## GRAMMAR IN THE SCRIPT:

## Literary and Visual Devices in Grammatical Constructions

by Hutch Kinsman

This is the fifth essay designed to help the non-linguist analyze the grammar in the hieroglyphic script and will focus on analyzing hieroglyphic texts in light of the poetic discourse that is found in present day Maya formal speech and on Early and Late Classic monuments. A number of explanations, definitions and examples will be presented followed by an analysis of Stela D from the site of Pusilha.

First, why even bother to study hieroglyphic texts from a literary standpoint? This essay will attempt to answer this question with the following points:

1) better meaning and translation,
2) monumental texts are actually structured with poetic devices,
3) better understanding of individual glyphs
4) better understanding of grammatical constructions
5) understand the visual or graphic placement of glyphs
6) understand how semi-literate ancient Maya could understand monumental texts.

Thompson himself recognized the poetic features of the Mayan writing (1971:62): "With such a melodious cadence in the Maya of the books of Chilam Balam and in that of modern prayers, it is logical to expect a similar setting for the hieroglyphic texts, and accordingly, we may believe that the redundant glyphs were inserted to better the flowing harmony."

In a paper presented to the Maya Society of Minnesota (2009:1), Nicholas Hopkins states, "Classic Maya texts, while mostly devoted to the historical record, are not just lists of historic events but carefully crafted narrations, and we can now see at least the basic elements of a narrative style that constitutes a literary tradition, with a literary canon that constrains the writers to a set of norms. What is most impressive about this tradition is that its norms persist today in the narratives of modern Maya speakers, separated from their ancestors by more than a thousand years. Despite the huge gap in time that separates the two eras of Maya narrative, our understanding of how a modern storyteller puts together his/her tale has given us great insight into how narratives were composed in Classic times."

A study by Gary Gossen about the oral traditions and cosmology of the Chamula Indians of Mexico revealed a narrative style for telling true ancient narratives (1974:142-158) that includes a formal repetition of key words, concepts and syntax, more formal than other styles with regard to couplets and metaphor, and multiple meanings for single words (ibid.: Figure 3, 50,51 ). An even more formal form of pure words is the Language for Rendering Holy, a style which, with few exceptions, has the parallel metaphoric couplet as the basic stylistic unit of language (ibid:161).

The basic unit of formal speech, the unit of which all of these structured forms are composed, is the couplet. The couplet is composed of two lines, sentences, or phrases, which are deemed parallel because the content of each is similar or even exactly the same in meaning or expression (Josserand and Hopkins, 1998:3).

The hierarchy of the use of the couplet is presented below (Hopkins:1996); in modern languages, and presumably in the Classic tradition, the use of couplets varies with the genre of the text, increasing as the formality of the genre increases:
a) prayer (all couplets)
b) mythological narrative
c) narrative history (couplets at peak events)
d) ritual speech
e) conversation (few couplets, but repetition of last segment)

Kerry Hull (2002: Ch'orti' poetic structuring) has recorded a healing prayer from the Ch'orti' curanderos that is completely composed of couplets. If each line was labeled with a letter, with a like line containing the same letter, the prayer would contain five couplets and its structure would be "AABBCCDDEE".
takar umakje'yr uyok
takar umakje'yr uk'ab'
akar usututjutir u't
takar usututjutir uk'ab‘
takar usakb'urichir u't with the simple heat of its face
takar usakb'urichir uxamb'ar with the simple heat of its walking
akar ufiebrir uk'ab'ob' with the fever of their hands
takar ufiebrir u'tob' with the fever of their faces
takar umalairir ixamb'ar with the bad air of your walking
takar umalairir iwajner with the bad air of your running
with the water-stopper of its foot with the water-stopper of its hand
with the whirlwind of its face
with the whirlwind of its hand

The body parts that are mentioned, "foot" or "hand", or the actions connected to those parts actually refer to the evil spirit that is causing the illness." This poetic device is called:
synecdoche: "often considered a kind of metonymy, involves a part-to-whole relationship, where a term with more comprehensive meaning is used to refer to a less comprehensive meaning or vice versa; that is, a part (or quality) is used to refer to the whole, or the whole is used to refer to part, for example hand, which was extended to include also 'hired hand, employed worker'. Some common examples found in various languages are 'tongue' > 'language', 'sun' > 'day', 'moon' > 'month'." (Campbell, 1999:260).

Metonymy "is a change in the meaning of a word so that it comes to include additional senses which were not originally present but which are closely associated with the word's original meaning, although the conceptual association between the old and new meanings may lack precision. Metonymic changes typically involve some contiguity in the real (non-linguistic) world. They involve shift in meaning from one thing to another that is present in the context (though being present may be a conceptual judgment call not necessarily immediately apparent to us before the change takes place). For example, English tea means, in addition to the drink, 'the evening meal' in many English-speaking locations." (Campbell, 1999:259).

Maya songs also follow a structured text. A Lacandon song (initially published in 1949 in Tlalocan, a Mexican journal, collected by Phillip and Mary Baer, and then reformatted by N. Hopkins and published in Tlalocan, 2008) sung when meeting a Jaguar in the jungle and meant to cause the jaguar to go to sleep is structured with a pattern of a couplet followed by a single line $A A B$, followed by alternating couplets, $C D C D$, followed by a triplet EEE. Distinct
syntax appears in different sections of the text. In the first section, the jaguar is stalking the human. In the second section, the jaguar hears the human's song and gets sleepy. In the third section the jaguar is asleep and dreaming (Hopkins, 2009:7):

Ju-jun tsit in jitik in wok
Ju-jun tsit in jitik in k'äb. Tan u pek in nej.

Tin wu'uyaj u tar a k'ay ch'iknach. Netak in wenen.
Tin käxtaj u pachtäkij che’.
Oken tin wenen yokor jenen che'.
Tu yek'er in nok'.
Tu yek'er in k'äb.
Tu yek'er in xikin.

Step by step I move my feet
Step by step I move my paws.
My tail is twitching.
I heard your song coming from afar.
I'm getting sleepy.
I looked for a fallen tree (to lie on).
I'm going to sleep on that (fallen) tree.
My hide is spotted.
My paws are spotted.
My ears are spotted.

## ADDITIONAL POETIC DEVICES

Another particularly useful device is called chiasmus, where instead of the usual arrangement of couplets AABB, the second line of the first couplet A is placed after the second line of the second couplet so the arrangement becomes ABBA. The couplet BB is now called a "nested couplet", surrounded or enveloped by another couplet. A well known biblical example occurs in the New Testament where Jesus is addressing his disciples in Matthew 19:30: "polloì dè ésontai protoi éschatoi kai éschatoi protoi." "But many [who are] first will be last, and the last first." (New King James).

The creation story inscribed on Stela C at Quirigua (Looper,2003:12), (drawing and integral translation by Matthew Looper) and discussed both by Hopkins (2009:5) and Hull (2002:famsi.org/reports) is an example of additional couplets, including a triplet, nesting within a couplet which is in turn nesting within that couplet. The interpretation below the drawing is by Hopkins (2009:4)(ISIG with long count date not shown).



A ISIG 13.0.0.0.0 4 Ajaw 8 Kumk'u, the Creation Event (took place).
B Three stones were set.
C The Paddler Gods erected a stone, in the First Five Sky place; it was the Jaguar throne stone.

C Another deity erected a stone, in the Large Town place; it was the Snake throne stone.
C And then it came to pass that Itzamna set a stone, the Water throne stone, in the Sky place.

B This was the First Three Stones (the First Hearth).
A 13 b'ak'tuns were completed, under the supervision of the six Sky Lord (Itzamna).

Taking the two statements of the end of 13 b'ak'tuns as the couplet AA, the references to the three stones as couplet BB, and the three individual stone settings as the triplet CCC, we can see that this text has a chiasmic structure, nested couplets and a triplet. Furthermore, since the statement of the third stone setting, by Itzamna (C3), is introduced by a Focus expression (i utiy, and then, it came to pass), it has a distinct verb (set, not erected), and the place and throne identification are reversed in order (identification followed by place, not the other way around), this final event is the Peak Event, the climax of the story. Unusual syntax is the hallmark of the peak event; as Robert Longacre noted, in Mesoamerican narratives in general, there is a "zone of turbulence surrounding the peak." (Hopkins,2009:5).

The Mayas also made extensive use of a poetic device that combines two elements to represent something different than what each individually represented. These "paired opposition" couplets go by many different names all describing the same thing:

1) "...metaphoric couplets, or structured oppositions, playing 'earth' against 'mud', and feet' against 'hands'...In Mayan languages in general, this kind of structured opposition is a mechanism for naming higher-level categories that have no other conventional names. Probably the best known is the pair 'fathers-mothers' in the expression for 'ancestors.' " (Hopkins, 2009:3).
2) "paired opposition, the juxtaposition of two (non-identical) elements of the same kind. At the smallest level, words may be juxtaposed to form a metonymic expression....The meaning of the pair is greater than the sum of their individual meanings." (Hopkins and Josserand, 1998:5,6).
3) "Key words of the couplets are frequently kennings, and thus when combined they may imply a third meaning quite different from the literal meaning of the elements. Thus wells and springs means settlements..." (Edmonson, 1986:19).
4) "As did the writers of the Chilam Balam texts, the scribes of the hieroglyphic script often used references to "sky" and "earth" in couplet form to represent the idea of "totality," or "everywhere." (This concept of "everywhere" for "sky" and "earth" is common in most Mayan languages). At Copán and other sites the term $k$ 'uh, "god," was coupled with "sky" and "earth" to record "sky god, earth god," i.e. 'all gods.' The pairing of such complementary elements that represent a whole is known as merismus." (Hull,2002:famsi.org).

Garibay Kintana (1953: cited thru Edmonson, 1982:xii) used the word difracismos to describe these paired opposites. One of the more well-known uses of merismus in the script is tok'pakal, or flint-shield, to describe an army.

## ANALYSIS OF CLASSIC MAYA INSCRIPTIONS

The well formed Classic text has (Hopkins, 1996):
a) an opening and a closing.
b) an internal structure built around couplets.
c) internal sections marked by topic change, distinct patterns of syntax, and/or a backstep in time.
d) special effects near the peak.

A typical opening would be an initial series and a typical ending might be a period ending. Special effects near the peak might include increased coupling, fancy language, and possibly a "zone of turbulence", or an area of the text that diverts grammatically from the norm, giving emphasis to the event that occurs at the "peak", or point of focus for the main event (ibid.)

Josserand and Hopkins (1998:8-17) give numerous examples of deciphering hieroglyphic texts from a literary standpoint. Most of the poetry is embedded in the text itself, and one must structurally lay out the individual glyph phrases to see the grammatical constructions. The poetic beauty of the creation text, Quirigua $C$ in the example above, for instance, is hidden within the double column of glyphs on the side of the monument. Kathryn Josserand (1998: Figs 19,20 ) does give one example of parallelism in graphic layout, Piedras Negras, Stela 36. The Initial Series Introductory Glyph is paired at the top of the stela with the rulers name (C1D2); the Tzolk'in day of accession (B4) is paired with the Tzolk'in day of birth (C4); the Haab date of accession (A8) is paired with the Haab period ending date (C8).


Figure 5.1. Piedras Negras Stela 36 (Drawing by J. Montgomery).

## PUSILHA STELA D

There is one example in the monumental inscriptions, Pusilha Stela D that appears to use the visual or graphic layout of the glyphs in the text to directly reinforce the grammatical construction. A number of the poetic devices are used, and a large block of glyphs benefits from the literary interpretation of the text. Although the monuments in general were probably not readable by much of the population (Houston 1994 and Houston and Taube 2000 cited in Looper 2003:25), visual layouts such as existed on Stela $D$ may have facilitated the understanding of the text by the general populace.

First, it is useful to peruse the text visually for any special symmetries or abnormalities. The oversize Initial Series Introductory Glyph (ISIG) is very prominent; the volutes on top, though slightly eroded, immediately catch the reader's attention. For anyone who has taken Nick Hopkins and Kathryn Josserand's introductory glyph course, who can forget Kathryn's vivid demonstration of waving her hands above her head, simulating the volutes of the ISIG? Adjacent to the ISIG is a group of 8 glyph blocks that include a pair at C1D1 that seems to match the pair at C4D4. Further down the left hand side at A10 is an 'u-tz'a-pa-wa grouping that matches a similar 'u-tz'a-pa-wa grouping in a mirrored position on the right side at H10. In fact, though eroded, the glyph collocation at A11 may match the $\mathbf{k} \mathbf{\prime} \mathbf{u}-\mathbf{H U L}-\mathbf{T U N}$-ni collocation in the opposing position at H11. There is another possible match-up with B13 and G13 with an $\mathbf{u}-\mathbf{K A B} \mathbf{' C H}^{\prime} \mathbf{C H A B}$ '- collocation. There is an interesting pair of glyphs at A9B9, what appears to be an AKB'AL glyph in a cartouche and a K'IN glyph in a cartouche. And then if one looks closely, there is another Long Count on the upper right side.


Figure 5.2. Pusilha Stela D (Drawing by C. Prager [2002:474]).

The next step is laying out the text in a structural analysis format:


ISIG 9 PIH 3[8] WINIKHAB ${ }^{\text {c }} 0$ HAB 0 WINIK 0 K’IN 5 Ajaw
ISIG 9 pih 8 winikhaab' 0 Haab' 0 Winik 0 K'in 5 Ajaw


A6B6


12 [days] HUL-li-ya 4 K'AL-ja
K'AL LAHUN 3 Ch'en
12 days huliiy 4 th (lunation) $k$ 'alaj $20+10=30$ (day lunation)
12 days since the new moon arrive, 4th lunation was bound, 30 day Ln.

? ? 8 WINIKHAB' NAH-TZUTZ-la/ma ? AK'BAL ? K'IN
? ? 8 Winikhaab' Nah Tzutz Paddler of night, Paddler of day
? "Ended the 8th K'atun nah?, Paddler gods of day and night.


B10

u-tz'a-pa-wa
BIRDHEAD
k'u-HUL-TUN
utz'apaw
BIRDHEAD
k'uhul tun. "He planted the BIRDHEAD divine stone."

"The ballcourt of ?


A12B12


A13
ti-k'uhul PLAZA?
ti k'uhul PLAZA?
in the divine plaza?"
"He erected the BIRDHEAD divine stone (at/near) (designated building/place?) in the divine plaza?" At this point in the text the antecedent for the " $u$, "he/she" third person singular ergative pronoun prefixing the verb tz'apaw is not known. The three glyph collocations at B11, A12 and B12 correspond to the STEPwitz collocation at G12 in the parallel phrase at the end of the inscription. Therefore it is reasonable to assume that these glyphs refer to some type of structure located somewhere in the plaza. By virtue of syntax and semantics the author suggests (originally suggested in 2007 during a discussion of Stela D in the Philadelphia PCS meeting) that the glyph located at A13b, and also at G14, H12b, and on Stela P at B11, Stela H at A16, B14, and E2 represents a "plaza", or in this case, a "divine plaza" at Pusilha. Since the transitive verb $t z$ 'ap has an ' $u$ prefix and a -aw suffix, the predicate must be operating in the active voice as a transitive construction, and therefore must have the $3^{\text {rd }}$ person singular
absolutive pronoun suffix -0 that represents the object. The BIRDHEAD k'uhul tun nominal phrase that follows the utz'apaw verb must then be the object.

Following the A13 collocation is most likely an u-KAB'/CHAB'-ya collocation followed by the ruler's name WUK CHAPAAT and a string of titles. It is likely that the position of name Wuk Chapaat occupies a position of importance at the very visible lower left hand corner of the inscription along with the first glyph of his title. Then, as shown above, the rest of his title begins at the top of the inscription directly adjacent to the over-sized ISIG.

## U-KAB'/CHAB'-ya


'ukab'! Wuk Chapaat chab'iiy
K'AWIIL CHAN-na
K'awiil Chan
'UX B'ULUK PIK
'ux b'uluk pik
CHAN WINIKHAB'
Chan Winikhaab'

K'AWIIL CHAN-na K'awiil Chan

## MUWAN

muwan

## 'OCH K'IN-ni <br> 'ochk'in

'AJ chi-chi?
'aj chich?


K'IN-ni-chi
K'inich


C3D3 ch'a-ho-ma ch'ahom


C4D4 K'IN-ni-chi K'inich


## C5D5 SAK tz'u-nu-na

 sak tz'unu'n

C7D7 K'UHUL ?UN AJAW-wa
K'uhul Ajaw Pusilha

The ruler's titles could be structured in the normal horizontal method, however the literary sense of the full title may best be seen by leaving the set of eight pairs of glyph collocations in the original vertical structure. The visual placement of the glyphs seems to match the poetic structure. ${ }^{1}$ Thus, instead of a string of disconnected elements, the ruler's title may be written:

Wuk Chapaat, K'awiil Chan,<br>K'awiil Chan K'inich<br>'Ux b'uluk pik ajaw<br>Chan Winikhaab' ch'ahom<br>K'awiil Chan K'inich<br>Muwan sak tz'unu'n<br>'Ochk'in Kaloomte'<br>'Aj chich(?) K'uhul Ajaw Pusilha.<br>7 Chapaat, K’awiil Sky<br>K’awiil sky sun-god<br>3-11 pik Ajaw<br>4 k'atun incense scatterer<br>K'awiil sky sun-god<br>Muwan bird, white hummingbird<br>Western Kaloomte

He of prophecy? ${ }^{2}$, Divine Lord of Pusilha
The K'awiil Chan K'inich ${ }^{3}$ phrase forms a chiasmatic couplet ABBA, where the two numbered titles ${ }^{4}$ 'Ux B'uluk Pik Ajaw and Chan Winikhaab' Ch'ahom are nested inside the two K'awiil Chan K'inich phrases. The muwan bird and hummingbird also form a couplet or even a paired opposite merismus. If when coupled together the muwan and sak tz'unu'n ${ }^{5}$ have a third different meaning, perhaps that meaning is tied to the "Western Kaloomte" war title which

[^0]follows. Not only are the ruler Wuk Chapaat and his son legitimized by having the sun-god name in the father's title, (Colas,2003:281), but the poetic style reinforces the religious aspect of the text (Gossen,1974:161) which also legitimizes the rulers (Colas,2003:269). The K'awiil Chan K'inich title is emphasized by being repeated, and the two numbered titles are emphasized by being nested.

The two transitive constructions, utz'apaw and ukab'/chab'iiy, with the antecedent for ' $u$ of both verbs at the end of the entire phrase, combine to make up an A/A (agent/agent) pivot chain (Mora-Marin 2004:353).

The next sequence begins with a counting verb 'u-TZ'AK-AJ, which will be translated as "its count" without explanation as the translation is still controversial, followed by a distance number that counts from the original Long Count 9.8.0.0.0 by a "since it happened on" that corresponding and earlier-mentioned Calendar Round date of 5 Ajaw 3 Ch'en:

"AND THEN", using ' $i$, begins the next statement, "the Lakam tun was broken". Although Prager (2002:222) has drawn what appears to be a -ya suffix below -sa syllabic sign, Robert Wald (2009, personal communication) believes the sign is eroded and unreadable since it occurs at the break in the monument (Wanyerka,2003:105) and the most likely suffix to occur would be a -ja passive suffix.



LAKAM TUN-ni


"lungs, from zac = white and ol = heart, metaphysical center". Thus the familiar phrase found in the inscriptions taken to mean "spirit", sak 'ihk', "white wind", may also refer to air from a person's lungs. In a Comparative Analysis of Ch'orti' Verbal Art and the Poetic Discourse Structures of Maya Hieroglyphic Writing, Hull (2002, Famsi website) gives an example of the couplet, k'a'y usakik' utis, "it was finished his white wind (spirit), his bad wind." A loose translation might be, "he no longer breathes, he no longer 'farts'." Erik Boot's Updated Preliminary Classic Maya-English English-Classic Maya Vocabulary of Hieroglyphic Reading (mesoweb.com/resources/vocabulary, 2009:154,155) gives definitions of "white/pure, untainted/resplendent" for sak. Therefore, sak tz'unu'n could be read as "resplendent hummingbird. Additionally there are examples of a sak muwan title on two vases, Justin Kerr numbers K2784 and K2803 (www.famsi.org) (http://research.mayavase.com/kerrmaya.html).

> 'i k'ahsaj lakam tun 'u-kab'iiy nineb'?
> "And then the lakam tun is/was broken; nineb' caused it to happen.

This short statement is a lead in to the "zone of turbulence" that follows. Although some of the glyphs are eroded and the details somewhat obscured, the major event involves a jub'uuy mediopassive statement about the bringing down of utok'upakal, "his flint, his shield", a paired-opposites construction mentioned above most likely referring to his/their army. Once again, an $u k a b$ '/chab' statement follows.

ju-b'u-yi
jub'uuy 'utok'upakal

ma-AK'B'AL-la
maak'b'al
"got taken down his flint his shield, 'not in the darkness?' ? ?"

The verb Jub‘ is a CVC root transitive verb (see chart, Kinsman,2008:32) and the -yi suffix derives the verb to a mediopassive construction.


K'AHK' ? ? -na?

'u JOL


For a possible translation of D14 through F3 see Prager (2002:223,224). Then "it happened" with a -ya deictic enclitic follows, followed by an eroded glyph and then what seems to be a "seating of the tun".


Once again, a major event is followed by an ukab'/chab' governing statement which includes the protagonist and the date on which the jub'uuy event occurred.


Although Prager has a -ji-ya suffixes on kab' (2002:225), since there is only one loop of each, it is difficult to discern whether the scribe intended both or just the -ya suffix. Since kab'i/chab'i is a derived transitive verb, it is grammatically correct to just have the deictic -iiy added (Wald,
personal communication 2009). Although the exact translation of the protagonist's titles is difficult, it is almost certain that the $\mathbf{k} \mathbf{\prime} \mathbf{i}-\mathbf{k}^{\prime} \mathbf{i}-1 \mathbf{i}$ ? collocation at F 8 is almost certainly a locative or a part of his name. MacLeod suggests "bloodline", but not "first" or "head" for baj, since that meaning normally only occurs at Yaxchilan (personal comm.,2009). Prager (ibid.) has ch'i-ch'iyi translated as "blood flows", a mediopassive. Although -yi serves to derive a mediopassive ending, that operation only functions on a CVC root transitive verb. The Calendar Round date of 2 Lamat 1 Sip corresponds to a long count of 9.8.1.12.8, to which the following distance number 2.13.5.12 is added to get the final recorded date of 9.10.15.0.0, 6 Ajaw 13 Mak.

The distance number 2.13 .5 .12 precedes a statement almost exactly like the one prior to the main jub'uuy event:


Since the first "lakam tun is/was broken" statement is written in the passive, then a later back-reference with the same verb would likely be written in the passive also. According to Wald it is possible there could be a - $\mathbf{j i}$ suffix ( $-\mathbf{j i}$ to supply the $-j$ - for the passive and - $i$ to supply the -iiy spelling for the back-referencing deictic -ya). Therefore the k'ahsaj lakam tun $u k a b ' i / c h a b ' i$ statement occurs twice, acting as a couplet with the main jub'uuy event nested in between.

A new statement now begins at F14 with a positional verb followed by some eroded glyphs and the calendar round date 6 Ajaw 13 Mak.


Since the glyphs at G1 and H1 are eroded, it is not certain what the subject is, though if referring to the stela itself, the "standing up" may be another way to make an utz'ap statement, and thus would be a couplet with that following statement.

Next begins a counting verb introducing the second long count of the stela, juxtaposed to the first long count on the left side of the stela. The calendar round 6 Ajaw 13 Mak is also restated to give another couplet.


Using six glyph blocks each between the counting verb and the Tz'olk'in date and the Tz'olk'in date and the Haab' date, the scribe arrives at the second utz'apaw statement in the mirror image position of the first utz'apaw statement, conveniently visually framing the lower portion of the stela with two transitive constructions; in fact, both utz'apaw statements are followed by ukab'/chab' transitive constructions to form two agent/agent pivot statements, the protagonist being mentioned only once at the end of each sentence.


The Chart 5.1 below summarizes the grammatical construction, moving most of the calendrical data to the left and highlighting the main events in the second column. Even in his use of voice, i.e. the active, passive, and mediopassive, the scribe seems to use a couplet pattern:

TRANSITIVE: "He planted the tun";
PASSIVE: "The lakam tun was broken"; MEDIOPASSIVE: "The army got taken down"; PASSIVE: "The lakam tun was broken"; TRANSITIVE: "He planted the tun;

TRANSITIVE: "He governed it." TRANSITIVE: "He governed it." TRANSITIVE: "He governed it." TRANSITIVE: "He governed it." TRANSITIVE: "He governed it."


## Chart 5.1. Grammatical Layout of Pusilha Stela D.

In fact, including the calendrical statements, the entire left two columns and most of the far right two columns are a parallel couplet composed of ISIG, long count, lunar series, 'utz'apaw and ' $u k a b$ '/chab' statements enclosing the center four columns of glyphs. Inside this couplet resides the short and concise parallel couplet composed of nearly the same four glyph blocks each, the k'as verb, lakam tun, ukab'i/chab'i verb, and the agent, ni-ne?-b'i. Nested in the center of these two couplets in the "zone of turbulence" is the main event, the mediopassive jub'uuy utok'upakal. Thus the pattern would be ABCBA.

## SUMMARY

Hopefully the reader/epigrapher will see the value of approaching the study of the hieroglyphic texts from the literary aspect as the analysis of Pusilha Stela D exemplifies. Stela D's opening and closing statements were part of the parallel structure and the entire text was built around couplets. The internal structure was marked by topic change and distinct patterns of syntax. The "zone of turbulence" included the only mediopassive statement in the text along with an extra uhtiiy statement and other information that was unfortunately eroded. A special effect included the couplet structure of the titles of the first ruler mentioned. The visual layout of the text contained a number of parallel elements that may have even been noticed by illiterate
onlookers. The visual couplets as well as the written couplets would have helped to legitimize the divinity of the ruler.

## NOTES

Since the thrust of this essay was the literary approach, and in the interest of space, some of the hieroglyphic texts were not completely grammatically analyzed. Additional information on transliteration and transcription can be found in Prager (2002:214-232), and Wanyerka (2003:104-109).

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## REFERENCES

Bolles, David
1997 Combined Dictionary-Concordance of the Yucatecan Mayan Language. www.famsi.org.

Boot, Eric
2009 Updated Preliminary Classic Maya-English Classic Maya Vocabulary of Hieroglyphic Reading. www.mesoweb.com/resources/vocabulary

Campbell, Lyle
1999 Historical Linguistics: An Introduction. Cambridge, Mass: The MIT Press.
Colas, Pierre Robert
2003 K'INICH AND KING: Naming self and person among Classic Maya Rulers. Ancient. Mesoamerica Volume 14, Issue 2. Cambridge: University Press. Also online http://journals.cambridge.org

Edmonson, Munro S.
1982 The Ancient Future of the Itza. The Book of Chilam Balam of Tizimin. Austin: University of Texas Press.

Gossen, Gary H.
1974 Chamulas in the World of the Sun. Time and Space in a Maya Oral Tradition. Cambridge, Massachusetts: Harvard University Press.

Hopkins, Nicholas A.
1996 The Poetry of Classic Maya Inscriptions. One Page Handout in possession of author, Workshop, Philadelphia Maya Weekend.

2009 From Classic Inscriptions to Chol Folktales: One Thousand Years of Maya Literary Tradition. Paper presented to the Maya Society of Minnesota, February 6, 2009.

Hull, Kerry
2002 A Comparative Analysis of Ch'orti' Verbal Art and the Poetic Discourse Structures of Maya

Hieroglyphic Writing. www.famsi.org/reports. Under Triplets, Quatrains, and Polystylistic Phrases.

Josserand, J. Kathryn and Hopkins, Nicholas A.
1998 The Art of Political Discourse in Classic Maya Hieroglyphic Inscriptions. Paper presented to the Symposium "The Poetics of Ideological Discourse in Mesoamerica," 97 th Annual Meeting, American Anthropological Association, Philadelphia, December 4, 1998.
Kerr, Justin
2009 Maya Vase Data Base. www.famsi.org
Kinsman, Hutch
2008 Grammar in the Script: Morphemes, CVC's, Affixes, and Clitics. The Codex, at the University of Pennsylvania Museum Volume 16, Issue 3. ISSN 1083-6314.

Looper, Matthew G.
2003 Lightning Warrior. Maya Art and Kingship at Quirigua. Austin: University of Texas Press.

MacLeod, Barbara
2008 The 3-11-Pik Formula. The Crabs and Glyphs 2008 Workbook. Sponsored by Hutch Kinsman and Barbara MacLeod. Arnold, Md.

Matthews, Peter, and Biro, Peter
2006 The Maya Hieroglyph Dictionary. www.famsi.org
Mora-Marin, David
2004 The Preferred Argument Structure, in The Linguistics of Maya Writing (Wichmann, editor). Salt Lake City: University of Utah Press.

Prager, Christian
2002 Die Inschriften von Pusilha. Epigraphische Analyse und Rekonstruktion der Geschichte einer Klassischen Maya-Stätte. vorgelegt der Philosophischen Fakultät der Rheinishchen Friedrich- Wilhelms-Universität zu Bonn.

Thompson, J. Eric S.
1971 Maya Hieroglyphic Writing, An Introduction. Norman: University of Oklahoma Press.

Wanyerka, Phillip J.
2003 The Southern Belize Epigraphic Project: The Hieroglyphic Inscriptions of Southern Belize. www.famsi.org/research.


[^0]:    1 "In many cases, the work of of the graphic designer obscured the structure of the text, and the verbal poetry of the inscription is lost in the formatting of the sculptor (e.g., the chiasmic structure of Quirigua's Stela C text, lost in the double-column format)" (Josserand and Hopkins, 1998:7).
    ${ }^{2}$ Matthews and Biro, www.famsi.org, under Resourses, Dictionaries, The Maya Hieroglyph Dictionary, 2006.
    ${ }^{3}$ The Sun God title K'inich is found in many king's names throughout the hieroglyphic script both in the "prefixed position" such as K'inich Janaab' Pakal, and in the "postfixed position" like K'awiil Chan K'inich. How titles such as these are related to the Sun God is discussed by Pierre Colas (2003:269-283).
    ${ }^{4}$ Both the 3-11 Pik Ajaw and 4 K'atun Ch'ahom titles give an indication of the ruler's longevity. According to MacLeod (2008:1-8), a ruler with the 3-11 Pik Ajaw title would have lived at least a span covering more than about 47 years, but which also covered three specific Long Count dates labeled as Single Stations (two of these), and one Triple Station. MacLeod (ibid.) also builds a case that demonstrates that the time indicated by 3-11 Pik ( $3 \times 8660$ days, a period of 71.13 tropical years [ 365.2422 days per tropical year]) corresponds to one day in the earth's precession cycle ( 70.59 years by modern calculations). A 4 K'atun Ch'ahom ruler would be older than 3 k'atuns of age (approximately 60 years old) and is now in his 4 th k'atun.
    ${ }^{5}$ Although the literal meaning of sak tz'unu'n is "white hummingbird", taken together this phrase may mean something different than, or may be integral to, a hummingbird of the color white, since white hummingbirds seem to be rare (no specific source yet). For example, from the Combined DictionaryConcordance of the Yucatecan Mayan Language (David Bolles, Famsi website), zac ol is defined as

