TTT of Quirigua Stela E

Author: Sim Lee
Last updated: 2024-12-06

[This document is part of the *Learner's Maya Glyph Guide*.]
[An HTML version of this TTT is also available.]
[Separate drawings and additional TTTs are available on the main TTTs page.]

Introductory Notes

- Sources used:
  - GutiérrezGonzález-PhD (*Los Dioses y la Vida Ritual de Quiriguá en sus Textos Jeroglíficos* (Gutiérrez González; 2012)):
    - Not just a TTT, but a transliteration, a transcription, *two* linguistic analyses (one morphological and one with syntax parsing), a literal translation, a smooth translation, *and then* a commentary.
    - In particular, quite a detailed explanation of the proposals and doubts in reading of the Copan EG. [1]
  - Looper-LW (*Lightning Warrior - Maya Art and Kingship at Quirigua* (Looper; 2003)):
    - Extensive analysis of the text on QRG Stela E, including background information on the monument itself.
    - In particular, quite a lot of information about Xukuy (spelled Xkuy) and Wak Mih Winkil, both mentioned in this inscription (for example in the same glyph-block – at B20a and B20b respectively).
- The drawings I used are from:
  - Looper-LW.p153.pdfp166 (west side / columns A-B).
  - Looper-LW.p150.pdfp163 (east side / columns C-D).
- A Sketchfab 3D model is also available.
- A full TTT is available at:
  - Looper-LW.p224.pdfp237 (west side / columns A-B).
  - Looper-LW.p223.pdfp236 (east side / columns C-D).
  - GutiérrezGonzález-PhD.p146.pdfp159 (west side / columns A-B).
  - GutiérrezGonzález-PhD.p142.pdfp155 (east side / columns C-D).
  - MHD "objabbr = QRGStE".
- MHD has the opposite convention for glyph-block labels, compared to the Looper-LW drawings and GutiérrezGonzález-PhD.
  - Looper-LW/GutiérrezGonzález-PhD:
    - West side: A-B.
    - East side: C-D.
  - MHD:
    - West side: C-D.
    - East side: A-B.

  The end notes here are labelled according to the Looper-LW system, but the TTT table also includes the MHD system in an additional column, for ease of reference.
  - Looper explains that Looper-LW/GutiérrezGonzález-PhD follow the Morley labelling whereas the "unexpected" order in MHD is because the reading order should be east first, then west (personal communication, 2023-04-20).

    - Despite this, I've put west first, as it seems to me to read more smoothly that way. This is at odds with the fact that most epigraphers have accepted the MHD order of reading. I will perhaps go with the flow in a future release of the TTT's.
- This TTT has been cross-checked against the MHD TTT ("objabbr = QRGStE").
- This TTT has been cross-checked against GutiérrezGonzález-PhD.
- The main protagonist, K'ahk' Tiliw Chan Yopaat, is named with an additional name/title, Holow Chan K'awiil. This name should not be confused with that of K'ahk' Holow Chan Yopaat, who ruled QRG about 15 years later.
- This is one of the inscriptions where the **K'IN** and **WINAL** coefficients of a DN need to be swapped in quite a number of instances, due to non-conformance to the usual convention of composing the glyph-block when writing a DN (see end notes under A12b-B12a, A13b-B13, and A14b-B14a).
- There are two ISIG's on this monument – one at the start of each of the east and west sides.
    - Each ISIG has an associated SS.
    - One irregularity is that the SS on the east side has a very unusual combination of glyphs at glyph-block D6, where Glyph-DE of the SS would normally be expected.
- Summary:
    - The west side covers "contemporary" events of the Late Classic period, while the east side principally covers events in mythical times.
    - West side:
        - Event #1 (724 AD): The accession of K'ahk' Tiliw Chan Yopaat as ruler of QRG, under the auspices of his overlord, Waxaklajuun Ubaah K'awiil, ruler of CPN. The accession was marked by a ritual involving the grasping of the K'awiil sceptre – a symbol of royal authority.
        - Event #2 (731 AD): The 15th *katun* period ending.
        - Event #3 (738 AD): [The rebellion of QRG against CPN and] the ritual beheading of Waxaklajuun Ubaah K'awiil.
            - This is recounted on B12b-A13a, without explicitly naming the agent.
            - It is also recounted on Stela J on H3-G4, also without explicitly naming the agent.
        - Event #4 (762 AD): A grasping ritual performed by the ruler of Xukuy (a still-unidentified site), under the auspices of K'ahk' Tiliw Chan Yopaat, about 40 years after the latter's accession. Perhaps this is recounted to demonstrate the increased power of QRG as an independent polity, after the successful throwing off of the CPN yoke.
        - Event #5 (771 AD):
            - An incense scattering ritual performed by K'ahk' Tiliw Chan Yopaat (referred to as the Ihk' Xukuup Ajaw), on the occasion of the 17th *katun* period ending.
            - Recounts that the ritual was witnessed by the ruler of Xukuy (this being the second time Xukuy is mentioned in this inscription) and perhaps gives the place where the ritual was performed.
    - East side:
        - Event #1 (771 AD): The raising of this stela on the 17th *katun* period ending (same date as Event #5 of the west side):

- The stela is named the "13-Ajaw Stone" because the 17th *katun* period ending is on 13-Ajaw (18-Kumk'u).
- The ritual was performed under the auspices of the "Four Ch'ahooms", which seems to be an additional name/title of K'ahk' Tiliw Chan Yopaat.

- Event #2 (date unclear): Recounts an event in mythical time, considered a parallel to Event #1, because it occurred on 13-Ajaw:
  - On 13-Ajaw (18-Sak).
  - At a place called *? Nal*.
  - Witnessed by *Ihk' ? Nal*.
- Event #3 (date unclear): Recounts another event in mythical time, also considered a parallel to Event #1, because it occurred on 13-Ajaw:
  - On 13-Ajaw (13-Wo).
  - At a place called Yax Chihil Witz.
  - Under the auspices of the god Mixnal.
- Event #4 (771 AD): Re-focusses attention back to the (contemporary) 17th *katun* period ending:
  - Recounting again that the ritual was performed under the auspices of K'ahk' Tiliw Chan Yopaat.
  - And that K'ahk' Tiliw Chan Yopaat scattered incense.
  - One additional detail of the event – a burial ritual (possibly involving a child or children).

The two events in mythical time on the east side make use of "extra-high calendar units" (see end notes under D12 and D15). These haven't, up to now, been well understood.

- *The Deep Time references at Quirigua contain higher periods that count vast spans of time. Carl Callaway (2024) has proposed a mathematical solution where the higher periods are preceded by a unique mathematical notation indicating they represent cumulative counts, that when applied, reach the intended target dates. He further showed how all the higher periods at Quirigua and Yaxchilan are solvable using cumulative counts, and the target dates that these huge distance numbers count to are solved by standard modular arithmetic.* [Carl Callaway, personal communication, 2024-10-22.]

MHD		Transliteration	Translation
		West side	
C1-D2	**A1-B2**	tzi:<ka[IXIIM^2]>:HAAB	ISIG
C3	**A3**	9.PIK	LC = 9.14.~~12~~ → 13.4.17, …
D3	**B3**	14.WINIKHAAB	
C4	**A4**	12^3.HAAB	
D4	**B4**	4.WINIK	
C5	**A5**	17.K'IN	
D5	**B5**	12.KAB	… (on) 12-Kaban …
C6	**A6**	u.<TI':HUUN[Glyph-G^4]:li>	[← SS starts here Glyph-G$_8$?, Glyph-F
D6	**B6a**	7:*20:<HUL:li>	Glyph-DE = it is 27 days into the current lunation

	B6b	<3.JGU[ja]>:K'AL:li [5]	Glyph-C = it is the 3rd lunation of the 6 governed by the JGU
C7	**A7a**	MIIN+CHAN [6]	Glyph-X = the one corresponding to Glyph-C=3/4+JGU
	A7b	u.<K'ABA':<ch'o[ko]>:a>	Glyph-B = (that is) his youth(ful) name
D7	**B7**	<20:10>.<5:<[K'AN]a>:si:ya> [7]	Glyph-A = there are 30 days in the current lunation SS ends here ➔] … 5-K'ayab, [8] … (LC = 9.14.13.4.17; 29 December 724 AD)
C8	**A8a**	u:CH'AM:K'AWIIL	Event #1 … (it is the) grasping-K'awiil(-sceptre) of …
	A8b	K'AHK':TIL{iw}:CHAN	… K'ahk' Tiliw Chan …
D8	**B8a**	YOPAAT	… Yopaat, …
	B8b	*ch'a:*jo:*ma [9]	… (the) Ch'ahoom;
C9	**A9a**	u:*KAB::{ji}ya [10]	… he ordered it, …
	A9b	18:<u.BAAH>.K'AWIIL	… Waxaklajuun Ubaah K'awiil, …
D9	**B9a**	<xu[ku]>:pi>:AJAW	… Xukuup Ajaw[11]. (= "The Lord of CPN")
	B9b	13:<3.<WINIK:<[ji]ya>>>	Event #2 DN = 6.~~3~~.~~13~~ → 6.13.3, [12] … (about 6 years and 263 days = 6 years and 9 months later)
C10	**A10a**	6:HAAB:ya	
	A10b	i:u{h}:ti	… then it happened, …
D10	**B10a**	4:AJAW	… (on) 4-Ajaw …
	B10b	13:YAX:SIHOOM	… 13-Yax [13], … (LC = 9.15.0.0.0; 18 August 731 AD)
C11	**A11a**	*i?:TI':ja:*AJAW?	… ? …
	A11b	20?:TI'?:ta [14]	… ?. [15]
D11	**B11a**	6:<14.WINIK>:ya	Event #3 DN = ~~1~~.14.6 → 6.14.6, [16] … (about 6¾ years = 6 years and 9 months later)
	B11b	1:HAAB:ya	
C12	**A12a**	i:u{h}:ti	… then it happened, …
	A12b	6:KIMI[17]	… (on) 6-Kimi …
D12	**B12a**	4:ka:se:wa	… 4-Sek [18], … (LC = 9.15.6.14.6; 29 April 738 AD)
	B12b	u:<<CH'AK:ka>.BAAH>:ji [19]	… (it was the) head-chopping of …
C13	**A13a**	18:<u.*BAAH>:K'AWIIL	… Waxaklajuun Ubaah K'awiil.
	A13b	16:<15.<WINIK.{ji}ya>	Event #4 DN = 1.1.15.16 → 1.4.16.15 [20], … (about 24 years later)
D13	**B13a**	1:HAAB:ya	
	B13b	1:WINIKHAAB:ya	
C14	**A14a**	i:u{h}:ti	… then it happened, …
	A14b	11:IMIX	… (on) 11-Imix …
D14	**B14a**	19:MUWAAN:ni	… 19-Muwaan [21], … (LC = 9.16.11.13.1; 24 November 762 AD)

	B14b	{*u}<CH'AM.wa>:PIIT?:*AJAW?	… he grasps it?, Piit Ajaw, … (= "The Lord of the Litter"?)
C15	**A15**	<K'IN.ni> :<<?/TIL?>+BAHLAM> [22]	… "Sunraiser Jaguar", …
D15	**B15a**	<xu[ku]>:ya:AJAW:wa [23]	… Xukuy Ajaw; … (= "The Lord of Xukuy")
	B15b	u:KAB:<[ji]ya>	… he ordered it, …
C16	**A16a**	ch'a:*jo:*ma [24]	… (the) Ch'ahoom. …
	A16b	19:<4.<WINIK:ya>>	Event #5 DN = 8.4.19, …
D16	**B16a**	8:HAAB:ya	
	B16b	i:u{h}:ti	… then it happened, …
C17	**A17a**	13:AJAW	… (on) 13-Ajaw …
	A17b	18:*HUL:OHL	… 18-Kumk'u [25], … (LC = 9.17.0.0.0; 20 January 771 AD)
D17	**B17a**	17:WINIKHAAB	… (it was the) 17th *katun*, …
	B17b	<CHOK.*wa>:ch'a:ji [26]	… he scattered incense, …
C18	**A18a**	ho:lo:wo [27]	… Holow …
	A18b	CHAN:na	… Chan …
D18	**B18a**	K'AWIIL:la	… K'awiil, …
	B18b	K'AHK':TIL{iw}:CHAN	… K'ahk' Tiliw Chan …
C19	**A19a**	YOPAAT	… Yopaat, …
	A19b	IHK':<<xu[ku]>:pi>:AJAW>	… Ihk' Xukuup Ajaw, … (= "The Lord of Black Xukuup")
D19	**B19a**	u:CHAN:nu	… Ucha'an … (= The Master of)
	B19b	18:u:<<BAAH:*ji>+K'AWIIL>	… Waxaklajuun Ubaah K'awiil, …
C20	**A20a**	<xu[ku]>:pi>:AJAW	… Xukuup Ajaw; … (= "the Lord of CPN")
	A20b	yi:ILA:ji	… he witnessed it, …
D20	**B20a**	<xu[ku]>:ya:AJAW:wa [28]	… (the) Xukuy Ajaw, … (= "The Lord of Xukuy")
	B20b	6:mi{h}:WINKIL [29]	… Wak Mih Winkil. (= "Six Zero Winkil")
		East side	
A1-B2	**C1-D2**	tzi:<ka[snake-2[30]]>:HAAB	ISIG
A3	**C3**	9.PIK	LC = 9.17.0.0.0
B3	**D3**	17.WINIKHAAB	
A4	**C4**	0.HAAB [31]	
B4	**D4**	0.WINIK:ki	
A5	**C5**	0.K'IN	
B5	**D5a**	<[yi]IHK'IN]>	[🡸 SS starts here Glyph-G_9
	D5b	TI':HUUN [32]	Glyph-F
A6	**C6**	13.AJAW	… (on) 13-Ajaw …
B6	**D6a**	WINIK?:ya	Glyph-DE?
	D6b	CHAN:na [33]	

A7	**C7**	<u.IXIIM.ja>:<2.K'AL:li> [34]	Glyph-C = it is the 2nd of the 6 lunations governed by the TMG
B7	**D7**	JUUN.<po:k'i>	Glyph-X = the one corresponding to Glyph-C=2+TMG
A8	**C8**	u.<<ch'o:ko>+<K'ABA':a>> [35]	Glyph-B = (that is) his youth(ful) name
B8	**D8**	20.9	Glyph-A = there are 29 days in the current lunation SS ends here ➔]
A9	**C9**	18.<HUL:OHL:la>	18-Kumk'u [36], … (LC = 9.17.0.0.0; 20 January 771 AD)
B9	**D9**	<tz'a[pa]>.ja	Event #1 … it was raised, …
A10	**C10**	YAX.<CHIT:<[<bi/BIH>?]ti>> [37]	… (the) Yax Chit …
B10	**D10a**	mi:yi	… Miy, …
	D10b	<[<XAAK/SAAK>]SAK>:IK' [38]	… Xaak/Saak Sak Ik', [39] … (= the specific name of the stela?)
A11	**C11a**	13:AJAW	… (it is the) 13-Ajaw …
	C11b	TUUN:ni	… Stone , … [40] (= the generic name of the stela)
B11	**D11**	u:KAB:<[ji]ya>	… he ordered it, …
A12	**C12**	ch'a.<4:ho:ma> [41]	… Chan Ch'ahoom. (= "The Four Incense Offerers")
B12	**D12a**	TZUTZ:ji:ya	Event #2 As it was completed …
	D12b	19.<5.<?:NAL>> [42]	… (the) 19th . 5th <?> {period ending of a very high calendar unit?}, …
A13	**C13**	<u{h}.ti>:ya	… it happened …
B13	**D13a**	13:AJAW	… (on) 13-Ajaw …
	D13b	<17/18/19>:SAK:SIHOOM / <17/18/19>:sa:<ku+SIHOOM> [43]	… 18-Sak; [44]
A14	**C14a**	yi:li:a:<[ji]ya>	… he witnessed it, …
	C14b	IHK':ma:a	… Ihk' Ma' …
B14	**D14**	<sa.LEM?>:NAL	… <something> Nal; … (= "Black Not <something> Place") [45]
A15	**C15a**	u{h}:ti:ya	… it happened at …
	C15b	WITZ':WINKIL? [46]	… Witz' Winkil. ("Water Serpent Person-ish")
B15	**D15a**	TZUTZ:ji:ya	Event #3 As it was completed …
	D15b	6:<IHK'.NAHB>:NAL [47]	… (the) 6th <Ihk' Nahb Nal> {period ending of "extra-high calendar unit"?}, …
A16	**C16a**	13:AJAW	… (on) 13-Ajaw …
	C16b	13:<IHK'[AT]>	… 13-Wo; … [48]
B16	**D16a**	u:KAB:<{ji}ya>	… he ordered it, …
	D16b	<mi.xi>:WINKIL [49]	… Mix Winkil, …
A17	**C17a**	u{h}:ti:ya	… it happened (at) …
	C17b	YAX:hi:chi:li	… Yax Chihil …
B17	**D17a**	wi:WITZ [50]	… Witz. (= "First Pulque Mountain") [51]

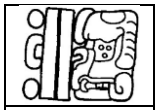
	D17b	ha:i	Event #4 He is the one / as for him, … (bringing the narrative back to contemporary times)
A18	**C18a**	u:KAB:ya:ji	… he ordered it, …
	C18b	u:BAAH[{an?}]:hi:li [52]	… (the) personification of …
B18	**D18a**	<[K'AN]TE'>:NAAH:?	… K'an Te' Naah ? … ("The Yellow/Precious Tree House ?")
	D18b	u?:KAN?:EK' [53]	… Ukan? Ek', … ("The Snake? of the Star")
A19	**C19a**	K'AHK':TIL{iw}:CHAN	… K'ahk' Tiliw Chan …
	C19b	YOPAAT	… Yopaat; …
B19	**D19a**	u:CHOK:ch'a{aj}:*wa	… he scattered incense, …
	D19b	13:AJAW	… (on) 13-Ajaw …
A20	**C20a**	18:HUL:OHL	… 18-Kumk'u; … (LC = 9.17.0.0.0; 20 January 771 AD)
	C20b	u:bu:t'u [54]	… (It is the) covering / filling / burial of …
B20	**D20a**	?:YATIK	… (the) child / children of? …
	D20b	a:AJAW:TAAK [55]	… (the) lords.

End Notes

[1] GutiérrezGonzález-PhD.p96.pdfp109.fn30 [English from Google Translate]: The emblem glyph of Copán consists of three glyphic elements: T756.T528.T177. There have been some proposals for its translation from a transliteration **xu**-**ku**-**PIH**/**xu**-**ku**-**pi** that would be transcribed *xukpi'* or *Xukpi* (see Schele, Grube, and Fahsen 1994; see Montgomery 2002). Looper (2003:135) points out that it could be read not only as *xukpi* but also *xukup* by a direct derivation from the word motmot (Momotus momota), which is not a bat but a flycatcher bird. This work does not follow these proposals, so the glyph of the bat (T756) that is observed in the main sign of the emblem glyph of Copán is not transliterated or transcribed or translated, but is handled as COPÁN (without translation and in capital letters). Whenever there is a reference to this bat glyph preceded by the logogram IK' in the first part (or transliteration), the traditional name of Copán will be used under the "black COPAN" formula.

[2] A1-B2. The LC **HAAB**-month is K'ayab, whose patron **IXIIM** matches the patron infixed in the ISIG.

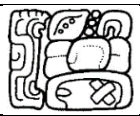
[3] A4.



A4

The drawing shows a definite "12", but the calendrical calculation requires a "13" (see end note under B5-B7). This is not a mistake on the part of the modern-day epigrapher-artist – the 3D model also shows a "12".

[4] A6. This is an unusual form of infixed Glyph-G.

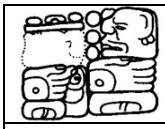
		
K&L.p65.pdfp65.G7.7 = Gronemeyer-GGF.p9.pdfp9.fig8f	Looper	Tolles

A6	A6	A6

In A6b, the middle component (vertically speaking), cannot be just a *plain* **HUUN** of Glyph-F = **TI'-HUUN-li**. If it were, then there would be no Glyph-G present in an SS with a Glyph-F. This is highly unlikely. This in turn suggests that the middle component (horizontally speaking) of the three subcomponents forming the middle of A6b has to be an infixed Glyph-G (with the two flanking elements being the "bows" of the **HUUN** and with Glyph-G obscuring the "knot" of the **HUUN**, either because of infixing or because of being place between the **HUUN** and the viewer). This then excludes the possibility of the **TIL/TILIW** proposed by GutiérrezGonzález-PhD (which would also mean that there's no Glyph-G). The "bows" of the **HUUN** have been mistaken for being the bent arms of **TIL**, as shown in the K&L.p65.pdfp65.G7.7.

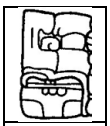
The Tolles photograph shows that this possible infixed Glyph-G might have a lower half which is slightly wider than the upper half. That in turn suggests that it could be Glyph-G_8. Furthermore, many forms of the "floppy pear" variant of Glyph-G_8 also have a bold left wall, ceiling, and right wall (which can be seen in the K&L and Looper drawings). Unfortunately, calendrical calculations require Glyph-G_7 (see end note under B5-B7). There doesn't seem to be a way of "forcing" (or even just gently "coaxing") a reading of Glyph-G_7 here.

[5] B6.

			
QRG Stela E B6 <7:*20:<HUL:li>>.<<3.JGU[ja]>:K'AL:li>	MHD (Tolles)		QRG Stela J B13 6.<<DG.ja>:K'AL:li>

- B6a:
  - 7:*20:<HUL:li>.
  - MHD also doesn't know what the very-eroded element between the "7" and the HUL in B6a is. It's compatible with being syllabogram **hu** (the upturned iguana head). However, MHD doesn't have any instances of "blhyphen contains hu-hul", so it doesn't seem to be an initial phonetic complement for the **HUL**. Is it possibly a "full crescent" variant of **K'AL/WINIK** = "20", making it 27 days into the current lunation? This is much larger than the value of the coefficient of Glyph-DE expected for this LC (9, see end note under B7).
  - The element on the bottom right of B6a looks like a syllabogram **ja**, but is actually just the moon part of the hand-pointing-at-the-moon variant of **HUL**.
  - GutiérrezGonzález-PhD.p146.pdfp159 has "[Glifo D]" for this eroded glyph, but this doesn't make sense, as "7" and **HUL-li-ja** together *is* Glyph-DE. A transliteration of **HUL-li-ja** shows that the moon glyph on the bottom right of B6a has been misread as syllabogram **ja** rather than part of the **HUL** logogram.
- B6b:
  - <3.JGU[ja]>:K'AL:li.
  - The end phonetic complement of li for the K'AL is not common, but known from other inscriptions, e.g., QRG Stela J B13.

[6] A7a.

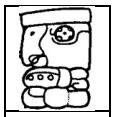

A7a

This is an unusual form of Glyph-X, with a CHAN conflated with (or infixed within) the MIIN. GutiérrezGonzález-PhD.p146.pdfp159 transliterates only as "Glifo X". The MHD photo and 3D model reveal that this part is quite eroded. Normally we expect a **CH'ICH'** at the bottom for 3+JGU and an upside-down **CH'ICH'** at the top for 4+JGU.

MHD reads the **CHAN** with confidence (i.e., no question mark). A search in MHD on "bllogosyll contains min" and "blsem contains Glyph X" yields 25 hits, these being all the MIIN-based instances of Glyph-X in the database. QRG Stela E A7a (E7a by the MHD system of glyph-block labelling) is the only instance with a **CHAN**.

If this were part of a name/title, then it would simply be a "sky-related variant" of the "SNB" (="Square-Nosed Beastie"). But it's difficult to know what that means in the context of Glyph-X.

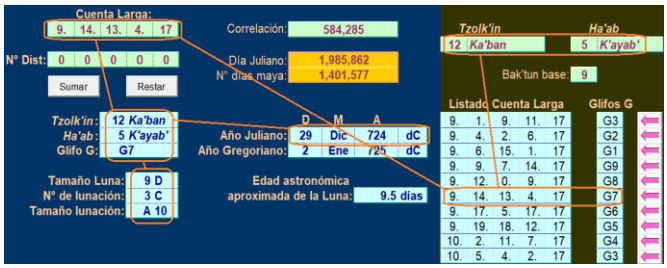
[7] B7b.



B7b

Both MHD and GutiérrezGonzález-PhD transliterate a syllabogram **ya** for the bottom element of B7b. Dorota Bojkowska: reading the bird-head variant of **a** and **K'AN** is ok, the **si** is very clear, and **ya** is acceptable, and from context we expect a HAAB date here. [Sim: could it be an eroded form of the "thin, rectangular parrot-head" variant of **a**? The three subcomponents look too equally sized to be that (that variant of **a** has the beak much longer than the head).

[8] B5-B7.Calendrical calculations:



The best-matching LC for CR = 12-K'aban 5-K'ayab is LC = 9.14.13.4.17; 29 December 724 AD. In the ISIG's LC, the coefficient of the Haab unit is "13", not "12" as appears in the drawing (see end note under A4). It would appear to be a mistake of either the designer or the carver (perhaps the same person) or the person responsible for the calendrical calculations.

SS cross-checks:

- The variant of Glyph-G and the values of the various coefficients of the SS as calculated by the Villaseñor calendar program can be cross-checked against what appears in the inscription.
- The variant of Glyph-X as it appears on the inscription can also be cross-checked against the coefficient and ruling god of Glyph-C.

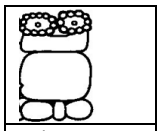
SS	Program	Inscription	
Glyph-G	G7	G8?	×
Glyph-DE	9	27	×
Glyph-C	3	3	✓
Glyph-X	n/a	For Glyph-C=3/4+JGU	Actual Glyph-C=3+JGU. The god matches, but it's unclear if the coefficient matches
Glyph-A	30	30	✓

Two or three out of five is not brilliant, but not a total disaster. Still, it remains a mystery to me why these SS cross-checks so often reveal a number of discrepancies.

I also often wonder how the roles were divided up in Classic Maya times, from the moment a ruler decided to commission the creation of a monument (with an inscription) to the final result. Who decided the actual iconography and which events would be recounted? Who determined the layout – the relative positions of iconography vs. text? Who chose the exact words of the text? Who decided if a word should be written as a logogram or as syllabograms (for words where either was possible)? Who decided if initial or final phonetic

completements should be present (for logograms where this was possible)? Who decided the actual variants of the logograms and syllabograms to be used? Was the person who played the role of the designer different from the person who actually carved the monument – i.e., was the former a member of the literati and the latter an artisan, or were they one and the same person? These questions become particularly relevant when there is an obvious mistake like the “12” instead of “13” in the coefficient of the **HAAB** unit of the ISIG’s LC at A4 – where in the whole process did this mistake slip in? Was it at the very start when the ”Obsidians” were making their calendrical calculations? Or at the very end, when the scribe was carving the actual number? If the former, then did the carver actually just blindly carve what the "Obsidian" had calculated, because he (the carver) knew nothing about calendrical calculations? Didn’t the ruler who commissioned the monument have the necessary knowledge to detect such mistakes?

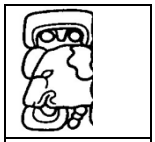
[9] B8b. Ch’ahoom.



B8b
*ch’a:*jo:*ma

This can be read from context, even though it’s quite badly eroded.

[10] A9a. *Ukabjiiy*.

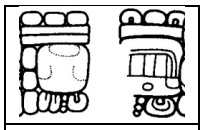


A7a
u:*KAB::{ji}ya

This can be read from context, even though the two cross-hatched circles and the scroll protectors of **KAB** are not present in the mammal head (at least, not in the drawing), and there is no obvious **ji** conflated with **ya**.

[11] B9a. There is some uncertainty in the reading of this word. See entry for *Xukuup* in CMGG.

[12] B9b-A10a. There is a major problem with the DN:



B9b A10a

From the drawing, DN = 6.1.13 or 6.3.13, under the normal convention for DN’s (and that of generally how to combine glyphs in a glyph-block). The uncertainty between “1” and “3” for the element to the left of **WINAL** is simply whether there are three dots or one dot and two fillers. However, neither value of DN added to the ISIG’s LC’s CR will produce the next CR of 4-Ajaw 13-Yax. Instead, 6.13.3 (i.e., swapping the **K’IN** and **WINAL** coefficients) is the value required, see next end note.

[13] B10.

CORRELATION CONSTANT: 584285

▲ 4 Ahau 13 Yax

Long Count	G	Y	Greg. Date	Julian Date
▼ 9.1.16.7.0	G5	Y5	23.10.471	22.10.471
▼ 9.4.9.2.0	G4	Y1	11.10.523	9.10.523
▼ 9.7.1.15.0	G3	Y4	28.9.575	26.9.575
▼ 9.9.14.10.0	G2	Y7	16.9.627	13.9.627
▼ 9.12.7.5.0	G1	Y3	3.9.679	31.8.679
▼ 9.15.0.0.0	G9	Y6	22.8.731	18.8.731
▼ 9.17.12.13.0	G8	Y2	9.8.783	5.8.783

The most obvious LC for CR = 4-Ajaw 13-Yax is the period ending LC = 9.15.0.0.0; 18 August 731 AD (as this is when rituals are performed).

However, the three mutually dependent aspects do not fit together:

1. ISIG's LC's CR_1 = 9.14.13.4.17; 29 December 724 AD; 12-Kaban 5-K'ayab.
2. DN = 6.1.13 or 6.3.13.
3. CR_2 = LC = 9.15.0.0.0; 18 August 731 AD; 4-Ajaw 13-Yax.

Neither DN = 6.1.13 nor 6.3.13 work:

```
 9.14.13. 4.17     9.14.13. 4.17
+     6. 1.13   +     6. 3.13
 -------------     -------------
 9.14.19. 5.10     9.14.19. 8.10
```

DN = 6.13.3 is the only value which works:

```
 9.14.13. 4.17
+     6.13. 3
 -------------
 9.15. 0. 0. 0
```

Summary:

- The clear values for coefficients and Tzolk'in day-name or Haab month-names means that not that much can be done to amend either coefficients or day-names/month-names. (CR's are harder to adjust anyway, because of a lot of mutual dependencies.)
- Instead, small adjustments made to the *reading* of the ISIG-LC and DN are sufficient to make all calendrical calculations work, namely:
    - One coefficient of the ISIG-LC needs to be amended: 9.14.12.4.17 → 9.14.13.4.17
    - The **K'IN** and **WINAL** coefficients of the DN need to be swapped: 6.3.13 → 6.13.3:
        - The switching of the **K'IN** and **WINAL** coefficients from the "regular convention" is an amendment which often needs to be made. This perhaps indicates that *it may be the convention itself* – formulated as a general rule (in modern times) – which is the problem, rather than that there is an actual problem with the DN of the inscription. (This is despite the fact that the convention "makes sense", in terms of how Maya glyphs usually behave.)
        - MHD makes the same amendment in the reading.
        - GutiérrezGonzález-PhD.p148.pdfp161 also makes the same amendment.
- The amending of one coefficient and the swapping of the **K'IN** and **WINAL** coefficients will be required several times in this inscription.

[14] A11.

A11

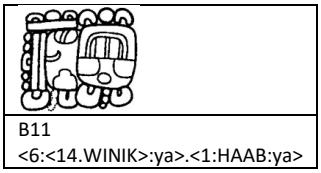
- MHD: i ti' ja ajaw 20? ti'? ta ➔ *i ?? aajaaw ??* = “and then ?? lord ??”.
- GutiérrezGonzález-PhD.p146.pdfp159:??-ti’-ja-ja-ta ➔ *? ti’ jajat?* = “_ la orilla ??” (_ the shore/bank ??).

MHD	GutiérrezGonzález-PhD
i	?? (does not read i).
ti’	Typo: ti’ should be TI’.
ja	ja.
AJAW	Does not read *AJAW.
20?	ja.
ti’?	The human head is treated as the head variant of **ja**.
ta	ta.

Neither MHD nor GutiérrezGonzález-PhD can make anything sensible of this.

[15] B9b-A11b. It’s unclear what the event on this date actually was, but Stela I C2-D4a explicitly says that a stela was raised by K’ahk’ Tiliw Chan Yopaat on LC = 9.15.0.0.0.

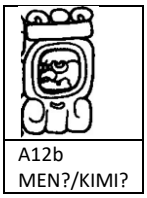
[16] B11.



B11
<6:<14.WINIK>:ya>.<1:HAAB:ya>

The drawing shows a definite DN = 1.14.6 (under the conventional rules of DN-syntax) but the calendrical calculation requires DN = 6.6.14. This means that here too, the **K’IN** and **WINAL** coefficients need to be swapped and the **HAAB** coefficient needs to be amended (see end note under A12b-B12a and A14b-B14a).

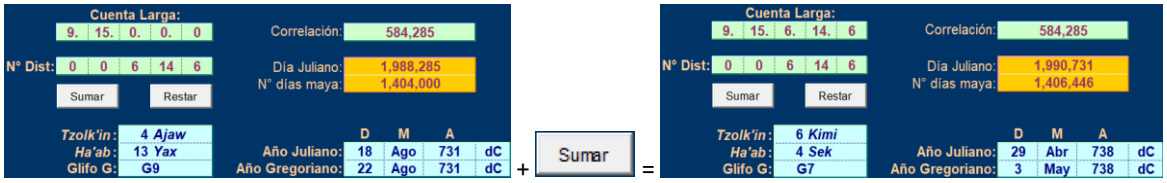
[17] A12b.



A12b
MEN?/KIMI?

The day-name *could* be a MEN, but the presence of what might be a jaw permits a reading of KIMI as well. KIMI is the one which produces a match with the previous CR + DN (see end note under A12b-B12a). Both MHD and GutiérrezGonzález-PhD.p146,pdfp159 also read KIMI.

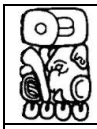
[18] A12b-B12a. Calendrical calculations:



LC = 9.15.6.14.6; 29 April 738 AD.

The previous CR + DN matches the current CR, if the DN is amended to 6.14.6 and the current day-name is read as KIMI. This requires the changing of the HAAB-coefficient *and* the swapping of the **K’IN** and **WINAL** coefficients (see also end notes under A13b-B13 and A14b-B14a).

[19] B12b.

		
QRG Stela E B12b u:<<CH'AK:ka>.BAAH>:ji		QRG Stela J H3 <CH'AK:ka>.<BAAH:<[ji]ya>>

It's not totally clear to me how to interpret the **ji** here – we can make the *ch'ak baah* either:

- "verbal": *uch'akbaahjiiy* = "since he head-chopped", with an underspelled *-iy*,

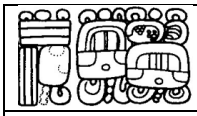
or

- "nominal": *uch'akbaah* = "the head chopping of", with **ji** just another form of **hi**, after the collapse of the *j/h* distinction in the late Late Classic.

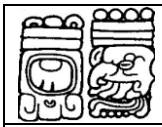
I think the latter is to be preferred, because the former would require a subject (e.g., K'ahk' Tiliw Chan Yopaat) to come directly after the verb (and there's none present, unless one wants to read just the implied pronoun "he"). The latter makes it just a "possessed noun" = "the head-chopping of", with the victim being the "possessor", Waxaklajuun Ubaah K'awiil (which does indeed come next in the text). On the other hand, with such a reading, I would have expected <**CHAK**:**ka**>.<**BAAH**:**ji**> rather than <<**CHAK**:**ka**>.**BAAH**>:**ji**>, i.e., the **ji** should complement only the **BAAH** (as an "end phonetic complement"), rather than complementing both the <**CHAK**:**ka**> *and* the **BAAH**. This latter argues more that it's a verbal inflection on *chak baah*.

Finally, comparing this glyph-block with QRG Stela J H3 confuses the issue even more. There (unlike here on QRG Stela E B12b), there is no **u** present, but there *is* a **ya**. That makes it much more likely to be a verbal suffix *-jiiy* (and the **ja** then not just an end phonetic complement of **BAAH**, after a merger of *-h* and *-j*). We hence can't use QRG Stela J H3 to influence our parsing of QRG Stela E B12b. See also end note under QRG Stela J H3 for more information.

[20] A13b-B13. The drawing shows a definite DN = 1.1.15.16 (under the conventional rules of DN-syntax), but the calendrical calculation requires DN = 1.4.16.15. This requires the changing of the HAAB-coefficient *and* the swapping of the **K'IN** and **WINAL** coefficients (see also end notes under A12b-B12a and A14b-B14a).


A13b-B13 16:<15.<WINIK.{ji}ya>> <1:HAAB:ya>.<1:WINIKHAAB:ya>

[21] A14b-B14a. Calendrical calculations:

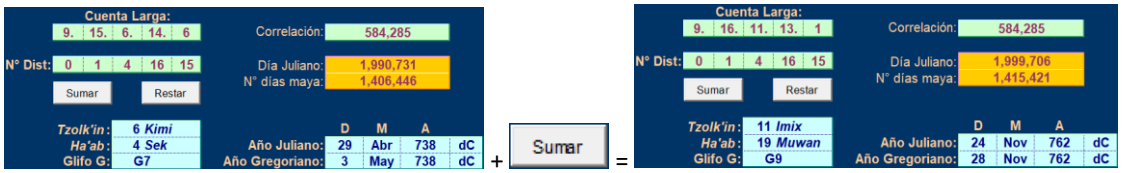

A14b-B14a 11:IMIX 19:MUWAAN:ni

Correlation Constant: 584285

▲ 11 Imix 19 Muan

Long Count	G	Y	Greg. Date	Julian Date
▼ 9.0.15.7.1	G6	Y6	11.2.451	10.2.451
▼ 9.3.8.2.1	G5	Y2	30.1.503	28.1.503
▼ 9.6.0.15.1	G4	Y5	17.1.555	15.1.555
▼ 9.8.13.10.1	G3	Y1	5.1.607	2.1.607
▼ 9.11.6.5.1	G2	Y4	23.12.658	20.12.658
▼ 9.13.19.0.1	G1	Y7	11.12.710	7.12.710
▼ 9.16.11.13.1	G9	Y3	28.11.762	24.11.762
▼ 9.19.4.8.1	G8	Y6	15.11.814	11.11.814

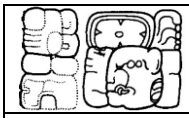
The most obvious LC for CR = 11-Imix 19-Muwaan is LC = 9.16.11.13.1; 24 November 762 AD.



LC = 9.16.11.13.1; 24 November 762 AD.

The previous CR + DN matches the current CR, *if the DN is amended to* 1.4.16.15. This requires the changing of the **HAAB**-coefficient *and* the swapping of the **K'IN** and **WINAL** coefficients (see also end notes under A12b-B12a and A13b-B13).

[22] B14b-A15.

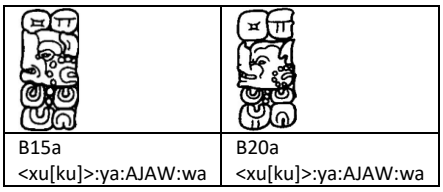
		
B14b-A15		K6751 B2 (MHD/Kerr) <MHD.MB3+ "Skyraiser"

MHD reads <CH'AM?.wa>:PIIT?:*AJAW <K'IN.ni>:<??.BAHLAM.?> and tentatively translates it as: The Lord of the Litter? takes it, "Sunraiser Jaguar" (MHD writes **PIT** rather than **PIIT**).

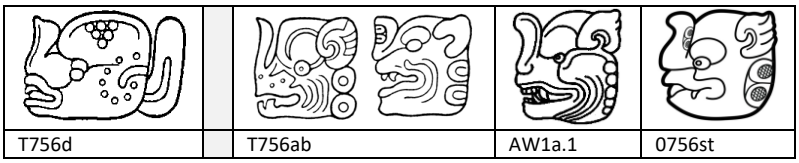
- B14b
  - This reads the bottom element ("**PIIT**?") as (already) part of the *subject* of the transitive verb **CH'AM**, continued with "Sunraiser Jaguar" in A15, and with a pronoun object (which is hence not manifested). This yields a translation of:
    - He grasps it, Piit Ajaw (="The Lord of the Litter"), "Sunraiser Jaguar".
  - An alternative would be to consider this bottom element as part of an explicitly named *object*, with the subject – "Sunraiser Jaguar" – starting only at A15. This yields a translation of:
    - He grasps Piit Ajaw (="The Lord of the Litter"), "Sunraiser Jaguar".
  - There is also the additional issue of the uncertainty of whether the "ben-ich"/"AJAW" element is an intrinsic part of the **PIIT** (if it is **PIIT**) or whether it should be read independently.
  - Dorota Bojkowska feels that the **PIIT** is part of the object, and the subject only starts at **K'IN**. This makes more sense than that **PIIT** is part of the subject's (extended) personal name. Also, an explicit object seems to make more sense.
  - Despite the absence of an *u-* before the root of the verb, this is not the antipassive, as that would normally be written with -**wi** rather than -**wa**. As this is not the antipassive, the possibility of an object for the verb can't be excluded, even if it's just "it" as the (non-manifesting) third person singular object pronoun, without an explicit noun object.
- A15:

- The translation "Sunraiser Jaguar" comes from MHD. The 'Jaguar' part seems reasonable, as the glyph has a distinct jaguar tooth, mammal ear, and darkness property marker. The motivation for 'Sunraiser' is the two arms on the side of the jaguar head "raising" the "sun" (=**K'IN**.**ni**) above them.
- GutiérrezGonzález-PhD.p146.pdfp159 gives: **CH'AM**?-?? **K'IN**-**ni** **TILIW**?[**B'ALAM**] ➔ k'in tiliw? b'a[h]lam = "Recibió _ K'in Tiliw B'ahlam(?)" (= "He received it, K'in Tiliw Bahlam?").
- Sim: It might seem reasonable to read this as **BAHLAM** infixed in **TIL**. The association of burning with the sun also seems reasonable *Til Bahlam K'in* = "Burn Jaguar Sun" (= "The Sun Which Burns the Jaguar"?). See however end note under QRG Stela D A21a for a small discussion where "Skyraiser" is peripherally mentioned. Its relevance to "Sunraiser" here is hard to determine, but they share the common feature of two bent arms lifting something above them – a **K'IN** (sun) glyph in QRG Stela E and a **CHAN** (sky) glyph in K6751 B2.

[23] B15a. The drawing shows <<xu[ku]>:ya:wa>:AJAW>. The same title occurs at B20a.



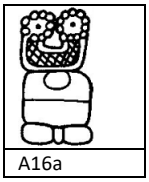
B15a <xu[ku]>:ya:AJAW:wa	B20a <xu[ku]>:ya:AJAW:wa



T756d		T756ab	AW1a.1	0756st

- Both MHD and GutiérrezGonzález-PhD transliterate similarly, with transcription *xukuy ajaw* = "(the) Xukuy? Lord".
- Looper-LW.p135.pdfp148.para1.l+3: This entity, nicknamed K'in B'alam, is termed an ajaw of a site provisionally read as "Xkuy." Elsewhere in the text of Stela E [at B20a] the same title appears, together with a toponym composed of a numeral six, a "shell-in-hand" sign, and *nal* (Fig. 4.18b). The "*Xkuy Ajaw*" is mentioned here as an observer of the period ending.
- Martin-AMP.p398.pdfp422.r6.c4 writes *Xkuy* instead of *Xukuy*. (Sim: this is perhaps borrowed from a modern Mayan language, as (initial) *xk-* is not a valid combination of sounds in Classic Maya).
- Neither *Xkuy* nor *Xukuy* are mentioned in Tokovinine-TPoP and Tokovinine-TPoPDB. This is because they don't read the bat-head glyph as **xu**. Instead, they take a neutral / cautious stand, and refer to it simply as T756d (= "head of leaf-nosed-bat *with infixed 'pond' and 'stalactite'*"). This is perhaps a wiser approach, as it distinguishes it from T756ab (= "head of (plain old) leaf-nosed-bat") – perhaps T756d doesn't even have one of the possible readings of T756ab (**SUUTZ'**, **tz'i**, or **xu**). Both Tokovinine-TPoP and Tokovinine-TPoPDB recognize T756d-ya (the Xkuy/Xukuy of other epigraphers) as a separate polity/location from QRG. Tokovinine-TPoPDB shows it occurring on QRG Altar O', Altar P', Stela E, and Zoomorph G.
- A search in MHD on "blengl contains xukuy" and "blengl contains lord" returns 6 hits, all in QRG (Altar O' (2 hits), Altar P' (1 hit), Stela E (2 hits), and Zoomorph G (1 hit). The search has to have two separate clauses (and-ed together) because 3 of the hits have *xukuy?* (with a question mark) and 3 of the hits have *xukuy* (without a question mark). It seems that Xukuy was a polity which was a vassal of QRG.

[24] A16a.

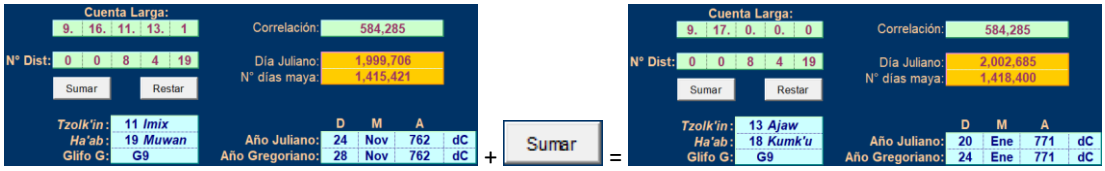


A16a

ch'a:*jo:*ma

This can be read from context, even though it's quite badly eroded.

[25] A17. Calendrical calculations:



LC = 9.17.0.0.0; 20 January 771 AD.

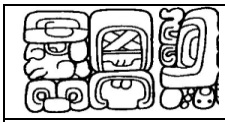
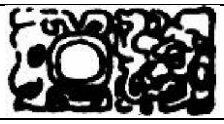
The previous CR + DN matches the current CR.

[26] B17b.

B17b

Both MHD and GutiérrezGonzález-PhD read **wa** on the top right.

[27] A18a.

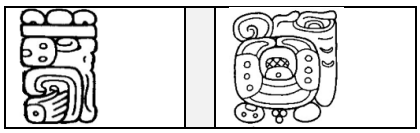
		
QRG Stela E A18-B18a <ho:lo:wo>.<CHAN:na> K'AWIIL:la	QRG Stela K C7-D7a <K'AHK'.<ho[lo]{w?}>>.<ya?:CHAN:na> <yo.<YOPAAT+AAT>>:ti	MRL Stela 1 E2-F2 ho{lo}.<wo:CHAN:na> K'AWIIL:la

- GutiérrezGonzález-PhD transliterates only syllabogram **wo** and does not attempt a transcription.
- MHD ho:lo:wo ➔ *Holow*.
  - **ho** is the "thick-lipped head" (as in BeliaevEtAl-NGA.p357.pdfp7).
  - **lo** may be the element infixed into the head of **ho** but it is by no means certain. Perhaps it is just **ho** and **wo**. Alternatively, it is in the bottom right of the head (very eroded), as it is in QRG Stela K C7a (not eroded).
  - **ho**{lo}:**wo** ➔ *Holow*, with underspelled **lo**, is also possible, as MRL Stela 1 E2 has ho{lo}.<wo:CHAN:na>.

Do not confuse *Holow Chan **K'awiil*** with *Holow Chan **Yopaat***, the name of a later QRG ruler. This ruler (K'ahk' Tiliw Chan Yopaat) features in many more QRG inscriptions, but is given the additional name/title Holow Chan K'awiil only in this inscription (Stela E). The name does however occur in two or three other inscriptions of another polity, MRL (Moral-Reforma), in reference to a different ruler.

[28] B20a. See end note under B15a.

[29] B20b.



QRG Stela E B20b 6:MIH:WINKIL?		QRG Stela J D17 <[IHK']WAY>:NAL:la

This is what MHD transliterates, with transcription *Wak Mih Winkil*. (This would formerly have been read as *Wak Mihnal*, before the general acceptance of **WINKIL**.)

Note that the leaf on the right, unusually, goes downwards and occupies the entire right side. We see something very similar in the **NAL** in QRG Stela J D17.

With a reading of *Winkil* instead of *Nal*, B20b *Wak Mih Winkil* might be an additional name/title of the *Xukuy* ruler rather than a locative phrase indicating where the incense scattering ritual was performed and witnessed.

- On the one hand – from the point of view of syntax – a locative phrase would have been expected earlier in the phrase/sentence, not at the end.
- On the other hand, additional names/titles tend to come early in the sequence, ending with the "*(k'uhul) ajaw*" title (or having the "*(k'uhul) ajaw*" title come towards the end, perhaps with only a *kaloomte'* title after it). For example, all the instances of the additional Mix Winkil (formerly Mixnal) name/title of Yaxuun Bahlam IV of YAX come (long) before the *K'uhul Pa'-Chan Ajaw* or *K'uhul Kaaj Ajaw* title.

On balance, I think reading it as an additional name/title is preferable. This agrees with MHD, which glosses it (in the blsem field) as a deity[-based] name/title.

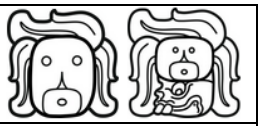
[30] C1-D2. The LC HAAB-month is Kumk'u, whose patron "snake-2" matches the patron infixed in the ISIG.

The patron of *Sak Sihoom* (Sak) and of *Hulohl* (Kumk'u) both seem to be snakes. See the CMGG entry for ISIG for more information.

[31] C4. This is the (snake-)head variant of HAAB.

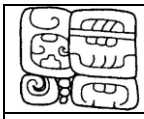
C4

[32] D5b. HUUN.

				
D5b TI':HUUN		TIK Stela 31 C5 (W. Coe) <YOP+HUUN>:BAHLAM	MHD.ZA7	1711st 1711hc

- From context, it's clear that this is Glyph-F = **TI'**:**HUUN**. It appears to be the deity head variant, but with a right-side-up "**la**-face" infixed in the centre of the head, where the LEM normally is (and thus obscuring the LEM).
- That infixed element may or may not be MHD.ZA7 (as it is in TIK Stela 31 C5, which is 1711hc with infixed **BAHLAM**). This is sometimes read just **HUUN**, sometimes as **YOP HUUN** – the status of the three "leaves" is a bit uncertain. For example MHD reads TIK Stela 31 C5 as **YOP**-**HUUN**-**BAHLAM** with no question mark on the **YOP**.
- There's a "**la**-face" in QRG Stela E D5b but the three "leaves" of MHD.ZA7 are missing, making the status of the "**la**-face" even more unclear.

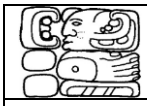
[33] D6.



D6
<WINIK?:ya>.<CHAN:na>

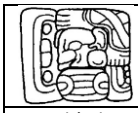
- MHD is unable to do much with this and has: <??:ya>.<CHAN:na> ➔ *?? chan* = "?? sky".
- GutiérrezGonzález-PhD.p142.pdfp155 gives: **HUL**-**ya**-**CHAN**-**na**, which is slightly closer to Glyph-DE, but the motivation behind **HUL** is obscure (is this **WINIK**-like glyph a reading for **HUL?**), and the **CHAN** is still unexplained.
- Sim: this is the spot in the SS where Glyph-DE is expected.

[34] C7.



C7
<u.IXIIM.ja>:<2.K'AL:li>

[35] C8.



u.<<ch'o:ko>+K'ABA':a>

GutiérrezGonzález-PhD.p142.pdfp155 gives: **u**-**K'AB'A'**-**CH'O**-**ko**-**wi?**, but the wi? is actually the bottom part of syllabogram **a**, with the top obscured by the **K'ABA'**, as transliterated by MHD.

[36] C3-C9. Calendrical calculations:

LC = 9.17.0.0.0; 20 January 771 AD.

SS cross-checks:

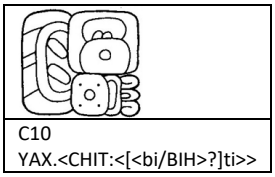
- The variant of Glyph-G and the values of the various coefficients of the SS as calculated by the Villaseñor calendar program can be cross-checked against what appears in the inscription.
- The variant of Glyph-X as it appears on the inscription can also be cross-checked against the coefficient and ruling god of Glyph-C.

SS	Program	Inscription	
Glyph-G	G9	G9	✓
Glyph-DE	9	0	×
Glyph-C	2	2	✓
Glyph-X	n/a	Glyph-C=2+TMG	Actual Glyph-C=2+TMG
Glyph-A	30	29	×

Three out of five is not brilliant, but quite good. Still, it remains a mystery to me why these SS cross-checks so often reveal a number of discrepancies

[Sim's *very speculative musings*: A mismatch in Glyph-A might be more due to epigraphers not fully understanding the correct method of calculating the theoretical value than to "mistakes" made on the part of the calendrical experts, designers or carvers of the time of the creation of the monument. For example, the modern algorithm might take the number of days in each of the 6 lunations as 29, 30, 29, 30, 29, 30 (or 30, 29, 30, 29, 30, 29) – which might have been true in general over the whole Maya region – whereas the "local standard" might have been 29, 29, 29, 30, 30, 30 (or 30, 30, 30, 29, 29, 29).]

[37] C10. Yax Chit.

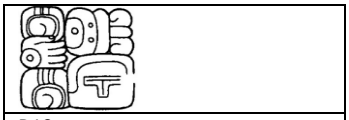


C10
YAX.<CHIT:<[<bi/BIH>?]ti>>

The main doubt involves the glyph on the bottom right:

- From the drawing, the element could be **ti** or **SAK**. MHD reads it as **ti**, as an end phonetic complement of **CHIT**.
- The drawing shows a quincunx infixed in the largest subcomponent of the **ti**, but MHD doesn't transliterate a **bi** or **BIH**. Using the 3D model and changing the angle of incident light can produce a wide variety of views, many of which show multiple dots (and some of which *might* be interpreted as a quincunx).

[38] D10.



D10
<mi:yi >.<<[<XAAK/SAAK>]SAK>:IK'>

- MHD: mi yi mok? sak ik' ➔ *?? moksakiik'?* = "?? Moksakiik'?" [Sim: **MOK** is the MHD transliteration for **XAAK**/**SAAK**.]
- GutiérrezGonzález-PhD.p142.pdfp155: D10 **yi**-**K'AL**-**yi**-[**u**]**SAK**-**IK** ➔ *yik'a['aa]y u sak ik'* = GutiérrezGonzález-PhD.p144.pdfp157 (free translation): "_ Se marchitó lo blanco y lo negro …" ("_ the white and black withered …") and accompanying footnote GutiérrezGonzález-PhD.p143.pdfp156.fn56: Traduzco la expresión *yik'a'aay usak ik' huxlajun ajaw tuun* como "se marchitó lo blanco y lo negro de la piedra del trece ajaw". He aquí una variante muy particular de Quiriguá para la metáfora de muerte o fallecimiento: *yik'a'aay usak nik'*, se marchitó su flor/su aliento blanco, … (I translate the expression *yik'a'aay usak ik' huxlajun ajaw tuun* as "the white and black of the stone of the thirteen ajaw withered". Here is a very particular variant of Quiriguá for the metaphor of death or passing away: *yik'a'aay usak nik'*, his flower/his white breath withered….)
- AT-YT2021-lecture22.t0:42:00-46:16 goes for yet another approach: **YAX chi**-**ti MIH**-**yi SAAK SAK IK'** 13 **AJAW TUUN**-**ni**, where Tokovinine (verbally, on the fly) renders **MIH**-**yi** as *mihiy* which he translates (again, verbally, on the fly) as "growing".
- Both GutiérrezGonzález-PhD and AT-YT2021-lecture22 are more ambitious than MHD, in attempting to read and translate this glyph-block. Both make the phrase in some way "verbal". I haven't found sufficient corroborative evidence to support either of these two interpretations and so have gone for a solution (following MHD) of reading C10-D10 as the specific name of the stela.

[39] C10-D10. Yax Chit Miy Xaak/Saak Sak Ik'.

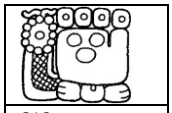
Syntactically and semantically speaking, this could be either a locative (= the spot where the stela was raised), or the "specific" name of the stela (as opposed to its "generic" name of "13-Ajaw Stone").

I think the latter is more likely, given the nature of the phrase itself – it "feels like the name of a stela". This is indeed the MHD interpretation of the two glyph-blocks (MHD has "blsem = monument name" for C10-D10). Or the first few words might be the locative phrase and the last few words the name of the stela. Or (perhaps the least likely) all of it is the locative phrase.

Note that the distinction between the name of a monument and the spot where the monument is located can become a bit blurred. When they say: "the scattering happened at <Altar-X>", do they mean Altar-X to be the object itself, or "the place where Altar-X is located", viewed as a toponym? But here the verb is *tz'ap* = "to raise", not *chok* = "to scatter", so it's much more likely that the entire phrase C10-D10 is the specific name of the stela.

[40] C11. The stela is called the "13-Ajaw Stone" because it was raised on 13-Ajaw.

[41] C12.

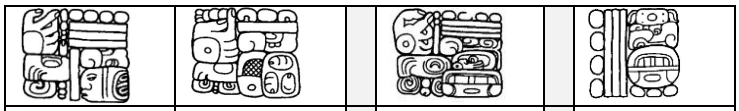


C12
ch'a.<4:ho:ma>

MHD transliterates the four dots with inner dots above the **ho** as "4" and reads it before the *ch'ahoom*.

- AT-YT2021-lecture22.t0:43:02-43:23 explains that they are [Sim: equivalent to?] the Hero Twins at the time of the creation of the (current) world: *And it's been ordered by Four Priests* – we're talking about deities in this case – who basically summoned reality into existence. Remember those four Hero Twins who do bloodletting in different kinds of places – in the water, on land, ... – this is what they're talking about: the establishment of the world. [Sim: However, the ISIG has an LC = 9.17.0.0.0, which is not the LC = 0.0.0.0.0 corresponding to the creation of the (current) world. Conversely, LC = 0.0.0.0.0 corresponds to 4-Ajaw 8-Kumk'u, which is also not the CR of the first event of this inscription.]
- See end note under QRG Stela J G8-H8 for a partial explanation, offered by GutiérrezGonzález-PhD.

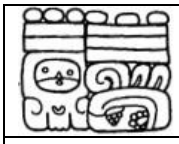
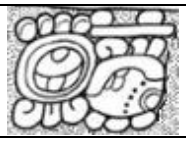
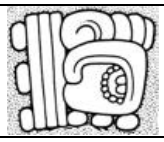
[42] D12. This is a period ending, but at a very long time ago in the past. There is something similar at D15.

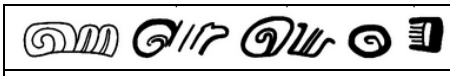


QRG Stela E D12	QRG Stela E D15		QRG Stela F C14		QRG Stela A D1

- MHD: 19 05 ajan? nal ➔ *balunlajuun ??* = "19 ??".
- GutiérrezGonzález-PhD.p142.pdfp155: 19-05-NAL-?? ➔ *b'olonlajun ho _ nal* = "19 _ en el lugar del cinco _" ("19 _ in the place of five _").
- GutiérrezGonzález-PhD.p144.pdfp157.fn59 gives: Esta notación desconocida de 19 periodos superiores al b'aktun podría ser la misma de la Estela F (este, C14). También la encontraremos en la Estela A (oeste, D1) = (via Google Translate) "This unknown notation of 19 periods above the *baktun* could be the same as Stela F (east, C14). We also find it on Stela A (west, D1)."
- Sim: Indeed, the shared *tzutz-* in QRG Stela E D12, D15 and QRG Stela F C14, and the shared "19" in all four is intriguing.

[43] D13.

				
Looper QRG Stela E D13 <13:AJAW>.<18:sa[ku]:SIHOOM>	3D Model QRG Stela E D13		StuartEtAl-TNoLCS.p5.pdfp5.fig5 CRN Panel 1 S1 <4:K'AN>.<7:sa[ku]:SIHOOM:ma>	Mathews TNA Monument 69 C 18.<sa[ku]:SIHOOM:ma>


MHD.32M 32Ma 32Ms.1&2&3 SAK? hu/wu

From checking an unpublished photograph and the 3D model, D13b is accurately drawn.

- Callaway (Washington reading group, 2024-05-18) says that this is **sa**:**ku**, a syllabogram-only spelling for **SAK**(**SIHOOM**) [Sim: perhaps with the KAWAK playing a dual role of being **ku** (for *sak*) and **SIHOOM**?]
- This is a known way to write *Sak-Sihoom*, as in CRN Panel 1 S1 and TNA Monument 69 C. These last two can be read with confidence because we have DN's to use for cross-checking. The three relevant hits can be found in MHD by a search on "blcodes contains 32M" and "blengl contains sak".
- My theory is that the logogram **SA'** gets used as a syllabogram **sa** by way of the very common process of dropping the final consonant of the logogram. A glottal stop, along with fricatives and nasals, are final sounds which very often undergo this process.
- Note that MHD doesn't read the "crest" as **sa**. It only recognizes a logogram reading of **SAK** (with a question mark) and a syllabogram reading of **hu**/**wu**. This is also a reasonable stance to take. In QRG Stela E D13, CRN Panel 1 S1, and TNA Monument 69 C, it represents **SAK**, with the KAWAK underneath purely for writing **SIHOOM**.
- In fact, the 3D model suggests that the coefficient of 18 might not even be correct. There are two larger circles, one on each side, and two smaller touching circles, in the centre. This leaves the possibility of 17 (the two larger circles being fillers) or 19 (all four circles contributing to the number). However, the Bonn calendar program indicates that both 13-Ajaw 17-Sak and 13-Ajaw 19-Sak are invalid dates, even with absolutely no restriction on the *baktun* coefficient. This leaves us only with our original 13-Ajaw 18-Sak.

[44] D13. Calendrical calculations:

MHD does not assign an "event long count" to this event (corresponding to the CR of D13) – instead it just has ??.

With the idea that this is probably meant to be a significant period ending, we can try entering LC = *.*.*.0.0 and CR = 13-Ajaw 18-Sak into the Bonn Calendar program:

Correlation Constant: 584285

Long Count	G	Y	Tzolkin	Greg. Date	Julian Date
0.19.11.0.0	G9	Y7	13 Ahau 18 Zac	1.1.-2728	24.1.-2728
3.7.0.0.0	G9	Y5	13 Ahau 18 Zac	20.5.-1793	4.6.-1793
5.14.9.0.0	G9	Y3	13 Ahau 18 Zac	6.10.-858	14.10.-858
8.1.18.0.0	G9	Y1	13 Ahau 18 Zac	20.2.79	22.2.79
10.9.7.0.0	G9	Y6	13 Ahau 18 Zac	9.7.1014	3.7.1014
12.16.16.0.0	G9	Y4	13 Ahau 18 Zac	24.11.1949	11.11.1949
15.4.5.0.0	G9	Y2	13 Ahau 18 Zac	10.4.2885	22.3.2885
17.11.14.0.0	G9	Y7	13 Ahau 18 Zac	27.8.3820	31.7.3820
19.19.3.0.0	G9	Y5	13 Ahau 18 Zac	13.1.4756	10.12.4755

- There are two LC's with "19" in them – one very much in the distant past (2728 BC, close to the creation of the latest universe) and one very much in the distant future (4755 AD, beyond the infamous 2012 *baktun* period ending). Neither of them is a particularly significant period ending (not even a *hotun* or half-*katun*, just a "*tuun*" ending).

- There is a *katun* period ending with LC = 3.7.0.0.0, but this shows no obvious relationship to anything mentioned in Event #2 (D12).
- Perhaps this event took place in the *very* distant past (much lower coefficients of higher calendar units than the *baktun*).

See also end note under C16, which discusses a very similar issue.

[45] D14. MHD considers this to be a toponym (given as such in the blsem field, 2024-10-01). It might have been earlier designated as a deity name.

Could it be the personage who did the witnessing of this event, because the actual location is given in C15b?

[46] C15b.

C15b
WITZ':WINKIL?

- MHD: ?? nal ➔ *??-nal* = "?? Nal".
- GutiérrezGonzález-PhD.p142.pdfp155: NAL-?? ➔ _ *nal* = "el lugar _" ("the _ Place").
- Dorota Bojkowska: the drawing shows **NAL**, but in photos related to Atlas Epigrafico de Peten (which are not necessarily open access):
    - The "**CHIT**/**lo**" looks more like a **WINIK**, so (with a water serpent underneath) this is just **WITZ'**.
    - The "**NAL**" looks more like a **WINIK**, because the left side is roundish and quite wide, with possibly two eyes and a mouth, so perhaps **WINKIL**.

Additional notes:

- Both MHD and GutiérrezGonzález-PhD do not attempt to transliterate the glyph below the "**NAL**", i.e., the **CHIT**-like element on top of the "serpent head" (**WITZ'**-like element). Specifically, there is no attempt to read it as *Witz'.*

[47] D15. Also perhaps a calendar unit which is much higher than the *baktun*. See end note under D12.

[48] C16. Calendrical calculations:

MHD does not assign an "event long count" to this event (corresponding to the CR of D16) – instead it just has ??.

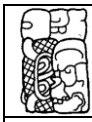
With the idea that this is probably meant to be a significant period ending, we can try entering LC = *.*.*.0.0 and CR = 13-Ajaw 13-Wo into the Bonn Calendar program:

Correlation Constant: 584285

Long Count	G	Y	Tzolkin	Greg. Date	Julian Date
0.10.9.0.0	G9	Y7	13 Ahau 13 Uo	13.8.-2908	6.9.-2908
2.17.18.0.0	G9	Y5	13 Ahau 13 Uo	29.12.-1973	15.1.-1972
5.5.7.0.0	G9	Y3	13 Ahau 13 Uo	16.5.-1037	26.5.-1037
7.12.16.0.0	G9	Y1	13 Ahau 13 Uo	2.10.-102	5.10.-102
10.0.5.0.0	G9	Y6	13 Ahau 13 Uo	17.2.835	13.2.835
12.7.14.0.0	G9	Y4	13 Ahau 13 Uo	5.7.1770	24.6.1770
14.15.3.0.0	G9	Y2	13 Ahau 13 Uo	21.11.2705	2.11.2705
17.2.12.0.0	G9	Y7	13 Ahau 13 Uo	7.4.3641	13.3.3641
19.10.1.0.0	G9	Y5	13 Ahau 13 Uo	23.8.4576	22.7.4576

See also end note under D13, which discusses a very similar issue. Here there is even less to connect any of these LC's to Event #3 (D15). This too seems to refer to an event which took place in the *very* distant past (much lower coefficients of higher calendar units than the *baktun*).

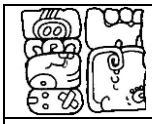
[49] D16b. Mix Winkil.



D16b

This is apparently the name of a God of the Underworld. The name is used as part of the extended name/title of PSD and YAX rulers. Here in QRG, it seems to be a reference to the god himself. See the CMGG entry on *Mix Winkil* / *Mixnal* for more information.

[50] C17b-D17a.



C17b-D17a
YAX:hi:chi:li wi:WITZ

The **hi** is above the **chi** but read after: YAX:hi:chi:li wi:WITZ = **YAX-chi-hi-li wi-WITZ** ➔ *Yax Chihil Witz* = "First Pulque?-ish/-type/Deer?-ish/-type Mountain". The translation *chih* = "deer" is only possible in the late Late Classic, after the merger of *j/h*.

[51] D12-D17a. Event #2 and Event #3.

Event #2 and Event #3 both have identical syntax:

- *tzutzuy* = "it was completed",
- <a-(presumably)-low-coefficient-of-a>
- <very-high-calendar-unit>
- on 13-Ajaw <appropriate-Haab-date>;
- he <ordered/witnessed> it,
- <name-of-mythical-being>;
- it happened at <a-mythical-place>.

[52] C18b. MHD gives u:BAAH:hi:li ➔ *ubaahil an?* = "of the image/impersonator?".

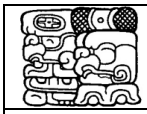
Looper
C18b
u:BAAH:hi:li

3D
C18b
u:BAAH:hi:li

3D
C18b
u:BAAH:hi:li

- The *an* is not present in the drawing (and hence also not transliterated by MHD).
- Examination of the 3D model (under two different lighting angles) also fails to conclusively show the presence of (an infixed) **AN**. This doesn't exclude the possibility that it was once present, as the 3D model also shows that there has been considerable erosion (or was never very deeply carved).
- It is however introduced in the transcription, perhaps in order to make for a smoother translation, because "the image" is awkward as the subject of the verb *ukabjiiy*, and "the personification" makes a better subject.

[53] D18.

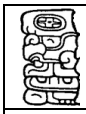
			
D18		MHD.AB2a K'AN	MHD.ST2a.1&3&4&5 TE'

- MHD: k'an te' nah _ u? kan? ek' ➔ *k'ante' naah _ ukaan? eek'* = "K'ante' Naah ?? Ukaan? Eek'".
    - Note that MHD has rendered the "**TE'**-like element *at the very bottom of D18a* as "_", so it is definitely not the **TE'** which is the second transliterated glyph. Instead, MHD has:
        - AB2a = monster-head with infixed **K'AN** = animal-head variant of **K'AN**.
        - ST2b = deity-head variant of **TE'**.
        - 1G2a = **NAAH**.
        - 200 = unknown
        - HE7? = **u**
        - AC6a? = **CHAN/KAN** (= "snake").
        - ZQD = **EK'**.

This means that MHD considers the main sign of D18a to be a *conflation* of **K'AN** and **TE'**. The **TE'** is not really visible, but perhaps known to be there from context (= other instances of the name *K'an Te' Naah*, see below).

- Dorota Bojkowska wonders if the bottom element of D18a might be **wa**.

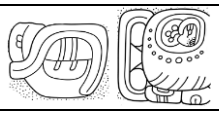
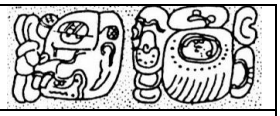
- GutiérrezGonzález-PhD.p142.pdfp155: K'AN?-NAH?-TE'-HUN-EK' ➔ *k'an/k'ahn te' nah hun ek'* = "pedestal de la casa del árbol, del libro de estrellas (?)" ("treehouse pedestal, from the book of stars (?)").
    - It seems that GutiérrezGonzález-PhD *does* read the glyph at the bottom of D18a as **TE'** and doesn't see a conflated **TE'** with **K'AN**.
    - It's unclear to me what the motivation for GutiérrezGonzález-PhD's "pedestal" is. Dorota Bojkowska does not agree with the **HUUN** reading nor with the translation involving "pedestal". The glyph at D18b (top) doesn't look like **HUUN**. In particular, the cross-hatching at both ends doesn't occur for **HUUN**. There is cross-hatching in the "two eyeballs" variant of **u**, but even there, the cross-hatching isn't of the *whole* of the two circular end elements but only a portion of them (hence giving the "eyeball" effect). This is what makes it perhaps slightly likely to be **u** (as suggested by the question mark assigned by MHD) while making it almost definitely not **HUUN**.
- I defer to MHD's reading for D18.

			
D18a		QRG Stela D B17b	TIK MT 9 / Alabaster Bowl 12K-244/22

Similar (but not identical) collocations are known:

- QRG Stela D B17b: *K'an Te'?/Chan? Naah*.
- TIK MT 9 / Alabaster Bowl 12K-244/22: *K'an Te' Nal*.

[54] C20b.

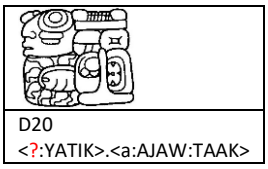
			
Looper-LW QRG Stela E C20b u:bu:t'u		MHD (Polyukhovych) PAL House C HS C3d-D3a ha[i] u.<<[bu]t'u>:wa>	Greene PAL Palace Tablet M11-N11 ha[i] u.<bu:t'u>.wa

- GutiérrezGonzález-PhD.p142.pdfp155: u-b'u?-?? ➔ *u _* = "de los" ("of the _") – i.e., Gutiérrez González does not try to read this glyph-block.
- MHD: u:bu:t'u ➔ *ubut'* = "covering" / "filling" / "burial".

- MHD also gives the meanings “cover”/“bury”.
- EB.p39.pdfp44.#9: *but’* = tv. “to fill”, giving PAL Palace Tablet N11 as the sole reference.
- EB.p147.pdfp252.#6: *but’*- tv. “to cover”, “to bury” (part of Appendix F, so no references to which inscriptions this can be found on).
- Kaufman-APMED.p974.pdfp974.#1: *b’ut’* with reflexes in more than ten Colonial or modern Mayan languages, with the meanings *(re)llenar* ((re)fill), *lleno* (full). [Sim: note that none of the modern reflexes actually retain the specific nuance of ‘burying”.]
- Other instances:
    - A search in MHD on “bllogosyll contains u” and “bllogosyll contains bu” and “bllogosyll contains t’u” and “blmaya1 contains but” gives 3 hits (shown above):
        - PAL House C HS D03a (“objabbr contains PALHCHS”).
        - PAL Palace Tablet N11 (“objabbr contains PALPT”).
        - QRG Stela E A20 (C20 in the glyph-block labelling of the Looper-LW drawings).
    - A search in MHD on “blmaya1 contains but’” gives the same 3 hits.
    - This suggests that the root *but’* is (generally) spelled only with syllabograms. MHD assigns it the meaning “fill”/“bury”. Interestingly, both of the phrases with *ubut’uw* in PAL are preceded by *hai*.
        - The context of PAL House C HS very strongly suggests the meaning of “bury”.
        - The context of PAL Palace Tablet is still reasonably suggestive of “bury” but perhaps slightly less so than in PAL House C HS.

Combined, they provide sufficient evidence for the same meaning in QRG Stela E, where the context doesn’t help at all.

[55] D20.



D20
<?:YATIK>.<a:AJAW:TAAK>

- D20a:
    - MHD: ?? ATIK.
    - GutiérrezGonzález-PhD.p142.pdfp155: ??-[le]??.
- D20b:
    - MHD: a:AJAW:TAAK ➔ *ajawtaak* = “lords”.
    - GutiérrezGonzález-PhD.p142.pdfp155: -a-AJAW-TAK? ➔ *ajawta[a]k* = “lords”.