-na</i>	<i>-na</i>
4. Thematic suffixes of intransitives	No	No	Yes	Yes
5. Inchoative suffix	<i>-'an</i>	?	<i>-l</i>	<i>-r</i>
6. Determiner	<i>jini</i>	<i>ni</i>	<i>ne ~ e</i>	<i>e</i>

to *-b'a ~ -b'u*. Houston et al. (2000:331, table 5) did not find any cognates in Ch'ol or Chontal, but they do reconstruct a Proto-Ch'olan (Common Ch'olan) form **-b'aa* 'transitivizer of positionals' given that the suffix is attested widely in Mayan languages and, therefore its presence as *-b'a* in Eastern Ch'olan indicates that it was inherited by Proto-Ch'olan, after one applies forward reconstruction. Since those authors assume that Proto-Ch'olan retained phonemic vowel length (and in fact that such trait was preserved still in Classic Ch'olti'an), they reconstruct the Proto-Ch'olan form as **b'aa*, from Common Mayan **-b'aa* 'transitivizer of positionals'. Kaufman (1989:D6, 24) reconstructs a Proto-Mayan form **-V₁b'a* 'depositive (to put into X position)', a suffix of positional verbs.⁸ He does not, however, reconstruct a descendant of Proto-Mayan **-V₁b'a* for Proto-Ch'olan-Tzeltalan, Proto-Ch'olan, or Proto-Tzeltalan (1989:D6, 24).

Ch'ol may attest to this suffix in entries like the following: *jexban* (i.e., *jex-ba-n*) 'arrastrar (viga, persona, animal) (to drag (beam, person, animal))' and *xixban* (i.e., *xix-ba-n*) 'adormecer (to make sleepy/drowsy)' (Aulie and Aulie 1998:64, 137). Here, the *-n* marker is the incomplete status marker of derived transitives of Ch'ol.⁹ Based on such examples, a Proto-Ch'olan

⁸ In Mora-Marín (2004a) I propose a Late Proto-Mayan form **-(V₁)b'a' ~ *-(V₁)b'aj* after incorporating the evidence from Itzaj (Hofling and Tesucún 1997), which attests to a reflex *-b'aj*; the final *j* of *-b'aj* is also attested in Q'anjob'al (Montejo and Nicolas Pedro 1996:95), which has two allomorphs: *-b'ay ~ -b'aj*.

⁹ Other possibly related forms are found in Ch'ol (Aulie and Aulie 1998:44, 55–56, 64, 137): *c'ux-bi-n* 'amar; querer (love; want)' (based on *c'ux* 'to eat'), *ch'uj-bi-n* 'obedecer; tomar en cuenta; creer (obey; take into account; believe)', *puj-ba-n* 'rocear líquido con la mano (sprinkle liquid with the hand)'. However, more research is necessary to determine whether the roots involved are positional roots or whether the suffix *-b'a ~ -b'i* 'transitivizer of positionals' became a more general 'transitivizer' in Ch'olan languages.

marker **-b'a* can be proposed from the data present in Ch'olti', Ch'orti', and Ch'ol through simple backward reconstruction and, of course, taking into account the presence of this marker outside of Ch'olan. While I follow Justeson et al. (1985:14) in the suggestion that Pre-Ch'olan did in fact preserve phonemic vowel length, as I discuss further below, I assume here that Proto-Ch'olan lost phonemic vowel length (Kaufman and Norman 1984:85) and therefore reconstruct **-b'a*. And while neither Ch'ol nor Chontal attest to a form *-b'u*, a quick glance at the Tzeltalan data, which I undertook at Søren Wichmann's (personal communication, 2002) urging, could provide some answers regarding the origin of this form.¹⁰ For as it turns out, Tzeltal and Tzotzil attest to a form *-p'u ~ -b'u*, with the general function 'transitivizer of positionals' and a specific meaning of 'depositive', following Kaufman's (1989) definition described above. But first, it is necessary to discuss another form attested in Tzeltal and Tzotzil: *-h- . . . -an*.

Kaufman (1989:D6, 24) reconstructs Proto-Mayan **-h- . . . -a/e* 'portative (to carry in X position)', alongside Proto-Mayan **-V₁b'a* 'depositive (to put into X position)'. He also suggests that Proto-Tzeltalan inherited the former as **-h- . . . -an* 'depositive' but that the latter, which he reconstructs as **-V₁b'a* for Proto-Western Mayan, may have been lost by Proto-Ch'olan-Tzeltalan times. As should be clear from the data presented by Houston et al. (2000) and from the Ch'ol data mentioned above, this was not the case: Proto-Ch'olan-Tzeltalan must have retained this marker. At this point, it is important to point out that Houston et al. (2000:331, table 5) also reconstruct **-h- . . . -an* 'positional transitivizer' to Proto-Tzeltalan (i.e., Common Tzeltal-Tzotzil). However, their definition for this marker is too broad: both the 'portative' and 'depositive' markers distinguished by Kaufman (1989) can function as 'transitivizers of positionals' depending on the context, which means that Houston et al. (2000) may be lumping together two different markers which share a general morphosyntactic function but have distinct meanings. It is possible that a distinction between the two is still maintained in Tzeltalan, which has preserved them both. For example, the following data (from Slocum et al. 1999:120) illustrate the Tzeltalan reflex of Proto-Mayan **-h- . . . -an*, reconstructed by both Kaufman (1989) and Houston et al. (2000):

(1) TZELTAL

La s-te[-h-]c'-a-n s-na te winiqu+e
 CMP 3SERG-stand[DEP]-DEP-TVZR 3SERG-house DEMS man+TOP

'El hombre erigió su casa/The man erected the house (lit., The man put the house in a standing position).'

¹⁰ Ch'ol and Chontal differ in their productive 'transitivizer of positionals'. Ch'ol has *-choko*, which is cognate with Ch'olti' <choqui>, while Chontal has *-tz'a*.

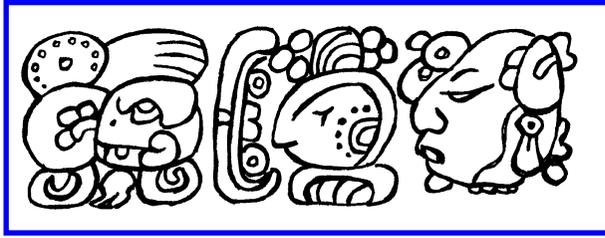


FIG. 3.—Passage from Palenque sarcophagus lid. Drawing by D. F. Mora-Marín after drawing by Linda Schele in the FAMSI archive (<http://research.famsi.org/schele.html>).

(2) TZELTAL

Te[-h-]c'-a-j

Stand[DEP]-DEP-IVZR

‘Se puso en pie/S/he stood on her/his feet (lit., S’he put [herself/himself] in a standing position)’.

These data also demonstrate that the ‘depositive’ marker is really *-h- . . . -a* and is therefore formally unchanged with respect to Kaufman’s (1989) Proto-Mayan **-h- . . . -a/e* ‘portative’. The Tzeltal suffix *-n* is a ‘transitivizer’, while the suffix *-j* is an ‘intransitivizer’. (These are probably cognate with Ch’ol *-n* ‘incompletive status of derived transitives’ and *-(V)j* ‘generic intransitivizer’.) The ‘depositive (to place in X position)’ meaning of the *-h- . . . -a* marker is independent of transitivity, as already mentioned above. Interestingly, the same seems to be the case with the *-b’u* marker attested in CLM texts. Although there are examples where it is clear that it was used with a transitivized stem, as in ‘**u-TZ’AK-b’u(-ji-ya)**, which shows the positional root *tz’ak* ‘to stack/succeed’ preceded by the third-person ergative prefix *u-* used to coreference transitive subjects, there are other examples where the suffix appears in an intransitive stem, as in the passage from the sarcophagus lid at Palenque shown in figure 3.

A transliteration and interpretation of this passage follows:

(3) **PAT-b’u-ya**

pat-b’u[-?iy]-∅

form-DEP[-?PERF]-3SABS

’u-T174-TUN-li

u-?carry/hold=tun-il

3SERG-?carry/hold=stone-POSS

?’IK’(N)(AL)

?k’(-n)(-al)

?wind/air/spirit

‘The carrying-stone of *Ik’(-n)(-al)* has/had been formed’.

TABLE 6
TZELTAL COMPARATIVE DATA PERTINENT TO CH'ORTI' *-b'u* SUFFIX

<i>al-p'u-j-el</i> (VI) 'calmar, disminuir, mitigar' (cf. <i>al</i> (VE) 'estar pesado')
<i>cot-p'i-j-el</i> (VI) 'recibir empujón' (cf. <i>cot</i> (VE) 'estar parado (cuadrúpedo)')
<i>cot-p'i-n-el</i> (VT) 'empujar'
<i>joy-p'i-j-el</i> (VI) 'girar' (cf. <i>joyol</i> (VE) 'estar en un círculo')
<i>joy-p'i-n-el</i> (VT) 'hacer girar'
<i>c'at-p'u-j-el</i> (VI) 'cambiarse, transformarse' (cf. <i>c'atal</i> (VE) 'estar atravezado')
<i>c'at-p'u-n-el</i> (VT) 'alterar, cambiar en, convertir en'
<i>say-p'u-j-el</i> (VI) 'pandear, flaquear' (cf. <i>sayal</i> (VE) 'estar abatido')
<i>say-p'u-n-el</i> (VT) 'hacer pandear, flaquear'
<i>ts'eh-p'u-j-el</i> (VI) 'ladearse' (cf. <i>ts'ehel</i> (VE) 'estar de lado')
<i>ts'eh-p'u-n-el</i> (VI) 'poner de lado'
<i>nij-p'u-j-el</i> (VI) 'caerse de frente' (cf. <i>nijil = jol</i> (VE) 'estar inclinada la cabeza, estar cabizbajo')
<i>nij-p'u-n-el</i> (VT) 'hacer inclinar'
<i>sut-p'i-j-el</i> (VI) 'voltearse' (cf. <i>sutel</i> (VT) 'devolver')
<i>sut-p'i-n-el</i> (VT) 'voltear, girar'

All data from Slocum et al. (1999:6, 19, 24, 59, 84, 116, 133).

Here, the root *pat* 'to form' takes *-b'u*. T126 **ya** is present, probably to spell the perfective status suffix $-([a]j)i(i)y$ proposed by MacLeod (2004). Since derived stems like *pat-b'u* could not take *-h-* '(medio)passivizer', which was relegated to transitive roots only and which would not be represented in the script, this verb must be analyzed as having some kind of intransitivizer which was clearly not fully represented, if at all.

Tzeltal and Tzotzil both have another marker of the shapes $-p'u \sim -p'i$ with a general function as 'transitivizer of positionals'. Its precise meaning is not always clear to me, but in some cases it seems to be 'depositive' (not unlike that of the *-h- . . . -a* marker), as in the following example from Tzeltal (Slocum et al. 1999:133):

(4) TZELTAL

La s-ts'eh-p'u-n-∅ hilel
CMP 3SERG-sidle-DEP-TVZR-3SABS remain

'Lo puso de lado (lit., S/he put it on its side).'

(5) TZELTAL

ts'eh-p'u-j-∅
sidle-DEP-IVZR-3SABS

'Se puso de lado (lit., S/he/it put her/him/itself on her/his/its side).'

Just like the depositive *-h- . . . -a*, the suffix *-p'u* (and its allomorph *-p'i*) also takes *-n* to form a transitive stem or *-j* to form an intransitive stem; therefore, *p'u* is not a transitivizer but simply a 'depositive'. The data from Tzeltal and Tzotzil in tables 6 and 7 provide evidence for these $-p'u \sim -p'i$ forms.

TABLE 7
TZOTZIL COMPARATIVE DATA PERTINENT TO CH'ORTI' *-b'u* SUFFIX

<i>jel-p'u-n</i> (TV) 'toss arms of one's shirt over one's shoulders' (cf. <i>jel</i> (TV) 'atajar pasando adelante; pasar sin topar; privar, quitar de oficio, privar a otro')
<i>tz'ot-p'i-j</i> (VI) 'become twisted, twist' (cf. <i>tz'ot</i> (TV) 'turn (candle, stick), twist, twist between fingers')
<i>tz'ot-p'i-n</i> (VT) 'make rebound, straighten, twist'
<i>sut-p'i-j</i> (VI) 'be converted or transformed, turn around' (cf. <i>sut</i> (IV) 'return')
<i>sut-p'i-n</i> (VT) 'comment, explain'
<i>nij-p'u-j</i> (VI) 'stray off the line or path'
<i>nij-p'u-n</i> (<i>yalel</i>) (VT) 'push down head first' (Aissen 1987:88)
<i>joy-p'i-j-el</i> (San Andrés) ~ <i>joy-bi-jel</i> (Cham., Ch'en.) (VI) 'dar unz vuelta'
<i>joy-p'i-n</i> (San Andrés) ~ <i>joy-bi-n</i> (Cham., Ch'en.) (VT) 'hacer dar vueltas' (cf. <i>joyel</i> 'rodear, cercar')
<i>ts'e-p'u-j</i> (VI) 'se pone de lado'
<i>ts'e-p'u-n</i> (San Andrés) ~ <i>ts'e-bu-n</i> (Cham., Ch'en) (VT) 'lo pone de lado, lo ladea' (cf. <i>ts'eel</i> 'estar de lado')

Data from Hurley and Ruíz Sánchez (1978:68, 91, 209, 210) and Laughlin and Haviland (1988:108-9, 181, 272, 299-300).

There are several facts that must be discussed here. As is clear from the data in table 7, Tzotzil exhibits dialectal variation. The Chamula and Chenalho dialects typically show *b'* where the San Andrés dialect shows *p'*. This is important because almost all instances of /*p'*/ in Ch'olan-Tzeltalan are the result of the split of Proto-Mayan **b'* into *b'* and *p'* in Proto-Ch'olan-Tzeltalan (Kaufman and Norman 1984:86); thus, the markers *-p'u* ~ *-p'i* are certainly cognate with Eastern Ch'olan *-b'u* and *-b'i*, specifically, and more generally with Proto-Ch'olan **-b'a*, given not only their form but their function as transitive markers of positionals.¹¹ Wichmann (personal communication, 2002) first brought these Tzeltalan markers to my attention in relation to the *-b'u* marker of Classic Lowland Mayan texts. Following up on this insight, I proceeded to systematically search for their uses in Tzeltalan and to check for

¹¹ Two of the Tzotzil dialects still show *b'* in fact, and it is possible that they represent a case of conservatism, meaning that they may have preserved *b'* in all instances of Proto-Mayan **b'* or that they may have inherited the split of **b'* into *b'* and *p'* but subsequently experienced a merger back to *b'*. Regarding Ch'olan, and even though Wichmann (2006:52-53) states that "Kaufman and Norman do not explicitly say that [their proposed Proto-Ch'olan **b':*p'*] contrast was lost in Ch'orti'," the fact is that those authors do say so: "Minor sound changes that have occurred since the diversification of the Ch'olan languages include the merger of /*p'*/ and /*b'*/ in Ch'orti', and the merger of /*a*/ and /*ä*/ in Eastern Ch'olan." However, I do agree with Wichmann (2006) in his characterization of conditions under which the split of **b'* into /*b'*/ and /*p'*/ took place, and also in his suggestion that the change did not originate in Ch'olan or Tzeltalan, but in Yucatecan, where the change has progressed the farthest. I also support his suggestion that the change reached Tzeltalan last and would add to this contention, as evidence, the data cited in this paper for the optionality between *b'* and *p'* in the Tzotzil suffixes *-b'u* ~ *-p'u* and *-b'i* ~ *-p'i*. I believe that Wichmann's proposal that the change did not reach Ch'orti' is possible too: if so, then the areal spread of this change excluded Ch'orti', but as Wichmann also

their presence in Tzotzil. The preliminary evidence presented here suggests that Wichmann's insight is on the right track and supports a Proto-Ch'olan-Tzeltalan reconstruction of **-b'a ~ *-b'u ~ *-b'i* 'depositive' (such meaning is attested in Tzeltal, and it would be a retention from Proto-Mayan).¹²

Based on the above discussion, we can conclude that the marker *-b'u* of CLM texts cannot be used as evidence for a Pre-Eastern Ch'olan basis for the standard language because it most likely was a retention of Proto-Ch'olan-Tzeltalan **-b'a ~ *-b'u ~ *-b'i* 'depositive'. Moreover, this comparative exercise has revealed that Mayan texts are likely to contain evidence for both **-b'a* and **-b'i* allomorphs of **-b'u*; although there are possible cases of **-b'a* in the inscriptions, to my knowledge no cases of **-b'i* have been identified so far.¹³ It is worth emphasizing that just as the Tzeltalan *-p'u ~ -p'i* markers are not actually transitivizers, but require *-n* to transitivize and *-j* to intransitivize, the same may have been the case in Mayan texts; this is clearly a matter for future study. For now I propose that the *-b'u* suffix be defined as 'depositive', rather than as 'transitivizer of positionals', based on the Tzeltal evidence and the epigraphic example just described.

3.2. The *-h- . . . -aj* 'passivizer' marker. The *-h- . . . -aj* 'passivizer' marker proposed by Houston et al. (2000:330) is not well supported. First of all, preconsonantal *h* was not represented in the script, in spite of recent claims to the contrary (Houston et al. 1998; 2000). This was shown almost two decades ago by Justeson (1989) and more recently by Lacadena and Wichmann (2004). Thus, any claim of an infix *-h-* marker would rest on a hypothetical and in fact questionable orthographic practice.

A spelling such as that in figure 4a, which shows the verb **CHOK-(k)a-j(a)**, cannot be proven to be *cho[-h-]k-aj-∅-∅* throw.down[-PASS]-PASS-CMP-3SABS 'it is/was thrown down', because it could be simply *chok-aj-∅-∅* throw.down-PASS-CMP-3SABS 'it is/was thrown down' instead. The only type of spelling that could support a transitive root passivized with *-h-* would be one where a transitive root is spelled in such a way as to suggest it is intransitivized with

notes, it would have included Ch'olti'. If it indeed included Ch'olti', then this could be a characteristic that would contradict Houston et al.'s (2000) hypothesis of Ch'olti' as the parent, rather than sibling, language of Ch'orti', as Wichmann (2006:53) concludes. I also believe Wichmann's proposed Terminal Classic-to-Early Postclassic dating for the spread of the /b'/:p'/ contrast is plausible.

¹² Further discussion of these markers, focusing on their precise phonological contexts in the modern Ch'olan and Tzeltalan languages, and the reconstruction of their distribution in Proto-Ch'olan-Tzeltalan times, cannot be carried out in this paper, but I have elaborated on it in Mora-Marín (2004b); however, I consider my current understanding of this problem as still in flux.

¹³ There may be an example of *-b'a* 'transitivizer of positional' in the spelling T174:643 **'u- b'a(-li)**, which appears to be a nominalization, rather than a finite transitive form (e.g., at least two Palenque Temple of the Cross incense burners). In addition, the precise reading and meaning of T174:643 is under review to this day among epigraphers.

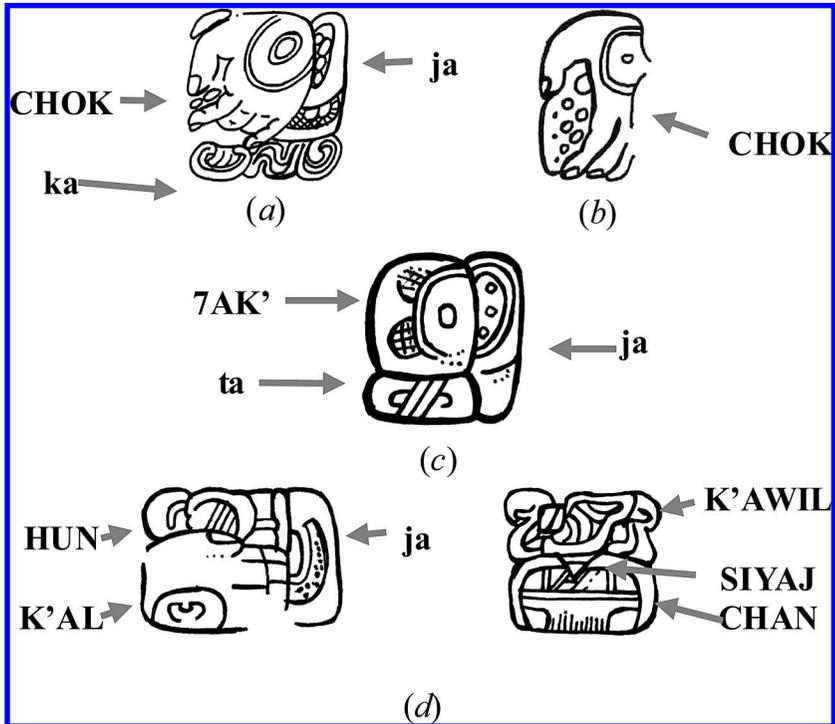


FIG. 4.—Different types of verbs with and without *-aj* suffix. (a) Glyph block at B4 on unprovenienced panel. Drawing by D. F. Mora-Marín after drawing by William Ringle in Bricker (1986:146). (b) Glyph block from Naranjo Stela 23. Drawing by D. F. Mora-Marín after drawing from the Corpus of Maya Hieroglyphic Inscriptions. (c) Glyph from Dos Pilas Stela 15. Drawing D. F. Mora-Marín after drawing by Stephen Houston. (d) Glyphs from Tikal Stela 31. Drawing by D. F. Mora-Marín after drawing by Linda Schele in the FAMSI archive (<http://research.famsi.org/schele.html>).

no apparent intransitivizing suffix. The spelling in figure 4b, which shows the spelling **CHOK**, must be an intransitized form of *chok* 'to throw down'. Yet it lacks evidence for an *-aj* suffix like the spelling in figure 4a, **CHOK-(k)a-j(a)**, does. In fact, it bears no explicit morphological marking of any sort. It is more likely that this is a spelling of *cho[h]k-∅-∅* 'throw.down[mediopassive]-PL.IV-3SABS 'it gets/got thrown.down'.¹⁴ This is not the only example.

¹⁴ Kaufman (1989) has proposed that Proto-Mayan *[-i(k/h)] 'plain status of root intransitives' was optional or, more precisely, used in some contexts (phrase/clause-finally) and not others (when not phrase/clause-final). Perhaps it was omitted in this example. To my knowledge the *-aj* intransitivizing suffix has not been shown to be optional in the modern Mayan languages that use it. I think it is more likely that the suffix this verb was supposed to take was simply underspelled, whether it was *-i* or *-aj*.

The very common spelling **7u-ti** also represents a mediopassivized inflection of *ut* ‘to finish’, rendering *u[-h-]t-i-∅-∅* finish-[MPASS]-CMP-3SABS ‘it got finished; it happened’. It demonstrates that *-h-* need not be accompanied by a suffix *-aj*. Thus, there is no need to propose a discontinuous affix *-h- . . . -aj* ‘passivizer’, since it is possible to show that the two were used separately.

Moreover, the suffix *-aj* had a variety of functions in CLM texts. Lacadena (2004) has shown that this suffix was used to derive intransitive verbs from active nouns (e.g., **ahk’ot* ‘dancing’, **tz’ihb* ‘writing’). Figure 4c shows the spelling **AHK’OT-ta-j(a)** for *ahk’[o]t-aj-∅-∅* dancing-IVZR-PL.IV-3SABS ‘s/he dances/danced’. Also, there is evidence that *-aj* also functioned as an antipassivizer (Mora-Marín 1998; 2004b and Vail 2000a; 2000b). Figure 4d shows the spelling **K’AL-ja-HUN SIJYAJ-CHAN-K’AWIL** for *k’al-aj-∅-∅=hun sihjyaj chan k’awil* wrap-IVZR-PL.IV-3SABS=paper(headband) born sky *k’awil* ‘Sky-borne K’awil headband-wraps/wrapped’. In this passage, the verb is a transitive root, *k’al* ‘to wrap’, but it is intransitivized. At the same time, however, it is followed by two nominal phrases: **HUN** for *hun* ‘paper (headband)’ and **SIJYAJ-CHAN-K’AWIL** for *Sihjyaj Chan K’awil*, the name of a lord from Tikal. Only one of these can be an argument of this intransitivized verb: *Sihjyaj Chan K’awil*, the human protagonist of the text. The remaining noun is generic and immediately follows the verb; consequently, it is very likely incorporated into the verb complex (Mora-Marín 1998 and Lacadena 2000). The most parsimonious analysis for the apparent *-aj* suffix of this text is as an antipassivizer. This demonstrates that the *-aj* suffix was a separate affix when used on a root transitive verb, in this case *k’al* ‘to wrap’: it is not possible to analyze **K’AL-ja** as a passive or mediopassive form in the above example, whether *k’a[-h-]l-aj* or *k’al-aj*. The only possible analysis is as an antipassive, and such analysis does not allow the presence of an *-h-* ‘(medio)passivizer’ infix.¹⁵

The reflex of this marker in modern Ch’ol (*-ij ~ -uj*) is in fact used as an intransitivizer of root transitives with antipassive (i.e., agent-focused) meaning, as in the following example:

(6) CH’OL (Aulie and Aulie 1998:20)

<i>Woli</i>	<i>ti</i>	<i>cuch-ij-el</i>		<i>come</i>	<i>ma’anic</i>
PROGR	PREP	carry-IVZR/APASS-NMLZR/INC		because	NEG
		<i>i-mula</i>			
		3SERG-mule			

‘Está cargando (en la espalda) porque no tiene mula (S/he is carrying (something) on his back) because s/he has no mule’.

¹⁵ However, one may find in dedicatory texts uses of the verb **K’AL(-la)-ja**, for example, as a passive or mediopassive, followed by a single argument that refers to an inanimate object, such as a pottery vase. In these contexts an antipassive analysis is not productive and therefore *-aj* must be some sort of generic intransitivizer, as Kaufman and Norman (1984) have proposed.

TABLE 8
CH'ORTI' USES OF *-a* < *-a(j)* ON A VARIETY OF INTRANSITIVES

Verb	Gloss
(a) <i>akt-a</i>	dance-IVZR 'to dance'
(b) <i>xan-a</i>	thatch/walk-IVZR 'to walk'
(c) <i>k'ech-p-a</i>	guide-PASS-IVZR 'to be led'
(d) <i>k'ech-m-a</i> ¹	guide-APASS-IVZR 'to lead'

¹This suffix is generally assumed by linguists to be simply *-ma*; however, given the parallels in these data, it seems plausible that it originated in *-m-a(j)*, though further analysis is necessary to test this.

Data from Pérez Martínez (1996a:31; 1996b:11, 112, 256).

Consequently, the *-aj* suffix was some sort of generic intransitivizer. Kaufman (1989:B155, C30) has proposed a Proto-Mayan **-aj* 'mediopassivizer of derived transitives' which would be the source of the suffix that Kaufman and Norman (1984:109) reconstruct as **-aj* 'intransitivizer' in Proto-Ch'olan-Tzeltalan. Houston et al. (2000:330, n. 11) do not carefully evaluate this proposal but simply state the following: "Kaufman and Norman (1984:109) propose that an *-aj* intransitivizer was suffixed to the root transitive passive *CV-h-C* to form the bipartite *-h- . . . -aj* in Ch'olti'an. We do not of course believe this, but it is a possible etymology for the intransitive positional that we reconstruct from Common-Wasteko-Ch'olan."

For instance, the evidence from Ch'olti' and Ch'orti', where *-a(j)* was used on derived intransitives of different types, to the extent that in these languages the suffix *-a* is redefined as a thematic vowel of derived intransitives, whether passives or antipassives, suggests that such marker was based in fact on a separate suffix *-aj* 'generic intransitivizer', shown in table 8.

The fact that Ch'orti' uses *-a* (cf. Ch'olti' <-a> ~ <-aj>) as a suffix of derived intransitives (actions, motion, passives, antipassives) strongly supports Kaufman and Norman's (1984) analysis and demonstrates that *-a(j)* is a suffix in its own right, independent of *-h-*, an ancestral trait (Proto-Mayan, Proto-Ch'olan) that is reflected as such in CLM texts. Furthermore, this function of *-a(j)* in Eastern Ch'olan as a "thematic [stem-forming] vowel of root or derived intransitives" is reconstructible to Proto-Eastern-Ch'olan (Kaufman and Norman 1984). Given that CLM texts do exhibit *-aj* as an 'intransitivizer', any Eastern Ch'olan language claimed to be particularly reflective of the Classic Mayan pattern in this regard would have to be a Pre-Eastern Ch'olan language that preceded the semantic and functional shift of ***-aj* 'intransitivizer' > **-a(j)* 'thematic vowel of intransitives'. But since this earlier meaning and function of *-aj* is the same as for Proto-Ch'olan and, in fact, the same as for Proto-Ch'olan-Tzeltalan, there is no good reason to use this suffix as evidence for an Eastern Ch'olan affiliation.

3.3. The $-V_{JY}$ ‘mediopassivizer’ marker. Houston et al. (2000) use a third reconstructed marker in support of the CCH: $*-V_{JY}$ ‘mediopassivizer’. They propose this marker has experienced a complex history of not only phonological shift, from Common Mayan $*-er$, but also semantic shift, from Common Mayan ‘intransitive positional’—reconstructions that I agree with, although as I explain below, ‘intransitive positional’ is not a sufficiently specific definition. And more importantly, those authors propose that it is the semantic shift, not the phonological shift per se, that they argue to be exclusive to Eastern Ch’olan (Ch’olti’, Ch’orti’). Although the authors do not seem to explicitly say so, they do not claim that the form of the suffix as $-V_{JY}$ is itself an innovation of Eastern Ch’olan. And in fact, they provide the Tzeltalan form $*-V_{JY}$ ‘intransitive positional’ < Common Mayan $*-er$. Thus, based on the Eastern Ch’olan suffix $*-V_{JY}$ and the Tzeltalan suffix $*-V_{JY}$ one can propose a Proto-Ch’olan-Tzeltalan suffix $*-V_{JY}$.¹⁶ Houston et al. (2000:332, figure 4) even reconstruct such a marker to Common Wasteko-Ch’olan, a subgroup that would include Huastecan, Tzeltalan, and Ch’olan. Here I assume Kaufman’s (1976; 1989; 1990) model, in which Huastecan was the first subgroup to break off from Proto-Mayan and is therefore not closely related to Ch’olan-Tzeltalan, which is more closely related to Greater Q’anjob’alan and, in fact, to Eastern Mayan (Greater K’iche’an, Greater Mamean) and to Yucatecan than to Huastecan.¹⁷ But the fact is that the form $*-V_{JY}$ can be reconstructed to the common ancestor of both Ch’olan and Tzeltalan in both Robertson’s (1992; 1998) and Kaufman’s (1976; 1989; 1990) models. Kaufman (1989), for his part, reconstructs this suffix to Proto-Ch’olan-Tzeltalan as $*-V_{JY} \sim *-ey$ ‘versive (to begin to become X)’. Thus, I focus here on the history of change in function and meaning of this suffix in Ch’olan-Tzeltalan although, as I show, the form of the suffix was not synchronically or diachronically uniform.

Houston et al. (2000:330–33, figure 4) trace the $-V_{JY}$ marker of CLM texts and Eastern Ch’olan back to Common Mayan (Proto-Mayan in Kaufman’s terms) $*-er$ ‘intransitivizer of positionals’, based on the regular sound change of $*r > y$ “in Wasteko-Ch’olan.” Subsequently, they continue, the synharmonic vowel of the descendant of Common Mayan $*-V_{Jl}$ ‘adjectival of positionals’ exerted analogical influence on the vowel of the descendant of

¹⁶ Dayley (1985:122–23) notes the presence of a set of ‘inchoative intransitivizer’ allomorphs of the forms $-ar$, $-ir$, $-or$, $-ur$, and $-r$ in Tz’utujil. Given that Ch’olan-Tzeltalan underwent a shift of Proto-Mayan $*r > y$, these forms could easily be cognate with the marker under present discussion, $*V_{JY}$, a matter that requires further investigation. K’iche’ also exhibits a similar, likely cognate, marker: $-ar$, $-ir$ ‘inchoative’ (López Ixcoy 1994:103).

¹⁷ The Huastecan sound change was independent (Kaufman 1989:D143–44), and in fact there is no evidence from phonological shifts to support the inclusion of Huastecan as part of a phylogenetic subgroup with Ch’olan-Tzeltalan.

Common Mayan **-er* 'intransitivizer of positionals', resulting in the following sequence of events: **-er* > **-ey* > **-V_{IY}*. The authors further argue that this marker was present in Common Wasteko-Ch'olan as **-V_{IY}* 'intransitivizer of positionals', alongside **-h- . . . -aj* with the same function and meaning. This situation was preserved in Common Ch'olan, while Common Tzeltal-Tzotzil retained **-V_{IY}* in Tzendal (Colonial Tzeltal) as 'intransitivizer of positionals', also alongside **-h- . . . -aj*, which pushed **-V_{IY}* out of this slot by the time we get to Tzeltal, which according to these authors uses only the descendant of **-h- . . . -aj*. After the split of Common Ch'olan the authors propose a shift of **-V_{IY}* 'intransitivizer of positionals' to 'passivizer' during Preclassic Ch'olti'an times and later to 'mediopassive' during Classic Ch'olti'an times. During Classic Ch'olti'an times, they continue, the suffix **-V_{IY}* was applied to verbs of motion (e.g., *lok'-oy* 'go out', *jub'-uy* 'come down', *t'ab'-ay* 'rise') and later, in Ch'olti' and Ch'orti', the marker was applied also to verbs of change-of-state (e.g., *cham-ay* 'die').

I agree with much of what Houston et al. (2000) propose as the history of this marker; but I also analyze things a bit differently. First, as already explained, I assume that Huastecan and Ch'olan-Tzeltalan are not closely related. Thus, I would agree with Houston et al. (2000) that the common ancestor of Ch'olan and Tzeltalan (not including Huastecan) had the suffixes **-V_{IY}* and **-h- . . . -aj*, both with intransitivizing functions, including the intransitivization of positional roots; as I discuss in more detail below. Second, while I would agree with both **-V_{IY}* and **-h- . . . -aj* or, more precisely, **-V_{IY}* and **-h- . . . -aj* (see discussion above of the meaning and function of **-h- . . . -a*) as the reconstructed forms, and that they had a function in common as 'intransitivizers', it is clearly not the case that they had the same meaning, as I shall show here, and thus they were not necessarily in competition from the outset. Kaufman (1989) does agree in part with the scenario for the marker in question: he proposes that Proto-Mayan **-er* was the source for Proto-Ch'olan-Tzeltalan **-ey* ~ **-V_{IY}* 'versive'. However, Kaufman defines **-er* as a 'versive (to begin to become X)' suffix, as far as its meaning is concerned. As I show below, this marker may in fact survive in Ch'ol with something close to the meaning 'versive' or 'inchoative (to become X)'. Kaufman (1989) also argues that **-ey* became the *-e(y)* 'passivizer' of Tzotzil, while **-V_{IY}* became the *-V_{IY}* 'intransitivizer (ingressive)' of Tzeltal, where it occurs nonproductively, as Kaufman (1971:59) had observed earlier, with a positional root (*tz'äk-ay* 'to be completed' from *tz'äk* 'to fix'), an intransitive root (*tzütz-uy* 'to come to an end' from *tzütz* 'to end'), and an adjectival root (*hòw-iy* 'to go crazy' from *hòw* 'crazy').¹⁸ Houston et al. (2000) provide evidence for the use of *-V_{IY}* as an 'intransitivizer of positionals' in

¹⁸ Kaufman (1971) uses *c* for *tz*, which has since become the standard grapheme for [ts].

Tzendal (Colonial Tzeltal), citing forms like the following: *chub-uy* ‘to sit down’ from *chub-ul* ‘sitting’, *chot-oy* ‘to squat’ from *chot-ol* ‘squatting’. This evidence from Tzendal and Tzeltal suggests that $-V_{IY}$ was used with a variety of roots, including positionals, adjectives, and intransitives, at least.

Third, and recalling Kaufman’s (1989) reconstruction of $*-h- . . . -a/e$ as ‘portative’ in Proto-Mayan, we can say that in Tzeltalan this suffix did not have a transitivity or intransitivity function on its own, but by the suffixes $-(V)n$ and $-(V)j$, respectively, which immediately follow the affix $-h- . . . -a$, as already discussed. And once again, Kaufman reconstructs the two markers with different meanings in Proto-Ch’olan-Tzeltalan: $*-h- . . . -a$ ‘portative’ and $*-ey \sim *-V_{IY}$ ‘versive’. The meaning ‘versive’ is consistent with the use of such a marker with a variety of different roots (e.g., positional, adjectival, intransitive), and it is consistent too with its uses in Ch’ol, as I discuss below. In Kaufman’s view, then, these markers may not have been in competition at all; while both may have been used with positionals, they conveyed different meanings and, furthermore, versives can be applied to a variety of roots, such as adjectives, nouns, transitives, intransitives. Consequently, Houston et al. (2000) seem once again to be lumping together two different meanings—this time the meanings ‘portative’ and ‘versive’—and defining them simply as ‘intransitivity of positionals’. While this function is an accurate description of the ‘versive’ suffix, which does intransitivize, it is an incomplete definition for that suffix, since such suffix applied to other types of roots besides positionals. But in any case, such function is an inaccurate description of the ‘portative’ suffix, since that suffix requires either $-(V)n$ or $-(V)j$ to be transitivity or intransitivity, respectively, in modern Tzeltal; since Kaufman reconstructs the suffix as $*-h- . . . -a/e$ to Proto-Mayan, it is likely that it descended as $*-h- . . . -a$ into Proto-Ch’olan-Tzeltalan, given that Modern Tzeltal has $-h- . . . -a$.

Fourth, and more importantly for the present purposes, the Proto-Ch’olan definition and functions of this marker may have been rather different from what Houston et al. (2000) reconstruct to Common Ch’olan—more in line with what is observed in the CLM texts. We already know that Proto-Ch’olan must have inherited the form $*-V_{IY}$. The question then lies in its function during the Classic period. The Colonial and Modern Tzeltal evidence suggests that this suffix was used with transitive, intransitive, positional, and adjectival roots in Proto-Tzeltal. This is consistent with a ‘versive’ interpretation. Is there evidence for such an interpretation in Ch’olan? Interestingly, Ch’ol, in addition to Ch’olti’ and Ch’orti’, also attests to the use of this marker, as shown in tables 9–12 with a variety of roots and stems.

A few remarks on the shapes of these suffixes are in order. In Ch’olti’, the suffix exhibits the form $\langle -V_{IY} \rangle$, while in Ch’orti’ it exhibits two allomorphs, $-V_{IY}$ and $-ay$: the $-ay$ allomorph occurs after a stem that ends in two conso-

TABLE 9
EVIDENCE FOR $-V_{IY} \sim V_y$ SUFFIX IN CH’OLAN LANGUAGES WITH MOTION WORDS

Distribution	Form of Suffix	Linguistic and Epigraphic Data
Motion	$-V_{IY}$ ($\sim -V_y$)	CH’OLTI’ <och-oi> ‘enter’, <loc-oi> ‘go out’ CH’ORTI’ <i>lok’-oy</i> ‘go out’, <i>t’ab’-ay</i> ‘to up’, <i>ekm-ay</i> ‘go down’ CH’OL <i>yajl-iy-on</i> ‘I fell’ (Schumann 1973:26), <i>ch’oj-iy-el</i> ‘levantarse (to get up)’ (Aulie and Aulie 1998:55) CLASSIC MAYAN LOK’-yi probably for <i>lok’-oy-i</i> (* <i>lok’</i> ‘go/come out’, v1), ?T’AB’-yi possibly for <i>t’ab’-ay-i</i> (* <i>t’äb’</i> ‘rise’, v1), ko-jo-yi possibly for <i>koj-oy-i</i> (<i>kaj</i> ‘go down(?)’, v1), ju-b’u-yi probably for <i>jub’-uy-i</i> (Ch’ol <i>jub’-el</i> ‘descend’, v1)

Unless stated otherwise, the sources for some of the data are compiled from Kaufman and Norman (1984) and Houston et al. (2000); Proto-Ch’olan reconstructions are taken from Kaufman and Norman (1984). The following symbols are used: IV ‘intransitive root’, P ‘positional root’, TV ‘transitive root’.

nants. In Ch’ol, the marker exhibits at least two allomorphs, $-äy$ and $-iy$. The former, $-äy$, is generally found after stems with a or $ä$ vowels (*wäy-äy-on*, *nyaj-äy-i*, *chäm-el-ay-el*), with few exceptions (*yäs-iy-el*, *colem-äy-el*), and is probably an assimilatory allomorph since it is generally not found with roots that have vowels other than a or $ä$, while the latter, $-iy$, is found in other contexts (not after roots with $ä$, except for *yäs-iy-el*). Pending further research necessary to test this idea, I note that it is possible that Ch’ol $-äy$ and $-iy$ may be reflexes of Proto-Ch’olan-Tzeltalan $*-V_{IY} \sim *-ey$, respectively. Once Ch’ol diverged from Chontal, it is possible that an originally productive set of allomorphs exhibiting vowel harmony with the vowel of the root became more and more restricted, until the only vowel harmony found was between root vowel $ä$ and $-äy$, which may have become relegated in Ch’ol to roots with vowels a or $ä$ primarily. The nonassimilatory allomorphs attested in Ch’orti’ ($-ay$) and Ch’ol ($-iy$) suggest that Proto-Ch’olan may have inherited a nonassimilatory allomorph, $*-V_y$, from Proto-Ch’olan-Tzeltalan $*-ey$, in addition to the assimilatory allomorph, $*-V_{IY}$, from Proto-Ch’olan-Tzeltalan $*-V_{IY}$. CLM texts do in fact attest to nonassimilatory forms, such as the allomorphs $-ay$, e.g., **ku-xa-yi** on potter vessel K1222 in Justin Kerr’s Maya vases archive at www.famsi.org, possibly based on the positional root $*kux$ ‘vivo (alive)’, for *kux-ay-i* ‘s/he/it became alive’, and $-iy$, e.g., **’u-k’i-yi** on two Early Classic carved plates, possibly based on $*uk’$ ‘llorar (to

TABLE 10
EVIDENCE FOR $-V_{IY} \sim V_Y$ SUFFIX IN CH'OLAN LANGUAGES WITH CHANGE-OF-STATE WORDS

Change-of-State	$-V_{IY}$ ($\sim -V_Y$)	CH'OLTI'
		<van-ai> 'to sleep', <cham-ai> 'to die'
		CH'OL
		<i>yäs-iy-el</i> 'descomponerse (come/fall apart, break down)' (Aulie and Aulie 1998:145), <i>wäy-äy-on</i> 'I have already slept' (Schumann 1973:26), <i>nyaj-äy-el</i> 'olvidarse (to forget)' \sim <i>nyaj-äy-i</i> 'se le olvidó (he forgot)' \sim <i>nyaj-äy-em</i> 'olvidado (forgotten)' (Aulie and Aulie 1998:85), <i>chäm-el-ay-el</i> 'estar a punto de morir (be about to die)' (Aulie and Aulie 1998:52), <i>ch'och'oqu-iy-el</i> 'hacerse más pequeño (become smaller)' (cf. <i>ch'o'ch'oc</i> 'chiquito (tiny, small)') (Aulie and Aulie 1998:55), <i>colem-äy-el</i> 'criarse (to be raised, to grow up)' (cf. <i>colem</i> 'grande (big)') (Aulie and Aulie 1998:37)
		CLASSIC MAYAN
		na-ja-yi probably for <i>naj-ay-i</i> (<i>*naj</i> 'to forget', VI or <i>*naj</i> 'full', AJ), wo-lo-yi probably for <i>wol-oy-i</i> (<i>*wol</i> 'spherical', P), u-k'i-yi possibly for <i>uk'-iy-i</i> (??), ku-xa-yi possibly for <i>kux-ay-i</i> (<i>*kux</i> 'alive', P)

weep)', but perhaps instead on a Yucatecan cognate of Proto-Ch'olan **uch* 'to drink'.¹⁹ In the case of Ch'orti', the assimilation rule was probably blocked by two intervening consonants between the vowel of the root and that of the suffix (Kaufman and Norman 1984:103). It is unclear at this time what the blocking conditions might be with Ch'ol *-iy*: some examples do show two intervening consonants, but not all, and thus it seems to be the default form, although none of the examples with *-äy* show two preceding consonants between the suffix and the root vowel, which could suggest that

¹⁹ While Hruby and Robertson (2001) trace the history of the suffix $-V_{IY}$ in CLM texts, they assume that the suffix always had this shape. Nevertheless, there are no explicit phonetic spellings of this suffix until A.D. 595 (**ju-b'u-yi**, Pusilha Stela D) and A.D. 603 (**ju-b'u-yi**, Bonampak Lintel 3). Prior to this time, almost all spellings, to my knowledge, are logosyllabic (e.g., **TZUTZ-yi**, **STAR-yi**), and therefore, it is unclear whether the suffix in question was $-V_Y$ (nonassimilatory) or $-V_{IY}$ (assimilatory). In fact, the only purely phonetic spelling of such a verb during the Early Classic period, to my knowledge, is the case of **'u-k'i-yi**, which suggests a suffix *-iy* was used; there are no spellings of this verb form in the Late Classic period, however. In the Late Classic period, moreover, one finds a text on a ceramic pot with the verb **ku-xa-yi**, seemingly showing a suffix *-ay* after a root *kux* (cf. *kux* 'alive', positional). The meaning implied in this case might be 's/he/it became alive', suggesting a 'versive' or 'inchoative' meaning for the suffix.

TABLE 11
EVIDENCE FOR $-V_{JY} \sim V_y$ SUFFIX IN CH’OLAN LANGUAGES WITH TRANSITIVE ROOTS

Transitive Roots	$-V_{JY} (\sim -Vy)$	CLASSIC MAYAN
		ja-tz’a-yi probably for <i>jätz’-ay-I</i> (*jätz’ ‘to strike’, VT), pu-lu-yi probably for <i>pul-ay-I</i> (*pul’ ‘to burn’, VT/IV), sa-ta-yi probably for <i>sat-ay-I</i> (*sät’ ‘to lose’, VT), tzu-tzu-yi probably for <i>tzutz-uy-I</i> (*tzutz’ ‘to finish(?)’, VT; no Ch’olan language today attests to its meaning in CLM texts)

TABLE 12
EVIDENCE FOR $-V_{JY} \sim V_y$ SUFFIX IN
EASTERN CH’OLAN LANGUAGES AS STATUS MARKER

Status Marker	$-V_{JY} (\sim -Vy)$	CH’OLTI’
		<van-ai> vs. <van-el>, <och-oi> vs. <och-el> (i.e., < $-V_{JY}$ > ‘completive’ vs. <-el> ‘incompletive’)
		CH’ORTI’ <i>num-uy</i> ‘pass’ vs. <i>num-en</i> ‘pass!’, <i>ekm-ay</i> ‘go down’ vs. <i>ekm-en</i> ‘go down!’ (i.e., $-V_{JY}$ ‘completive’ vs. <i>-en</i> ‘imperative’)

-iy in fact started out as the allomorph following two consonants and was extended subsequently to other contexts, probably encroaching on the other possible values of $-V_{JY}$, except *-äy*. Similarly, in the case of the examples attested in CLM texts, it is unclear what the conditions for the nonassimilatory allomorphs *-ay* and *-iy* may be. Curiously, these nonassimilatory forms in CLM texts correspond to the nonassimilatory forms in Ch’orti’ (i.e., *-ay*) and Ch’ol (i.e., *-iy*). This may not be coincidental, and one can only hope that a pattern will emerge with the description of more nonassimilatory forms in the ancient texts.

It is time to discuss the function—not just meanings—of these suffixes. The *nyaj-äy* case in Ch’ol is especially instructive since Aulie and Aulie (1998:85) provide examples with *-el*, *-i*, and *-em* status markers following the suffix *-äy*. This shows that the marker in Ch’ol matches the use of the $-V_{JY}$ marker in CLM texts, where $-V_{JY}$ was followed by *-i* ‘plain/completive status of intransitives’ (e.g., **na-ja-yi**, probably for *naj-ay-i-Ø* forget/fill-?VRS-CMP-3SABS ‘it became filled/forgotten’). Also, in Ch’ol, this suffix can be interpreted in many instances as ‘versive (to begin to become X)’ (*chäm-el-äy-el* ‘estar a punto de morir (be about to die)’ or ‘inchoative (to become X)’ (*ch’och’oqu-iy-el* ‘hacerse más pequeño (become smaller)’ and can be used with a variety of root and stem types, just like in Colonial Tzeltal and Modern Tzeltal: intransitive stems (e.g., *chäm-el-äy-el* ‘be about to die’,

wäy-äy-on ‘I have already slept’) and adjectival stems (e.g., *ch’och’oqu-iy-el* ‘hacerse más pequeño (become smaller)’). I suspect it may be found with transitive and positional roots and stems as well, but this requires further research. Just like Ch’orti’ and Ch’olti’, as well as CLM texts, in Ch’ol this suffix may occur with change-of-state verbs (*chäm-el-äy-el* ‘be about to die’, *yäs-iy-el* ‘descomponerse (come/fall apart, break down)’, *wäy-äy-on* ‘I have already slept’) and motion verbs (*yajl-iy-on* ‘I fell’ [Schumann 1973:26], *ch’oj-iy-el* ‘levantarse (to get up)’).

It can be concluded, then, that these uses (with a variety of root and stem types) and meanings (e.g., ‘versive’) can be reconstructed back to Proto-Ch’olan, given the Ch’ol and Ch’orti’-Ch’olti’ data, and to Proto-Ch’olan-Tzeltalan, given the comparative data from Tzeltal. What we have, then, is a likely Proto-Ch’olan-Tzeltalan suffix **-V_{ly}* ‘versive’, as proposed by Kaufman (1989), or both ‘versive’ and ‘inchoative’, which descended into Proto-Ch’olan as **-V_{ly}*. Kaufman (1989) reconstructed a nonassimilatory allomorph for Proto-Ch’olan-Tzeltalan, which descended into Tzotzil as *-e(y)* ‘passivizer’; Proto-Ch’olan may have inherited this nonassimilatory form, as suggested by the default markers *-iy* in Ch’ol and *-ay* in Ch’orti’, both of which may be attested too in CLM texts.

Moreover, Ch’olti’ and Ch’orti’ differ from CLM texts, and from what we can now expect for Proto-Ch’olan, in a key way. Kaufman and Norman (1984:103–4) have shown that the suffix *-V_{ly}* in Ch’olti’ and Ch’orti’ is used in paradigmatic contrast with other status markers, such as *-el* ‘incompletive’ and *-en* ‘imperative’, as illustrated in table 12. They therefore propose that Proto-Eastern Ch’olan had **-V_{ly}* as a ‘completive status marker’. To suggest that Eastern Ch’olan resembles CLM texts more closely than Western Ch’olan (i.e., Ch’ol), one would have to propose that Pre-Eastern Ch’olan (i.e., Classic Ch’olti’an) did not use **-V_{ly}* as a status marker but as some sort of intransitivizer (e.g., versive, inchoative, passive, mediopassive); Houston et al. (2000) do in fact suggest that the suffix may have been a ‘passivizer’ in “pre-Classic Ch’olti’an.” This may have been the case. But, crucially, the Ch’ol evidence tells us that this was the case for Proto-Ch’olan anyway, in which **-V_{ly}* most likely meant ‘versive’ and was not a ‘completive status marker’, given that it was likely followed by *-i* ‘plain/completive status of intransitives’, as suggested by the spelling patterns (i.e., **-CV-yi**). Consequently, the use of this suffix with verbs of motion and change-of-state was probably a Proto-Ch’olan trait, not an innovation of “Classic Ch’olti’an” (i.e., Pre-Eastern Ch’olan) that was inherited by Ch’olti’ and Ch’orti’. The use of this marker with change-of-state and motion verbs in CLM texts, therefore, cannot be used as evidence for Eastern Ch’olan as the basis for the standard of the texts. The use of this marker as an ‘intransitivizer’ (more specifically, ‘versive’) is an ancestral trait; its use in Ch’orti’ and Ch’olti’ as a ‘completive status marker’ is an innovation. While we cannot use a shared

retention to argue in favor of a specific linguistic affiliation, we can in fact say that the form and meanings of this suffix in CLM texts are not particularly reflective of their form and meanings in Ch'olti' and Ch'orti' and, therefore, that CLM texts could simply reflect a Proto-Ch'olan-Tzeltalan, Pre-Ch'olan, Proto-Ch'olan, Proto-Western Ch'olan, or Pre-Eastern Ch'olan pattern. Thus, the evidence presented here not only supports Kaufman's reconstruction of Proto-Ch'olan-Tzeltalan $*-V_{JY} \sim *-ey$ 'versive', but it also suggests that this marker was inherited by Proto-Ch'olan and constitutes the source of the Proto-Eastern Ch'olan marker $*-V_{JY}$ 'completive status marker of (some) root intransitives' (Kaufman and Norman 1984:103, table 13).

4. Discussion.

4.1. Summary and interpretation of the results. If we assume that the traits discussed so far, and shown to be shared by various Ch'olan and Tzeltalan languages, are not the result of contact diffusion but instead of shared retentions, we can argue for the following scenario, shown in figure 5. It suggests that Proto-Ch'olan-Tzeltalan already exhibited the markers argued by Houston et al. (2000) to be exclusive innovations of Pre-Eastern Ch'olan, and that their meanings and functions were in fact similar if not generally the same: $*-b'u \sim *-b'a \sim *-b'i$ 'depositive (of positional roots)', $*-h-$ 'mediopassivizer', $*-aj \sim *-ij \sim *-aj$ 'generic intransitivizer', and $*-V_{JY} \sim *Vy$ ($/CC__$; specific vowel not certain, but candidates include *e*, *i*, *a*) 'inchoative/versive'.²⁰

At this time, then, the CCH cannot be supported, and therefore the null hypothesis (Justeson et al. 1985, Justeson and Fox 1989, and Justeson and Campbell 1997) of a pre-breakup form of Ch'olan, such as Proto-Ch'olan-Tzeltalan, Pre-Ch'olan, or Proto-Ch'olan, as the standard written language of CLM texts still stands.

4.2. Late Preclassic and Early Classic evidence. If we assume this for now, we can then ask the following two questions: (1) Exactly which pre-breakup form of Ch'olan is attested during the Classic period? (2) What about the earliest Mayan texts?

Late Preclassic (ca. 400 B.C.–A.D. 200) and Early Classic (ca. A.D. 200–600) texts attest to the exclusive Ch'olan shift of $*oo > uu > u$ and $*ee > ii$

²⁰ Since it is not uncommon for adjacent vowels to merge into one, in the process producing a vowel that represents a phonetic compromise, it is not unlikely that an original $-ay-i$ suffix could have led to $-ey-i$ through partial noncontact assimilation in Tzeltalan, accounting for the Tzotzil form $-ey$, and to $-iy-i$ through total noncontact assimilation in Western Ch'olan, accounting for the Ch'ol form $-iy$. Ch'orti' would be conservative, exhibiting $-ay$ from $*-ay(-i)$, which suggests that perhaps Proto-Ch'olan inherited $*-V_{JY} \sim *-ay$, with Proto-Western Ch'olan (Ch'ol) changing to $*-V_{JY} \sim *-iy$ and Proto-Eastern Ch'olan retaining $*-V_{JY} \sim *-ay$. This is somewhat unclear and thus more research is needed.

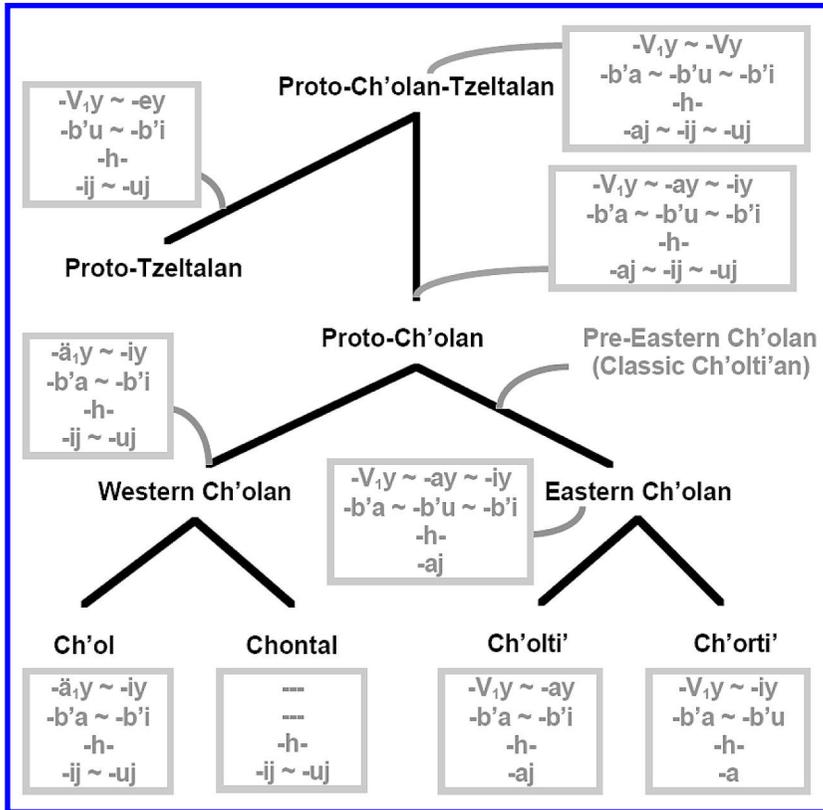


FIG. 5.—Revised history of three morphological markers.

> *i* (Justeson et al. 1985 and Justeson and Fox 1989), as well as to other innovations, both directly and indirectly, shown in figures 6a–6c.

By the middle of the Early Classic period there are various phonetically explicit spellings attesting to exclusive Ch'olan innovations. Two examples, suggested in this paper for the first time, are the cases of the spellings **-ji-ya** (fig. 6a) for the enclitic sequence $*+i(i)j+i(i)y$ 'since, already', from Proto-Mayan $*+eej$ 'in the future' and $*+eer$ 'in the past', and **'UNIW-ni** for the month name <uniw> (fig. 6b).²¹ These spellings are attested on the Tikal Ballcourt Marker by A.D. 416 and attest to the exclusive Ch'olan shift of

²¹ This spelling, **ji-ya**, could spell two different markers. Fox and Justeson (1984) and Wald (2004) have argued convincingly in favor of a reading as $*+(i)j+iy$ 'since, already', an amalgamated sequence of two enclitics. However, this reading can only work for cases where it is used after nouns and adverbs. After verbs, the sequence most likely corresponds to the perfective $-(e)j$ plus an enclitic or suffix $-i(y)$, as argued by MacLeod (2004).

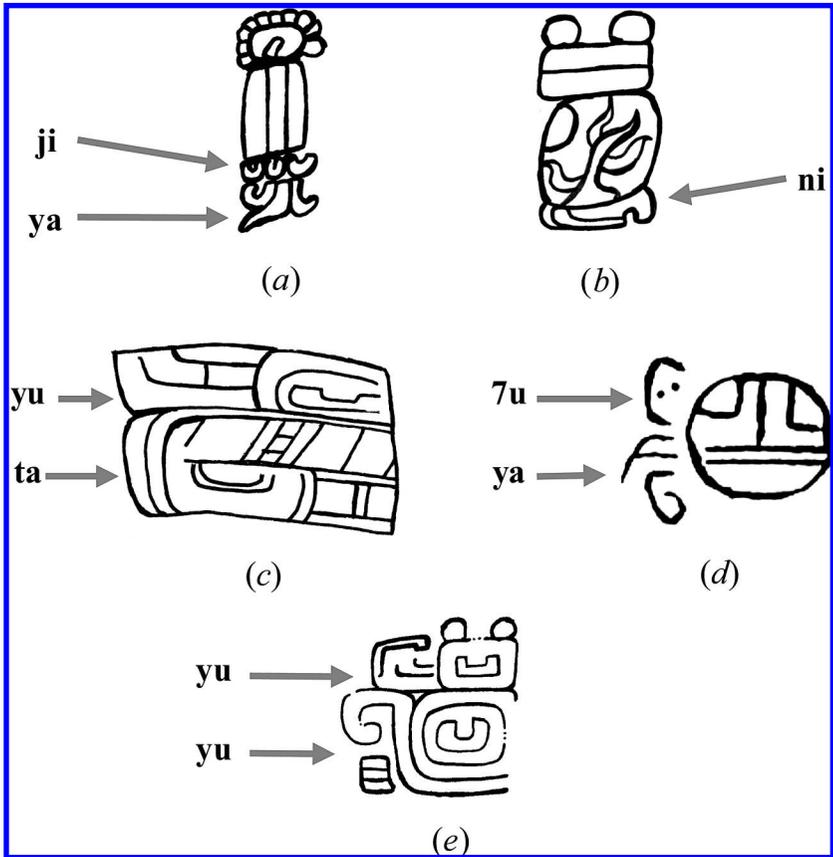


FIG. 6.—Early evidence for exclusive Ch’olan innovations. (a) Spelling of enclitic sequence **+i(i)j+i(i)y* ‘since, already’ at the end of **HUL-XIII-ji-ya**. Glyph F6a on Tikal ballcourt marker. Drawing by D. F. Mora-Marín after a drawing by Linda Schele in the FAMSI archive (<http://research.famsi.org/schele.html>). (b) **XII-’UNIW-ni**. Glyph E6b on Tikal ballcourt marker. Drawing by D. F. Mora-Marín after a drawing by Linda Schele in the FAMSI archive (<http://research.famsi.org/schele.html>). (c) **yu-ta**. Glyph on Tikal Shard from Cimi phase. Drawing by D. F. Mora-Marín after a drawing by David Stuart in Stuart (2005:9). (d) [**u**]ya-’AK’AB’. Glyph D6 of Dumbarton Oaks quartzite pectoral. Drawing by D. F. Mora-Marín. (e) Glyph A2 on tubular jade bead from Cenote of Chichen Itza. Drawing by D. F. Mora-Marín.

ee > ii > i*. Thus, allowing for roughly a generation of prior use before an innovation was written down for the first time, we can say that by ca. A.D. 385 both shifts had occurred, at least at Tikal. Also, a phonetic spelling of **yu-ta on a pottery shard from Tikal dated to A.D. 1–200 (Cimi phase), shown in figure 6c, has been brought to the attention of epigraphers recently by

Stuart (2005:9). If MacLeod (1990:394) is correct in postulating that the common collocation **(ta-)yu-ta-la** is analyzable as *(ta+) y-ut-al*, where *-ut* may derive from a possible Greater Tzeltalan **oot* ‘food’ (attested as *och* ‘sustento o comida (sustenance or food)’ in Colonial Yucatec, where it exhibits the Yucatecan **t > ch* shift; see Barrera Vásquez 1980:593), then this spelling would explicitly attest to the ***oo > *uu* shift in Ch’olan by ca. A.D. 1–200. Also, the Dumbarton Oaks quartzite pectoral, an inscribed object possibly dating to ca. 300 B.C. (Mora-Marín 2001), already provides direct phonetic evidence of linguistic innovations. There one finds a spelling **’u-ya-’AK’AB’/’AK’B’AL-li**, for *uy-ak’ab’al/ak’b’al* ‘his/her/its darkness’, as shown in figure 6*d*. The prevocalic *uy-* allomorph of the third-person ergative prefix is unique to Ch’olan and Yucatecan (i.e., Lowland Mayan) languages. Last, in terms of lexical innovations, it is worth noting that a Late Preclassic text found in the Cenote of Chichen Itza (fig. 6*e*) attests to a sporadic change in the lexical item for ‘bead’ found exclusively in Ch’olan. The Proto-Mayan form is **u’h*, while the Proto-Ch’olan form is **uy ~ *uhy* (Kaufman and Norman 1984:135). The glyphic spelling in question shows **yu-yu** for *y-uhy* 3SERG-bead ‘his/her/its bead’. This can only be given a Ch’olan interpretation. Thus, given that we have evidence for Ch’olan phonological innovations embedded in the most conservative components of the script by Classic times, it is possible to discriminate between Ch’olan and Yucatecan, and to favor *uy-* as a sign of Ch’olan speech in the earliest texts.

In other words, by the end of the Late Preclassic period there is succinct evidence pointing to an already established Ch’olan language, resulting from the differentiation of Ch’olan-Tzeltalan into distinct Ch’olan and Tzeltalan languages. Yet, as I discuss next, such a language must have been an early form of Ch’olan, for there is surprisingly very little evidence for the differentiation of Ch’olan into distinct Eastern Ch’olan and Western Cholan LANGUAGES by the end of the Classic period. In other words, the Ch’olan language already established in Mayan writing by ca. A.D. 200 may have preceded the breakup of Proto-Ch’olan by at least six centuries.

4.3. Additional scenarios. If that is the case, then we may now ask another set of questions: (1) Is there evidence, besides that pertinent to the CCH (Houston et al. 2000), that would support a scenario in which Ch’olan had already diversified—split up into distinct Eastern Ch’olan and Western Ch’olan languages—during the Classic period? (2) Is there additional evidence that would support a scenario in which Western Ch’olan—as opposed to Eastern Ch’olan—served as the basis for the standard written language of CLM texts?

A full review of the pertinent evidence is simply not permitted here. However, it is possible to outline an assessment. First, Justeson and Fox (1989)

did not find significant evidence for the differentiation of Ch’olan during the Early Classic period, but they suggested two possible Western Ch’olan innovations by the Late Classic period—the Chontal variation between *aj+* and *a+*, reflexes of Proto-Ch’olan **aj+* ‘male; relatively large/active being’ (Kaufman and Norman 1984:139), and the Ch’ol marker *cha’an* ‘from, since; because of, in order to; belonging’. Those authors noted that these markers were too temporally late (Late Classic) and too geographically restricted (western lowlands) to warrant anything other than a status as vernacular innovations. Josseland et al. (1985) proposed that the so-called *ti*-construction of CLM texts bears a close relationship to similar constructions in Ch’ol that are used to express progressive actions. Mora-Marín (2003a; 2004b), upon further review of the evidence, found examples of this construction in Chontal, following an observation by Barbara MacLeod (personal communication, 2004), in Ch’olti’, which suggests that the construction is a Proto-Ch’olan trait. Also, Mora-Marín (2003a; 2004b) has observed that CLM texts bear evidence of the exclusive Western Ch’olan independent pronouns **hini* ‘that one; s/he/it (over there)’ and **hina* ‘this one; s/he/it (over here)’. Once again, however, these are too geographically restricted, present in a handful of pottery vessels, two from Calakmul and three from the Naranjo region, as well as too late in appearance—Late Classic—to suggest anything other than local vernacular variants of the standard forms **ha’i* and **ha’a* attested in monumental texts. Last, Macri (1998:2) has also pointed to a likely Western Ch’olan marker in CLM texts consisting of the numeral classifier =*uk* ‘a short period of time’ attested only in Ch’ol. Though a unique attestation, Macri suggests that the context of T855 in glyph block B1 of Aguateca Stela 7, which is dated to A.D. 790, is sufficiently constrained to support its identification with the numeral classifier =*uk*. If so, this could be an attestation of another specifically Ch’ol marker but, as before, it is a unique and very late occurrence, and thus at best provides evidence for a feature that would eventually become part of Modern Ch’ol.

Lacadena and Wichmann (2002), for their part, have identified several more interesting traits pertinent to possible cases of Ch’olan differentiation. Two of these are strictly orthographic differences: **WINIK-ki** vs. **WINIK-la** as spellings for ‘month (count of 20 days)’, based on *winik* ‘person’, and **K’AN-’a-si-ya** vs. **K’AN-’a-si** as spellings for the name of the seventeenth month. Unfortunately, these orthographic differences are NOT obviously correlated with linguistic innovations—whether of Eastern Ch’olan or Western Ch’olan—and in one case, the spelling of the seventeenth month name, no etymological analysis is even provided by those authors to try to account—linguistically—for the observed spelling differences. They also identify a glyphic spelling of a *-w-aj* ‘passivizer’ suffix that is exclusively attested in Modern Ch’orti’, attested twice, once at Tikal (Lintel 2, Temple IV) by ca.

A.D. 727 and the second time at Copan (Altar Z) by ca. A.D. 769. Note again the late date of these two instances. Wichmann (2002:16–17) provides support for an Eastern Ch’olan innovation at Copan in the form of a marker spelled with T585 **b’i** (presumably) for *-ib’* ‘instrumentalizer of positionals’ (i.e., Proto-Ch’olan probably had **-l-ib’* ‘instrumentalizer of positionals’). This marker is attested on an inscribed bench dated to A.D. 780, though not in a fully explicit phonetic spelling: the spelling is logosyllabic, showing **CHUM-b’i**, and thus could potentially be used for a word such as *chum-l-ib’*. But again, if we accept this identification of the use of *-ib’*, as opposed to *-l-ib’*, as evidence for Eastern Ch’olan, it would still make up a single example, from a single site, from late in the Classic period.

Finally, Mora-Marín (2005*b*) has shown that the suffix **-täl* ‘incomplete status of positionals’ is attested in a single Classic Lowland Mayan text, found on a Late Classic pottery vessel from Motul de San José—K2784—dating to ca. A.D. 672–830, but more likely to the second half of the eighth century, i.e., to ca. A.D. 750–800 (Reents-Budet 1994:332). Thus, it is a case of a single occurrence of a marker that can be reconstructed to Proto-Ch’olan, a marker that should have spread throughout the Proto-Ch’olan speech community prior to the diversification of such community into distinct languages. This trait, therefore, serves as a warning: it is a case of a marker reconstructible to Proto-Ch’olan, and yet one that does not make its first appearance until close to the end of the Late Classic period.

The preliminary answer to the questions posed above, consequently, is negative at this point. There is insufficient evidence for significant differentiation of Ch’olan into distinct languages; at best, the evidence from these sporadic and late innovations, attested exclusively today either in Eastern Ch’olan or Western Ch’olan, serves only as evidence of dialectal differentiation. It is simply not possible to use any of these traits to attribute a primordial status to either Eastern Ch’olan or Western Ch’olan in relation to the standard written language of CLM texts. Moreover, if this pattern survives further scrutiny, a model in which Proto-Ch’olan had yet to split into distinct Eastern Ch’olan and Western Ch’olan languages by the end of the Late Classic period would seem feasible and would be consistent with the proposal by Dahlin et al. (1987), which attributes the diversification of Ch’olan to the aftermath of the political collapse at the end of the Classic period. Dahlin et al. (1987:368), in fact, have argued that during the Early Postclassic period, “well known for its severe population reductions, wholesale abandonments of sites, the scattering of local elite superstructures, and the disruption of economic and political networks,” a rapid rate of linguistic divergence may have resulted from a generalized state of “demographic and cultural collapse.”

5. Conclusions. Other than the conclusions already stated regarding the nature of the evidence compiled by Houston et al. (2000) in favor of their CCH, as well as the reanalysis of the data in light of additional comparative evidence, which supports a Pre- or Proto-Ch'olan hypothesis instead, it is important to highlight the following analytical necessities. First, it is crucial for linguists to attempt a more thorough reconstruction of the history of the Ch'olan-Tzeltalan languages. Such reconstruction will facilitate the testing of hypotheses pertaining to the linguistic affiliation and historical stage of CLM texts in general or of possible local vernaculars that deviate from the standard. In other words, it is not time, at least not yet, to narrow or focus on a single language, such as Ch'orti'; instead, a broader but more intensive focus on all of the Ch'olan-Tzeltalan languages will likely yield more fruitful results. For that matter, it is also crucial for linguists to publish more research on the reconstruction of the Yucatecan languages and the grammatical structure of Pre- and Proto-Yucatecan, for it is abundantly clear that Yucatecan scribes sometimes embedded Yucatecan in their texts (Justeson and Fox 1989 and Lacadena and Wichmann 2002). Second, it is crucial for linguists and epigraphers to attempt a more thorough grammatical analysis of CLM texts. This is made clear by the definition of the suffix *-b'u* by Houston et al. (2000) as 'transitivizer of positionals' in spite of evidence suggesting it had merely a 'depositive (to put into X position)' meaning, divorced from transitivity. Third, this last point illustrates a major methodological necessity: that of distinguishing between morphological function, such as 'transitivizing' vs. 'intransitivizing', and morphological meaning, such as 'depositive' vs. 'portative', or 'passive' vs. 'mediopassive' vs. 'inchoative' vs. 'versive', for example. It is also crucial for all scholars interested in Mayan culture and history to be more critical of proposals on the nature of the sociolinguistic milieu of the Mayan lowlands, given the quickly evolving state of decipherment of texts and analysis of their linguistic and orthographic structure, as well as the fact that findings are often disseminated quickly without sufficient testing—even when such proposals require substantial historical linguistic analysis. This statement is necessary given the ready and almost automatic acceptance by several archaeologists and epigraphers (McAnany 2000, Webster 2000, Lacadena and Wichmann 2002; 2004, and Hruby and Child 2004) of the CCH proposal by Houston et al. (2000), despite significant reservations from a variety of linguists who specialize in Mayan linguistics and epigraphy (e.g., Brody 2000, Fought 2000, Hofling 2000, Storniolo 2000, and Jossierand and Hopkins 2002; 2004), and despite the very few references by Houston et al. (2000) to much of the previous literature on the problem at hand (Campbell 1984, Hopkins 1985, Jossierand et al. 1985, Justeson et al. 1985, Justeson and Fox 1989, and Justeson and Campbell 1997).

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