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MAYA CALENDRICAL GLYPHS: Types of Calendrical Passages

Simple CR: 6 Chikchan 8 Yax

CR with Lord of the Night:
8 Chikchan G2 18 Sak

CR with PE: 6 Ahaw 13 Muan
completed 14th k'atun

DN with CR:
1.1.17 [to]
1 Ben 1 Ch'een

DN, PDI with CR:
2.3.5.10 [to]
6 'Ahaw 8 Sek

DNIG, DN, ADI, CR:
3.0.17 [from]
4 'Akbal 17 Xul

DNIG, DN
10.14.12

Tsolk'in with numbered k'atun:
completed 5 Ahaw 7 k'atun [9.7.0.0.0]
Simple IS (ISIG, LC and CR): 9.15.0.0.0 4 'Ahaw 13 Yax

Simple IS (ISIG, LC, CR and PE): 9.15.15.0.0 4 'Ahaw 18 Xul 5 tunob lacking

Complex IS (ISIG, LC, split CR, Lord of the Night, Lunar Series, 819-Day Count):
9.13.17.12.10 8 'Ok
G7/F, 5Z, Y, 15E, D, 5C, X, B, 10A
??,??,??
DN 1.1.17 [from] 1 Ben 1 Ch'en 819-event & actor
13 Yax
MAYA CALENDRICAL GLYPHS: Initial Series Introductory Glyph & Periods

**ISIG**
Initial Series Introductory Glyph

**Kinchiltun**
20 kalabtunob

**Kalabtun**
20 piktunob

**Piktun**
=20 bak'tunob

**Bak'tun**
= 20 k'atunob
= 144,000 days

**K'atun**
= 20 tunob
= 7,200 days

**Tun**
= 18 winalob
= 360 days

**Winal**
= 20 k'inob
= 20 days

**K'in**
1 day
MAYA CALENDRIICAL GLYPHS: Initial Series Periods (Animate forms)

Bak'tun
= 20 k'atunob
= 144,000 days

K'atun
= 20 tunob
= 7,200 days

Tun
= 18 winalob
= 360 days

Winal
= 20 k'inob
= 20 days

K'in
1 day
MAYA CALENDRICAL GLYPHS: Numerals 1 - 10

hun

ka'

'ox

kan

ho'

wak

'uk

waxak

bolon

lahun
MAYA CALENDARICAL GLYPHS: Tsolk'in day names ('Imix through 'Ok)
MAYA CALENDRICAL GLYPHS: Tzolk'in day names (Chuen through 'Ahaw)

Chuen

'Eb

Ben

'Ix

Men

Kib

Kaban

'Ets'nab

Kawak

'Ahaw
MAYA CALENDRIAL GLYPHS: Haab periods (Pop through Yax)
MAYA CALENDRIICAL GLYPHS: Haab periods (Sak through Wayeb)
<table>
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<th>Glyph</th>
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<tr>
<td><strong>Pop</strong></td>
</tr>
<tr>
<td><strong>Wo</strong></td>
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<tr>
<td><strong>Sip</strong></td>
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<td><strong>Yax</strong></td>
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MAYA CALENDRIcal GLYPHS: ISIG variables (Haab patrons), seatings & endings

Keh

Mak

K'ank'in

Muan

Pax

Kayab

Kumk'u

Haab period ending

Haab period seating
### MAYA CALENDRICAL GLYPHS (Distance Numbers & Direction Indicators)

<table>
<thead>
<tr>
<th>DNIG</th>
<th>Distance Number Introductory Glyph</th>
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<tr>
<td>DN</td>
<td>2 periods share 1 period glyph</td>
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<tr>
<td>DN 20-39</td>
<td>(1-19) + 20</td>
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<tr>
<td>DN 1-19</td>
<td>(1-19) + $k'in$ sign</td>
</tr>
<tr>
<td>DN 1-19</td>
<td>(1-19) + $tun$</td>
</tr>
<tr>
<td>DN 1</td>
<td>1 day to sunrise</td>
</tr>
<tr>
<td>DN</td>
<td>until sunrise</td>
</tr>
<tr>
<td>PDI</td>
<td>(until or +)</td>
</tr>
<tr>
<td>ADI</td>
<td>(since or -)</td>
</tr>
<tr>
<td>ADI</td>
<td>(since or -)</td>
</tr>
<tr>
<td>FDI</td>
<td>(future)</td>
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MAYA CALENDARICAL GLYPHS: Lords of the Night (Glyphs G1-G9 & F)
MAYA CALENDRIICAL GLYPHS: Period Endings

ORDINAL PERIOD COMPLETION (verb + u + number + period)

CARDINAL PERIOD COMPLETION (verb + number + period)

ORDINAL-NUMBERED PERIOD (u + number + period)

Tun COMPLETION

Tun SEATING

FIRST Hotun (LC = x.x.5.0.0)

Hotun LACKING (LC = x.x.15.0.0)

HALF PERIOD COMPLETION (LC = x.10.0.0.0 or x.x.10.0.0)
Allographs of u

Prepositions

Verbal Affixing: -ha, -ah (passive)

Verbal Affixing: -lah (positional)

The verbal inflections shown here represent a split-ergative system. Please see the main text for a discussion of current controversies regarding ergativity vs. split-ergativity in Mayan hieroglyphic writing.

Verbal Affixing: -wan (positional)

Verbal Affixing: -hiy, -ihi (intransitive, completive)

Verbal Affixing: u.. wi or u.. wa (transitive)
- u bah “his image” [Yucatec -ba]
  Though no longer considered to be a verb, this phrase is included here because of the frequency of its usage and recent changes in its interpretation. It consists of the third person pronoun *u prefixed to a rodent head, the morpheme BAH, often with phonetic complements -ha or -hi. The construction is a possessed noun, or “stative”, which can substitute for a verb in a sentence.

- ak' “to give” [Tsotsil ?ak’]
  The root is depicted with cross-hatched hand, seen from the back, the morpheme 'AK'. It is inflected with ya- and -wa to spell y-ak'-wa “he gave it”. Note that the y- functions as the third person pronoun in front of a root beginning with a vowel.

- ak'ot “to dance” [Yucatec ok'or]
  The root is depicted with a sign composed of a donut-like ring to the right which are attached a pair of often cross-hatched loops, the morpheme 'AK'OT. This sign can take on the overall shape of a turtle’s head which, being 'AK', functions as a phonetic complement. The morpheme also can carry the phonetic complement -ta. It is usually inflected with -ha, reading ak'ot-ah, “danced.”

- chok “to throw” [Chol choc] or
  “to drip” [Yucatec choh]
  The root is depicted with the backside of a downturned left hand between the thumb and forefinger of which drops (ch'ah) can often be seen. This is the morpheme CHOK. It can also be constructed phonemically cho-ko. It is inflected with *u- and -wa, yielding the transitive construction u-chok-wa ch'ah, “he/she threw drops”. The object is sometimes spelled phonemically ch'a-ha following the verb but is usually implicitly understood to refer to the drops pouring from the hand.

- chuk “to capture” or “to seize”
  [Yucatec chuk, Chol chuc]
  The root is spelled phonemically chu-ka or chu-ku, and is inflected with *u- and -wa,-ha, or -hi-ya, to read u-chuk-wa “he/she captured”, chuk-ah/chuk-i? “was captured”.

- chuk
Chum “to seat” [Yucatec kum-]
The root is depicted by a seated lower human torso, the morpheme CHUM, often infixed with the phonetic complement mu. It can appear uninflected or inflected with -wa-ni, or -wa-ni-ya yielding chum-wan or chum-wan-i, “was seated”. It can be conflated with ahaw or another title, or be followed by a prepositional phrase ti ahaw, referring to the seating of the ruler in office.

Ch’ak “to chop” [Yucatec ch’ak, Tsotsil č’ak]
The root is depicted with an axe, the morpheme CH’AK, with or without the phonetic complement -ka. It can be inflected with -ha to read ch’ak-ah, “was chopped”; it can also appear uninflected followed by a possessed noun, most often u-ba(h), “his self”, in which case it is reflexive, “he chopped himself”.

Ch’am? “to receive”? [Yucatec k’am]
The root is depicted by the backside of a left hand with the fingers held horizontally and the thumb vertically, and with a wide range of signs that can appear held between them, morphemically CH’AM? It can appear with or without phonetic complements cha- or -ma, and with or without inflection, the most common being ’u- and -wa, to spell u-ch’am-wa, “he/she received”. The object received typically follows the verb. At times the object appears as the sign held in the hand, and at other times is left implied. [It should be noted that the same open hand sign is used in the child-of-mother morpheme Y-AL, but in such cases carries phonetic complements ya- and/or -la to distinguish it from this verb.]

Hok’ “to tie” [Yucatec hok’]
The root is depicted with a knotted band, morphemic HOK’, tied around the sign T181, which provides the inflection -ha, to spell hok’-ah “was tied”. It is usually followed by the phrase ti ahaw “as king”. The entire phrase hok’-ah ti ahaw apparently refers to the tying on of the royal headband at the time of accession of a king.


- **hub** "to tear down" [Yucatec hub] or "to come down" [Chol jibel]
The root is constructed phonemically hu-bu and inflected with -yi to spell hub-uy, "was torn down".

- **hul** "to arrive" [Chol jibel]
The root is constructed phonemically hu-li, and is inflected with -ha or ha-ya, to read hul-ih or hul-ih-y, "arrived".

- **il** "to see" [Yucatec il, Tsotsil ?il, Chol ilan]
The root is depicted with the image of an eye from which sight lines project to the left, morphemic 'IL. It is inflected with yi- and -hi or with -'a-ha/hi, reading y-il-i "he/she saw" or il-ah "was seen".

- **k'al** "to close" [Yucatec]
The root is depicted by the backside of a right hand held horizontally, the morpheme K'AL, which is positioned under a variety of signs which name an object. Among these objects are:

  1. When it occurs with glyphs reading sak hun, "white paper" it can be uninflected, or inflected with -ha or -hi-ya. The full phrase k'al-ah/k'al-i sak hun seems to refer to the tying on of the royal headband (made of white paper) at the time of accession. It can itself be followed by the phrase tu bah, meaning "himself".

  2. When it occurs with glyphs reading tun, "stone" or "year" it can be uninflected, or inflected with -ha or with tu- and -wa. The full phrases u k'al-wa tun or k'alah tun both appear to refer to the ending of a year and the attendant ceremony of placing a stone monument.

  3. When it appears with the image of a deer hoof (a morpheme of unknown value), it can be inflected with tu- and/or -hi-ha. It refers to a pre-accession ritual, perhaps heir designation.
k'ay “to lose” [Tsotsil č’ay]
The root is spelled phonemically k’a-yi, and is followed by the phrase u sak nik nal, literally “his/her white flower”, a probable metaphor for the soul. The entire phrase appears to be a metaphor for death, “his/her soul was lost”.

kim “to die” [Yucatec kim, Chol chmel]
The root is depicted with a skull mainsign, the morpheme KIM, which can appear alone or with the phonetic complement -mi. It appears both without inflection and with -ya, to spell kim or kim-i, “died”.

mak “to close” [Yucatec mak, Tsotsil mak]
The root is constructed phonemically ma-ka or ma-’AK, and is inflected with -ha and sometimes additionally with -hi-ya, reading mak-ah or mak-ah-i “was closed”.

muk “to be buried” [Yucatec muk, Chol muc]
The root is constructed phonemically mu-ka and is inflected with -ha, reading muk-ah, “was buried”.

naw “to adorn” [Cholti naual]
The root is constructed phonemically na-wa, and is inflected with -ha to read naw-ah, “was adorned”.

och “to enter” [Yucatec okbal, Chol ochel]
The root is depicted with a representation of a rattlesnake tail, the morpheme ‘OCH, occasionally with a phonetic complement -chi. When followed by the morpheme BE (“road”) it forms the phrase och be “to enter the road”, a metaphor for “to die”. This collocation appears alone or with the affixes -hi, -ya and/or -ha. When followed by the morpheme K’AK’ (“fire”) it forms the phrase och k’ak’, apparently a verb for dedication rituals involving the use of fire.
pas “to open up” [Yucatec pa’s]
The root is constructed phonemically, pa-sa and is usually inflected with -ha, reading pas-ah, “was opened up”.

pat? “to form” [Yucatec pat, Tsotsil pat]
The root is depicted with a sign composed of a circle of dots to which is attached a brush-like tab, morphemically PAT? It can appear with the phonetic complement -ta, or it can be attached to glyphs which identify the subject formed, for example, pat tun, “the stone was formed”, i.e., “the stela was made”. It can appear uninflected or with -ha, -la-ha, or -wa-ni, to read pat-ah, pat-lah, or pat-wain, “was formed”.

pis “to play ball” [Yucatec pis]
The root is constructed phonemically pi-tsi, and is inflected with -la-ha, to read pis-lah, “played ball”.

put “to burn” [Chol put]
The root is constructed phonemically pu-lu, and is inflected with -ya to spell pul-i “was burned”.

sih “to be born” [Yucatec sih]
The root is depicted as an upturned frog head, the morpheme SIH. It is used with or without the phonetic complements -hi and -ha?, and with the inflection -ya or -ha?. The inflected spellings are SIH-hi-ya, yielding sih-iy, and SIH-ya-ha, yielding sih-yah?, both “was born”.

tsak “to conjure” [Yucatec tsak]
The root is depicted with a left hand holding a fish, morphemic TSAK. It can occur uninflected or inflected with 'u- and -wa, to read u-tsaq-wa “he/she conjured” or with -ha or -ya-hi to read tsak-ah-(i), “was conjured”.
ts'ap “to implant” [Yucatec ts'ap]
The root is constructed phonemically ts’a-pa, often with the pa infixed into the ts’a. It can appear uninflected with the inflections ’u- and -wa, to read u-ts’ap-wa “he/she implanted”, or -ha to read ts’ap-ah “was implanted”. It is often followed by tun reading, for example, ts’ap-ah tun “the stone was implanted”, i.e., “the stela was erected”.

ut “to happen” [Yucatec uch]
The root is constructed phonemically ’u-ti or ’u-to. It appears uninflected or inflected with -ya, to spell ut-i “happened”, or -ma, to spell ut-om “it will have happened”.

wal? [meaning unknown]
The root is depicted with a sign, often a skeletal head, from the top of which emerges a bifurcated emanation and the eye of which is a large se sign, apparently a morpheme. It can appear with phonetic complements wa- and/or -la and with inflections -ha, -ya, -ha-ya, and -hi-ya-ha.

yul “to burnish” [Yucatec yul]
The root is a phonemic spelling yu-lu, which is typically uninflected, spelling yul meaning “burnish”.

*phonetic value unknown*
The root is depicted with a sign for a mirror or a monster head, affixed with -ya and sometimes with the phonetic complement ’ah-.

*phonetic value unknown*
The verb is probably a morpheme referring to autosacrifice by genital mutilation. It is depicted by the lower body of a kneeling human with various signs in its lap.
diamond phonetic value unknown
The root of this verb is unknown. The glyph appears to be a metaphorical pictogram composed of a hand over the earth, depicted phonemically as ka-ba or morphemically as KAB?. It carries the inflection 'u-. In modern Chol there is an expression for birth which is literally “to touch the earth” and the same metaphor is likely implied here.

diamond phonetic value unknown
The root of this verb, called “God N”, is unknown. It commonly appears in the Primary Standard Sequence on ceramic pottery, where it substitutes with an image of a stepped platform, with which it has been assumed to share a reading. It has long been thought to refer to some type of dedication and can be followed by the proper name of a building or object. Suggested values for this glyph include: hóy or huy, pay, uh. It often carries the phonetic complement -yi.

diamond phonetic value unknown
The root of this verb, called the “Step” version of God N, is unknown. It consists of an image of a stepped platform in profile, with a footprint, or sometimes the phonetic complement hu-, ascending it. Though it is generally assumed to be phonetically identical to God N, it remains possible that the substitution is semantic rather than phonetic.

diamond phonetic value unknown
The root is depicted with the sign for star, from which descend liquid drops, a morpheme of unknown phonetic value. Within the drops can appear -yi, probably an inflection, or various glyphs which refer to a location, either specifically or in general. It is clear that the verb has some reference to astronomically timed ritual warfare.
AH “he” or “sir” [Yucatec ah]
The title can be represented by any of the ’a phonemes, which in such cases can be read as morphemic ’AH. The title is typically attached to one or more glyphs of a man’s name phrase, including his personal name and/or titles.

AHaw “lord” [Yucatec ahaw]
The title can be represented in many different ways:
(1) with a prefix consisting of the elements ’a-po.
(2) with the profile head of a young man with a spot on his cheek;
(3) with any type of head, including a human or a vulture, wearing a scarf;
(4) with an abstract sign carrying two looped lines. All of these are read as morphemic ’AHAW, and all may be accompanied by phonetic complements ’a- and/or -wa.

AH [number] bak “he of [number] captives”
[Yucatec ah and baksah]
The title is constructed of the morpheme ’AH, prefixed to either a phonemic ba-ki or morphemic BAK spelling of bak, “captive”. The morpheme BAK is represented by a view of a long bone (also bak) or skull. Between the ah and bak appears a numeral from one to twenty.

AH k’ul na “mason”? [Tsotsil ch’ulna]
The title is constructed phonemically with ’AH “he”, K’UL-na. The root ch’ul refers to various aspects of building construction, such as planing and polishing.

BA “first” [Tsotsil ba]
When prefixed to another noun, the title BA acts as an adjective, for example, ba ch’ok, “first youth” or ba sahal, “first sahal”.

MAYA NON-CALENDRICAL GYLPHS - TITLES
- bakab “representative” [Yucatec bakab]
  The title is constructed phonemically ba-ka-ba to spell bakab.

- chak te’ “tree Chak” [Yucatec chak and che’]
  The title is depicted with a monster who holds an axe in his left hand, the morpheme CHAK, accompanied by the suffix TE’ “tree”. Chak is a deity who carries an axe, is associated with the trees situated at the four corners of the world and who is responsible for rain.

- chak te’?
  The title is a substitution for the monster head chak shown above. It appears to be constructed of phonetic elements including ma and ku, however its reading remains problematic.

- chan “sky” [Chol chan, Yucatec ka’an]
  The title is depicted by one of several glyphs, including an abstract form, a snake’s head, and a bird’s head, all carrying the morphemic value CHAN. It is often accompanied by the phonetic complement -na and rarely by ka-.

- ch’ahom “dripper” [Yucatec ch’ah and -om]
  The title is constructed phonemically ch’a-ho-ma, to spell ch’ahom, “he who drips”.

- ch’ok “youth” [Chol ch’oc al l] or “descendent” [Yucatec ch’uk]
  The title is constructed phonemically ch’o-ko. It can be modified in various ways including with the addition of le-le, lel, or WINIK-ki, winik “person”.

♦ *its'at* "artist" [Yucatec *its'at*]
The title can be constructed phonemically 'i-ts'a-ta or it can be represented by the image of a young man in a fancy headdress, sometimes with quills stuck into the band, the morpheme 'ITS'AT.

♦ [number] *k'atun* [title]
Most any title can be modified with the morpheme for *K'ATUN* (20 years), with or without a prefixed number. These function as adjectives which state either the age or length of reign of the titled person, for example, *ho k'atun ahaw* "five *k'atun* lord", or *ox k'atun sahal*, "three *k'atun* sahal". A five *k'atun* lord is living into his fifth *k'atun* and is therefore between the ages of 80 and 100.

♦ *k'awil* "nourisher" [Yucatec *k'awil*]
The title is typically shown as a profile monster head with mirror-marked forehead from which smoke scrolls (phonemic *k'a*) emerge. The title can be abbreviated by showing just the mirror with smoke scrolls, or even just the smoke scrolls themselves. Any of these versions can carry the phonetic complement *-la*.

♦ *k'ul* "holy" [Yucatec *k'ul*]
In its most detailed form, the title is portrayed with a profile non-anthropomorphic head to which is attached a semi-circle of dots. The dots can also appear alone, or attached to any number of signs for precious objects (including a shell, *yax*, *k'an*, and others). Phonetic complements *k'a* and/or *-li* are occasionally present.
✧ *mak’inah / k’inich* “sun-eyed” [Yucatec k’inich]
The title can be constructed phonemically with the elements ma-K’IN-na, or K’IN-ni-chi or can be depicted by an image of the sun god, morphemic MAK’INAH / K’INICH.

✧ *na* “mother” or “lady” [Yucatec na’]
The title is depicted with a profile female head, the morpheme NA. It is typically attached to one or more glyphs in a woman’s name phrase, both to her personal name and titles. The na phonemes may also be used in some cases.

✧ *pitsil* “ballplayer” [Yucatec pits]
The title is constructed phonemically, pi-tsi-la, to read *pitsil*, “ballplayer”. It is typically either prefixed with ’AH “he” or followed by ’AHAW “lord” to read “he the ballplayer” or “ballplayer lord”.

✧ *sahal* “fearing one” [Yucatec sahal]
The title is constructed phonemically sa-ha-la, to read *sahal*. The verb is used by persons who are known to be subordinates of the king.

✧ [number] *tsak* “number/nth successor”
[Yucatec tsak, Chol tsajcan]
The title is depicted with a swastika-like symbol, the morpheme TSAK, with or without phonetic complements -ka and/or -ba. When prefixed by ‘u-the number should be read as an ordinal, i.e., nth, as in the phrase u-kan-lahun tsak-ab, “14th successor”.

✧ *yahaw te* “tree lord” [Yucatec ahaw and che’]
The title is constructed phonemically with ya-prefixed to ’AHAW “lord” and TE’ “tree”. The ahaw sometimes carries the phonetic complement -wa.
The so-called “penis-title” has five basic forms:

[a] yox-at “scarred penis” [Yucatec yox and ach]
This form of the title is depicted with a profile of the male genitalia with prominent slash marks or scars (yox) at the upper margin of the penis (‘at), as well as an infixed xa on the back of the scrotum, a yo- prefix and -ti or -ta suffix.

[b] yox-at “scarred penis” [Yucatec yox and ach]
This form is depicted with the phonemic construction yo-’AT-ta or yo-’a-’AT-ta, presumably yo[x]-at.

[c] tox-at “bled penis” [Yucatec tox and ach]
This form is identical to [a] above, except with a to- prefix in place of the yo-.

[d] tox-at “bled penis” [Yucatec tox and ach]
This form is a head variant of [c]. The head is the ‘dangle god’ with its right arm turned upward and either thrust through the open ring of a tun-marked sign, or with the latter held in its open palm. It always carries a to- superfix and can carry a -ti or -ta suffix.

[e] yotox-at “very scarred penis” [K’ekchi yotox-yotox and Yucatec ach]
This form is identical to [a] and [c] above, but with both yo- and to- phonetic complements.

 Phonetic value unknown
The title is composed of up to three elements: (1) an upturned vase with a k’in infix, (2) a female head, NA, and (3) the sign CH’UL, “holy”. Though the full phrase has not been translated, it is clearly a title which designates important women.
Reminder: Most relationships are expressed with stative constructions, in which a possessive pronoun 'u ("his or "hers") is placed before a noun which describes the relationship, for example, 'u sahal, "his sahal". When the noun to be possessed begins with a vowel sound, the initial 'u becomes a y- sound, and will be expressed with the appropriate y-phoneme for the initial vowel of the relationship term, for example, "his wife" is expressed y(a) atan, or yatan, while "his house" is expressed y(o) otot, or yotot. In the following descriptions, the phonetic reading and meaning are given in the first line, followed by the linguistic sources for the root words, if known, and then by the standard construction of the relationship phrase, if appropriate. For more details on relationships, see section 92.1 - 92.34.

✧ y-al "her child"
[Yucatec al "child, child of a mother"; Chol alob or alo', "child, youth")
(child's name)-(y-al)-(mother's name)
The relationship is typically constructed of phonemic ya prefixed to what is assumed to be a morpheme YAL. The latter is composed of a glyph showing the back of a left hand, with fingers pointing left and thumb upraised, occasionally with la suffix. Between the thumb and fingers of the hand can appear any number of elements, including an upside-down ahaq head (la), a small curl, or the element which is used for the day-name Ben (ah); these are probably phonetic complements and do not affect the meaning of the glyph. Occasionally the term is spelled solely with the phonemes ya-la:

✧ y-atan "his wife"
[Yucatec atan "married woman"]
(wife's name)-(y-atan)-(husband's name)
This relationship is typically constructed of phonemic ya, followed by a crossed-bands glyph which has been read as ta or TAN, and suffixed by phonemic na. In at least one instance, a known ta allograph substitutes for the crossed-bands. It is well-known from the codices where it accompanies scenes of coupling between a man and a woman,

✧ 'u-bah [u-lo] 'u-? "his/her?"
(child's name)-(u-bah [u-lo]...)-(parent's name)
This complex relationship phrase combines two or three possessed nouns to yield a metaphor for parentage which is as yet poorly understood. Because of the paired contexts in which it appears, it is clear that the phrase can refer to a child of either parent.
◦ 'u-bak “his captive”
[Yucatec baksah, “vanquished or captive”]
(captive’s name)-(‘u bak)-(captor’s name)
This relationship is typically constructed phonemically with ‘u, ba, and ki. It can also be composed of ‘u prefixed to the bone glyph which is known from other contexts to be morphemic BAK.

◦ ‘u-chan “his guardian”
[Yucatec kanan, “a thing which one guards”]
(captor)-(‘u chan)-(captive)
This relationship is typically constructed of ‘u, followed by a snake-head CHAN, often with the superfixed phonetic complement cha. Other glyphs known as the morpheme CHAN can substitute for the snake-head, including the numeral “4”. The term refers to the relationship between a captive and his captor.

◦ y-et “his/her companion”
[Yucatec etel, “with him/her” and yet, “in union, together”]
(name)-(y-et)-(name)
This relationship is typically spelled phonemically ye-te. It occurs between names of individuals without any consistent denotation of superiority or subordination.

◦ ‘u-huntan “his/her cherished one”
[Yucatec hun “to put much care into something]
(cherished one’s name)-(‘u-huntan)-(cherisher)
This relationship is constructed with ‘u prefixed to the number one, HUN, followed by morphemic TAN, with or without a final na suffix. It is often the second glyph in a two part relationship phrase ‘u-bah ‘u-huntan. It is almost exclusively used to denote the child of a mother, though other contexts are known.
diamond y-ichnal "with him/her"
[Yucatec yiknal, "with him/her, together with"
(name)-(yichnal)-(name)
This relationship can be constructed in two ways: the first is a phonetic construction spelled yi-chi-
NAL, the second utilizes an unusual left arm glyph which apparently carries the full morphemic value
ICHNAL, prefixed by the yi phoneme. It appears between names of individuals, and even deities, without any consistent denotation of superiority or subordination.

diamond y-itah "his/her sibling or friend?"
[Chol *ijti'an "sister"]
(person's name)-(y-itah)-(sibling or friend)
This relationship is constructed phonemically of yi, ta and hi. It occurs in a wide variety of contexts, in reference to both men and women, kings and captives. Early work on the term suggested that it referred to siblings or clan siblings (relatives within the same generation), wide variety of usages of the term have suggested to other scholars that it must be very general in nature, something like "his/her friend". We are still of the opinion that a some kind of fraternal blood relationship is being expressed in most instances.

diamond 'u-mam "grandfather"
[Yucatec mam "grandfather"]
This relationship is composed of an 'u-prefix followed by one of several main sign heads which have been read MAM. In the codices, the phrase is spelled phonemically 'u-ma-ma.

diamond 'u-ne "his tail?" (yu)u-den "his mirror?"
[Yucatec ne, "tail", nen, "mirror"]
(child's name)-(u-ne or yu-nen)-(father's name)
These two phrases are strikingly similar visually, however they may present two metaphors for the same child of father relationship. The main sign of both is an animal tail, often spotted, which carries the phonemic value ne. It is prefixed with either 'u or yu, and in at least one instance is marked with a pair of doubling dots to give ne-ne, or nen, "mirror". The mirror surely conveys the idea of the child being the image of the father.
'u-nikil “his flower?”
(Yucatec nik, “flower”)
(child’s name)-(‘u-nikil)-(father’s name)
This relationship is constructed with an ‘u prefix, followed by a right-side up ahaw head, often decorated with extra elements and/or sprouting curls from its top, which is known from other contexts as morphemic NIK “flower”. It is often suffixed with the phonetic complement li. This relationship is known from the contexts of its many examples to refer to the child of a father, though the precise sense of the metaphor is unclear. A phonetic spelling ‘u ni-chi is known from Tortuguero St. 6.

‘u-sahal “his sahal”
(subordinate’s name)-(‘u-sahal)-(superior’s name)
This relationship is comprised of an ‘u-prefixed sahal title.

‘u-ts’ak-ab “his successor”
(Yucatec ts’ak, “to enumerate (generations)”
(founder’s name)-(‘u-ts’ak-ab)-(successor’s name)
This relationship is comprised of an ‘u prefix, followed by a main sign with the morphemic value TS’AK, with optional -ab, li, and/or hi suffixes. In many instances, there is a numeral inserted between the ‘u and the TS’AK, to give the numerical placement of the named successor within a sequence of rulers. Though the title implies that the given count or succession is from the founder of the lineage, the actual names or titles of the founder seldom appear.

‘u-way “his nagual”
(Yucatec h-way, “witch, nagual”)
(way’s name)-(‘u-way)-(name of owner of way)
This relationship is comprised of an ‘u prefix followed by a morpheme read as WAY, with a variety of optional suffixes including ya, ha, and li, and sometimes with the infix bi, thus generating the variants ‘u-way, ‘u-wayal, ‘u-waybil, etc. The term appears to name the nagual, or spirit-world other, of the person whose name follows the relationship term. These ways often have animals as part of their names.
'u-yahaw-te “his/her tree lord”
[Yucatec ahawbil, “what ought to be held as a king or prince” and che’, “tree”]
(subordinate’s name)('u-yahaw-te)-(superior’s name)
This relationship is comprised of an 'u-prefix
yAHAW-te title, sometimes with suffixed phonetic complement wa.

Three relationship glyphs of unknown phonetic value.
Though clearly functioning as relationship glyphs, and in the first two cases defining well established and clearly understood relations (child-mother and mother-child), the specific sound and sense of these phrases is unknown. While it is known that the third defines a relationship between a king and a favored lady, that specific relationship is not known.

 phonetic value unknown
(child’s name) (relationship) (mother’s name)
This rare relationship refers to child-of-mother in known contexts. It is a visual metaphor composed of phonemic ya prefixed to the head of a long-beaked bird, from whose open mouth a smaller bird emerges. Because of the initial ya, some scholars have suggested that it also reads y-al.

 phonetic value unknown
(mother’s name) (relationship) (child’s name)
This glyph appears to be a relationship denoting “his/her mother”. It is composed of phonemic ya prefixed to the head of a spear-nosed bat (xu?), occasionally with na or ni phonemes suffixed, suggesting that a relationship term something like yaxun, though none has so far been found.


\* Phonetic value unknown "his woman"
This complex relationship phrase is known from three examples at Yaxchilan where it describes a relationship between Shield Jaguar and two of his female consorts. The phrase consists of three *u*-prefixed elements: the first is the upside-down vase which precedes female names, and the second is the earth glyph, k\(\text{ab}\) or k\(\text{ah}\). The third is unclear.

A widely distributed verbal collocation that defines a special kind of relationship and that has long been treated as a relationship glyph. Unlike the previous relationship glyphs which are situated syntactically between two nouns, this collocation begins a typical verb-initial sentence.

\* *u-kah-i "he/she made happen"
[Yucatec ka'ah, "to make happen"]
(*u-kah-i*)-(overseer of event)
This very common and very puzzling verbal expression is included because it functions in a manner similar to relationship glyphs, defining a relationship between a previously identified event and its promoter. It is constructed with the day-sign Caban prefixed by a presumably transitive subject pronoun, *u*, and suffixed with hi and ya phonemes that indicate an intransitive completive verbal inflection. Known in other contexts to represent "earth", the caban sign has been read as both morphemic K\(\text{ab}\) and K\(\text{ah}\). While the details of the sound and meaning are still a matter of debate, it is clear that this expression, which is used in a wide variety of contexts, is intended to focus attention upon an individual who is not the primary agent of an event, but who is in some manner responsible for it, being the king, queen, revered ancestor, military leader or other noteworthy individual under whose auspices the event occurs.
Two nominal phrases that refer to a relationship, but do not function syntactically as relationship glyphs.

- *'its* winik "younger brother/sister person"
  [Yucatec *its’in*, "younger brother or sister" and *winik* "man or woman"],
  This phrase, from the Palace Tablet at Palenque, is constructed of phonemic *'i* and *ts'i*, followed by a morpheme known to be both WINAL and WINIK. For evidence that an optional *ki* suffix indicates that it reads WINIK in this context, see next entry. Two other examples from Yaxchilan are illustrated here, though their *ti* suffixes are problematic. Because the term is nominal, appearing as a part of a name-phrase that identifies the person named as a younger brother (of whom, is never stated), this is not technically a relationship glyph and thus has no prefixed possessive pronoun.

- *suk* winik "older brother person"
  [cf Yucatec *suku’n* "older brother" and *winik* "man or woman"]
  This relationship is constructed of phonemic *su* and *ku*, followed by a morpheme known to be both WINAL and WINIK. The presence of the phonetic complement *ki* on the latter confirms its reading as WINIK. As in the previous entry, this example—also from the Palace Tablet at Palenque—is a nominal term that identifies the subject as an older brother (again, of whom, is not said), but which is not, syntactically, a relationship glyph.
DAY-NAME/HAAB-NUMBER CORRELATIONS

If the day name is:                        The haab-number can be:

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<td><strong>Kimi</strong></td>
<td><strong>Chuen</strong></td>
<td><strong>Kib</strong></td>
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<td><strong>Manik’</strong></td>
<td><strong>Eb</strong></td>
<td><strong>Kaban</strong></td>
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<td><strong>Ben</strong></td>
<td><strong>Eis’nab</strong></td>
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<td><strong>Muluk</strong></td>
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<td><strong>Kawak</strong></td>
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<td><strong>Men</strong></td>
<td><strong>Ahaw</strong></td>
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TABLE OF HAAB MULTIPLES

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