

**MAYA TRANSITION EPIGRAPHIC
DICTIONARY**

$\underline{a}_1, \underline{a}_2, \underline{a}_3$
'water'

The full water
circle ($\underline{a}_3$) is
seen in $\underline{a}_3$ - $\underline{kik}_3$
= 'blood'

$\underline{a}_1, \underline{a}_2, \underline{a}_3$
written with
a row of
droplets

MTED / Maya Transition Epigraphic Dictionary.

Maya

$\underline{a}_1, \underline{a}_2, \underline{a}_3$ 'water'
& phonetic
phonetic at least as $\underline{a}_1$ is
concerned.

Harris/Stearns 1992 p66,
footnote 14, state: "The
term 'water group affix'
was originally coined by
J.E.S. Thompson". The two
authors see the said affix
usually on top or the left
edge of a composite.

Nothing more is said by
them relative to the row
of droplets in so many
other glyphs, excepting
the composite standing for
'divine' (?) and 'holy' (?).
By the way, the better read-
ing of that composite is
kul (later oh'ul in Cholan).
This kul means in the Old
and New World 'family', i.e.
'blood clan' in analytic
script. Thus 'family' in a
positive sense, namely
'noble', also referring to
'noble things, places etc.'.

The Maya glyphs rendering
the notion 'blood' provide
a fine example of glyphic
structuring. The basic idea
is 'water', i.e. $\underline{a}_1$ - $\underline{gig}_2$ in Sumer
and $\underline{a}$ - $\underline{kik}$ in Maya, in both meaning
'water-black'.

For details as to 'family' and 'noble'
see kul.

Sumer

$\underline{a}_1$ - $\underline{gig}_2$ 'blood' = water-black

The two relative graphs are seen in
Borger, R., 1981 (and SAGS 1992)
n579 17 A = WATER, from *a^u, *ab
Pos. 3-a: Sumer. a₁'water'
Pos. 3-b: Akkad. mû 'water'

n427 < MI₁ = NIGHT
Pos. 2-a: Sum. GIG₂ = ge₆, gi₆, gig₂
= 'night' and 'black',
Pos. 2-b: Akk. mušû, mušî-tu 'night'

Maya, continued:

I think that $\underline{a}_1$ - $\underline{kik}_1$, that is, $\underline{a}_1$
plus the well-known Ek/K'ek/Kik/Tšik-
glyph means 'ordinary black water'.

But in an conflating/merging compound
of the two glyphic elements ('water'
plus 'black') the $\underline{a}_1$ -bar becomes
either a half-circle ($= \underline{a}_2$) or a full
circle, in order to merge with 'black'
as a means to express 'blood'. Said
notion 'black', placed below, appears
as a field painted black, or shaded
with crosshatch, or marked with many
vertical lines, giving the illusion
of falling long black hair.

The two resulting compound-glyphs are
well-known as referring to 'blood'.
Neither the analysis nor the reading
is given by the new generation of epi-
graphers. The supporting reflexes in
modern Mayan languages will be found
sub $\underline{a}_2$ - $\underline{kik}_2$ and $\underline{a}_3$ - $\underline{kik}_3$.
Also the notion 'red' (like 'blood')
is derived from these two words.

For more informa-
tion relative to
water-glyphs see
the glyph-family
that starts with
mu 'bird' (and
mu 'phonetic')
leading to

mu (Akkad.) 'water'
& muš (Sum.) 'rain'
plus (Sum.)
muš-muš =
'intense
rain', and
(Maya and Sumer.)
muš-la 'rain-carrier'
= cloud' etc.

The protopictures of
the cuneiform graphs
are given by Anton
Dainel in his famous
Sir - Sumerische Gram-
matik. Water = waves,
the night-picture al-
most like that of the
Maya variants, black.

SAGS - Sumer-Akkadian
Generative Scriptology
started in 1963

I. = Thompson's 1962
Mayan Glyph Catalog

I.94, I.95 = Glyph
Ek, K'ek = 'black'

Maya

a₂ 'water', like a₁ to a₆
main feature: row of drops
along a vertical bar = a₁
or here (a₂), for insertion
purposes, a horizontal
curved bar

Inserted as a graphic classifier:

nab₁ pan-Maya: palm of hand,
*hollow hand serving as
cup/dish/plate
glyphic appearance e.g. in
Gates 1931 nr 385

nab₂ pan-Maya: ocean; *sky,
the glyph is nab₁ plus
a₂ as a silent classi-
fier, see Kelley

1962 p23, glyphs I-b, IX, XIII-b;
A variant name of the glyph is IMIX
= Day nr1, originally = a-meš =
'water-in-plural' = abundance
(Maya meš 'mosquito' = en masse, plu-
ral-suffix, as in Sumerian)

tin^{II} nab₂ 'little ocean' = 'lake'
and tin^{II} 'river', variant:

*tin^{II} a₁ cf. Chontal tsi-ah
Aguacateca tsi-ā 'river', *-n-
lost via -h-

For more see tin^I 'falcon' and tin^{II}
'small', which partly, due to assimi-
lation of dental before -i-, do ap-
pear as tsin, sin in Modern Maya.

a₂-kik₁ (quod vide)
= 'blood' = 'water-black'

KIK₁ and MI₁ 'black, night, zero'

both denoted, originally, by
falling black hair that covers
the eyes, creating darkness.

Karl Faulmann 1880 (Wien, Pest, Leip-
zig) noted that the Aztecan hiero-
glyph which depicts the night shows
black hair mixed with some stars.

Certain Maya star-words, e.g. ot
seem to be akin to uta 'louse'
confirming the relative etyma found
in Papuan and Melanesian languages
of New Guinea.

The night = 1000 eyes:

Internationally well-known is Sanskrit sa-hasrākṣi- = '(night) with the
thousand eyes', IE sm-gheslo-okw-s-i- (Latin mille 1000 = *smi-ghzl-).
My proposal: IE gheslo- has a consonantal metathesis, should be ghel-s-
cf. ghel-s-ā 'die Gelse', sort of midge/mosquito, with IE -s- = 'insect'.

Sumer

a₁ 'water', NoFo a^u
cf. Kurdish/Popular Pers. au
from ab, Indo-Iranian ap-

Borger, Rykle, 1981 (& SACS 1993)
n579 if A = WATER
Pos.3-a: Sumer. a 'water'
3-b: Akkad. mā 'water'

n129 if NAB (AN-AN) = SKY-SKY ***
Pos. 1-A: Western Eurasian nab/hnab/
/knab = *flat/hollow hand/cup/dish/
plate, Anglo-Saxon hnæpp, NHG Napf,
Arab. hanabé 'little bowl' etc.
see e.g. Kluge 160 sub 'Napf'.

Pos.8-a: Sum. nab *ocean; sky, god;
8-b: Akk. nāb 'sky, god'

Pokorny 1959 p315 proposes also
an IE (= Indo-Europ.) nebh-, Iran.
nab (= Sumer.) 'humid' (Sanskrit also
nābhas- nt. 'fog, sky', Avest. nabāh-
'sky' etc.) Pos.10-a: Sum. nab 'river'

In Sumer: n579 Pos.3-a: a-meš
= 'the waters' with

n533 if MEŠ (ME+EŠ) = INSECTS

Pos.10-a: Sum.Highl. meš = maxši-
10-b: Sum.Lowl. mug = muk^{si-}
= pan-Indo-Iran. 'insect, fly',
with meš in Sum. as plural-suffix
= n533 Pos.4-A; accordingly:

Pos.3-a: Sum. meš 'abundant'

n465 if DIN = VINE-TENDRIL ?

Pos.18: Sum. tin 'falcon'
"19: Hurrite *tin 'small'

a₁-gi₂ 'water-black' = 'blood'

n69 Pos.32: Sum. BAD-MI = water-night
= 'blood'

GIG₂ and MI₁ = 'black and night'

both denoted by graph n427
originally drawn as follows:

This picture may refer
to black hair (the Sume-
rians called themselves
the Blackheads), hair with in-
sects, which makes suppose that

n129a if MUL (AN+AN+AN) ***
Pos.2-a: Sum. mul 'star' may refer
to IE (Indo-Europ.) meur-, mour-
'ant'. Thousands of insect-eyes
are the stars, same as in Papuan
etymology. 143-A = n286 Pos.0.

a₂-:-kab₁ mu-k.ul

References: SAGS / Sumero-Akkadian Generative Scriptology
HGS / Historical Grammar of Sumerian, Bonn, 1964 ff.
MSD / Maya Script Deciphering (in preparation)

a₂-:-kab₁

extinct

mu-k.ul

buried



MTED / Maya Transition Epigraphic Dictionary

Neo-Maya tša₄ yi (oh'a yi)
to die, to extinguish
Old Maya a₂-:-kab₁ mu-k.ul
extinct } buried }

The reading tša₄-yi etc. (Harris 1993 p2 (22)) = Neo-Maya, see above, deserves a special study. tš- from k- is a Cholan phonetic issue. Cf. Tzeltal tše.b 'two' from Old Maya ka.b with plural-b-suffix, sometimes written in rebus by means of the flat-hand-kab₁-glyph, see MTED kab₁, ka.b.

No doubt that 1000 years ago speakers of a Cholan dialect saw and wrote the flat-hand-kab₁-glyph but in reading pronounced tšab, tšeb, and even tšam. Disturbing is the fact that such speakers were inclined to generalize the reading/pronouncing tša(b) etc., within the emerging trend of phonetic writing, to denote in such writing terms which have a tša(b)-syllable of a non-ka(b) origin (e.g. *tab). However, it was left to the upper class scribes or to speakers of non-Cholan dialects to see in the tša₄-yi here under discussion (see heading) what was actually in it. The glyphic structure first reveals that it is a ligature. Indeed, infixed is MTED a₂ 'water' just like in MTED a₂-nab 'ocean, lake', later naab. The nab-hand (MTED nab) points downwards. The identic tša₄-flat hand points to the right, being a 4-MTED kab₁-hand. It follows that the ligature's analysis or 'etymology' imposes a reading a₂-:-kab₁. As a verb, it is understandable to mean 'water-taking' that is, e.g. to quench thirst, then: to quench a fire, to extinguish etc.

It so appears that a Cholan tša₄ (generalized in rebus or phonetic) stems from previous tšab/tšaab/a-tšab/a-kab. The following -yi has a similar origin. It is not a verbal suffix. The yi-glyph's neo-Mayan reading probably refers to a yi-term which

a₂-:-kab₁ mu-k.ul
extinct buried



The glyph-compound
ch'ay /
ch'a-yi
is seen
(as mean-
ing 'to die,
to be ex-

tinguished') in Harris 1993 p2 (22).

The Tzeltal-verb muquel means 'cubrir, enterrar, sepultar, oclutar, tapar'.

was, or still is, a synonym of that actually denoted by the ligature-shaped glyph structure. From said structure it appears that the synonym sounded mu (= being an infixed subfix) and that the glyph's upper part has to be read kel, kil, kal and/or kul. Together that makes mu-kul/ke/kil/kal, liable to comprise various homonyms. Out of the fossilized tša₄-yi-sequence, a choice is easy. Think of Tzeltal muk-ul 'sepultado/buried'.

Sumer, Akkad, Indo-European

It is understood that with Sum. a-kab, a-gub = 'water-hand, water-holding, *water-taking, water-cup etc. such loans as Akkad. agubbû 'Weihwassergefäß' (vSoden, AHw 17-a) find their explication. See MTED kab₁.

An archaic syllable mu is at the bottom or nuclear lexicon of many languages; it means 'closed lips, to keep mum, to cover or to close the lips by means of the forefinger or the flat hand'. It means also 'things not to be told, a secret, mysterious'. Extended by the causative suffix -k, -ka, -ka(r), verbs such as 'to cover, to hide, to inter, to provide for a solemn funeral' do come into existence (cf. Maya-Tzeltal muk-el 'tapar, cubrir, enterrar, oclutar, sepultar'). Another semantic chain leads from muk 'to keep mum' towards 'be silent, deprived of speech, stupid'; cf. Akkad. muqu 'lame, tired' and Arabic mūk 'to be stupid', vSoden AHw p675. In Cuneiform Script, the relative word is written as follows:

Graph n3  MUG/MUK/MUQ, BUK, PUK
Pos. 4-A-a/b: muq/muk 'speechless, stupid'

Maya continued :

To make it etymologically more transparent, I propose to write mu-k.ul (root muk 'to cover etc.'). The full reading of tša₄-yi in Old Maya spelling is thus a₂-:-kab₁ mu-k.ul = '(he was) extinguished/dead (and) buried'. This is something more than only 'to die'.

Some reader may ask how is it possible to derive yi from mu-k.ul? I recall that the first syllable in some epigraphic kinship terms is yi standing for previous u. In addition, some mayanists do read the mu-sign as an u-sign which would be applicable to a late phase in some local Maya speaking but not in writing since the old orthography was retained though being properly used and understood but spoken in the new way. The progress in speaking corruption would have followed this line: mu-k.ul/ukul/yikul/yik/yi.

a₂-kik₂ (1)

'blood'

T.26

 (= water-
black)

MTED / Maya Transition Epigraphic Dictionary

Grube 1990

his *T.501-C



Maya

a₂-kik₂ 'blood' = water-black

Sumer

a₁-gi₂ 'blood' = water-black

With the submissions of the MTED-entry a₁/a₂/a₃, the glyphic structuring of Maya a₂-kik₂ (= Sumer. a₁-gi₂) 'blood' has been sequentially explained. Of course would nobody be wholly satisfied by that sort of analysis. What decisively counts is confirmation of a morphological nature in the Mayan vocabulary and, for the clarification and fixing of historical phonology, a corresponding identity of the proto-Mayan preform-reconstruction with the form and meaning of the counterpart in a Sumerian as spoken and written by polyglot scholars, presumably of Babylon under Darius the Great, at about 500 aC. Following Prof. Dr. Dr. Heinsohn, Bremen, Sumerian was by no means extinct at that time.

Because the blood-glyph here under review appears in composites referring to Maya blood-rituals, there can be no doubt that we are on the right track. But unfortunately, the Thompson-1962-glyph-catalog is, in the form as presented for instance by Nikolai Grube (presently Bonn) 1990, Annex p86-134, not in agreement with glyphic reality. For mysterious reasons, Grube has done a lot to make tabula rasa in uniting or gathering under a single heading all that what he judges to be variants, with chaotic results. Does he think that Maya script and Maya scribes belong to an area and to an epoch in humanity's history having been mentally underdeveloped? In criticizing Grube here, I risk to be earmarked as an incompetent outsider by him and his friends in Germany and the Americas. In some respect, even Wolfgang Gockel, Die Geschichte einer Maya-Dynastie, 1988, Mainz, did submit better copies, unshifted, of the Thompson-Catalog glyphs by keeping asunder what not belongs together. Grube's treatment of the Thompson-Catalog-contents discredits a lot of his researchwork on the Entwicklung der Mayaschrift (his doctoral dissertation of 1990).

In my 1992 paper 'Die prä-alphabetische Mayaschrift' = PM p6 and 7, I studied in more detail the case 'water-black/blood'. Terrence Kaufmann 1976 p170 posits erroneously proto-Maya *kik 'blood'.

a₁ = 'water', NoFo a^u
of. Kurdish & Popular Pers. au
from ab, Indo-Iranian ap-

Borger, Rykle, 1981 (& SAGS 1963 ff.)

n579 14 A = WATER

Pos.3-a: Sumer. a 'water'

Pos.3-b: Akkad. má 'water'

n427 MI₁ = NIGHT/NACHT

Pos.2-a: Sumer. GIG₂ = ge₆, gi₆, gi₂

= 'night' and 'black'

Pos.2-b: Akkad. mūšu, mūši-tu 'night'

The pattern 'water-black' = 'blood' re-appears several times in Sumerian:

Iran. *ab-sama, OPers. *ab-tama- = 'water-dark', Highl. a^u-tama-, produced Sumer. a-dama 'blood', so in n69 Pos.32-a; whence 32-b: Akkad. ada-ma-tu f. 'blood'

The Arabs adapted this word to mean 'to be red' = 'adama'.

Cf. modern Maya kiak 'red' from older Maya a₂-kik₂ 'blood' with the quite frequent internment of the initial vowel.

Maya, continued:

Although many Maya tongues suppressed the initial a- of a-kik 'blood', there are some which do preserve it:

Teco-Maya kyäk 'blood' from *a-kik, Terrence Kaufmann 1976 p170 posits erroneously proto-Maya *kik 'blood'.



This a₂-kik₂ glyph is seen in Tikal, Stela 31, see Schele & Freidel 1991 p165 (München), correctly defined in a blood-ritual context.

The same glyph is ibidem p165 and again p533 Note 49 in more

detail discussed with the final proposal to read it as ba₁ (thus following Grube's T.501 heap of 'variants').

Harris/Stearns 1992 p57, 'Decapitation' with axe verb, = tšak, shov a₂-kik₂-il, cf. Sumer. a₁-gi₂-igila = 'blood seeing'.



Ibidem, p55, 'Scattering' of blood written with symmetric two-fold a₃ 'water' and below -kik₂ 'black' as follows:



'he sheds/scatters water-black = blood.'

NoFo = rendering proto-Sum. words in etymologically transparent Normalised Form, e. g. da 'hand, side' = dh^{at}, = WPers. SW dast, NW zast, Sanskrit hasta-, IE ghesto- 'hand'.

Maya blood terms: Cakchiquel a-kik (Fernandez 1892

p4, with a-i from a-i = vowel assim.)

Chol o-tšitš = blood (Fern.p43) Pocomam San Luis kyek 'blood' with a- interned. Aguacateca has a-šitš-al 'blood' (MNL nr37)

Palatalization of k > tš is regular in Cholan-Maya.

MTED / Maya Transition Epigraphic Dictionary a_2-kik_2 (1)

Maya

NoFo = Normalized Form

 a_2-kik_2 'blood' = water-black

With the submissions of the MTED-entry $a_1/a_2/a_3$, the glyphic structuring of Maya a_2-kik_2 (= Sumer. a_1-gig_2) 'blood' has been sequentially explained. Of course would nobody be wholly satisfied by that sort of analysis. What decisively counts is confirmation of a morphological nature in the Mayan vocabulary and, for the clarification and fixing of historical phonology, a corresponding identity of the proto-Mayan preform-reconstruction with the form and meaning of the counterpart in a Sumerian as spoken and written by polyglot scholars, presumably of Babylon under Darius the Great, at about 500 BC. Following Prof. Dr. Dr. Heinsch, Bressen, Sumerian was by no means extinct at that time.

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Sumer -'blood'
water-black a_1-gig_2 'blood'

a_1 = 'water', NoFo a^u
cf. Kurdish & Popular Pers. au
from ab, Indo-Iranian ap-

Borger, Rykle, 1981 (& SAGS 1963 ff.).
n579 $\overline{A}$ = WATER
Pos.3-a: Sumer. a 'water'
Pos.3-b: Akkad. mû 'water'

n427 $\overline{MI}$ = NIGHT/NACHT
Pos.2-a: Sumer. GIG₂ = ge_6 , gi_6 , gi_8
= 'night' a n d 'black'
Pos.2-b: Akkad. mûšu, mûši-tu 'night'

The pattern 'water-black' = 'blood' re-appears several times in Sumerian:

Iran. *ab-sama, OPers. *ab-tama- = 'water-dark', Highl. a^u -tama-, produced Sumer. a-dama 'blood', so in n69 Pos.32-a; whence 32-b: Akkad. adama-tu f. 'blood'

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Maya, continued:

Although many Maya tongues suppressed the initial a- of a-kik 'blood', there are some which do preserve it:



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The same glyph is identical p165 and again p333 Note 49 in more detail discussed with the final proposal to read it as ba_1 (thus following Grube's T.501 heap of 'variants').

Harris/Stearns 1992 p57, 'Decapitation' with

ixx verb, = $tšak$, show
 a_2-kik_2 - il , cf. Sumer.
 a_1-gig_2 - $igila$ = 'blood
seeing'



Ibidem, p55, 'Scattering' of blood written with symmetric two-fold a_1 'water' and below a_2-kik_2 'black' as follows:



'he sheds/scatters water-black = blood'

a_2-kik_2
'blood'
(= water-black)



Grube 1990
his *T.501-C



T.26

NoFo = rendering proto-Sum. words in etymologically transparent Normalised Form, e. g. da 'hand, side' = d^u ast, = NPers. SM deat, NW zeat, Sanskrit hasta-, IE $ghesto-$ 'hand'.

Maya blood terms:

Cakchiquel a-kik (Fernandez 1892 p4, with e-i from a-i = vowel assim.)

Chol o-tšitš = blood (Fern.p43) Pocoman San Luis kyek 'blood' with e- intermed.

Aquasateca has a-šitš-el 'blood' (MML nr37)

Palatalization of k > tš is regular in Cholan-Maya.

The Sumerian 'system' appears transparent in the concept water-black = 'blood' and water-white = 'pus/Eiter' e.g. in Borger 1981 p73, n69 Pos.31: BAD-UB = water of the day, lugud = 'pus/Eiter'; and Pos.32: BAD-MI = water of the night, a.dama = 'dark blood'. MI 'night', a variant of MI_6 , both are denoted by graph n427. Sum. a.dama 'water-dark' = blood, has its dam 'dark' from NoFo $tama/šama$, NW-Iran. sāma-, Sanskrit śāma- (Mayrhofer III p324) varian śyāma- (p383) 'black, dark-coloured'. Iran. *ap-sāma-, Skt. *apa-śāma- = 'water-black' maybe eligible.

Cosmologically important since black rivers/lakes/seas had been judged to be World Glass's blood.

This is an obsolete, precursory page, however, of interest

MTED / Maya Transition Epigraphic Dictionary

a₂-kik₂ (2)

'blood'

= water black

Maya

a₂-kik₁ 'blood' = water-black

The relative glyph is seen in Tikal, Stela 31, see

5 Schele & Freidel 1991 (München) p165.



As usual, water-drops mark 'water' and the intense marking with lines does refer to 'black' etc.

40 See glyphs a₁ to a₇ and muš 'rain' and see the glyph of kik₁.

Although most Maya tongues suppressed the initial a- of a-kik 'blood', there are some which do preserve it:

45 Cakohiquel e-kik 'blood' (Fernandez 1892 p4 with e-i/a-i assimil.)
Aguacateca a-šitš-el' (MWL n37)
Chol o-tšitš 'blood' (Fern. p43)
(the o- may need some study)

20 Pocoman San Luis kyek 'blood' with initial e- interned, *e-kik
Similarly Teco-Maya kyäk 'blood', properly *kiak from *a-kik.

25 T. Kaufmann 1976 p170 posite erroneously proto-Maya *kik' 'blood'

Sumer

a₁-gig₂ 'blood' = water-black

The two relative graphs are seen in Borger, Rykle, 1981 (& SACS 1993)

n579 17 A = WATER, from *a^u, *ab

Pos. 3-a: Sumer. a 'water' 3-b: Akkad. mû 'water'

n427 <=> MI₁ = NIGHT

Pos.2-a: Sum. GIG₂ = ge₆, gi₆, gig₂ = 'night' and 'black'

2-b: Akk. mûšû, mušî-tu 'night'

The pattern 'water-black' = 'blood' or even 'water-night' (contrasting with 'water-day' = 'clear blood') re-appears several times:

cf. my PM-6 and -7 written at a time when I could not refer to the Maya-blood-glyph discussed here.

Iran. *ab-sama-, pre-Sum. NoFo a^u-tama- produced Sum. a-dama = 'water-dark' = 'blood' (n69 Pos.32) whence Akkad. adama-tu 'blood'.

The Arabs adapted this word to mean 'to be red' = 'adama'.

The occurrence of trans-Atlantic identic compounds, such as 'water-black' = 'blood', showing same sequence, same spelling, of which the origin lies of course in the Old World, means overwhelming proof in favor of trans-atlantic infusion. We know that a₂-kik₂ (Maya)/a₁-gig₂ (Sumer) do stem from a historical phonetic and semantic development confined in space and time, namely Mesopotamia, and about 500 aC.

More precisely, Babylon, where scholars tried to find in language traces of divine power and intervention. They could not verify that Sumerian gig₂ 'night, black' has had phonetically quite different preforms, e.g. *gi₆, *kib, *kup, *k^upa, Lowland-Sumerian, a cognate of Sanskrit kṣapa- 'night'. They had been as fascinated of speaking gig as we are by spelling nait (= night). Who is capable, or interested, in evaluating in nait Indo-European *nok-t-s? as stemming from an older a-naku 'the rear part of the World Giant's celestial skull, = North, the dark region? that neck is a cognate of nait? that na'aku'u- means, by analogy, the rear region of the body? because by infixing the thorakio/bodily 'glottal' -j- into naku?

Mankind's speaking behaviour is fixed on the requirements of the present moment, writing behaviour is somewhat more historically conditioned. If too much, it finds no readers. But historical research has to resort also to historical linguistics, sound changes, meaning changes. Every moment of mankind's history has also its peculiar way of speaking, even of writing, even in spite of deliberate conservative intentions.

Facing a humanity exposed to overkill it makes sense to reconstruct the whereabouts and howabouts of the origins. The way is long. For Meso-america it begins with Col or Yucatec, back to Old Maya, to the Mediterranean Lingua France spoken 500 aC in coastal places, including those in the Land of the Basques, Canary Islands, composed of Akkadian/Sumerian, Old Persian, Aramaic/Semitic; then Aryan, Indo-European, proto-lingua humana.

a₂-kik₂ a₂-kik₂

'red, blood'



MTED / Maya Transition Epigraphic Dictionary

Maya

a₂-kik₂ a₂-kik₂ 'red' = blood-blood

For details as to a₂-kik₂ 'blood' see the preceding pages

- 5 The student of the Historical Phonology of the Mayan languages is bound to study Umlaut-phenomena, quite common in Germanic languages and extant globally. It is well-known that a post-root-vowel (of a CVC-root) can affect the length, modulation and/or diphthongization of the root-vowel, thus creating traces which may remain even if the post-root-vowel has disappeared. This process is a sort of regressive Umlaut. The same is valid in the case of pre-root-vowels resulting in phenomena of the same nature due to progressive Umlaut. The inter-
- 75 beginning forming a diphthong (e.g. -ai- or -ia-, later -a-) has already been exemplified sub a₂-kik₂ 'blood' = water-black, preceding page, line 66 and marginal notes (= retention and/or inter-

- 20 In global semantics it is well-established that the term 'blood' can form the basis for terms denoting 'red'. Reduplication of a color-term is also globally well-known and is archaic. In Maya, cf. e.g. Chol q'yn-q'yn (or k'on-k'on), Maya (Yucat.) k'an and k'an-k'an, Petén k'a-k'an 'yellow' (according to Stoll, Otto, 1958 p56-94, sub 'amarillo' = nr159).

- The same reduplication is found in Maya relative to 'red' Maya (Yucat.) cha-chák (= *chak-chák), Petén cha-ohaj, Chol and Izentel chā-chōk (= *tāok-tāok). Of course is Cakchiquel, Aguateca, and Uspanteca quiak (with correct initial qu/k- instead of corrupt ch/tā-) in a more original shape than Chol and Yucatec-Maya. With conservative *kiak we have reached the point to speak of progressive Umlaut, arguing that the a₂ 'water' has been interned into -kik₂ = 'black, dark'. So we can posit an archaic preform a₂-kik₂ a₂-kik₂ = 'red'.

A look at the variants of the Maya-glyph denoting 'red'

a₂-kik₂ a₂-kik₂

'red/rot'
= blood-blood



T.109 = 'red'
(T. = Thompson)

= 2 times

a₂-kik₂

'blood'

= water-black



Among the variants of T.109 which Grube 1990, Entwicklung der Mayaschrift, p92 has copied, there is, left side, one which clearly shows, symmetrically, 2 times 'black', and shows also the little half-circle of a₂ 'water', on both ends of the

Sumer

a₁-gig₂ a₁-gig₂ 'water-dark-water-dark'

- 40 For details as to a₁-gig₂ see the preceding pages

Note the Arab. 'adama 'to be red' = a loan from Sumer. adama 'blood' (= n69 Pos.32-a), literally a₁ 'water' plus dama 'dark', = Iran. SW tāma-, NW sā-ma-, a variant of Sanskrit śyāmā- 'black' (Mayrhofer, Manfred, 1976 Concise Etymolog. Sanskrit Dict. III p383; Pisani KZ 68, 173.)

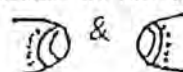
- 50 that is: T.109, does confirm, epigraphically, what was found out linguistically. This fact proves the interrelation between Maya-proto-script and Maya-proto-language, in the future to be expected in many cases. It would appear a bit strange should (after publication of my today's above findings) Linda Schale and Nikolai Grube keep on reading T.109 'red' in spoken modern Chol = chō-ehōk 'red'.

- In my opinion it is our task: reconstruction of the language such as it was handled and grammatically mastered by those who created the glyphs and their orthographical use. They did it to demonstrate their intellectual achievements, addressing the intellectuals of posterity, writing not only for recording the feats of a forest of kings.

- 65 Following Grube (see margin of this page) p92, the glyph T.109 'red' is very old (321 pC): first appearance, COL Pyrite Plate; TIK Statue; last occurrence in the Codices and in Landa.

- William Gates, Dictionary, 1931, p92, sub 'colors' states: "... we should remember that the word Chac 'red' has two uses in several Mayance languages, and yet a third in the Maya of Yucatan. Chac means red, and is also an intensive, 'very.' "

glyph. One variant, not listed by Grube, shows also the drop-lets of a₂ 'water', outside the half-circle,



Maya tšak (by W. Gates coined to be pan-Mayan ...) has

indeed homonyms with different etyma. In Turkish, tšok means 'much' and 'very'.

In a separate study, probably headed "džoko, more will be said.

$$\text{Dresden } 1-a \text{ leap year } 16 + 7 \times 50 = 366 \quad 1-b \text{ leap year } 6 + 12 \times 30 = 366$$

p49, below

$$a_2 - \text{kik}_2 = \text{KUK}_2$$

Day 8
LAMAT



MTED / Maya Transition Epigraphic Dictionary

Maya

Remainders of an Alphabet

The West-Semitic Consonantal Alphabet was originally a series of pictures with lexical assignments. The initial consonants determined the phonetic use but the graphs received, within the sequence of the 'alphabet', later also a numeric value, e.g. š (šin) = 300, t (taw) = 400. In Maya, the sequence of day- and month-names do in a number of cases not simply mean what they mean in Maya Calendars, but, seemingly unlawfully, their glyphs can denote a numeric value, usually numbers of days, e.g. 350; 360; 400; 584; it cannot be excluded that glyph rows had originally names of which the initial consonants or CV-syllable had been employed, proceeding from a phonetic system, for the phonetic writing of words. Because of changing glyph names and glyph meanings the 'system' is, for the time being, not transparent.

Nikolai Grube, presently Bonn, sees (in his revised Thompson Catalog contained in 1990 p87-135, sub T.510 = T.638) Day n8  and the Star-sign  = big star, planet Venus, one basic form. That this comprises also the meaning, to a certain extent, is supported by a sort of scribal escapade. Indeed, in Harris/Stearns 1992 p133 a row of 8 variants of Day n8 - LAMAT  is reproduced of which the fourth sign is a compound, superfixed $a_2 - \text{kik}_2$ = 'blood' and beneath it the lower half of the KUK  glyph, namely , so that the meaning is, as expected in Venus-renderings, 'blood-Venus'.

Sumer, Ancient Orient

For 'Venus' see Maya $a_1 -$ (MTED) KUK_1 1/2/3/4 = $-\text{kik}_1 -$ 'Bird Quetzal' meaning also 584 days $-\text{KUK}_1 -$ (= 1 synodic Venus year)

and for 'blood' see Maya $a_2 - \text{kik}_2$, Sumerian: $a - \text{gig}_2$ 'water black/blood' $u - \text{gug}_4$ or $u - \text{gun}_3$ 'Venus'.

Maya, continued.

This scribal escapade reveals the amount of freedom and changing possible in Maya writing.

This is also true in respect of the Dresden Codex p49, Venus table. The topos $a - 1 = 16$ yaškin (16-month n7) means $7 \times 50 = 350 + 16$ days and means a 4-year-leap-year period.

The topos $b - 1 = 6$ ceh/CEH (6-month n12) means $12 \times 30 = 360 + 6$ days and means a 4-year-leap-year period.

The two 4-year periods = $8 \times 365 = 2920$ do equal $5 \times 584 = 2920$ (2 intercalary days not counted).

The synodic Venus year of 584 days is stated in red ink at the bottom of the page: 236 = Morning Star, 90 = upper conjunction, 250 = Evening Star, 8 = Lower conjunction.

Dresden p49 b410

	a	b	c	d
1				
2				
3				
4				
5				
6				
7				

236 + 90 + 250 + 8 =



The holy Venus Number 'Eight' reappears as Month Number 'Eight' = LAMAT, being the cube root of 584 d

(Synodic Year of $\frac{1}{2}$) And that the reading of CEH of $8 + 64 + 512$ d. = $\text{chak-mu}_2/\text{TUW}$ = 'red 350-day year, as 6×60 , is likewise realistic is discussed in detail in MTED sub mu_2 .

For $d - 1$ (11 XUL) and $d - 1$ (19 XUL) see MTED BAK-KIN = 400, aka. b-BAK-KIN = $800 + 19 = 819$ d The Mars/60d K - 819 d period coseological interrelations: $9 \times 91 = 819$; $4 \times 91 = 364$, requiring 5 adjustment days every four years. Vague year = $354 \frac{1}{2} \times 9 = 3276$, or 4 Old Mars years: $4 \times 819 = 3276$ The 4 quadrants, ideas, for more see $a - \text{tin-liab}$.

That the reading $350 + 16$ d is realistic is proved in MTED bak-liab , where the Dresden Codex Agricultural Almanac and its Leap Year fixing by $7 \times 50 + 16$ is discussed.

 a₂-nab₁ (= IMIX) should not be misread as: which is a₂-kik₂ 'water-blak/blood' as Harris 1993 does.

a₂-nab₁
'ocean'

= Thompson
T.501-A

IMIX = day n¹
of the 20-day
month

MTED / Maya Transition Epigraphic Dictionary

Maya

a₂-nab₁, later na'ab, nab^{II} 'ocean'
tin-na'ab 'small ocean = lake, river'
*tin-a₁/-a₂/-a₃ 'small water, river'

For the water-terms a₁/a₂/a₃ and their use in affixation see the relative MTED-entry.

To construct a₂-nab₁ 'ocean' the flat-hand-picture used to denote pan-Maya nab - 'palm of the hand' was taken as basis. The appropriate flat-hand-glyph is listed, e. g., in Gates 1931 nr385.

To make clear that a single term should have a single glyph the a₂-affix was infixed in the palm-region of the flat-hand-glyph.

The glyph thus obtained is *T.501-A = nab^{II}, not to be confounded with *T.501-B = ba₁ = IMIX

Useful insight relative to meanings 'ocean' and 'lake' is proposed by David Kelley 1962 p28, glyphs I-b, IX, XIII-b (the latter excellently = tin-na'ab 'lake').

Grube, N. 1990 p104, four T.501-variants must be carefully distinguished from each other. The occurrence of the IMIX-glyph in Maya documents is enormous. For more a₂-meš 'the waters', and IMIX meš.

For more information relative to water-glyphs see the glyph-family that starts with mu 'bird' (and mu 'phonetic') leading to mu (Akkad.) 'water' & muš (Sum.) 'rain' plus (Sum.) muš-muš 'intense rain', and (Maya & Sumer.) muš-la 'rain-carrier = cloud' etc.

See also MTED naab (with a₂ 'water' inserted) = 'pond, lake, ocean'.

In Harris 1993 p16 the IMIX glyph is in four instances properly read nab and translated 'watery, water place, sea'; on p24, he sees water = nab (read nab₁) in a le-le-le glyph.

Sumer

nab in Sumerian (plus nab- in Aryan, and nob in Slavio) refers to water, humidity, clouds, sky, and God.

But a nab referring to the hollow hand and its use as cup-, disk- or pan-etymon is virulent in Western Eurasia: preform knab-, later hnab- and finally nap/nab etc. As a loan from Iran. *xnab- note Arab. hanabé 'little bowl'; more in Kluge 1960 p160 sub 'Napf', Anglo-Saxon hnac pp.

a₁ 'water', cf. Maya a₁/a₂/a₃ 'id.'

Borger, R. 1981 (& SAGS 1963 ff.)

n579 17 A = WATER

Pos.3-a: Sumer. a 'water'

Pos.3-b: Akkad. mā 'water'

n129 17 NAB (AN-AN) = SKY-SKY **

Pos.1-A: Mesopot. *nab 'hollow hand'

Pos.8-a: Sumer. nab 'ocean, sky, God'

Pos.8-b: Akkad. nāb 'sky, God'

Pos.8-c: Elam. nab 'sky, God'.

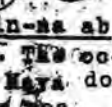
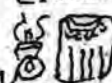
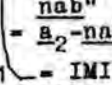
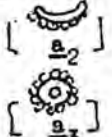
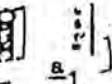
For more IE (Indo-Europ.) cognates see Julius Pokorny 1959 p315, sub nebh-.

Pos.10-a: Sumer. nab 'river' coincides with Maya nab^{II} 'lake/ocean'

It follows that Maya nab^{II} and nab^{II} are in agreement with Mesopot. and Sumerian nab with the preforms *knab- for 'hollow hand' etc. and *nebh- for 'water, humidity, fog, clouds, sky'.

In support of tin^{II} 'small' it may be recalled that to those up to 100 Babylonian-500-mc lingua franca lexemes shared by Maya and Basque belongs tin 'small' retained in Maya as tin/tšin/tsin/sin etc. and in Basque as tšin/tain. Even the derivative tšin 'a little thing, grain' reappears on both sides of the Atlantic. cf. Maya-Tzeltal tšin 'grano/grain' and Basque tšin-gar 'granizo menudo = small hailstone = kleine Hagelkörner'.

By the way, Basque gar 'hail/Magel' equals Turk. kar 'snow'. Both these words reflex an Iran. *kahrā/kaxā-, Indo-European/IE kaklos/kaklos 'hail, grain of ice' as surviving in Nordic/Germanic/Old High German hagal. Runic *h-hagal = a picture of an ice crystal; furthermore in Greek kákhla 'little stone, pebble' (notion 'hail lost in a warmer region?'), written in IE *ka-ak/kak- with one k- mirrored.



MTED / Maya Transition Epigraphic Dictionary

Maya a_3 'water' a_3 - kik_2 'blood' = water-black

As can be seen from pan-Mayan pom '(copal) incense', written $po-m(o)$, or rather as ligature (in Mayanistic terminology: conflation) $po-i-m(o)$ (the sign $-i-$ means here 'ligature'), the phonetic syllable mo is a circle of droplets with a little circle in its center. In the pom -ligature, that center-circle is covered by the phonetic syllable po . This so created glyph is listed in William Gates' Outline Dictionary of Maya Glyphs, 1931/1978, nr357, together with combinations as in the Dresden and Madrid codices. Erroneously, Gates assigned the pom -ligature to his nr358. Sub nr341-PQ he informs us that the ' pom ' (= nr341,4) appears on p26, 27, 28 of Dresden etc. Interesting is his nr357.5 since here the polyglot scribes enter again into action. The a_3 'water' refers to spoken Sumerian, and mo 'water' to spoken Semitic. Note the droplets in both of them. The Semitic synonym was good enough to function as phonetic syllable. Non-differentiation of the 2 glyphs, perhaps due to a majority vote in Linda Schele's workshop, entails serious problems. Gates' nr357.5, with a Semitic ya -dini-utive, means $mo-ya$ 'a bit of water'.

Harris and Stearns 1992, Chapter 4: Known Maya Glyphs: The Vocabulary, have p55: Scattering (of blood); note the twofold symmetric structuring of the a_3 -glyph

 a_3 'water' a_3 - kik_2

water-black

= 'blood'



both = 'water'

 a_3 - kik_2

William Gates, 1931/1978, An Outline Dictionary of Maya Glyphs, brings:

p160 n351 a glyph that looks like a_3 as recurring 4 times in Dresden, in glyph-blocks, pp 26,27,28,25.On p166 sub 'minor elements', n677, a glyph looking like a_3 - kik_2 'blood'.

The other 'water'-glyph, mo , is seen on p161 n357 as recurring (without infixings) about 13 times mostly in Madrid, and 6 times Dresden (p50b; 50c; and B.42.a.3; B.63.b.4; B.71.b.7. Incense $po-mo$ appears in Dresden p26.a.153; p27.a.14; p28.a.15; p25.a.13.

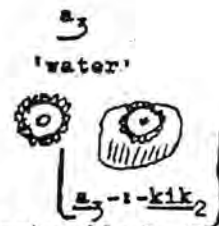
Sumer a_1 'water' a_1 - kik_2 'blood' = water-black

The reference to the idea of 'black or dark blood' persisted in Sumer through the ages. See Anton Deissel Σ (= Sumerisches Lexikon). Cf. mud, 'blood' Σ 81,8/26; and mud, 'blood' Σ 69,27; and mud, gig_2 Σ 69,116 = black blood'. Sum. mud, itself (no Aryan etymology) may be the product of graphics as a hybrid compound of Akkad. mu 'water' and Sum. n381 Pos.6-a: ud, u, 'day' in the sense of 'clear'. Cf. the analogs sub n69 Pos.31-a: BAD-UD = 'water-day' = 'clear blood', Pos.32-a: BAD- Σ 18 = 'water-night' = 'dark blood'. An obsolete Sum. 'bad 'water', Iran. 'vada-, is akin to Russ. voda 'water' and pertains to the IE Ablaut scheme ud-, ved-, vod- (the latter leading to Engl. water). It so appears that Mesopotamian prealphabetic remedies of writing intervened in innovational language development. And so in Maya, too. Borger 1981 (SAB 1963 ff) <I>-IGI 'eye' n449 Pos.30-a: Sumer. <I>-I' igi-la 'to see', Maya ila .

Maya, continued:

On p57, they have Decapitation with a simplified a_3 -glyph (droplets replaced by a circle, duly insert in the kik -glyph, to render a_3 - kik 'water-black /blood' equalling the Sumerian preform); below appears il , ila 'seeing, to see'. The axe-names tun, kin, fen, bat (and uak?) are traceable in both, Sumerian and Maya.

What here counts is the axe-picture. the ka_1 -glyph below the axe is, as to its meaning here, probably that as in itsi-ka, = Sum. isi-ga = 'fire-make(r)'. Since 'axing' needs a semantic complement, the above a_3 - kik - ila 'blood-seeing' is added, really meaning 'red/dark blood'. As to Maya tšak 'decapitation', reference be made to Neo-Maya tšak 'skull'. The 'beheading-glyph-compound' is so in part decoded: BAT-ka(r)-Tšak-a_3-kik-ila 'axe-making on head, blood seeing'. The short form 'he was axed' = 'beheaded' is of course most archaic. Cf. Engl. hack, Germ. hacken/Kopf abhacken, IE *kag-, *kak-, with frequent tša- from *ka- in Maya. Engl. hatchet, from French hache, from German hache 'chopping axe etc.'. Contamination with hook/Haken.



a₄-bi₁-li₁
'grandson'

MTED / Maya Transition Epigraphic Dictionary



Maya

a₄-bi₁-li₁ '(the son) of the son'
= 'grandson'

Terms of familiar relationship played an important role within and between ancient societies. These terms remain unchanged over millennia because of constant flux and reflux of blood between the members of the ruling families and the hereditary and nobility prerogatives involved. With the arrival of Ancient Near Eastern nobility at 500 aC in Mesoamerica their consanguinity nomenclature and legacy models superseded the underdeveloped local structures and their terms because of the understandable trend of the natives to have a share in aristocracy and scholarship.

The reflex of Akkad. apil- reached also areas North of Maya-land (later occupied by the Aztecs) so that this word, in the form of pil, entered the Nahuatl language, or, resp. survived there, together with Sum. *na-bal 'man of transformation', Maya na-ua-l(a) 'sorcerer, shaman' (later abridged into ual/uai/way, cf. Maya-Jacalteca na-wal 'shaman' (MWL n212, p298). Aztec. nagual 'sorcerer' is indeed a loan from Maya.

For more on relationship terms see Maya hun, hun- 'son' (equalling Iran. hunu- IE sunu-, Engl. son. See also Maya ben 'son' from Akkad. bin-, Sem. ben 'son'. See Maya hun-tan = lit. 'son's wife' = 'daughter-in-law', which stems from SW-Iran. hunu-dan (NW-Iran. zan 'wife'). A variant is Maya *a-li-b(i) 'daughter-in-law' = Sum. erib₂ 'id.'; note Maya me-a-li-b(i) 'mother-in-law' = Sum. me-a-rib.

The relationship terms deserve careful study: sb it appears that an Iranian *ha(a)-zan means wife's partner, like ham-rah = road-partner (ham is German zusammen); cf. Turk. yol-daş 'id.', and kar-daş 'womb's partner = brother'.

SW-Iran. *ha-dan became Akkad. hatanu = son-in-law or husband

of one's daughter.

The term reappears in Maya (Coe 1992 p215) as ya-a-tan-n(a)- his wife, but the same is said by 'her husband' is. Variants of tan *wife appear in Cholan tān, tāh renderings. To the *ha-dan 'husband' group of terms belongs atan-kil 'wedding/marriage' in the sense of husband-getting.

At the beginning of our century Arnold Leeb-berg, Leyden 1903, saw already the Semitic hatan in a Maya ahatan 'Ehepartner'. For his list of correspondences (a fraction only) see Dr. Heinrich Sudhoff, 1990, Sorcery Kolumbus (Lübbe) p131-133.

Akkad./Sumer

(a-pil)-a-pi-li '(son) of son' = grandson
/ ibil-ibila(ya)

Akkad. a-pil is the 'construct state' of aplu 'son, heir'.

SARS n144 ~~FE~~ TUR 'small' ~~ET~~ ~~naaa~~Pos.5-a: Sumer. ibila 'hereditary son'Pos.5-b: Akkad. aplu, apil- 'idem'

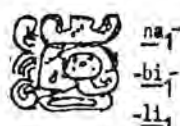
The preform of both, Sum. and Akkad., is Lowland/Highland *u-pula-, from proto-Highd. hu-purda = NW-Iran. (Avestan) hu-puṣra-, Sanskrit su-putra- Indo-European (IE) su-putros 'good son'. Wolfram von Soden, AHW (Akkad. Handwörterbuch) p58 thinks, erroneously, of a Semitic etymon for aplu. Since aplu means 'boy' (serving in temple) with synonym Sumer. bur, the putra-origin of bil/pil is confirmed, as bur/*pur is a Sum. loan from NW-Iran. puṣra/puṣra-, cf. New Pers. puhr 'son'.

Sum. ibila 'son, heir' is corrupt Lowland/Esasal dialectal slang. And so is Akkad. *apila which at 500 aC replaced Sum. ibila the Sumerians being in retreat at that time. The final -i of Maya a-bi-li is a Semitic genitive suffix, stemming from Iranian -hila, Sanskrit -śya, IE -syō, Greek -(h)io. The grandchild/grandson-term in full is IE *putros putrosyo = 'the son of the son', shortened in Maya by retaining the final word only.

Maya, continued:

In Harris/Stearns 1992 p62 we find ya-a-bi-li 'his grandson', which is well-attested. Problematic is na-bi-li, allegedly 'first grandson'. Suspect is also Maya na 'lady'. With Mesopotamian Ishtar / Inanna 'Venus', generalized already in Akkadian to mean 'beautiful lady', said Maya na is rather - ina_n -, - Sum. Inanna.

a₄-bi₁-li₁
'grandson'



The above composites can be seen in Harris/Stearns 1992 p62 with transcription and translation. Since Aryo-Sumerian nā, oblique nar-, orig. 'man', later = prince, a hybrid nabil could mean 'son of a prince', or 'grandson of a prince'.

 a₂-nab₁ (= IMIX) should not be misread as a₂-kik₂ 'water-blak/blood' as Harris 1993 does.

a₆-nab

'ocean,
lake, pond'

MTED / Maya Transition Epigraphic Dictionary

Maya

a₆-na'ab 'ocean'
also 'lake, pond'

The above compound is studied in order to help eliminate a prevailing confusion. Two different glyphs, phonetic ba₁ and another one, similarly looking, are both indiscriminately used as offering the reading ba₁.

10  a₂-nab The structuring of the false ba₁, which has actually the value na'ab (q.v.) and a₂-nab (with meaning 'ocean' etc.), is studied sub MTED a₁, a₂, a₃.

15 This did not hinder L. Schele to read occasionally the NAB = na'ab - glyph correctly as NAB 'ocean, lake'.

In Schele/Freidel 1991 (Munich) p55 compound elephant-trunk plus NAB is presented (including a naturalistic underwater picture showing a full-size fish) with the legenda: nab = 'swamp, pond'. Theoretically, applying the present CV-Syllabary, or L. Schele's way of reading a twofold-shaped ba₁, the elephant trunk glyph would have to be na- and the subfixed 'ba₁' would have to be -b(a) thus rendering na-b(a) = NAB 'ocean'.

20 But in the Harris/Stearns 1992 CV-Syllabary appears sub a (p45) also an elephant-trunk glyph, without the circle of 9 dots. Instead it has one 'eye'. Do these variant features hint at different phonetic values? However, for the time being I accept the a-glyph of the Syllabary as a₆ and do hope that the variant with the circle of 9 dots is its more archaic version.

30 It can be noted that another slight difference between glyphs is being neglected:

 = a₃ 'water'
Sum. n579
Pos.3-a: = a 'water'

 = mo 'water'
Akkad. n579
Pos.3.b: mu 'water'

35 Thus it appears that the ancestors of the Maya took advantage of their polyglot wisdom for creating a transparent script (transparent for linguistic insiders ...).

a₆-na'ab
 a₁ (cf. a₂-nab, na'ab)
 a₂ also 'lake, pond'

 a₃
 a₄ T.229

 a₅
 a₆
and even more
The value a₁ is also transcribed ah 'man, being' (cf. proto-Sum./Iran. ah-, Sanskrit as- Indo-European /Latin es- 'to be'). So, e.g., the scribe is written 'the man of writing', Old-Maya ah-ti-ba: see special study sub MTED tib 'write' being the reflex of Sumerian dub 'written text, tablet'.

Also the sign a is used to render ah in the sense of 'male article' following Harris 1993. The sign a (elephant trunk) could, as a picture, be identified with the meaning of Sum. a₂ 'arm, side, power, wage'. Note that in Sanskrit the elephant trunk is called hasta = 'hand, arm', and hastin means 'elephant'. Sum. a₂ was previously *yz, and still older: ds = SW-Iran. dast 'hand'.

While the basic idea of the signs rendering a₁, a₂, a₃ is transparent (a bar with drop-lets), thus transcribing Maya and Sumerian a 'water', the basic idea of the signs a₄ and a₅ is unknown.

Relative to Maya tib 'writing' and Sumerian dub 'written text' note the phonetic parallel as in Maya tin₂ 'young, younger brother' in front of Sum. dun 'young' (comprising, by retaining the same root, also the notion 'younger brother'). The DON-graph denotes also šul 'young'; the common preform is šuna, corresponding with the Sanskrit yuvān 'young' (Latin iuven- 'young').

Sumer

nab 'ocean, the sea'

40 Borger, R., 1981, Ass.-Bab.Zeit. obanliste = ABZ, Kevelaer.
n129  NAB (AN-AN) = sky-sky
Pos.8-d: Sum. Highl. nab 'the sea'
Pos.8-e: Akkad. ti'am-tu f. 'id.'
(my source is A.Deimel, SL 129,7)
Pos.10-a: Sum. Highl. nab 'river'
Pos.10-b: Akkad. nāru (= n-h-r) id.
for more see a₂-nab, na'ab

al,
'child'

MTED / Maya Transition Epigraphic Dictionary



Maya

al₁, ^ala₁ 'to rise, child'

Maya ^ala-kin₁ is well-known as meaning 'the rise of the Sun' = 'East'. Its upside down AHAB-glyph T.139/T.178 reappears in Maya y.a-l(a) 'his/her child'. There are hundreds of occurrences of al 'child, product, fruit, raise fruit, animals, children' as in Sumerian.

Striking is mi-al 'female child' = 'girl' since it coincides with Sumer. n554 Pos. 2-a: mi 'woman, female, vulva', and n298 Pos.27-a: al 'fruit', al-gal₂-la 'fruit-bearing' dL 298,30.

Not to speak of Maya alam 'young animal' and Semit./Hebr. 'alam 'young man' (with final -at referring to 'girl', see W.L. Holladay, Hebr. & Aramaic Lex. 1988 p274).

Cf. Maya ma-al 'not young' = 'old', with the Sem. (and Iran.) negative prefix ma-, frequently recurring in other Mayan lexemes.

Pokomam has vu-als 'fruit' with the vu-classifier-prefix, formerly u- referring to plants, trees, fruit. This is Sumer. u₂ = n318 Pos.3-a, = 'plant/Pflanze', determinative before names (and products) of plants. Accordingly Quiché u-šak 'laaf', cf. Iran. šakh 'branch'.

Since Sum. u₂ means 'plant' (= Lowland; former *huh-, Highl. hah-, = Sanskr. sas-), it is understandable that Maya-Quekchi ū means fruit, and that in cases where u-, vu- is prefixed, it does not necessarily point to u- (formerly Semit./Iran. hu, Aryan/IE/Lāt. su- 'his') = 'his/her'.

Interesting is the Maya term ka-ā₁ = 'grandchild', as it should be understood to mean 'Number 2 child', i.e. the child of the second generation of children.

This construction could recur in glyphs.

*) Cordemex p 286

al
a^a
la
T.139/T.178



y.a-l(a)
> y.al

= 'Her child'
in Harris/Stearns
1992 p60.



yal
'child of (mother)'
(Coe 1992 p175)

The above raised thumb
means 'mother (= me) of

the hand's children'
= fingers. Fingers
are thus itti- (= body
part prefix, Sum. uzu)
-al-kab, or itti-kab-
al 'hand-children'.
the thumb was in Old
Maya, at least ortho-
graphically, itti-
-kab-al, and (depicted)
'the child of mother'

Sumer

al₁, al₃ 'rise, raise, fruit, product etc.'

SASS n298 AL₁ spade ...

Pos.24-a: Sum. AL 'fertile domestic female animal'
as notel in Anton Deimel, dL 298,8

Pos.26-a: Sum. al-bar-ra 'product-'carrying'
as to Sum. bar- cf. Aryan bhar-, Indo-European/
IE bhar-, Greek pher-, phor-; Engl. bear 'carry'.
(al-bar-ra in dL 298,29)

Pos.29-a: Sum. al-di 'to plant, cultivate, to till'
as in A. Deimel, dL (Sumer. Lexikon) 298,72

Pos.31-a: Sum. al-al 'plantation, planting' ibid.

SASS n105-II al₃, ALAM (SU₁AL₂), GAN₂

Pos.4-a: Sum. al₃-al₃ 'plantation' (= Highland)

Pos.4-a: Sum. ul₃-ul₃ 'plantation' (= Lowland)

The root al- is also Indo-European/IE, cf. Latin alumnus 'pupil', alimentum, altus 'raised, high', Germanic alt/old 'grown up'. Perhaps Lat. albē f. 'dawn, first morning light' may be a cognate of Maya ^ala-kin 'rise of the sun, East'.

There are the well-known Semitic/Sumerian verbs which refer to 'lift, rise, be above' with root al-, al-, il-, ul- (the last three = Lowland) including 'god' as 'the High One', Ilu. El, Elohim, Allah.

The secret of getting at a certain amount of the true language of the Maya inscriptions is to re-examine again and again the alleged phonetic value especially of those signs which belong to the Knorozov Consonant-Vowel-Syllabary. Their oldest phonetic value is binding for a first entry in the MTED. To obtain these oldest values resorting to

Sumerian or Akkadian cognate counterparts is the best means. But variant phonetic values of a given sign cannot be ignored. Such value variation is common in the Cuneiform Script as well and need in Maya be recorded by appropriate indexing. So e.g. footprint is pad₁, bad₁ and ba₁ in agreement with differing recurrences in periods and areas.

sounded actually ya-
-al₁-so-kab-al 'child
of a mother (with 4 or
various children)'. The
term me.kab.al (a MTEB
entry q.v) meant, in
rebus, Semitic (and Maya)
sa.qabal 'acceptance
(by acclamation), cf. New
Persian (hybrid) qabul
kardan 'to accept, receive'.
That finger was mainly kab-al (Skt. tokan).

not al-kab, is supported by itti-kab-
tok 'finger', by
pleonastic Tzental
y.al.kab-al (Fern.
1892 p57) and in
Tzotzil kon-tuk
(= 'kab-tok), Subin-
ha -kab-tik (cf. Old
Pers. tauhma,
Sum. domu 'child'

aš₁-ba.l₁-lahum₁

As a rule - as we have seen in other instances - covering of the lower jaw, be it by means of a piece of jaguar skin = bal₁, be it by a flat hand = kab₁, in rebus -ka.b₁-12₁ does not suppress the numeric meaning of the jaw, namely '10' = lahum

Flat hand covering
jaw = in rebus ka.b-lahum
= 2 x 10 = 20 (cf. KATUN)

'9' = BOLON



a) Die Kopf-Variante des Zahlworts neun
= bal₁

MTED / Maya Transition Epigraphic Dictionary

Maya

aš₁-ba.l₁-lahum 'nine', the meaning is: 'still one to ten' = Neo-Maya BOLON '9'

- 5 The head-glyphs in the case of '9' reveal the above preform. 'Still 2 to 10' for '8' and 'still 1 to 10' for '9' is found in other Amerindian languages, but also in Finno-Ugric in the Old World. The structure pattern is paleo-American, the lexemes involved are Sumerian: aš = '1'; bal 'the ear or a piece of skin of the jaguar', that is =
- 15 balam, goes back to Akkado-Sumerian ba-rām-u, preform Indo-Iranian dva-rañ = 'two-coloured'. Cf. Lat. bis '2 times' from IE (Indo-European) dwi-s, Sanskrit dviṣ 'id.', and
- 20 New Pers. bist '20' from dvi-st = 2 times 10, bar from dvar 'door' as in Sumerian.
- But lahum is Akkadian, = 'jaw', as in Maya where the jaw has the meaning 10. In other Old Maya lexemes
- 25 Sum. maš-maš 'the jaws' provide with maš (Maya ka-matš = 'jaw') the meaning '10'. The 'linking'-power of -ba.l- makes sure that the jaw of the head-glyph must be
- 30 -lahum, and not -maš '10' in the cases where -ba.l- appears.

- Neo-Maya has certainly hun = '1'. Etymologically, this hun stems
- 35 from Lowland and means 'together' (= Lowland). Highld. ham means in addition 'to gather/sammeln'; but in pre-Greek hem-s this root (IE sem-, som-, sp-) produced again
- 40 '1' (male); hm-ya (female) etc.

We shall meet it again in some Maya un-kin = Sum. un-kin 'coming to-



The case of binding-power has been referred to sub muk, with mu.k-ku-ku 'bird Quetzal'

In this head-glyph, bal is pleonastically inserted: bal₁ + bal₂ jaguar-ear/ahr

a) Die Kopf-Variante des Zahlworts neun = bal₂

Aus Schele/Freidel 1991 p559, deutsch (München).

Sumer

- Borger, 1981, Ass.-Bab. Zeichenlist
- n1 AS
- 45 Pos.1-a: Sum. Highl. aš 'one'
Pos.1-a': Sum. Lowl. +uš₂₀ 'one' from OPers. 'hassa-, Avestan haθra-, Sankrit satra-, IE sp-tro- 'in one'.
- 50 n5 BA
- Pos.39-a: Sum. Highl. ba- 'two-'
Pos.39-a': Sum. Lowl. +bu₁₄ 'two' preform Iran. dva- 'two'
- Pos.43-A-a: 'ba- 'dative-prefix'
55 in New Pers. and Elamite

- n1 RAM / Aš
- Pos.44-A-a: Sum. Highl. +ram 'colour' NPers. rang, Sanskrit raṅga- 'id.', entered Akkad., ba-rāmu, 60 refers also to iris of the eye.

- n74 MAš / BAR
- Pos.86-a: Sum. Highl. maš-maš 'jaws'
Pos.86-a': Sum. Lowl. +muš₁₃ 'jaw'
Pos.86-b: Akkad. lahū, 'lahum' 'jaw'

- 65 Maya, continued :
gether, 'assembly' (cf. Zu-sam-men-kun-ft).
The forehead prefix = Neo-Maya yaš 'green', Old Maya raš 'green'
- 70 has obviously in some Maya-regions at 700 pc lost the y- and could therefore render aš 'one' in rebus. See similar r-/y-development sub MTED ubad, (I) 'jewels'.

- 75 '9' as a holy number is discussed sub e-tin-hab, = etz'nab also relative to the Maya 9-day week instituted like our week.

forehead prefix = phon. ša/aš = '1', cf. 11/11,
ear = bal(.am) = jaguar-ear;
jaw = 10, though covered, counts; (again bal(.am) = jaguar-skin).

In Palenque, there are similar BOLON-head-glyphs, one with head-band, but jaw covered with jaguar skin.

The jaguar-ear taken to be bal, became, generalized, the phon. value bal.

Discussion of *eš₁,
'3' and *eš₂ 'Moon', -b

'plural-suffix',
in Neo-Maya -ob, -ib

inherent in some
glyphs with final -b

MTED / Maya TRANSITION Epigraphic Dictionary

Maya

-b 'plural-suffix',
in Neo-Maya -ob, -ib

In Old and Middle Mayan texts not directly attested. But note the case kab, 'hand' and, same glyph, ka.b, 'two' as subfix of an occult lahum-head-glyph which means 'two times ten' = ka.b-lahum 'twenty', quod vide.

A head-glyph for '2' carries as superfix the hand-glyph; rather fist-glyph kab, so that the numeral 'two' in this case must be transcribed ka.b, quod vide.

The o- of the numeral oš '3' can be, via assimilation, the product of the plural suffix -ob (Sumer. has eš 'three') so that eš-ob became oš-ob. As a consequence see MTED eš₁ 'three'.

As to the plural suffix -b note what Mary Shaw 1966 p29 tells us relative to Achi dialects:

- 2: ka-ib, ke-b; Inscr. ka.b
- 3: oš-ib' (-ib by analogy with 2)
- 4: kah-ib' (Old Maya kan-xb)
- 5: ho-ob, ho-ob (Old: *kab-ab?)

What here appears is that the above -b was originally -ab or -ub, or -ib, which is in agreement with the Sum. pronoun 'they' in the various dialects, subject to vocalic assimilation or changes by analogy. Since in Sum. uš-u '30' (= 3-10), Lowland in any case, recalls that eš makes sense only in its preform a-šai, Avest. (a-) -əri, Sanskrit tri- '3' and Atri-

Sumer, Elam

a-be, u-be, ab-e, ub-e, be, ab 'they'
in Elam used as 'suffixed' plural-signs!

Borger 1981, Ass.-Bab. Zeichenliste/ABZ
More or less through all the values quoted above discernable.

Preform is. Old Persian, Iranian, Aryan avai 'they', Skt. ave.
It is a 'there'-deictic pronoun (a-y-) contrasting with the 'here'-deictic pronoun i- (IE, Indo-Iran., Elamite).

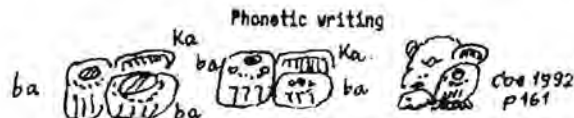
Here a sentence structure typical for Sumer: The sheep, men, then they-took. The object is recapitulated once more before the verb. In Elamite, the plural is expressed after each noun by adding 'they', 'there'-deictic. This procedure was obviously in Babylon 500 aC felt useful and practical. Once accepted, it was divulged in Maya Lands.

Maya, continued:
'father of the Moon', a preform which was of course known by the polyglot wizards of Babylon 500 aC, they will have insisted upon eš in Old Maya, the more so since eš in Sum., and probably also in Maya, is one of the various Moon names. Therefore: eš₁ = 'three', and eš₂ = 'Moon'.

Other CVC-terms and phonetic values with final -b may in future turn out to comprise the plural -b which can also hold good for VC-syllables with final -b.

In the inscription, evidence is found that the change from -n- to -h- is Middle Maya in some instances: the above kan/kah- '4' is involved.

For Sum, the pronoun
'they' is found in
n128 AB/UB₆
Pos. : ab/ub₆
or sub
n511 LAGAB x U
Pos. : ub₄/ab₅

ba₁-kab₂

'minister'

MTED / Maya Transition Epigraphic Dictionary



Maya

ba₁-kab₂-ma₁ Ruler's Minister-in-Chief
 I. I. Ruler's Prime Minister
 *501-b 74 Ruler's Grand Vizier

Even the post-Knorozov-improved now much applauded phonetic CV-Syllabary has some glyphs of doubtful phonetic value, especially in ch-/ch'-/tz-/ /tz'(-dz)-series plus the 5 vowels. This is logical since assimilated dentals (= tš/ts) and palatalized velars (also = tš) are in historical phonology of modern Mayan languages equivocally evaluated, and in Classical Maya obviously too. Many Ancient Maya scribes certainly knew that e.g. tin was in one related language or in one group of lexemes pronounced tin, in others tsin, and finally even tšin, in some cases with final -m. They knew also that kin had similar 'variants' (tšin etc.). In the absence of perfect phoneticism and bound to respect sacrosanct writing traditions, remedies adopted by the scribes to overcome writing problems require now a case-by-case study.

This applies likewise to ligatures (i. e. the merging or blending of 2 or more glyphs). It is clear that Knorozov-CV-syllables which transparently are former ligatures, need questioning.

Here now a remarkable case: In Harris/Stearns 1992 p63, appears, among 'Titles', a term Ch'ahom = 'scatterer', in three 'variants'. Two more variants are seen in Grube 1990 p55 likewise labeled Ch'ahom. The reading is based on doubtful phonetic oh'a and ho and on certain ma. I don't want to discuss

Sumer

PA-kab 'a Cuneiform 500-aC-neologism attested in transatlantic Maya-land'

Borger, Rykle 1981 (& SAGS 1993) n295 PA '*staff/Stock' PA, Pos.9-a/b: PA, acronym of PA-TE-SI in use in Sumer and Akkad, referring to 'town-ruler' or 'governor'.

Borger, R. n88: kab ; n167: qab, both these values in use in Sumer and Akkad to denote 'hand, wing'.

PA = supervisor, in Sumer & Akkad
 PA-kab = 'hand/assistant of a PA'

Maya, continued :

workshop majority votes. What matters is what ideas led to the structuring of the title-ligature T.672-a which is basically a raised fist. No difference is seen by the workshop between a raised and a lowered fist, namely T.672-b (and -c). Grube shifted (p113) -c to T.667 silent and secretly. Inserted in the title is ba, q.v. That the raised fist-glyph was a kab-glyph was soon found out in May 1992. Henceforth it will be indexed kab₂. Since kab₂-ba₁ makes no sense, it means ba₁-kab₂ = Bakab, a well-known high-ranking person and/or divinity.

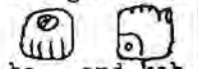
For cuneiform correspondences see above sub Sumer. Harris/Stearns 1992 p72 invite attention that ba, in Maya is a prefixed adjunct to titles, (see above, cuneiform PA, = 'ruler'), and since 'hand' globally can refer to 'secretary' etc., the meaning is clear

ba₁-kab₂
 ruler's minister

ba₁-kab₂-ma₁
 ruler's

Prime Minister
 or Grand Vizier

a ligature of



ba₁ and kab₂
 = ruler + hand



The Ruler's Grand Vizier: the suffixed ma is Maya ma, mah 'big, great' I. 74 and Sumer., Akkad. and Indo-Iranian mah 'big, great', likewise IE (Indo-

European) mag(h)-, mag(h)-, Lat. mag-nus, Greek megas, also megalos, Gern. Mecklen(-burg) etc.

See Borger, R. 1981 n57 Pos.2: Sum.Highl. mah, Lowl. mih 'grand, sublime'; Indo-Iran.: Sanskrit mah-, mahā- mahan 'great, venerable etc.', Aryan = māh-, Avest. maz- Mazrhofer II 609.

Dr. Vámos-Tóth, Bátor, Editor of Tamans News-letter, 1700 Makiki St. 204, Honolulu, HI 96822, in the letter dated Feb. 12, 1993, he sent me, tells me regarding Maya/ Sumer kab 'hand' that Magyar bele-kap means 'to take fire'; oda-kap = to catch at with hands; fel-kap = to pick up hastily by hands; ki-kap = get a scolding, hit by hand; bele-kap = put one's hand to something; kap = a lot;

el-kap-ja kezét = jerk/ snatch one's hand.

Regarding to Maya kab 'bee' and 'honey', note Magyar kap-tár = bee-hive, bank. Most strikingly is Magyar fo = 'lord', Lowl. Sumer. and Maya po = 'lord', and bee-po 'son of lord' = 'prince'; fluctuation: po/pa/ba/va/ua. It is Prof. Dr. Paposi-Jobb, Andor, Clarion Univ. of PA (41 Wilson Ave., Clarion, PA 16214 USA) who invited attention to Magyar fo

ba₂

'to make'

T.757



Maya

ba₂ 'gopher', in rebus: 'to make'

Harris/Stearns 1992 Understanding Maya Inscriptions, p58, briefly mention the so-called 'general'-verb (u)-bah 'he/she did, he/she is, it happened'. Its logographic main sign is T. (=Thompson) 757. Following T. Closs (in MEXICON VI-1984 p52-b below) T.757 depicts probably a gopher (a rodent) called in Maya ba, bah.

It is obvious that many Mayan monosyllabic roots of this consonant-vowel type (= CV-type, typical for the Maya Phonetic Syllabary) are better written by using (in rebus) an appropriate portrait glyph, instead of recurring to the Syllabary.

But even the rebus-application of the gopher-portrait-glyph ba₂ creates homonymic problems. That is why the eloquent and polyglot scribes decided to insert in the portrait, as an infix below the ear region, the glyph T.281 denoting KAN (usually referred to as Maya kan 'yellow', formerly = kan-kan, equalling Aryan kankan- 'gold, honey'). They took advantage of the fact that Maya Highland kan-, Lowland kun- likewise mean 'to make' (preform kaⁿn-, Iran. and Aryan kar-n-). This was of course also a rebus operation. In Aryan and in Maya, such *kar-n- is systematically used in its normal kar-shape; it works, as in Sumerian, Aryan, Turkic, when postfixed, as a sort of causative, e.g. tu-kar 'tu-maker' or 'tu-making', cf. Maya tu-kur 'buho/ a great horned owl'. An additional reading support can be seen in the ear of T.757, as kaⁿn II = Aryan karna- 'ear/Ohr'. The dropping of internal and final -r- is quite normal in Maya and Sumer (HGS §154, 155).

The secret of getting at a certain amount of the true language of the Maya inscriptions is to re-examine again and again the alleged phonetic value especially of those signs which belong to the Knorozov Consonant-Vowel-Syllabary. Their oldest phonetic value is binding for a first entry in the MTED. To obtain these oldest values resorting to Sumerian or Akkadian cognate counterparts is the best means. But variant phonetic values

of a given sign cannot be ignored. Such value variation is common in the Cuneiform Script as well and need in Maya be recorded by appropriate indexing. So e.g. footprint lo is pad, bad, and be, in agreement with differing recurrences in periods and areas. It is clear that Akkadian apēšu 'tomake/work', as a loan from (SW-)Iran, *apiš 'id.', shows the well-known vocalic assimilation e-e from a-i.

Sumer

The gopher-head-glyph is thus plurivalent. It refers to the animal depicted and named ba, bah, and, in rebus, it uses this name to denote ba/pa 'to make, to do' (= Sum. ba₂/pa₂ 'idem'). Pleonastically, at one hand, the inserted glyph kan 'yellow', in rebus used to mean *kaⁿn (cf. Akkad. sakanu, Sanskrit skarn-) 'to make', and, at the other hand, the ear-contours of the gopher-head-glyph referring to *kan/kun/kin 'ear'. This latter ear-name actually needs the Maya body part prefix išš/išš (= Sum. uzu- 'id.'). Cf. Modern Maya šš-kin 'ear' (Old Maya *išš-kaⁿn), see e.g. MTED vi₁-tšš₂-ki₁ with proto-pan-Maya *išš-kak 'finger/toe-nail', = Sum. uzu-kak 'id.'. This implies that the Maya reader was free to read the gopher glyph as ba/pa 'to make' and as kan/kun (= *kaⁿn) 'to make'. As to Maya u-kan 'he/she did/made' recall popular Persian u (šš)-kumad 'he/she makes'. Also Old Persian kun- stems from karn-. Maya kan/kun/kin 'ear' is found in Sum. n428 Pos.1-a: dug šakan (Akkad. šikka-tu f.) '2-eared vessel/jar/cup', from previous *šū-kaⁿn '2-eared/2 handles', *džū-karna/du-karna, with zero-grade Aryan *du-², counterparts dva-, dvi '2'. Structurally cf. Greek amphorā, a haplology, from *amphi-phorā = '([jaⁿ) being carried (phor-, pher-) by both sides (handles)'.
Sum. ba, pa₂ 'to make', in Deimel's ŠL 5,6. It stems from Highl. *pah- 'work; make'

SAMS n5 BA, PA₂ *turtle? BA, PA₂ *turtle?Pos.38-a: Sum. Highld. ba, pa₂ 'to make'Pos.38-b: Akkad. apēšu 'make, work'.

Both, the Sum. and the Akkad. word, are denominative verbs from IE/Indo-European opos/opeses = Lat. opus, operis; Aryan/Skt./Avest. apas- 'work!', thoroughly studied in Pokorny 1959 p780. Both, Pokorny and Mayrhofer failed to take notion of an Iranian secondary development: cf. hadah 'seat/Sitz' paralleled by hadiš (= Old Pers.), manah/maniš 'spirit, mind' (as in Maxā-maniš/manah); and, as attested by Akkadian, apah/apiš 'opus/work'. Only Roland G. Kent, 1953, Old Persian, (New Haven USA) p213 submits some interesting remarks relative to this exclusively Iranian phenomenon. Anglo-Saxon afnan 'to do' and German uben 'perform' belong to this IE root. And Maya ba₂

Sum. n597 Pos.5-a: gar, -5-a: *gur₂₄ 'make' (Maya kur);
Sum. n233 Pos.4-a: ga₂, -4-a: *gu₂₀ 'make', cf. Maya ka as in MTED itsi-ka 'fire-maker', = Sum. izi-ga₂ 'idem'.

A: Sanskrit duš-karna 'bad ear' (Iran. duš-karna-) became, via džūš-, Sum. šš-kan = Maya išš-kan, later tšš-kan 'deaf'. I propose to assign to the gopher glyph an additional value kan 'to make', indexed as kan₂.

Here a general remark to Akkadian and Semitic. I recall that Ungnad proposed to see in Akkadian an almost non-Semitic language. But also an overwhelming part of Semitic vocabulary and morphs do stem from Iranian/SW-Iranian = Sumerian of millennia of infusion, absorbed via trilateralization and 'Semitic' restructuring..

MTED

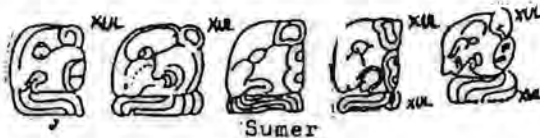
Maya

*BAK₁-KIN₁ '400 days'

- Let us assume that BAK means 400 as in Neo-Maya or Pseudo-Maya BAK-TUN = '400 years of 360 days'. No relative glyph has seemingly so far been identified or made known to the general public. Should it be so, then 800 would be *ka-BAK (2 x 400). My reflections started from investigating p49 of the Dresden Codex, the so-called Venus-Table. A reproduction of the 4 vertical left side rows a to d (lower ends) consisting of the topos -1 to -7 is found among the footnotes of this page. The topos under examination is d-1. It has the number 19 and a snout-like glyph with superfixed AKAB/AKBAL 'night' and subfixed the complement -ni. Accepting the above BAK, and taking akab as a phonetic rebus-value, we could read *ka.b-BAK-KIN-n(i) which means '2 x 400 days'. Adding the aforementioned 19 to the 800 days thus obtained, we have before us the famous Palenque 819-day-period.

- The neighbouring topos, c-1: its main-glyph is obviously the same as in topos d-1, namely *ka.b-bakin 'ape' = BAK-KIN-ni = 2 x 400 days. But here akab means night and not in rebus *ka.b '2', and bakin 'ape' is here makin 'ape', in rebus *mah-kin 'moon-year', of 355 days; The proposed 11 days to be added makes 366, the rural leap year. Translate: the year of the night lord, or night goddess moon

Month n6 XUL was seemingly called *hakin which word in rebus admitted *bak-kin = '400 Days'. But a *bak-tkin, *batkin cannot be excluded. To say that the head-glyph XUL is the head of an animal (Grube 1990 p53) is just an assertion. In some variants, the head shows in the ear region a duplication sign: are the divine twins involved? This would imply admissibility of inversions as in the case of the ape-lexeme *batkin/tabin (with variant Teco-matkin 'ape', Kaufmann 1969 p171). Remember the Maya-Quiché Popol Vuh brothers Hun-Batz and Hun-Chouan: Reconstruct: *batkin and tabin = Chouan. God Hun-ah-pu (= Itzamná) transformed these into apes. *tabin recalls Aryan asvin = 'the Dioscuri'



Sumer

*BAK-KIN

'400 days'

= month G,

XUL

- For Sum. cognates see MTED
kin 'Sun, day'; su 'to sink, to be eaten'; al 'to rise'; and a₂-kik₂ 'water-black = blood'.
 See also MTED a₂-kik₂-KUK = 'blood Venus'; KUK (1), (2), (3) 'Venus'; = KUK_{1/2/3/4/5}

Maya, continued:

- (needing the proposed 11 days to be a mak-hab, = a bird Maquaw-year, plus 1 intercalation day at 4 years intervals). Planet Venus is referred to in only 50 % of the 7 rows studied here, easy to be understood since no rebus-readings are involved. Förstemann, 90 years ago, had of course no idea of rebus operations.

- The 9 in topos/caption d-6 is significant. 9 refers to planet Mars, since as Mars' holy number, it is the cube root of 819 of. 9 + 81 + 729 = 819 days. This number probably refers to the synodic year (now 780 days) of Mars before the 'War of Troy' in which Mars became injured (Athena, sent by Jupiter, hit him).

- For more on the Dresden Codex p49 Venus Table see MTED a₂-kik₂-KUK 'blood Venus'.

Dresden Codex p49: The so-called 'Venus Table' is actually a survey of Maya calendrical achievements. The first caption, a-1: The main-glyph ya₂-kin means 'green-sun/year' = the agricultural year, or rather leap year, of the Codex pp 381 to 41b, studied in MTED sub ak-hab (pp 20-A/B/C/B/E). The 'green year' has 350 + 16 days = the 366 day-leap year, note the nr 16 in ti caption, that the month n is named ya₂-kin is of minor importance. The next caption, c-1, has nr 6 + the TUN-glyph of month n6, 10, 11, with superfix. TUN is 360 days, + 366, again a reference to the leap year. Caption c-1 is *mah-kin, the 355 day-moon year, plus 11 days, referring also to the solar leap year and caption d-1, bak-kin plus 19, is as ka.b-bak-kin-ni, the 400 day-ax-synodic Mars-year.

Dresden Codex, the so-called

Venus Table being

a survey of

years

The KIN-ai

glyph seems

to mean

'type of year'

Year patrons

The big star

planet Venus

as appearing

East, North

West, South

discussed in

Main text

Units of 20:

11 x 20 etc.

plus rest = nrs.

1 to 19?

Four phases of

Venus

	a	b	c	d
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

Correctly under c-1, yah-kin 'the moon year', we see in c-3 the picture of the moon-goddess. Correctly under a-1, the mak-hab rural year, we see the agauw/ak-hab bird head of Codex page 49b. And under b-1, *ka.b-bak-kin-ni, we see in d-3 bakin, in rebus = bak-kin, the ape-pictures.

The captions a-6 and b-6 are still illegible. The caption c-6 is most probably a vague year (= 364 days), and d-6 means a vague year = 4 x 1 quadrant = 4 x 819 days = 3276 days. Inherent in this number is the Maya 8-day-week which, like our 7-day-week, suffers no interruption.

All glyphs denoting the n6 = XUL/ul = Bakin 'ape/Ape' are listed in Harris/Stearns 1992 p135, 'month name'.



XUL = tul 'ape'

ba₁

'to give'



Maya

ba₁ 'to give, to sacrifice'and phonetic CV-syllable ba₁

The accurate scribes kept on seeing the difference between ba₁ 'to give' and a₂-nab₁ 'ocean' (ocean: its variant reading is a₂-meš = 'the waters', = Sumer. a₁-meš 'idem'; which in later Maya is IMIX/imiš 'day nr.1'; simply reduced to -meš, in Maya and Sumer = 'mosquito', serving to denote 'en masse' = 'plural'; the above a₂-nab 'ocean' survived, with a₁-internment, via na'ab, in nab₁ 'ocean').

ba₁a₂-nab₁

The inaccurate scribes produced a bit of confusion, especially in the case of calendric IMIX. As we have seen in a₂-nab₁ 'ocean' (q.v.), the basic picture of Pan-Mayan nab 'the palm of the hand' may also be explained to mean 'open hand', that is: 'to give generously'. The required diacriticon is 'a thing in the open hand', namely a circle with two diagonal strokes, = ba₁:

nab₁ba₁

The phonetic use of the glyph 'gift, sacrifice' thus created, obscured obviously the original logographic value, or antiquated its usage. A survival is seen (in appreciating the frequent b>w>u-passage) in the -ua/-wa-syllable of na-wa- or na-ua-, a verb literally meaning 'man-offering' = 'human sacrifice', which term appears in phonetic writing (not logographic writing!): na₁-ua₁ (q.v.). Note the identity of na₁ 'human being' in Maya and Sumerian. For Maya, see more on na-wa in Harris/Stearns 1992 Understanding Maya Inscriptions, p58. That the same verb appears with the meaning 'betrothal, marriage' is not really strange. 'Person-offering, person-dying' in the marriage ritual has already by some Etymologists of IE (= Indo-Europ.) languages been seen in Anglo-Saxon bryd and brydguma (bride and bridegroom) who proposed a Pre-Germanic *m(b)ratā f., IE mrtā f. = 'the Lady offering her life (for the sake of proliferation)'.

Footnote: Old/New Greek phagein 'to eat' (IE bhag-) was originally 'to consume one's allocation'. In Aryan, IE q- before -s became ž which spread by analogy/ in some cases was generalized, Skt. j = dž, Avert. ž.

It is well-known to insiders that a number of hitherto made readings and translations is doubtful. A notion so important as 'to give/to sacrifice' is, as far as ba (= Sumer. ba) is concerned, by phonetic variation = ua/wa, ba, pa. Cf. e.g. Quiché zi-pah 'hinschenken/donate wholly', would equal a Sum. *ši-ba = Sanskrit ati-bhāṣ- A similar construction is Quiché zi-poh 'utterly confute', Sum. *ši-bu, Aryan ati-bhu/phu (-pu is onomatopoeic). The ba-type recurs in Maya ne-ba 'poor', properly '(has) no-allocation'; a variant is ne-ba; ne/me- equalling Sum. na-/nu- and na/mu- 'negating prepositions' recurring in Indo-European; the latter mainly prohibitive (details in Pokorny 1959); the 'bird of offering' u-betš - 'pheasant' recalls *hu-baxš, with hu- 'bird', this time prefixed, and Pers. bax-tan, baxšidan (Sanskrit bhāṣ-, bhakṣ-, bhag-, bhikṣ- 'allocate').

SAGS n5 BA, BI₆
Pos.3-a: Sum.Highl. ba 'to give, allocate'
Pos.3-a: Sum.Lowld. bi₆ (from *bu) 'idem', both, -a and -a', used as phonetic values (from Aryan bhag-, Pokorny 1959 p107: note that Old Church Slav. ne-bog- 'poor' equals Maya ne-ba 'poor').

SAGS n70 NA, NU₈ (Skt. nā)
Pos.2-a: Sum.Highl. na 'man, human being'
Pos.2-a: Sum.Lowld. nu (later lū) 'idem'.

The oblique of na 'man' is nar (Skt. nar-).
SAGS n325 NAR₃, NUR, NIR 'man, prince'
Pos.3-A-a: Sum.Highl. nar₃ 'man, prince'
Pos.3-A-a: Sum.Lowld. nur₃ and nir 'idem'

The Maya UINAL-glyph means 'man' and '20' (10 fingers + 10 toes); but it denotes also Maya na and nab₁ (Sum. na and nar/nār 'id.'), as in tsi-na 'younger (brother)', see MTED tin₂.

IE/Indo-European nar- is seen in Lat. narō, Greek andros (with parasitic -d-), Aryan nar-.

The sumerologists read Sumerian, as to the meaning, more or less correctly, thanks to the Assyrian LI/Lexical Lists, but what they transcribe are rather conventional codes in the case of basic graphs/nouns/verbs, or phonetic pull-well, in that the differences between Highland -a-words and Lowland u-words are being disregarded, though most graphs render both these variant soundings of values and terms where pan-Aryan -a- is involved. The Highland manner of reading was adhered to by the scribes of Eudea, the priest-king of Lagash. Darius the Great did, in Bisutun, not adopt Sumerian in his trilingual inscription because everybody knew that Sumerian is a SW-Iranian dialect closely related to Old Persian, especially the Eudea way of speaking and writing. Very corrupt is the Sumerian Ene-Sal dialect which left almost no traces in Maya.

*BAK-KIN p(2)

MTED / Maya Transition Epigraphic Dictionary

Maya

- e.g. 19 ^aka.b BAK-KIN = 819 days
 19 + 2 x 400 days
 5 11 akab MAH-KIN = 366 days
 11 + 355 days

The above mysterious formulae belong to a whole system sustained by Sun, Moon and Mars. - Some 7 months ago I finished writing p(1) of *BAK-KIN. Here I improve in that I now include all 4 columns a, b, c, d. It is now clear that p49 of the Dresden Codex is not exclusively devoted to the synodic Venus year, = 584 days, but speaks also of the Rural Year, of the 360 day TUN year, of the 355 day Lunar Year, and of the pre-catastrophic 819 (now 780) day synodic Mars year (columns a/b/c/d), assigning 3 topoi to each year, fixing with a/b/c the solar leap year with 1 intercalary day every 4th year.

I think no wise men in mankind's history ever succeeded to tell us so much by only 4 x 3 compounds. The lower 5 topoi of the 4 columns bring details as to the 4 phases of Venus which is more or less deciphered since 100 years.

For a proper reading/deciphering we need lexical, glyphic, technical, and calendarological definitions. The first statement to be made is that Maya KIN means also 'year', and not merely 'Sun' and 'day'. The names of animals shown in head portraits (bird macaw and ape bakin/makin) denote periods, but if read in rebus, denote these periods reasonably by means of proto-Maya lexical compounds. So e.g. does the bakin-ape read in rebus mean bak-kin = 400 days (cf. bak-tun = 400 tun-360-day-years) and similarly the makin-ape refers to mah-kin = 'lunar year (Iran. mah 'moon')'. Consequently does Yax-Kin (a month name) mean here 'green year' (= the rural year); and the Keh-month's 2 glyphs TEAK TUN do here mean 'tun-year increased'.

Certain variants of ape-names have their counterparts in the Old World: Pan-Maya koy/k'oy, with frequent o from au, thus *kau, renders Sanskrit kapīh = 'ape', Semit. *qāpi, Old-Eg. qepi, Hebr. qoph (cf. Greek kēpos/kēpos, Lat. cephus) see Mayrhofer I 156.

Maya Teco mātšin 'monkey' (Kaufmann 1969 IJAL p171), short: Maya māš, māš, has a cognate in Mongol. mātšin 'ape'. For the Maya *batšin-variant see Manju fetīl. Old Turkish has bātšin

- the ape of the 9th animal-year-cycle (following Radloff). Japanese has masi-ra 'ape' studied by Murayama 1958 229 in the context ExOr (Extreme Orient Group of languages: Ainu, Korean, Japanese, Manju, Mongol etc.). Maya-Chuj tšabin 'ape' (en-tailang tšaven/chouen) is an inversion of batšin.



ANCIENT ORIENT

- 40 See entries sub p(1)
 Babylonian Lunar Year
 of 354/355 days

Maya continued :

First Column: The reader is invited to look at the MTED-pages relating to the Dresden-quoted mak-hab-year, that is the Macaw-year of 365 days. The 1st topos says: 16 days to the 'green year Yax-kin, already analyzed sub MTED mak-hab (various pages). Of it, the Dresden shows 7 sections of 50 days each = 350 days of rural work; then a 15 day festival, or in case of a leap year, 16 days. The 2nd topos can be read itsi-ka-us-ni, a verb, stating something like 'identity', recurring as the 2nd topos in the four columns. The 3rd topos is a head picture of the Macaw-bird, Neo-Maya and in late inscriptions = mo-o-o *makau-hu (-hu = 'bird' classifier in Sum./Maya).

Second Column: The 1st topos says: 6 days to the TEAK TUN, normally 360 plus 5, but in leap years 6 days. 2nd topos: itsi-ka-us-ni, see above. 3rd topos: A compound still undecided: a human head plus affixation.

Third Column: The first topos says: 11 days to the akab makin-n(i)-ape, that is, to the mah-kin-n(i)-lunar-year of 355 days leap year to attain the 366 day solar leap year. 2nd topos: itsi-ka-us-ni, see above. 3rd topos: Moon-goddess head, affixings. The above mentioning of akab 'night' is = Moon's night-litling lunar year.

Fourth Column: the 1st topos says: 19 days to be added to ^aka.b bakin = to the 2. bakin-apes, that is, to the ^aka.b-bak-kin-period = 2 x 400 day ex-Mars-synodic year = 819 day period of Palenque, presently lasting 780 days. 2nd topos: itsi-ka-us-ni, see above sub First Column. 3rd topos: The head-glyph of an ape with forehead prefixing mo-k(a)- uok, archaic variant is bak, later batš/vats (Faulmann 320). Think of the 2 ape-brothers Hun-bats and Hun-chouen of the Popol Vuh (Maya Quiché).

The mouth-jaw region of the ape-head might also point to ba-k(a) = 'ape', with *ba 'lip' and ka 'tooth', thus pleonastic writing often found in head glyphs, for a decorative completion of face details.

Remember that the 819 day period (4th Column) is numerically related with the 364-day-vague year nine of which do equal 4 ex-Mars years: see MTED a-tin-hab. The 9-night-week of 9 night lords is basic to Mars, as 8 to Venus, and 7 to Planet Jupiter.

'400 days'
 = month 6,
 XUL

'ape'
 = BAKIN
 in rebus
 *BAK-KIN

This page is mainly a resumption of the previous page, more adhering to the order followed by the Maya scribes on p49 of the Dresden Codex. Omitted in the main text of this page is a hint to the vega year I made on the previous page based on an idea I had on July 15, 1996: in that I read lower part of p49 Venus Table topos c-6 as '1 vague year', complementary to the neighboring topos d-6 = 9 vague years = 9 x 364 = 4 x 819 = 3276 days. This increases the number of differing Maya Years/periods by 3, thus totaling alone on the lower half of p49 to 6 years/periods.



kab₄-kab₄-hil 819
= hand of Kawi
20 minus 1 = 19
2 x 10 x 20 x 2 = 800



ETZ'NAB
Day n18

e-tin-hab I
(ya-tin-hab)
a bit smaller
(= vague) year

MTED / Maya Transition Epigraphic Dictionary

Maya

e-tin-hab 'a bit smaller year'
= the vague year of 364 days

The meaning of many Maya glyphs and glyph-compounds is absolutely unknown. Via context and compound-analysis progress can be achieved. Of help may be current glyph-names as in the case of the Day n18-ETZ'NAB-glyph-variants. However, not so much the allegedly known Maya day-names are fascinating. Remarkable are the relative glyphic variants, mostly up to 9, which often suggest a number of differing names for one and the same day (or also for one and the same month). Take the case of Day n8 LANAT. Some glyph-variants clearly refer to planet Venus when not depicted as Quetzal-bird, or phonetically written ku-ku, but when depicted as the 8-rayed star, the brightest of all stars, its 8 rays revealing globally also its holy basic number 8, synonymous with Venus, because $8 + 64 + 512 = 584$ (1st, 2nd, 3rd power added yields the number of days of the synodic Venus year). So does 7 in respect of Jupiter (399 days) and 9 in respect to 'pre-catastrophic Mars' (819 days, now 780).

By analogy, Day n18 ETZ'NAB seems to refer to the aforementioned holy number 9 of planet Mars, neo-MAYA BOLON = '9' meaning often 'Mars'. See its 'etymology' MTED a8-ba.1-lahum = '1 till 10'. Day n18 refers to 2×9 , or $2 \times 91 = 182$, a half vague year = 364 days. The 9 of Mars has been globally retained, in Maya-land by a sort of a 9-day-week, of which 364 yield a big vague year of 3276 days. The Dresden p49 Venus Table brings TSAK-KUK - the big or red/bloody star = Venus and the 4 aspects of directions: East, North, West, South. Similarly, in Dresden/Tzolkin 58, Mars = kab-hil-Kawi has four representatives (kab = assistant/hand), the 4 Ba-kabs, watching the four 819-day-sub-periods of the big vague year of 3276 days (see above). Remember the formula $9 + 81 + 729 = 819$ (addition of the 1st, 2nd, 3rd power of 9). Following Greek mythology, it was Jupiter's Athena who in a cosmic upheaval injured Mars (downgraded from 819 to 780 days believed to be temporarily within the planetary ball-game, see MTED kab₇).

Many signs are pictograms, cf. the Macabird-picture meaning in rebus mak-hab (= MTED I-V) the rural year of 365 days and a 4th one of 366 according to Dresden 38b/39b/40b/41b = $7 \times 50 + 16 = 366$ days = the year with an intercalary day. The latter formula $7 \times 50 + 16$ recurs in one single glyph-compound of Dresden p49 Venus Table a-1. - Other Maya glyphs are geometrically structured. A solar year's most realistic 4 seasons last $4 \times 91 = 364$ days, less realistic is $4 \times 90 = 360$ days of the round year = TUN, discussed sub MTED ka-mu8, where mu8 is a rain-period, incorrectly 360 days.

Sumer, Iran

Borger, Rykle, 1981, ABZ (Ass.-Bab.Z'1. n172 gi8

Pos.8-a: Sum. izi 'fire' OPers. assi-
Pos.8-b: Akkad. i8a.tu 'fire' = *gi8
from Aryan-A *kitra-, -B citra-
= 'shining', cf. NHG heiter 'bright'.

Pos.7-a: Sum. gibil4 'new' *nabina-
cf. Sanskrit navāna-, nava- 'new'

Maya *itsi-nab 'fire-new/flint' equals
Old Pers. assi-nava 'fire-new';
assi- being Avest. a8ri-, Aryan atri-
cf. Lat. atrium 'stove-room' etc.

As to Maya tin-hab 'small year' see
the relative rebus-writings in MTED.

An acceptable way to mark the 4 seasons is depicting an x-shaped cross. For Day n18 ETZ'NAB this is done by an x-cross of wavy lines and for the 364 day-vague year by means of 2 crossed bars in x-shape. The latter's name is obviously e-tin-hab as suggested by a suspect glyph. Indeed, at Palenque 1C, there are 2 seemingly interrelated glyph compounds (by Mayanists probably believed to be historical dates). Compound D-5 is readable: 2 days 8 + 9 UINAL-la, that is $2 + 180 = 182$ = a half vague year; the other compound, C-6, consists of the 2 bars crossed in x-shape plus as background the MTED hab-glyph which usually means something like a solar year (in the case of MTED tin-hab = 'small year' likewise the ceremonial TZOLKIN 260-day-year). The superfix is obviously -1-, while the subfixed circles may be bad rendering of phonetic ya = a (of e-tin-hab). The numbers 182 and 364 thus denoted by the 2 compounds belong to the 'big e-tin-hab' of 3276 days, see above.

And now the Dresden Tzolkin 59-compound relative to 80d kab-hil/Kawi (= Akkad. qablu 'battle'): For the upper flaring/smoking glyph see MTED kab-kab. Postposed id MTED hil 'Crescent' and phonetic. That makes together kab-kab-hil = 'hand/assistant of Kab-hil. The rest is a human head in profile. The eye is a UINAL-glyph meaning 20. The postfixed 2 hooks may mean 'minus one' = 19 days. The jaw means lahum = '10' (= Akkad. *lahum 'jaw'). One tooth, = ka, means in rebus ke '2', thus ka-lahum = '20', and the 2nd tooth means the second power of 20 = 400. The subfixed is probably the causative -ka known as a variant of the kam-ka₂ glyphs = make die = to kill, here meaning 'make an operation' in that one of the super-fixed kab is assumed to have an additional value, namely ka.b = 'two', that makes 2×400 plus 19 = 819 days of the synodic Kab-hil/Mars-year. a/b/c/d = 4×819 above the 4 directions East/North/West/South each with an assistant, a KAB or 'hand', a Ba-kab. E N W S:

Tz. 59, a b c d:



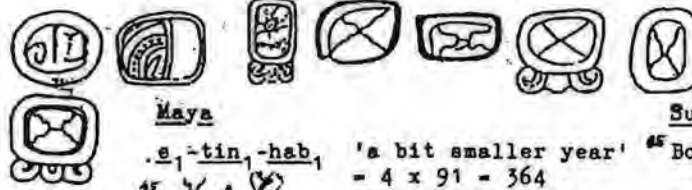
and below:



Harris/Stearns 1992 p134: Day n18 (= 2 x 9) - etz'nab

e₁-tin₁-hab₁ II

MTED = Maya
Transition
Epigraphic
Dictionary
as presented
within MSO =
Maya Script
Deciphering



Maya

e₁-tin₁-hab₁ 'a bit smaller year'
= 4 x 91 = 364
'The vague year'

Sumer

Later, erroneously,
also read 'itai-nab
'fire-new' made by
'fire-stone/flint!'.
Borger, R. 1981, Ass.-
Bab. Zeichenliste
n467 < 𒀭𒀪𒀭𒀭 / DUN
Pos. 14-a: Sum.A: 𒀭𒀪,
Pos. 14-a': Sum.B: 𒀭𒀪,
both < 𒀭𒀪 = 'young'
and 'small', see
MTED tin₂ 'younger
brother'
n483 𒀭𒀪 LAGAB
Pos. 3-a: 'hab 'year'
see MTED hab₁ 'year'

It is due to William Gates 1931
p6 and his reference to Förstemann
Commentary on the Dresden Codex, 1906,
p159 that I focus here on Day-
n18 etz'nab as meaning 'vague year'
= 4 x 91 = 364.
Starting from MTED tin-hab I & II
= 260 and 360 day years, or 'small
years', I posit 'e₁-tin₁-hab₁
as the preform of:
etz'nab as meaning 'vague year'.
And since 9 vague years = 3276 days
are 4 God K-quadrants = 4 x 819 =
3276 days, I am inclined to call
this latter period 'Big Etz'nab'
or 'big e-tin-hab'.

As stated wherever required,
the number 9 is the holy number
of God/planet Mars reminiscent
of the precatostrophic duration
of the Mars Synodic Year of 819
(now 780) days. 'Nine' is the
cube root of 819, and implies the
sequence 9 + 81 + 729 = 819 days.
It implies a Mars-year of 9
'9-day-weeks' = 819, thus enriching
the different Old and New World
types of weeks (5 day week = Earth,
7 day week = Jupiter; 8 day week =
Venus). The 'big e-tin-hab' has
364 9-day-weeks = 3276 days.
The matter of intercalary days has
been studied sub MTED nak₁-hab₁.
Throughout the MTED references to
day and period counting and inter-
relations will be found.

120 somewhat-small-year
= vague year of 364 days
4 x 91 = 364 Earth
(9 x 91 = 819 *Mars) Old,
(3 x 260 = 780 Mars) New,
73 x 8 = 584 Venus
73 x 5 = 365 Earth
54 x 7 = 378 Saturn 378
(111 x 7 = 777) Jupiter 399
57 x 7 = 399 Jupiter 399
117 x 7 = 819 *Mars

A conjunction of
grandfather = Saturn,
father = Jupiter,
son = Mars
was believed as helpful
for repairing the injury
of Mars: 780 > 819 d.

Only the Maya piously kept in mind
and devoutly respected the full
truth, namely that a celestial po-
wer or committee had instituted
and kept running a system of inter-
connected planetary periods concei-
ved to impress and form earthly
man, but liable to disintegrate
and again to return into the estab-
lished order.

Förstemann's 'vague year' etz'nab
= e-tin-hab of 364 days (of which
9 do equal 4 Kaul/God Mars years
of 819 days = 3276)
has in Palenque TC
C-6 a special glyph
as visible in D-5
= 2 d + 9 m or 180
65 = 182 d + 1*364 = hab-X (X = A.23)

It is not easy to combine name and glyph relative to
Mars. For the same problem relative to Venus see
KUK (1), (2), (3). Suitable is Gates 1931 n92
in the context of Dresden Codex, Tzolkin 58, as seen

below: and
so in
Tz.59 a-4/2
4 quadrants
4 directions
4 colors

75 The flare on top has, inter alia, the value kab₄-kab₄
quod vide. The 'eye'-infix is the Day n11 - CHUEN/
UINAL-glyph which often means '20'. The 2 hooks
at UINAL's right side may mean 'minus 1' = 19.
The visible mouth/lower jaw means lahum '10', the
first tooth (its name ka) is in rebus '2', thus
2 x 10 = 20. The second tooth means its 2nd power =
400, with a ka, b₄ = 2, x 400 = 800 + 19, the Mars-
a

Maya, continued:
or better 'red/bloody Mars', since
the eye has the circle of 9 dots,
and phonetically ka₄ 'teeth' and
and the -hil-crescent affix plus
other elements. Sub e-3 follows an
event which Thompson believes is 'de-
solation'. The following vertical
row is: f-1 la-kin; f-2 chak-kuk₂
= big star = Morning Star, and f-3
the event containing lu = ka₄-sa =
'destroying/killing'.

For more on the Venus Table see MTED
a₂-kik₂-KUK₂ 'Blood Venus'.

As shown sub MTED kab₄-kab₄
the first kab₄, in rebus, may
again mean 'hand/assistant'
so that kab₄-kab₄-hil would
mean 'assistant of God Kaul',
that means here the the a/b/c/d
= 4 Ba-kabs guarding 4 qua-
drants (World directions, E/W/
N/S) each during 819 days = to-
talling 3276 days, see above.

	e	f	g	h
Table 1				
Table 2				
Venus 3				

11c The Venus Table, which has 3 colored
pictures, the upper one being Venus
(star-marked), shows Mars as second
picture with the circle of 9 dots
on the thigh. The above extract,
topos a-1, has the kab₄-hand,
postfixed is the crescent -hil;
again kab₄-hil = Kaul = 'Mars'.
But below, topos e-2, again 'Big'
Mars

See furthermore 'BAK-KIN' 400 days'
in the form '19-ka₄-BAK-KIN' =
19 plus 2 x 400 days = 819 days'.
(Venus Table, bottom, d-1 = 19 XUL
= month n6).

In the Dresden Codex,
p49, Venus table, see
MTED BAK-KIN, we see
exactly below 1-d, 19-
aka₄-BAK-KIN-ni/819.
In 6-d, 9 x 364 = 3276 = 4 x 819, comple-
mentary to the neighbouring 6-c = 1 x 364
= 1 vague year, the small etz'nab/e-tin-hab.
The glyph itself, ending -ka, is still un-
clear.
See Kabil₄

MTED / Maya Transition Epigraphic Dictionary

The text of this page was written 1988 to form part of SAGS / Sumero-Akkadian Generative Scriptology sub n123.26 II; and also to HGS / Historical Grammar of Sumerian, § 14-a (2)., Sub-Chapter ASTRONOMY

e-tin-hab III

Old Mars Year'

n123

Pos. 26-a

Add. II

In 1993 I thought it useful to insert it in MTED in Mars context

Maya e-tin-hab 'Old Mars Year'

Extract from SAGS 1988 (< Borger 1981)
n123 $\frac{1}{2}$ DIR (SI-A) = $\frac{1}{2}$ n114 + $\frac{1}{2}$ n579
Pos. 26-a: Sum. muls₅ 'Mars' Add. II

Postclassical Global Cosmological Obscurantism, here: As denounced by Re-evaluating the Maya 819 Day Phrase (7th century pC, first used by the Palenquanos, see Barthel 1985)

There is no doubt that an extinct **civilization firmly (and righteously!) believed that our planetary system is giving us a lesson supplied by an intelligent co-operative power ruling the Universe. What non-co-operative modern scientists are unable to see is obvious in the eyes of children and pupils: The synodic years of the planets do offer a system of most impressive numbers:

Jupiter $7+7^2+7^3=7+49+343=399$ days

Venus $8+8^2+8^3=8+64+512=584$ days

Mercury $4,5 + 4,5^2 + 4,5^3 = 4,5 + 20,25 + 91,125 = 115,875^d$

and 2 times 4,5 = 9 in the case of the pre-Trojan Mars:

Mars $9+9^2+9^3=9+81+729=819$ days
= the Maya 819 Day Phrase.

I say: Pre-Trojan Mars: The so-called war of Troy was, as stated by Homer, accompanied by a celestial war, read: by a sort of cosmic upheaval in that Jupiter (through his 'daughter' Athena) inflicted an injury to (the orbit of) Mars (resulting in the change 819:780-day synodic year of planet Mars). For implications, see my study of 8.11.1988 $\frac{1}{2}$ 470,3 Sum. XV = Akkad. Istar 'Venus' line 47-62 and 31-35 and 68-69. As to that injury, I found, today, confirmation in the story of the Trojan War where Athena managed to injure Ares/Mars. But after the cosmic incident the nations kept on worshipping Mars invoking his attributes of old:

His working figure/Basic number 9 (like 8 for Venus, 7 for Jupiter), IE/Indo-European nu-n, newen, enw as in Lat. nun-dies (9-days-week), Greek enuo, enualis = Enyo, Enyalis, Lat. quinquatrus from quinque-quattuor = 5+4 = 9, festival on March 19, referring presumably to a previous 819-day year, counted by nun-dies.

Here that much I found relative to Maya/Palenque 819 days in a fascicle kindly sent to me by Prof. Barthel in September 1986 = special copy of his study on 'Hindu-Maya Syncretism: The Palenque Focus', which appeared in Ibero-Amerikanisches Archiv N.F. Jahrg. 11, Heft 1 1985 p51-63 (Colloquium Verlag Berlin): p60

This page is dedicated to Frau Dr. Heineke Sudhoff, 5300 Bonn-Röttgen, in der Wehrhecke 43. The overwhelming cumulative numeric evidence is supported by hand-symbols and animal symbols the collection of which I started 56 years ago.

Jupiter is evoked by the oath hand, cf Hebrew saba' '7' + 'swee/schwören'.

'Eight', the basic number of planet Venus, is shown by two

crossed arms covering the breast with hands showing 4 fingers the thumb being hidden.

Mercury's number 4,5 is globally shown by the flat hand marking 4 fingers and a half one = the thumb.

The number of Mars, '9', = two times Mercury: $2 \times 4,5 = 9$, thus two such hands lifted as war-lords or presidential candidates do.

Another way is the symbolic allusion to animals using the

As is well known from Classic Maya culture, starting in the middle of the 7th century and first used by the Palenquanos, a glyphic notation for colours and world-directions (the so-called 819 days phrase) enters the epigraphic scene. Here we find the equivalences: Red = East / Yellow = South / Black = West / White = North. This system of colours and world-directions corresponds, with a phase displacement, to the sequence used on Java and Bali, i.e. in Hinduized Western Indonesia. The same phase displacement seems to be documented in the Popol Vuh: i.e. to have persisted among Highland Maya.

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Paper presented at the 44th International Congress of Americanists, Manchester 1982.

Venus = Morning and Evening Star's two cows drawing the carriage of Venus in holy processions in India = 2×280 approaching 564. Rome's later corrupted novem dies/nundina (8 days instead of 9) days honoring the Mars year (819) is a parallel to Elam's 8-day week honoring the Venus year: $584 = 73 \times 8$ cf $365 = 73 \times 5$

MTED / Maya Transition Epigraphic Dictionary

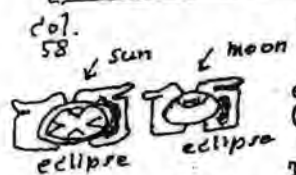
Maya

*eš, 'Moon'

The moon-glyphs have been identified, a number of Neo-Maya 'moon'-names are known, but which name covers which type of moon-glyph is unknown. For the crescent I have found MTED hil,

quod vide.

In the Dresden Codex, there are 3 different moon glyphs:



with the hanging dog below; Furthermore, between Col. 58 and 59; and the moon-eclipse of D.p38 b (p40 b has the hanging dog).

The full-moon-sign is certainly that in the eclipse since the shadow of Earth covers the moon when moon and sun are in opposition, once in a lunar month is opposition but not always accompanied by an eclipse. The drawing of the eclipse recalls the superfix of uayab = the last 5 days of the 'solar' year, the woe-days, see MTED uai-hab. Also the eclipses are 'woe'-phenomena to the Maya. Assuming that the moon/full-moon is called eš, we should thus have obtained the names of the two eclipses: uai-kin and uai-eš respectively. Could apply to Sumer (bui/vai = 'woe') analogically.

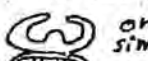
uai-eš, =
'lunar eclipse'
or 'woe-moon'



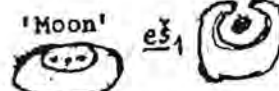
uai-kin,
'solar eclipse'
or 'woe-sun'



See uai-hab =
'the 5 woe-days'
of the year



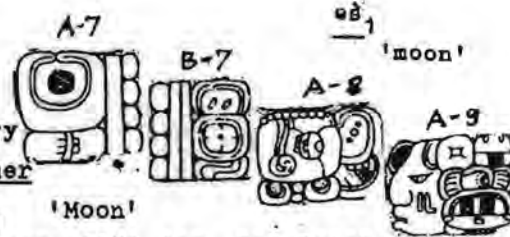
on similarly eš means 'three' and 'moon' and 3 x 10 is inserted in the moon-graph. In Maya, all



That the boat-shaped moon-picture means moon, full-moon, month of 28/29 days is supported by the moon-eclipse glyph appearing in the Dresden Codex p38.b (see MTED sub mak-hab II, the



discovering of the leap-year extra-day at 4 solar years intervals). In Sumer, eš means 'three' and 'moon' and 3 x 10 is inserted in the moon-graph. In Maya, all



Sumer
eš, 'Moon'

Borger, 1981 Ass.-Bab.Zeichenliste n472 <<< eš 'Moon' Pos.5-A-a: Sum.Highl./Lowl. eš 'three' NoFo a-eš1-, NW-Iran. eri-, Sanskrit tri-; Atri- 'father of the Moon' Pos.6-a: Sum.dXXX = 'Moon(-god)' Pos.2-a: Sum.Lowl. šku '30', from eš-u = '3-10' = '30' (archaic: 3 circlets = 30, in Maya = 3)

Maya, continued:

The firestone/flint, more or less a homonym of day-18 etznab at a time probably 700 pC, could seemingly also be written nab-etz. I see in it an Old Pers. nava-assi = 'new fire' which to make it the stone is useful. But the day-18-name itself has another etymology, for which see MTED e-tin-hab which refers to the 819-days-Mars-period.

In Schele/Freidel 1991 (Munich) p195 Abb.5.9,a), 3rd block at right, topos A-1, a scribe has written nab-MOON, i.e., imiš + MOON which the authors translate as meaning flint/firestone. The scribe obviously inverted the sequence of etz-nab into nab-itsi 'new fire'. He thus revealed, by using for ets/itsi a moon-sign, that at that time some ets meant 'moon'. His escapade is fruitful to us. I see in ets, eš a Maya reflex of Sum. eš 'Moon'. More verifications are still required.

moon-glyphs carry 3 circlets in the sickle, cf. eš 'moon', hil 'crescent', and u 'waning moon'. An assignment of 20 days to the eš-glyph as done by Linda Schele in her translation of Piedras Negras 63, stela 3, topos A-7, can receive a better explanation. The next block says 14th day of month YAXKIN, then follows (A-8) yu tun-hil/tun-11 'her birth' (see MTED tun, 'give birth') and (A-9) 'lady princess KATUN' (see MTED sub KATUN). In this context it makes sense

that her correct and healthy pregnancy duration of 9 months (of 28/29 days) is expressly mentioned. She was not a premature birth. A-7 spells thus: eš eš-ba.l-lahue ki = months nine 'unhindered'. Sum. gi (as in šul-gi/Dun-gi) = youth unhindered, cf. Sanskrit yun-a.kṣita 'youth imperishable' is Maya ki. SAGS n85 gi Pos.3-a: gi 'health' SAGS n467 šul/DUN, Pos.2-A-a: Sum. šul/dun 'youth', Skt. yur as in IE/Indo-Eurp. *yun-yos = Latin junior 'younger' etc.

using day-20-AHAB = ahab
as frontal affix

hab₂

MTED / Maya Transition Epigraphic Dictionary

'year in general'

Maya

Sumer

hab₂ unconventional way of rendering 'year in general' by using the day-20 glyph ahab 'Lord' seeing in it ahab

For etymologies see MTED hab₁ and mu₁, mu₂, ma₁.

- 5 To people who like simplification, e.g. in orthography (writing English phonetically, like most Slavic nations handle their languages) it will appear simply monstrous to see
- 10 Mayan ways to tackle writing problems. But the Maya had seemingly in mind to fight time and language decay. Over two millennia they preserved many terms like they got
- 15 them from Sumer. The decay of Latin in Europe was not stopped in spite of celebrating the holy mass in Latin. The Maya scribes often hopped from one glyph to any other
- 20 that sounded more or less like the word they wanted to denote.

The word KATUN = 20 360-day years, was written in many different ways and in adherence to different lexical compositions. Like pretentious ones amongst us they exhibited apparently everything they had learned and thus created to the Mayanist an Ocean of interconnections.

- 30 Sum. ma, Neo-Maya ka-mat 'the jaw' had in Sumer a Lowland spelling mu. To speak, in Maya-Land, Akkadian lahum 'jaw' was the 3rd means to show learning. To use mu
- 35 'rain' in rebus for mu 'jaw' (thus omitting reference in a head glyph to its jaw) was admissible. But in one case the scribe omitted even the drops around mu (necessary to make from mu a mu, 'rain') and
- 40 trusted thus in the reader's intelligence.

Below (according to Harris/Streams 1992 p70) the grass-ping hand (Sum. ku 'hand') meaning 'to sink' (Sum. ku) and the kin-n(i)-sign = 'sun' = 'West, evening' and the bird-Quetzal-head-glyph. 'Western Quetzal' = 'Western Venus Star or Evening Star', seems also to mean 'terrible Quetzal = awful Venus, war'.

The postfixed -na ('house') is rather a complement to mark the variant KUN-na 'Venus-star'



No sense makes: (k'in-ni-ich-k'uk'-na) K'inich K'uk' Na = 'Mahk' inah-K'uk'-House'; H/S p70. Indeed, in Sum. (u)-gun 'Venus' is older than the gug (Maya KUK). For more see the 5 pages of MTED dealing with KUK 24/23/4/5 'planet Venus/Quetzal(coatl)'

45 Maya, continued:
The KATUN-compound giving the mu-les-son plus an ahab 'year' (not 'Lord') on the nose of the head-glyph is found in Palenque TFC I-1.



TFC I-1

The reading ka, mu, (-ka,) ahab confirms the existence of the alternatives enounced, e.g. relative to the 'jaw' which invariably refers to 'ten' throughout the MTED, be it ma or mu or lahum. All that is Mesopotamian 'jaw', (and 'ten' as it survived, in -mi, in Turkish). Furthermore, it confirms 'year in general', unscientifically spoken, = hab (in the Dresden Codex: the solar year =

Now, repeated, the case referring to ka, b, lahum-ahab (see in MTED).



B-3

70 It is also found in Palenque, Trilogy I, B-3. But instead of lahum the alternatives mu, ma are admissible.

For the sake of convenience, ahab 'year' is in MTED given the transcription hab₂. Here some day-20

-AHAB-glyphs:



Cf. the 4 Macaw-bird-years = the 4 big years of 365 days each sub mak-hab, as in the Dresden Codex p40b, in this MTED, in the context of regular intercalation of an extra-day at the end of the fourth Macaw-year, i.e. leap

year, as discovered on May 28, 1993 in the Dresden Codex p40b by the author. MTED mak-hab pl, II, III, IV, V. There is an interrelation between the name of the Macaw-bird and the name of the macaw-palm (on the fruit of which the birds feed). Said palm is, in Yucatec called macahuba/macahiba (Webster's 1961 p1353)

MTED / Maya Transition Epigraphic Dictionary

Maya

hab₁ 'solar year'
= 'insemination or rain period'

Since Maya hab means also 'rain', and ahab 'Lord' is thought to mean inseminator, there is no doubt that civilization started with agriculture. The more so as the 'secret name' of the ceremonial 260-day-year is, cryptographically written, the 'little year' or 'small year' = tin-hab q.v.

What here counts is the etymology, the time the term hab was introduced. The hab-glyph continued to be used, also incorporated  hab for glyph-structuring in the field of 360-day-round years; also in respect of the 365-day-year (see uai-hab = uayeb 'the last 5 days').

The term hab, with its glyph, survived as a phonetic value, as in 'hab-lahun' = '15', later ho-lhun, discussed sub MTED kab₂.

The term hab, with its glyph, was used as a complement, just for joke decided by a Palenque scribe who wrote, 2 times, the month-n7-KAYAB: above the picture of a turtle, below (with hab as a complement to make clear what turtle-name he meant) the evocation of -ab, last sounds of KAY-AB. The meaning 'turtle' was never forgotten, though numerous other turtle names existed. Note OPers. kaśyapa, Sanskrit kaśyapa-, NPers. kaśaf 'turtle'. Topci: Palenque Plate S-2 and A-12 (e.g. Gockel 1988 p285). The loss of intervocalic -s- in Maya is quite normal.

Cf. the 4 Macaw-bird-years = the 4 big years of 365 days each sub mak-hab₁ as in the Dresden Codex p40b, in this MTED, in the context of regular intercalation of an extra-day at the end of the fourth Macaw-

year, i.e. leap year, as discovered on May 28, 1993 in the Dresden Codex p40b by the author.

The Quekchi tšihab 'year' is found in MWL n153, and tšab 'year' (= Quekchi) in Stoll n155 p78

The jokes of the scribes in writing various years by means of various glyphs is perplexing. See below 5 TUNs as in Gates 1931 p3 where TUN is written (what he did not realize) tin-hab 'small year' (since 360 is not 365 = hab).

 5 TUNs = 1800^d

hab₁
'year'
'solar year' 

Sumer

hab 'rainy, muddy (period)'

Borger, Rykle, 1981, Ass.-Bab.Z'liste n483  LAGAB = 
Pos.23-a: Sum.Highl. hab 'muddy, rainy (period)'

my addendum:

Pos.3-a: Sum.Highl. 'hab 'year' 
because of Semit. loans from Sumer: habb 'seed', and ahab 'insemina/tor, -tion', also Biblical ('lover' etc.)

Sanskrit śav-, Iran. šav- 'to engender, to rain'. IE (Indo-Europ.) Ablaut-couple sew-, zero-grade su- with su-n-u- 'son', Iran. hunu- Maya hun 'son, child'.

For the pan-IE distribution see A.Pokorny, Idg.Wb. p912.

Maya, continued

The glyph itself is seemingly cosmologically structured: an ellipse (orig. a circle) divided in an upper and a lower half, with the winter-sun below and in the upper half the year's subdivisions. The sun in a resting place, disappeared, is almost nordic.

That there was a lot of confusion in the field of calendrics among common Maya people (or interrogating ethnologists) is apparent from Quekchi tšihab, var. tšab 'year' preform tihab/tinab/tin-hab, but the old tin-hab is once (Gates) 260 days, and another time (Förstermann) 360 days. Anyhow: smaller than 365 days = hab, the original 'solar' year. sufficiently exact for rural people.

Morley 1915 p59, refers to another writing of the Calendar Round seen by Förstermann, 360, = tin-naab = tin-hab

 small year, not 365

Still more is submitted in MTED sub tin-hab