

# The Classic Mayan Causative

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“There does not seem to be any evidence of causative forms in the hieroglyphic inscriptions” (Hopkins and Josserand 2010:54).

“... a possible causative transitive *-se/-es* (or *-esa*) ... [is] infrequent and [its] existence is debatable” (Law and Stuart 2017:147).

Given that the existence of a productive causative affix in Classic Mayan inscriptions has recently been questioned, the purpose of this paper is to revisit some of the evidence previously presented in favor of this identification (e.g., Zender 1999:78 n. 48, 2004a:195, 2005:7 n. 5, 2010a:84), as well as to update those studies with several additional contexts which have only come to light in recent years.<sup>1</sup> As will be seen, the evidence in favor of the original identification is considerable. Nonetheless, it can readily be admitted that of the seven unproblematic contexts presently known, the causative appears without further derivation in only three of them: a state of affairs which has certainly impeded the recognition and acceptance of its identification more than might otherwise have been the case.

From a comparative perspective, causatives are valency-increasing operations; that is, they increase the number of arguments governed by the predicate (see Dixon 2000; Dixon and Aikhenvald 2000; Song 1996). In the specific case of causatives, a new argument is added to the verb, and this is now understood to be the subject or agent (i.e., the causer). This in turn causes the original subject to become the object or patient (i.e., the causee), which is now compelled to *do* or *be* something by the new subject. A classic example is provided by the Spanish *hacer* + infinitive construction, which converts the simple intransitive *el corre* ‘he runs’ into causative *le hago correr* ‘I make him run.’ (Note that English *make* + infinitive has essentially the same function.) All languages have ways to express causation, and three broad types of causative are widely recognized in the literature. In addition to periphrastic causatives of the type just exemplified in Spanish and English, there are also lexical causatives, which express the causative relationship directly. A common example is English *he dies* compared with *I kill him* (i.e., *I cause him to die*), where *kill* directly encodes the causative relationship. Equally common are morphological causatives, which express causative relationships through affixes and other verb-stem changes (e.g., tone, vowel length, reduplication). Although Spanish and English have no causatives of this type, morphological causatives are very common in other languages, where a strong case has been made

that they arise via grammaticalization; that is, by the development of particles and auxiliary verbs used in periphrastic constructions into affixes and other morphological markers (Song 1990; see also Operstein 2014 for a convincing account of the origin of the Proto-Zapotec causative affix *\*k-* from an earlier particle for the potential mood).

As recently noted by Polian (2017b:212), “most Mayan languages show a causative (transitivizer) suffix which originally involved an /s/ (Smith 1976:57), e.g., K’ichee’ *-isa*, Mam *-sa(a)*, Yucatecan *-(e)s(a)*, Huastec *-θ*, etc. It applies at least to intransitive stems, and often also to adjectives, but normally not to transitive stems. For example in K’ichee’ *kam* ‘to die’ > *kam-isa* ‘to kill’ (Larsen 1988:195). On the basis of these and other cognates, Kaufman (2015:354) reconstructs Proto-Mayan *\*-i-sa* as a causativizer of intransitive verbs, noting that it “probably contains the vi thematic vowel *-i-*” and is therefore “to be analyzed [as] */-i-sa/*.” Kaufman (2015:1028-1029) further notes that descendants of Proto-Mayan *\*-i-sa* are “found in all branches of Mayan” apart from Greater Q’anjob’alan, where it was evidently replaced by the periphrastic causative *\*aq’* ‘put, give’ + dependent verb.

According to Kaufman and Norman (1984:145), Proto-Ch’olan most likely inherited this suffix as *\*-esä*.<sup>2</sup> They further note that, while both branches of Ch’olan retained a vowel-final version of this suffix, *-se*, only the Eastern branch manifests a consonant-final allomorph, *-es* (Kaufman and Norman 1984:99). Nonetheless, they also observe the presence of consonant-final *-es* in Tzeltalan languages and note that “if these are

<sup>1</sup> A previous version of this paper was presented at the Third Annual Workshop of the Textdatenbank und Wörterbuch des Klassischen Maya project at the Rheinischen Friedrich-Wilhelms-Universität Bonn in December of 2017. I’m grateful to my fellow presenters for their feedback, especially Dmitri Beliaev, Albert Davletshin, Christian Prager, Frauke Sachse, Alexandre Tokovinine, and Gordon Whittaker. I would also like to thank two anonymous reviewers for thoughtful suggestions that have greatly improved this paper.

<sup>2</sup> I think Proto-Ch’olan *\*-esa* more likely, but I’ve expressed the reasons for my uncertainty regarding the reconstruction of Proto-Ch’olan *\*ä* [ə] elsewhere (e.g., Zender 2010b:6 n. 7). It might also be noted here that Becquey (2014:778-783) reconstructs *\*-esaa* on the basis of similar concerns, although I think the suggestive evidence which he cites in favor of Proto-Mayan *\*-isaa* (e.g., Kaqchikel *-isa*, with final [a] rather than [ə]) has other explanations, and that Wastek *-tha?* and K’ichee’ *-isa* provide adequate evidence to urge acceptance of Kaufman’s (2015:335) reconstruction of Proto-Mayan *\*-isa*.

<u>Ch'olti'</u> <chamai et> <i>cham-ay-et</i> die-IV-B2 you died (Morán 1695, f.69, l.32; cf. Robertson et al. 2010:70)	<achamçe> <i>a-cham-se-Ø</i> A2-die-CAUS-B3 you killed them (Morán 1695, f.80, l.1; cf. Robertson et al. 2010:85)
<u>Ch'orti'</u> <i>cham-ay-Ø</i> die-IV-B3 he died (Hull 2016:87)	<i>u-cham-se-Ø</i> A3-die-CAUS-B3 he killed him (Hull 2016:88)
<u>Acalan Chontal</u> <chami> <i>chäm-i-Ø</i> die-CMP-B3 she died (Smailus 1975:37 [f.157, l.19])	<uchanzen> <i>u-chäm-se-n-Ø</i> A3-die-CAUS-INC-B3 he kills him (Smailus 1975:102 [f.168, l.9])
<u>Chontal</u> <i>chäm-i-Ø</i> die-CMP-B3 he died (Delgado 2004:48)	<i>u-ts'äm-s-i-Ø</i> A3-die-CAUS-CMP-B3 he killed him (Delgado 2004:117)
<u>Ch'ol</u> <i>chäm-i-Ø</i> die-CMP-B3 he died (Vázquez 2011:288)	<i>i-tsän-s-ä-Ø</i> A3-die-CAUS-CMP-B3 he killed him (Vázquez 2011:442)

**Table 1.** Ch'olan forms for 'die' and 'kill' (orthography respects the source, interlinear glosses by the author).

archaic, then they constitute evidence for reconstructing *-es* causatives for proto-Greater Tzeltalan (and hence for proto-Cholan)" (Kaufman and Norman 1984:100).

It will be useful at this point to examine a typical intransitive verb and its causative expression in the Ch'olan languages, preparatory to identifying analogous forms in the Classic Period inscriptions. Following Polian's K'ichee' example above, I have gathered attested Ch'olan forms for 'die' and 'kill' in Table 1.

The Eastern Ch'olan (Ch'olti' and Ch'orti') causatives are models of clarity and simplicity: the causative verb stem now takes a prefixed ergative (Set A) pronoun to cross-reference the new subject, a causative affix (*-se*) to express the new relationship, and a suffixed absolutive (Set B) pronoun to cross-reference the new object. By contrast, the remaining Western Ch'olan forms, while broadly similar to the Eastern Ch'olan model, also include explicit aspectual suffixes (both incomplete and complete) and various morphophonemic assimilations and reductions triggered by the presence

of the causative affix. Most notably, the final /m/ of the verb root *chäm* frequently undergoes homorganic nasal assimilation to the /s/ of the causative affix, resulting in an /n/.<sup>3</sup> Additionally, however, the initial postalveolar affricate *ch* /tʃ/ of the verb root undergoes a dissimilative change to alveolar *tz* /ts/ in Ch'ol, while in Chontal it also undergoes glottalization to *tz'* /tʃʔ/. As Josserand and Hopkins (2010:52) have noted, such changes are frequent enough in Western Ch'olan languages that "a number of causative stems ... are not always recognizable for what they are." As will be seen, causatives in the inscriptions behave much more like Eastern Ch'olan exemplars, though whether this is because of the close

<sup>3</sup> It should be noted that this kind of assimilation is also documented in Eastern Ch'olan, although it is not so frequent as in Western Ch'olan. Thus, Morán lists an alternate form, <Achance> (i.e., *a-cham-se-Ø*) 'you killed them' (Morán 1695, f.80, l.1) for the entry discussed in Table 1.



Figure 1. Blocks 1–3 of Clause 1, Copan Str. 9N-82 hieroglyphic bench (photographs by the author).

relationship that has been argued to obtain between Ch'olti', Ch'orti', and the inscriptions (Houston et al. 2000), or because Early and Late Classic causatives of ca. AD 500–800 still reflect a state of affairs closer to Proto-Ch'olan, cannot be satisfactorily resolved on the basis of present evidence.

#### *Ut'abse 'he raised it'*

The first context we will consider is the carved bench from Copan Str. 9N-82, a well-preserved full-figure inscription of sixteen glyph blocks which has already received ample attention in the epigraphic literature (Riese 1989; Stuart 1992; Zender 2004:266-272). The opening clause of the text runs from blocks 1–6 (Figures 1 and 2), the first two of which provide the date 9.17.10.11.0 11 Ahau 3 Chen, or July 7, AD 781 (Stuart 1992:180). Following the date, the next four blocks (3–6) can be analyzed as in Table 2.

So far, this is a typical self-referential dedicatory passage. The verb is written with the full-figure portrait glyph of the elderly, chapfallen God N (T1014c **T'AB**), who cradles a syllabic sign (T17 **yi**) in his left arm and strokes his chin with his right hand.<sup>4</sup> The intransitive verb *t'ab-* 'rise, go up' is sufficiently widespread in Ch'olan languages that Kaufman and Norman (1984:133) were able to reconstruct it for Proto-Ch'olan, but note that here it appears in a characteristically Eastern Ch'olan form (e.g., Ch'orti' *t'abay* 'go up, ascend,' Hull 2016:427). As I've noted elsewhere (Zender 2004:268), K'awiil

K'uk' is said to be the predecessor and may also be the father of Mak'an Chanal, and his portrait (identifiable due to the *quetzal* and *k'awiil* elements in his headdress) is carved on the bench support directly below his name in the text.

The next clause (Figure 3, #7-9) introduces our causative:

*ut'abse yo[h]k'ol ch'ahoom um ti' ... xook*  
 u-t'ab-se-Ø y-ohk'-ol<sup>5</sup> ch'ah-oom<sup>6</sup> Um Ti' ... Xook  
 3A-go.up-CAUS-3B 3A-above-REL smoke-AGN Um Ti' ... Xook  
 He raised it above the Censer, Um Ti' ... Xook.

<sup>4</sup> David Stuart (1998:416-417; Stuart et al. 1999:37) proposed the **T'AB** value for T1014c on the basis of its substitution with the T45.843 'step' verb, which formally evolved from a foot (T45) ascending steps (T843), and often appears in contexts calling for a verb of motion. Also relevant were substitutions with ?-ba(-yi) collocations in three inscriptions from northern Yucatan. Although offered tentatively, Stuart's proposal remains productive. Other proposals—such as **HUY** (MacLeod 1990:143-147) and **HU' ~ U'** (Mora-Marín 2007)—involve mistaken analyses of the T45 element (which is never syllabic **hu**, **ju**, or **u**) and/or mistaken equations of T1049 **T'AB** 'decendent's-spirit-ascending' (e.g., K791, K2914, K4387) with Landa's second <u> sign. The iconic motivation is uncertain, but perhaps **T'AB** 'ascend' invokes the Atlantean god's established role as a 'lifter, raiser.' Alternatively, as Stephen Houston (personal communication 2016) points out to me, pM *\*t'ab* 'to eat without teeth' (Kaufman 2003:1168) may reference the aged god's absent dentition. Outside of verbal contexts, this logogram reads **ITZAM** (Martin 2015).

*t'ab[aa]y yotoot mak'an chan[a]l yal ix ... utz'akbuul k'awiil k'u[k']*  
 t'ab-aay-Ø y-otoot Mak'an Chanal y-al ix-... u-tz'ak-bu-il K'awiil K'uk'  
 go.up-IV-3B 3A-home Mak'an Chanal 3A-child lady ... 3A-line.up-CAUS-REL K'awiil K'uk'  
 The home of Mak'an Chanal, child of Lady ... (and) follower of K'awiil K'uk', went up.

Table 2. Analysis of blocks 3–6 of Copan Str. 9N-82 hieroglyphic bench.



4

5

6



ma-k'a-na-CHAN-la

ya[YAL]-la-IX[?]-?

u-TZ'AK-bu-li-K'AWIIL[k'u]

Figure 2. Blocks 4–6 of Clause 1, Copan Str. 9N-82 hieroglyphic bench (photographs by the author).

The verb is again written with the full-figure form of T1014c **T'AB**, his left arm appropriately upraised as if in the act of lifting. He is preceded by T1 **u** and followed by a full-figure insect, the animated form of T520 **se**.<sup>7</sup>

Intriguingly, the T45 'foot' element of the more typical T45.843 **T'AB** sign is also inserted between the Old God and the insect, perhaps as a disambiguating mechanism intended to ensure that the reader interprets T1014c as

<sup>5</sup> In a Ch'olan context, we might have expected *-ahk'ol* 'above' (Kaufman and Norman 1984:139), as in contemporary *ya-k'o(-la)* spellings at both Copan and Palenque (see Stuart 2017:3; Zender 2017:14 n. 23). The discrepancy might be explained in at least three ways. The simplest explanation is carving error, perhaps stimulated by the usual *yotoot* following such dedicatory verbs, as in block 3 above. Another possibility is regressive vowel assimilation, motivated by the stressed *o* of *ahk'ol* (note also the long, stressed *oo* of nearby *ch'ahoom*.) A third possibility is Yukatekan influence, where Yukatek *-o'ok'ol* and Itzaj *-ok'ol* (Hofling 2017:718) indicate that Proto-Yukatekan had innovated *\*-ohk'ol*. Yukatekan syntax might also be indicated by the *ch'ahoom* title preceding the personal name (see Lacadena 2000). It may be relevant that Miller (2015:514) identifies some non-local individuals in burials associated with Structure 9N-82.

<sup>6</sup> This composite, full-figure logogram is remarkable in its incorporation not only of the distinctive headband with escaping tendrils

of smoke characteristic of the **CH'AHOOM** head variant, but in the figure's functional pose, huddled before an incense-burner into which he deposits [**po**]mo, *pom*, 'incense.' As Stephen Houston (2014:117) has noted, these multiple, layered contributions to meaning must surely comprise a nearly unique collaboration of figural, phonetic, and lexical signifiers in a single logographic context.

<sup>7</sup> The head-variant of T520 **se** has long been recognized from controlled substitutions in *ka-se-wa* spellings of the month Zec (e.g., YAX L.41, B1 and YAX St.12, D1). Some years ago now, I also noted its substitution for **se** in spellings of *teles* 'crested basilisk' (e.g., Kuna-Lacanha L.1, D1-C2 and L4-K5; see also Davletshin 2011:3, Krempel 2016:62). Full-figure versions, while rare (see, e.g., YAX Throne 2, east, block 2 in Mayer 2008:Fig. 5), nonetheless reveal the 'percentage' markings and 'death eyes' associated with insects. I therefore suggest that the **se** value derives from a term like Ch'orti' *ses* 'louse' (Hull 2016:366) or Ch'ol *ses* 'avian mite, coloradilla' (Hopkins et al. 2011:203).

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8

9



u-T'AB-se

yo-k'o-lo-CH'AHOOM

u-mu-TI'-?-XOOK

Figure 3. Clause 2 of Copan Str. 9N-82 hieroglyphic bench (photographs by the author).



Figure 4. Scene from an unprovenanced vase in a private collection (drawing by the author).

**T'AB** rather than **ITZAM**. The implication of this causative construction is that the house-raising of clause 1 was indeed conducted by Mak'an Chanal, and that it took place "above" the final resting place of Um Ti' ... Xook. This remote predecessor of Mak'an Chanal may well have been the occupant of one of the early burials in Patio A, perhaps even the Middle Classic "priest" in Burial VIII-36; Um Ti' ... Xook was in any case also honored by a depiction on the bench support below his name and titles, as revealed by the *xook* in that figure's headdress (Zender 2004:269-272). I omit the rest of the bench text here, since its contents don't bear directly on the question of causative *-se/-es*, and because it is both well understood and amply discussed elsewhere.

Before turning to additional examples of the causative, however, it might be noted that, whereas the *t'abaay* of clause 1 is exclusively Eastern Ch'olan, the *ut'abse* of clause 2 is fairly widespread within Ch'olan languages (e.g., Chontal *t'ab-se* ~ *t'ä'se* 'lift,' Becquey 2014:185; Ch'olti' <tabse> 'subir' (i.e., raise),' Morán 1695, f.64, l.21; Ch'orti' *t'abse* 'raise up, elevate, put up high, keep safe, lift up,' Hull 2016:427). For this reason, and unlike *t'abaay*, its presence here can't be taken as positive evidence for an Eastern Ch'olan affiliation of the script. Rather, *ut'abse* in both Eastern and Western Ch'olan merely preserves a form of causative derivation that must already have been present in Proto-Ch'olan.

#### *Hiin t'absaan 'this is what they lift'*

A polychrome vessel in a private collection provides our second context (Figure 4). The main scene depicts two elderly Itzams attempting to lift carved deity effigies with the assistance of their two servants, the duck-billed Wind Gods (Ik' K'uh). Associated captions describe the scene, while a lengthy text—now, sadly, mostly eroded beyond legibility—may once have provided a fuller context. Directly above the seated Itzam is an L-shaped caption that can be read as follows:

**hi-na T'AB sa-ni 4-TUUN-ni ITZ(AM)[?tzi]-?ma**

*hiin t'absaan chan tuun itzam*

*hiin t'ab-(e)sa-VV<sub>1</sub>n-Ø Chan Tuun Itzam*

DEM.PRO.<sup>8</sup> go.up-CAUS-AP-3B Chan Tuun Itzam

*This (is what) the Chan Tuun Itzam lift.*

Although complicated slightly by the *-VV<sub>1</sub>n* (< \*-oon) antipassive of derived transitives (for which see

<sup>8</sup> Alfonso Lacadena (2000:167) first proposed **hi-na** as *hiin*, 'he, she, this one,' citing Ch'ol *hini* 'él, ella, ése, ésa, éste, ésta' (Aulie and Aulie 1978:65) and Proto-Ch'olan *\*ha'-in* 'this, that' (Kaufman and Norman 1984:139). Hull et al. (2009) have proposed an alternative analysis of *hiin* as the first person independent pronoun, but Beliaev and Davletshin (2006) provide strong support for Lacadena's original solution.

Lacadena 2000 and Zender 2010:13, n. 22), the preceding -s- can hardly be interpreted as anything other than the syncopated remnant of a causativizing suffix. In this case, given the otherwise inexplicable *a* of the antipassive suffix, we have our first evidence of the archaic -*esa* causativizing suffix, whose original final vowel has been preserved (and lengthened) by the following antipassive suffix. The same outcome can be found in Ch'orti', where e.g., *chamsan* AP. 'kill' (Hull 2016:88) stems precisely from *cham* 'die' + -(*e*)*sa* + -VV<sub>1</sub>*n*.

A parallel causative antipassive context can also be found on the recently-discovered La Corona Element 56, an all-glyphic block which most likely comprises "the second part of a longer text with its first portion still missing" (Stuart et al. 2015). As its discoverers note, this long and important text "recounts several important events involving the La Corona ruler named Chak Ak' Paat Kuy" and "[s]ome of the history mentioned on Element 56 describes ceremonial dressing and adornment, no doubt reflecting the complex process of royal investiture before Chak Ak' Paat Kuy's inauguration on September 9, 689" (Stuart et al. 2015). It is precisely in the context of the final events leading up to the king's accession that we come upon a short five-glyph passage containing yet another causative (Figure 5 and Table 3).

The subject of both passages is Chak Ak' Paat Kuy, named explicitly in previous clauses, and therefore unstated here. It is he who establishes a new settlement (of unknown location) a scant nineteen days before his official accession, and he who populates that new settlement with people from Saknikte' (La Corona). The second verb, *hulsaan*, clearly stems from the intransitive root *hul-* 'arrive here' (Kaufman and Norman 1984:120), which is derived as a causative with the archaic causative -*esa* before being antipassivized with -VV<sub>1</sub>*n* (from



Figure 5. La Corona Element 56, pC5–pC7 (drawing by Mary Kate Kelly, courtesy of Proyecto Regional Arqueológico La Corona, PRALC).

\*-oon). It's possible that *ajsaknikte'* was considered a sufficiently generalized noun phrase that it was in fact incorporated into the antipassive construction (i.e., 'he

6-**IK'-5-YAX-SIJOOM-ma** ?**KAJ-yi-AHK-TUUN-ni** **HUL-sa-ni-AJ-SAK-NIK-TE'**

*wak ik' ho' yaxsijoom kajaay ahktuun hulsaan ajsaknikte'*

wak Ik' ho' Yaxsijoom kaj-aay-Ø Ahktuun hul(e)sa-VV<sub>1</sub>n-Ø aj-saknikte'

6 Ik' 5 Yaxsijoom establish-IV-3B<sup>9</sup> Ahktuun arrive-CAUS-AP-3B<sup>10</sup> AG-Saknikte'

(On) 6 Ik 5 Yax, Ahktuun was established (and) he brought people there, (namely) those of Saknikte'.

**u-19-la-ta-12-'Imix' 4-SAK-SIJOOM-ma-JOY-ja-ti-AJAW**

*ubaluunlajun la[h]t lajchan 'imix' chan saksijoom jo[h]yaj ti ajaw[il]*

u-baluun.lajun-laht lajchan 'imix' chan Saksijoom jo<h>y-aj-Ø ti ajaw-il

ORD-19-NCL 12 Imix 4 Zac encircle<PASS>-IV-3B PREP lord-ABSTR

Nineteen days later, (on) 12 Imix 4 Zac, he was encircled in (the) kingship.

Table 3. Passage of La Corona Element 56.

<sup>9</sup> This analysis, and a **KAJ-yi** value for T550, were first suggested to me by Dmitri Beliaev and Albert Davletshin (personal communications 2015).

<sup>10</sup> This analysis was first suggested to me by Alfonso Lacadena (personal communication 2015); see also Prager (2018:4-5).



<tali uchandzac aHau ukaua pax/ua uppenel chanpel acathanihi>  
 tali uchantz'a[h]k ajaw uk'aba['] paxwa up'eneel chanpel akat'aniji  
 tal-i-Ø u-chan-tz'ahk-ajaw u-k'aba' Paxwa u-p'eneel Chanpel a-ka-t'an-i-Ø-iji  
 come-CMP-3B ORD-4-line.up-lord 3A-name Paxwa 3A-son Chanpel ASP-1A-speak-CMP-3B-CLT  
 The fourth ruler in line, named Paxwa, son of Chanpel, whom I've already mentioned, came.

<hain ahau yuual uia/lahulçi vinic tixchel>  
 ha[']in ajaw yu[w]al uyala[']hulsi winik tixchel  
 ha'in ajaw yuwal u-ya-la'-hul-s-i-Ø winik Tixchel  
 DEM.PRO lord ADV 3A-DEM-MANY-arrive-CAUS-AP-3B person(s) Tixchel  
 This was (the) king who then brought many people there to Tixchel.<sup>11</sup>

**Table 4.** Passage from “king list” of *Paxbolon-Maldonado Papers*.

people-of-La-Corona-brought’); if not, however, then Ajsaknikte’ was mentioned rather in apposition to the verbal phrase, indicating by means of a stative/equational relationship with whom the king has populated the new settlement.

Intriguingly, a very similar passage appears in the early seventeenth-century Acalan Chontal *Paxbolon-Maldonado Papers* (Archivo General de Indias, Mexico 138). There, in the “king list” section of this document (f. 156, ll. 3-5), we can read a brief account of the fourth ruler of the Cozumel-derived dynasty of Acalan-Tixchel (Table 4).

Here, the intransitive verb *hul* ‘arrive’ is once again derived as a causative (i.e., ‘cause to arrive’), although this remains an active transitive construction without further derivation as an antipassive. La Corona Element 56 (dedicated in AD 690) and the *Paxbolon-Maldonado Papers* (written in 1612 but undoubtedly copied from earlier sources stretching back into the 1500s) can thus be seen to touch on very similar themes, including an evidently long-standing cultural practice whereby new rulers founded towns and could compel their subjects to settle them.

### AjnunsaaJ Chan K'inich

A fourth context, albeit one with numerous examples, has only recently become clear with the discovery in 2015 of Naranjo Stela 46 (Figure 6). Here, for the first time, the second glyph in the royal name of Ajwosal Chan K'inich (to use the previous nickname, popularized by Martin and Grube 2008:71) could at last be identified as T206 NUM.<sup>12</sup> As Martin et al. (2017:672) have recognized in their initial publication on the new stela, the new context allows the first confident transliteration of the king's name, which I propose should be analyzed as follows:

### AJ-NUM-sa(-ji) CHAN-na-K'IN(ICH)<sup>13</sup>

ajnunsaaJ chan k'inich  
 aj-num-(e)sa-aaj chan K'inich  
 AG-pass.by-CAUS-NOM sky K'inich  
 K'inich is the Passer in the Sky (or, perhaps, the Sky-Passer)

Here, the intransitive verb *num-* ‘to pass by’ is first derived as a causative, presumably with *-esa*, which leads to syncopation of the *e* and the form *numsa*. At this point it is quite possible that contact between *m* and *s* results in homorganic nasal assimilation of *m* to *n*.<sup>14</sup> The resultant causative *numsa* ~ *nunsa* ‘cause to pass’ is then nominalized with *-aaj*—cf. Ch'orti' *mek'saj* n. ‘a hug’ < *mek'-e* tv. ‘to hug’ (Hull 2016:277-278). The resultant

<sup>11</sup> Here I would like to acknowledge perceptive studies of these and other passages in the *Paxbolon-Maldonado Papers* by Restall (1998), Smailus (1975), and Wald (2000) that have greatly influenced my thinking. The translation and analysis above is, however, my own.

<sup>12</sup> T206 NUM was tentatively proposed by David Stuart (2012) on the basis of a comparison between a personal name on CRN Step 1, block VI (**nu-mu-lu a-nu-CHAHK**) and an unrelated but clearly parallel name on Chancala Panel 1 (T206-**a-nu-cha-ki**). Stuart further noted that Proto-Ch'olan \**num* ‘pass by’ (Kaufman and Norman 1984:127) provides an iconic motivation for the ‘snake,’ and that the archaic Ch'ol noun *ñumol* ‘surplus’ (Hopkins et al. 2011:165) provides a potential explanation for non-verbal contexts of T206.

<sup>13</sup> Other examples of the name explicitly include the **-ji** (e.g., NAR St.47, A8a); nonetheless, it is frequently abbreviated, as here. Most examples of the name also omit both *chan* and *k'inich*, so the present context provides (as so often) a mix of both explicit and abbreviated elements.

<sup>14</sup> Given the logographic spelling, one cannot be certain that this assimilation applied here, but comparable forms in Ch'olan languages suggest it as a strong possibility. Thus, as Becquey (2014:780) notes, “[t]his rule is obligatory in Chol *-ñuñ-sa* ‘cause to pass’ ... and optionally in Acalán Chontal—<chamçe> ~ <chançe> ‘to kill’ ...—and in Cholti—<chamze> ~ <chançe> ‘to kill’.” Indeed, as Hopkins and Josserand (2010:52) have noted, Ch'ol *ñuñsañ* can undergo still further reduction to *ñusañ* (see also Hopkins et al. 2011:166).

u-?UH-la HUB u-K'ABA' yu-k'e sa ta-?AK 7-XIB WIN k'a yo-ma ?AK-na OOK  
 uhal hub uk'aba' yuk'esa ta ak huk xib win[ik] k'ayoom akan ook  
 uh-al hub u-k'aba' y-uk'-esa ta Ak Huk Xib Winik k'ay-oom Akan Ook  
 moon-?ADJ trumpet<sup>15</sup> 3A-name 3A-cry-CAUS PREP Ak Huk Xib Winik sing-AG Akan Ook  
 Lunar Trumpet is the name of the singer Akan Ook's noisemaker for Ak Huk Xib Winik

Table 5. Nametag on the Pearlman Conch Shell Trumpet.

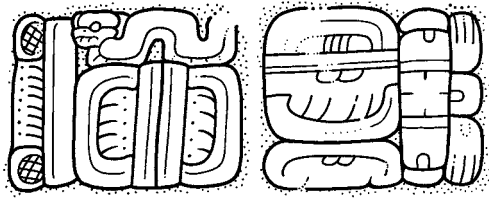


Figure 6. The name of Ajnunsaa Chan K'inich, Naranjo Stela 46, back, F13–E14 (detail of drawing by Simon Martin and Alexandre Tokovinine).

noun *numsaaj* ~ *nunsaa* 'a causing-to-pass' is then agentivized with initial *aj-*. The final sense must be of an occupation signifying 'one who makes things pass' or, since the causative occasionally operates as little more than a transitivizer—as one may see in, e.g., Ch'orti' *numes* 'to pass, surpass' (Hull 2016:304) and Ch'ol *ñusañ vt.* 'to pass something' (Hopkins et al. 2011:166)—it may mean little more than 'one who passes things.' Given these considerations, I've glossed *ajnumsaaj* ~ *ajnunsaa* simply as 'passer' (but see Martin et al. 2017:677 for an alternative interpretation).

#### Yuk'esa 'his noisemaker (lit. crier)'

Our fifth context is a derived noun for a musical instrument and has at least two examples. On the unprovenanced Early Classic Pearlman Conch Shell Trumpet, as I noted some years ago now (Zender 1999:78, n. 48), an elaborate nametag dominates the first twelve glyph blocks of its inscription (Figure 7). These can be read as in Table 5.

In addition to another text panel, with twelve further blocks providing the pedigree of the singer Akan Ook, the Lunar Trumpet also contains several iconographic registers including, most appropriately, an image of the Maize God in his lunar aspect. Does Ak Huk Xib Winik perhaps represent a Hunt God whose aspect the singer adopts for performance? Be that as it may, the lexical identification of **yu-k'e-sa**, *yuk'esa*, 'his noisemaker (lit. crier)' proceeds from Tzeltal *ok'es* 'trumpet' (Slocum 1953:46) and Tzotzil *ok'es* 'trumpet' (Laughlin 1975:67), both clearly nominalized causatives derived from the

intransitive verb *ok'* 'cry'—see, e.g., Tzeltal *ok'-* 'cry (coyote)' (Berlin 1968:221). Although the derived term 'trumpet' is not attested in either modern or historically documented Ch'olan languages, it should have had the form *\*uk'esa*. Thus, note Ch'orti' *uk'-i* 'cry, weep, shed tears' (Hull 2016:468) and the Ch'ol possessed nominalization *y-uk'-el* 'cry of animal, cat's meow, pig's screech, cow's moo' (Attinasi 1973:229). Why there is no explicit

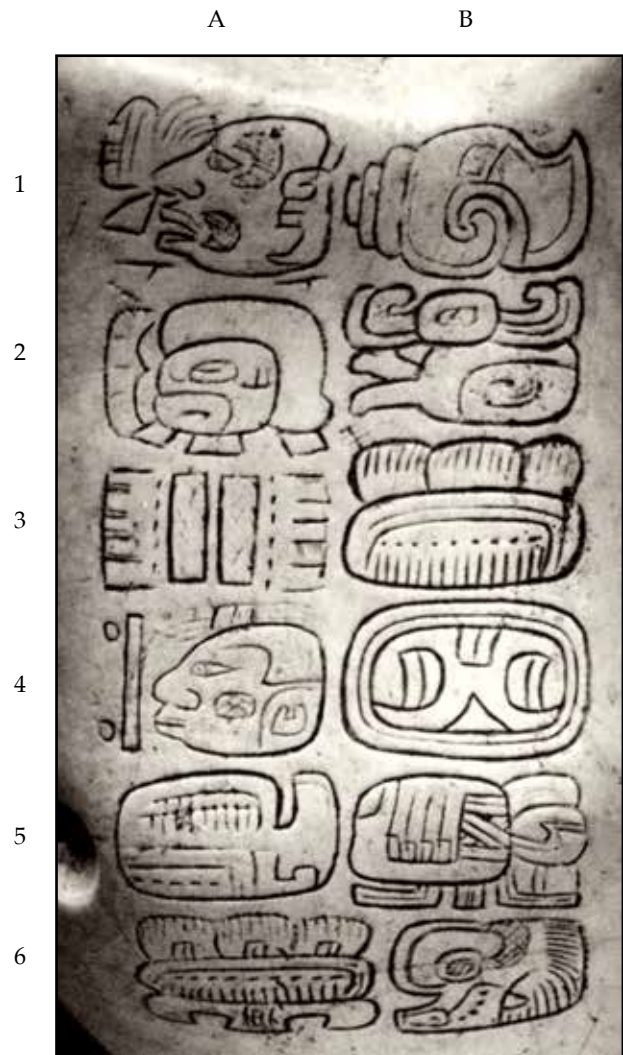


Figure 7. The first text panel of the Early Classic Pearlman Conch Shell Trumpet (after Coe 1982:Pl. 63).

<sup>15</sup> For *hub* 'shell trumpet,' with initial *h-* and short vowel, see Zender (2017:17, n. 32).



B4

A5

B5



Figure 8. Unprovenanced Early Classic jade celt (after Berjonneau et al. 1985:Cat. 333).

nominalizing suffix on this ‘noisemaker’ term remains unclear (although note that the Tzeltalan languages do not have one either), as does the presence of archaic *-esa* despite the lack of a following suffix. Perhaps these mysteries are related and the Early Classic context reflects a time before the change of *\*-esa* to *-(e)se*. Alternatively, an innovative *-se/-es* causative may have shunted earlier *\*-esa* to an instrumental role, albeit with the retention of some causative semantics. More data will be needed to test these possibilities.

At first glance, it might seem that Tzeltalan *ok’es* ‘trumpet’ provides a compelling gloss for epigraphic *uk’esa*, but I prefer the more literal rendering ‘noisemaker’ or ‘crier’ because this term can also refer to other kinds of musical instrument. One such is on an unprovenanced jade celt first published by Berjonneau et al. (1985:Cat. 332, 333). Following the opening date, and before the name of its owner, three glyphs provide the verb and two possessed nouns in apposition (Figure 8), which can be read as follows:

u-K’AM-wa yu-k’e-sa u-ka-ya-wa  
*uk’am[a]w yuk’esa ukaywa[k]*  
 u-k’am-V<sub>1</sub>w-Ø y-uk’-esa u-kaywak  
 3A-take-TV-3B 3A-cry-CAUS 3A-?thunderbolt  
 He took his noisemaker, his thunderbolt

The object in question would appear to be the jade celt itself, referred to poetically and somewhat diphthastically as an *uk’esa* ‘noisemaker’ (since celts were worn as pendants on broad belts, and would certainly have chimed against one another with the slightest movement) and as a *kaywak* (a frequent but poorly-understood term for celts, which I have tentatively interpreted as ‘thunderbolt,’ presumably in allusion to Chahk’s thunder axe).<sup>16</sup>

## Two remaining contexts

Although not as well understood as the five contexts discussed above, two additional examples of causativizing *-se/-es* should be at least briefly touched upon here. The first is one that I have explored in an earlier discussion of the raccoon logogram EHM (Zender 2005:7 n. 5) in a short passage of five glyph blocks on Tortuguero Monument 6 (Figure 9), which I would now analyze as in Table 6.

The passage follows an unclear series of events which nonetheless take place *y-itaaj u-k’uh-uul ihk’ ... yax suutz’* (i.e., with his [i.e., the ruler’s] god, Ihk’ ... Yax Suutz’), so it seems likely that this god is also the agent of the causative verb. There are some difficulties,

<sup>16</sup> This suggestion posits the development of a specialized Early Classic (or earlier) lexeme from the same source as Classic Mayan *chahk* ‘thunder,’ namely Proto-Mayan *\*kahoq* ‘thunder (stone)’ (Kaufman 2003:489). There is already some indication of this development in Proto-Ch’olan *\*chahuk* ‘lightning, thunder’ (Kaufman and Norman 1984:117)—a form attested epigraphically on PNG Throne 1, left support—not least since the *\*k > ch* change is now understood as diffused rather than inherited (see Law et al. 2014). Note also the parallels provided by Tzeltal *chahwuk* ‘trueno, rayo, relámpago’ (Polian 2017a:175) and Chontal *chawäk* ‘trueno’ (Keller and Luciano 1997:410). Prior to palatalization *\*kahuk* is only three changes away from *kaywak*: (1) rounding of *\*h* to *w*, motivated by following *u* (as in Chontal and Tzeltal); (2) regressive assimilation of *\*u* to *a* (as in Chontal); and (3) a sporadic epenthesis of *y*. Indeed, one might well posit a pre-Chontal *\*kawak* (eerily similar, of course, to the Colonial Yucatec day name), which would require only the final (admittedly unmotivated) epenthesis to produce attested epigraphic *kaywak*.

<sup>17</sup> For *xa* as an intensifying particle see Proto-Ch’olan *\*xa* ‘more’ (Kaufman and Norman 1984:139) and Ch’orti’ *-xa*, which has developed into a suffix (Hull 2016:491).

ha[i] ?xa-a-je-se yo-OHL-la 8-ko-BAAK-li-bi 4-EHM-ma-cha  
*haa’ xa ajes yohl waxak ko[hk] baaklib chan ehmach*  
 haa’ xa<sup>17</sup> aj-es-Ø y-ohl waxak kohk baak-l-ib chan ehmach  
 DEM.PRO INTEN wake-CAUS-3B 3A-heart 8 turtle ?-POS-INSTR 4 raccoon  
 he has certainly awakened the heart(s) of the eight turtle(s) ... (and) four raccoons

Table 6. Passage of Tortuguero Monument 6.

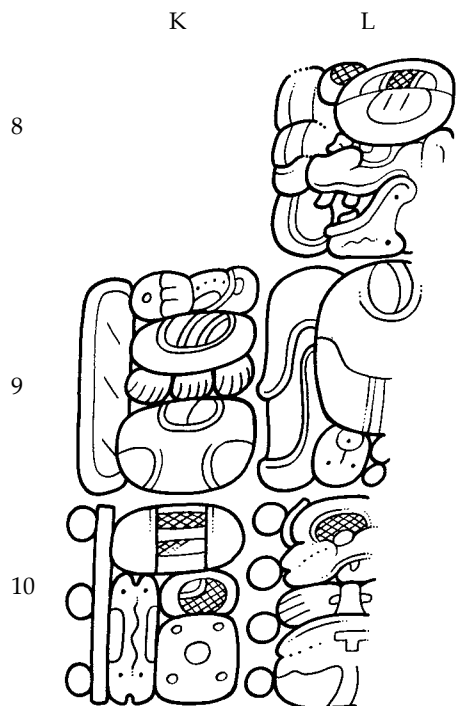


Figure 9. Tortuguero Monument 6, L8-L10  
(drawing by the author).

however, not least of which is the lack of an ergative pronoun on *ajes*. Gronemeyer and MacLeod (2010:56, n. 62) have proposed this as an instance of otherwise unattested ergative extraction, known from Yucatekan languages, and perhaps this is the case. However, the decidedly unique ritual context, several remaining uncertainties concerning sign values, and a significant loss of text in the following clause all urge caution in reading too much into this one example.

A final context takes us to Caracol Stela 1, the last known monument of Yajawte' K'inich II (r. AD 553–593), recording his period-ending ceremony of AD 593. On the lower front register of the stela, following the parentage statement connecting the king to his mother, we find the following glyph block in the expected position of 'child of father' (Figure 10):

**u-T'AB-se-?le-u-CHIT-CH'AHB**

ut'absel uchit [u]ch'ahb

u-t'ab-s-el u-chit u-ch'ahb

3A-go.up-CAUS-NOM 3A-twin 3A-creation

his raised up one, his twin, his creation

Although unique, there are several similarities with other parentage statements. For one thing, the *uchit uch'ahb* portion is reasonably well known (see, e.g., YAX L.10, D6). The *t'ab* is decidedly less common, although even this has precedent in other Early Classic inscriptions. Note, for instance, the 'child of father' passage on Tikal St. 39, pB4-pA5, where we find **T'AB[yi]-u-CH'AHB ya-AHK'AB-li**, *t'abaay uch'ahb ya'k'baal*, 'his creation

(and) his darkness ascend.' On Caracol Stela 1, intransitive *t'ab* has evidently been causativized and then most likely nominalized with a rare **lu**-semblant sign which I would tentatively identify as the Classic forebear of Landa's second **le** (see Zender 2017:11-12, n. 20 for relevant contexts and discussion). The gloss above is no more than a suggestion, pending further examples and a more certain decipherment of the **lu**-semblant.

## Conclusions

Having reviewed and discussed seven distinct script contexts of the archaic *-esa* and innovative *-se/-es* causatives in Classic Mayan inscriptions, we may conclude that there is now ample evidence to support the presence of these suffixes by no later than the Early Classic period. As we've noted, the causative suffix appears without further derivation in only three of our seven contexts, and this has certainly impeded its recognition and acceptance (e.g., Hopkins and Josserand 2010:54; Law and Stuart 2017:147). But we have also seen that there are really no acceptable alternatives to the interpretations entertained herein for the *-(e)sa*, *-se*, and *-es* suffixes encountered on verbs and nouns in inscriptions from across the Maya area: from Tortuguero and La Corona in the west, to Naranjo, Caracol, and Copan in the east. And while seven contexts may not seem like very many, it must be remembered that these contexts each stand in for multiple iterations. Thus, there are at least two instances of *yuk'esa*, and scores of *ajnunsaaj*. For these reasons, we may regard seven unique contexts as indicative of a reasonably productive suffix, and one not without a certain degree of regional and temporal

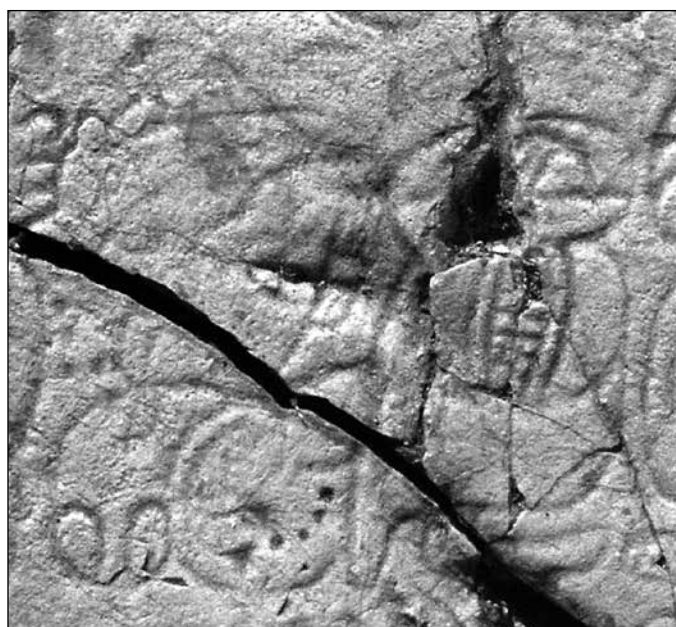


Figure 10. Caracol Stela 1, front, G2 (photograph courtesy of Jorge Pérez de Lara).

variation, perhaps suggesting a development from \*-esa to -se/-es during the life of the script. (There are other candidate causatives, to be sure, such as a rather widespread *ya-?le-se*, employing the *lu*-semblant sign discussed above; but for the moment these still involve too many unresolved issues to be unproblematically admitted to the canon.) Finally, it should not be forgotten that Ajnunsaa Chan K'inich ruled Naranjo for seventy years, from AD 546 to at least 615 (Martin and Grube 2008:70), and every nobleman and commoner who spoke his name during and even long after his influential reign perform also uttered the Classic Mayan causative.

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