A Grammatical Analysis of Yaxchilan Lintel 25

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Yaxchilan Lintel 25 is a magnificent example of Maya art and cultural expression. The distinctive "cookie cutter" carving (Schele & Miller, 1986) strongly emphasises the quality of the artist's craftsmanship. The situating of this decorative lintel in a doorway of structure 23, has allowed the piece to escape much of the harsh erosive forces typical of the tropics and as a result a clear and beautifully preserved work of art remains. The Lintel itself was found and removed to the British museum by Alfred Maudsley at the end of the 19th Century, where it remains on display alongside a number of other fine examples from the site. Traces of colour still visible on the piece allude to the heightened splendour the once richly painted scene would have possessed. Despite the text's relatively short length, attempts at decipherment, while they can rely on certain conventions of Maya writing, at the same time are confronted with some more problematic features, which reinforce the essential ambiguity of Maya writing, our own lack of understanding and the perennial dangers of incorrect decipherment[1].

The first thing to note is the direction of reading. Maya writing is typically read from left to right in dual columns. Once the final glyph of column 2 has been read, the reader continues the text at the top of column 3 and so on. The text on Lintel 25 takes a rotated L shape of single columns. This is a common form and the same reading principle usually applies, however, the text on Lintel 25 is written in reverse, starting on the right and proceeding leftward. Reversed texts are rare though this is example not unique. A possible way of understanding this phenomenon is to consider the location of the reader within structure 23 and the context of the site as a whole. Could the reversal work like a mirror, or glass, suggesting we understand the reader as being on the "other-side", for example in the underworld? The text could then be

understood to be written from the underworld, or used as a way of locating the action of the scene within a supernatural realm.

Yaxchilan Lintel 25, Picture Courtesy of the British Museum

The other major difficulty relates to the grammatical structure of the text and the ambiguity regarding the nominal phrase referring to the object of the transitive sentence. This problem will be addressed later.

Ancient Maya writing follows the syntactical structure of Verb – Object – Subject (VOS) for transitive statements and Verb – Subject (VS) for

intransitive. At the start of a new text and a new sentence, a temporal indicator is written, typically utilising a calendrical form, though varying forms and combinations do exist. Lintel 25 begins with a calendar round date. The calendar round is a combination of two separate calendars used in conjunction to produce a cycle the equivalent of a 52-year period. Each calendar takes a main sign and a numerical coefficient. The first part of the calendar round is the 260-day *Tsolk'in*, a calendar that possibly refers to the human gestation period and/or an agricultural cycle. The *Tsolk'in* consists of 20-day names that permutate against numbers 1 through 13, creating a cycle of 260 days. The second part of the calendar round is the 365-day *Haab*, a solar-based calendar. The *Haab* is constructed of 18 "months" of 20 days and a 5-day period at the end of the calendar.

The text on Lintel 25 begins with the calendar round date *5 Imix 4 Mak*. The numerical coefficient is given in bar and dot form. Each single dot has a value of 1 while a bar represents 5. Thus *5 Imix* is written as a bar followed by the day sign cartouche for *Imix*. As is typical with *tzolk'in* dates, the cartouche is subfixed by a **–ya** syllable, though the meaning of this sign in this context is unknown and is unlikely to have been read, acting more as an unspoken marker of a *tzolk'in* date rather that a phonetically read sign. The *Haab* date 4 *Mak* is written by the numerical coefficient 4, given as 4 dots, followed by the sign for the month *Mak. Mak* is spelt phonetically by two signs, to produce the consonant-vowel-consonant (CVC) root, the final vowel is dropped in speech giving CVC(V), supplied by signs representing **ma** and **ka**, therefore **ma-k(a).**

As previously mentioned regarding syntax, the next glyph following a temporal indicator will be verbal. Verbs are subject to grammatical affixation to provide information on the verb. The verb in the text in question takes a logographic root sign, *tzak*, "conjure/manifest". Its suffixing shows it to be a root CVC transitive verb that is marked as an active transitive and is inflected in the third person for both subject and object. The subject is prefixed to the root while the object is suffixed in final position. Active transitive verbs take a pronominal prefix for the subject, in this case a marker for the 3rd person, and a **–Vw** thematic suffix (Coe & Van Stone, 2001; Kettunen & Helmke, 2005). The

vowel of the suffix echoes the vowel of the root in speech, though it is always written with the **–wa** syllable. The object in the 3rd person takes a **–Ø** suffix, meaning it is unwritten though theoretically the suffix is still there. The glyph can be morphologically understood as follows:

> **u-TZAK-aw-Ø**
>
> 3se-CVC-Vw-3sa
>
> *utzakaw*
>
> "he conjured it" [2]

Following a transitive verb is the object (in intransitive statements the subject would take this place as no object is present). Lintel 25 has an extended nominal phrase and proves somewhat problematic. A glyph-by-glyph transcription is reasonably simple, though an accurate translation is more difficult with regards to the chain of possession. The first compound, at E1b, is itself complex both in terms of understanding the grammar of affixation and with regards to understanding the translation of the term. The compound takes the nominal logographic root, **K'AWIIL**. An interesting convention of Maya writing is employed within this glyph, that of infixing. A **–wi** syllabic sign is incorporated into the back of the main sign. This features is used throughout the script to help provide information on the reading of the main sign as a phonetic complement, or to act as an aesthetic method of writing by conflating two signs that are to be read within one glyph block. In this case the **–wi** sign clearly is meant as a phonetic complement for the reading of the main sign as *k'awiil*. While phonetic complementation is a common feature of the script, this instance is rare as it provides the middle consonant of a CVCVVC root, whereas complementation typically specifies the initial or final Consonant. In conjunction with the following affixes, its employment becomes clear and aids the reading of the postfixes.

Subfixed to the main sign, side-by-side, are two syllables, **-la** and **–li**. The reading order of the script dictates they are to be read in that order. The **–la** syllable must be understood as a phonetic complement to the main sign, stating the final consonant and providing information on the final vowel of the

root (Houston et al., 2001:21-22). This is where the **–wi** infix becomes important and determines the nature of the **–la** suffix. Phonetic complementation was never employed for a middle syllable alone. Occasionally a combination of syllabic signs would be affixed to a logograph to spell out more than just the final consonant. The presence of the middle root consonant in the form of **–wi** means that the subsequent glyph must also be a phonetic complement to provide the final consonant. The use of **–la**, with a disharmonic vowel, confirms its reading as a phonetic complement and further aids the reading of the root logograph.

As previously noted, the final vowel is typically dropped from the reading in concordance with the general CVC nature of the Maya lexicon. The final, silent vowel is not totally redundant in writing though. Rules of harmony (the silent vowel echoing the previous) and disharmony (taking a different vowel value than the previous) provide information on the reading of the final read vowel (Coe & Van Stone, 2001; Houston et al., 2004; Kettunen & Helmke, 2005). A disharmonic spelling implies that the vowel is complex, e.g. long vowel (VV), glottalized vowel (V'), rearticulated glottalized vowel (V'V) and glottal stop (') (Houston et al. 1998). A harmonic spelling implies a simple vowel (V).

When read together, the vowel of **–wi** is kept and the vowel of **–la** provides information on the word final vowel. As a disharmonic spelling the vowel must be complex, reconstructed as **–wiil** (CVVC) (Kettunen & Helmke, 2005). **K'AWIIL** is a known logograph with a confirmed reading of a long final vowel. The suffixing of **–wi** and **–la** agree with this.

U-K'AWIIL is then further affixed with **a** –li syllable. Suffixing of a noun beyond phonetic complementation changes the quality of the noun. The **–li** suffix is a common abstractive attached to root nouns to alter the meaning of the noun. *K'awiil*, as a root, is a god in Maya belief concerned with the power of rulers and with lightning. By adding an abstractive suffix, a different meaning is derived. When considering the context and the nature of the god

k'awiil, a probable reading is "power" or "energy" (of *k'awiil*) (Zender, personal comments, 2005).

The transliteration of the glyph compound is *uk'awiilaal*. The vowel of the abstractive is dependent on the preceding vowel value and subject to rules of disharmony. The previous vowel is taken from **–la**. Although as a phonetic complement it is left silent, it is reawakened to provide the word final vowel for **–li** to be attached to. The **i** of **–li** is disharmonic and therefore creates a complex vowel, thus forming the abstractive suffix **–aal** and therefore *uk'awiilaal*, "its energy/power".

The object of the sentence continues with a couplet used as an expression of war based on the flint tipped spears and hand-held shields used in combat, *utoo'k' upakal*. D1a is a **u-** syllable utilizing a skull and eyeball form rather than the ubiquitous **u-** bracket. D1b contains three glyphs. The first two provide the phonetics, **to-k'a**, to give *too'k'*, "flint", and the last is the logogram **PAKAL**, "shield". The disharmonic phonetic spelling **to-k'a,** provides the complex vowel of the root to provide *too'k'*.

> **to-k'(a)**
> CVVC
> *too'k'*
> "flint"

Patterns of substitution within the script provide purely phonetic readings for *pakal* as **pa-ka-la**, and thus the phonetic value of the logogram can be confirmed (e.g. Dos Pilas Hieroglyphic stair 5, step 5).

Examples such as that on Dos Pilas Hieroglyphic stair 5, step 5 also establish the correct reading of the phrase on Lintel 25 as *utoo'k' upakal*, "his flint, his shield", the 3rd person possessive pronoun **u-**, spoken twice although written only once. The doubling of sign usage occurs in other places within the script, most famously within the spelling of *kakaw* "chocolate", which is more

typically phonetically written **ka-wa**. The reader is required to double the value of the first sign to produce **ka-ka-w(a).**

After this war couplet the object of the sentence continues with *ajk'ak o'chahk* at glyph block C. This appears to be the proper name of a patron god of Yaxchilan (Martin & Grube, 2000) and is found on other monuments and also on carved bones recovered from a tomb in structure 34. Zender believes this god to be a personification of Yaxchilan's military might (Zender, Personal Communication, 2005). The initial sigh at the top of C1a is the phonetic sign **a/aj**, which is also used as a male agentive to mean "he" or "he of…". This is superfixed to the logograph **K'AK'** "fire" and thus produces, "he of fire". The disharmonic phonetic complement **–ki**, attached to the logographic root **CHAHK**, clarifies the complex root vowel whilst also confirming the reading of the main sign by echoing the final consonant. *Chahk* is the Maya god of rain and lightning and is associated with the four cardinal directions and their associated colours (Taube, 1992; Miller & Taube, 1993). *O'chahk* is therefore an allusion to the great god or possibly a site-specific manifestation of *chahk*.

The next phrase posses a problem due to questions over the transliteration of the text. Since j and h occasionally alternate, the phrase **u-K'UH-ju-lu** (*uk'uh jul*, "holy-spear") could also be transliterated as **u-K'UH-hu-lu** (*uk'uhul*, "holy"). There appears to be stronger evidence for the "holy-spear" reading, principally based on the companion text and iconography of Lintel 24. On this monument the King, *Itzamnaj B'alam*, is holding a staff that issues flames from the top. The accompanying text describes the object as a "fiery spear" (*k'akal jul*). Variants of the same glyphs are used in both texts to spell *jul*. Similarities in the glyphic content and the themes depicted iconographically suggest that the phrase should be read as "spear" and that this was an important theme and ritual device in a war context.

> **u-K'UH-ju-l(u)**
> 3se-holy-spear
> *uk'ul jul*
> "his holy-spear"

Accompanied by the following glyphs, **tza-ku** (tzahk), a nominalised term derived from the root verb *tzak*, "conjure/manifest", the whole would appear to read *uk'uh jul tzahk*. There is some debate as to how to translate this phrase. Zender believes it may translate as, "it was (in reference to the previous verb clause) the god-spear conjuring of Shield Jaguar (the actor to be named in the following text)" (Zender, Personal Communication, 2005). Therefore the manifestation of *ajk'ak o'chahk* was achieved through a ceremony performed by the subject of the text utilising his "god-spear". My preference for the phrase is that it is a title associated with *ajk'ak o'chahk*. The position of the phrase is suggestive of a titular reading in reference to the object of the sentence, rather than the subject. From a number of other inscriptions at Yaxchilan, Shield Jaguar's naming begins with his title as a 4 *katun* lord, including the companion lintel 24. This appears at A1 on Lintel 25, immediately after *uk'uh jul tzahk*. This would therefore appear to be an appropriate place to divide the text between object and subject.

A titular reading for the phrase might mean "(he is) the holy spear manifest", which may be a godly war title making *ajk'ak o'chak* the very embodiment of divine military might, though further research into this is required for confirmation. The object as a whole could be translated as, "the power of the flint and shield of *ajk'ak o'chak*, the holy-spear manifest".

The naming of elites was an important part of Maya inscriptions, recording their lives and achievements and as such much of the text space was devoted to glorifying the elite lord's name. At position F1 the subject naming starts with a compound containing a numerical coefficient 4, an *ajaw* sign and a *katun* sign. Despite *ajaw* appearing as a superfix to the main sign, it is to be read last. It's position at the top of the glyph possibly in reference to the exalted meaning of the glyph as lordship. A *katun* is a period of 20 years, a significant ritual period in the Maya long count calendar. The compound is part of a familiar title referring to the length of time the king has ruled. Our actor is a 4-*katun* lord, so is between 60 and 80 years old.

CHAN-AJAW-KATUN

Numerical coefficient-lord-*katun*

Chan katun ajaw

"4 *katun* lord"

A2 is the proper name of the king of Yaxchilan, *Itzamnaaj B'alam* "shield Jaguar", spelt by two logographic signs. His name precedes further titles. A3 is a phrase that refers to his achievement in battle in capturing a foreign lord. A3a takes a main sign **CHAAN** "captor", with a phonetic complement **–nu** for the final consonant and to elucidate the complex vowel of the root. The **u-** bracket once again is superfixed to the main sign to provide 3rd person possession. The name of the captive is stated at A1b. The name begins with **aj-** as in C1a for *ajk'ak*. The main sign is the inverted form of *ajaw* "lord", Thompson's T178 (Thompson, 1962), which frequently appears as phonetic -**la**. Polyvalence within the Maya script allows a sign to have different meanings and sounds, the appropriate reading is usually made clear by context or, as is the case here, phonetic complementation. A **–ki** syllabic sign is affixed to the main sign providing a final consonant value of **k**. T178 appears on Lintel 27 of Yaxchilan in the phrase *k'a'ay u sak nik ik'il,* "his white flowery breath was extinguished", where T178 is to read as *nik* "flower" (Martin & Grube, 2000:127). The use of a **–ki** syllabic sign on Lintel 25 appears to give a clue to the reading of T178 in this instance as a logogram, **NIK**, the vowel of the **–ki** echoing the root vowel. The captives name may be translated as "he of the flower".

aj-NIK-[ki]

male agentive-flower

ajnik

 "he of the flower"

Finally the last glyph block concludes the subject name and the sentence. A4a follows the typical emblem glyph formula naming the actor as a holy lord of a geographical or political realm. The beaded element is a shortened form of the *k'ul* compound of B1a, translated as "holy". Below this is the *ajaw* "lord"

compound, which in the "four-*katun* lord" expression found at A1. These two elements form a standard part of the emblem glyph formula where they are attached to a variable main sign that designates the bounded area that the king rules over. Most ceremonial centres have a single sign, though for a still unexplained reason Yaxchilan takes two although both do not always appear. The sign present here is the less common of the two and a phonetic reading is proving elusive. The other sign shows a modified *chan* "sky" glyph, apparently read *siyaj chan* "sky born" (Martin & Grube 2000) or *pa' chan* "split sky" (Martin, 2004).

Finally the common king title *bakab* is spelt phonetically. According to early colonial sources such as Bishop Landa, the Maya of the Yucatan understood the *bakabs* to be four sky-bearers (Gates, 1978). A king may take this title to elevate himself to the essential cosmic role as a sky-bearer.

ba-ka-b(a)
bakab
CVCVC
Bakab

The primary text of Lintel 25 is a commemorative text regaling the king, "Shield Jaguar", and recording a blood letting rite that was performed before a war was launched that summoned the power of an ancestral warrior deity. Progressive decipherments in the Maya script have allowed more and more detailed analysis and translations of individual texts and the grammatical structure of a forgotten language. Decipherments can now focus on specific points beyond a basic reading, leading to detailed analysis and argument over minute aspects of the language and script to provide exact readings and understanding. This deeper analysis continues to provide problems and complexities that have not been explained or remain ambiguous within the script. Yaxchilan Lintel 25, beyond being a magnificent example of ancient Maya art, throws up a number of these ambiguities and problems as well as

following the conventions of a wide range of accepted characteristics of the

hieroglyphic script.

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[1] Indeed The British Museum website still states of the inscription that "it's true significance is not known" (eds).
http://www.britishmuseum.org/explore/highlights/highlight_objects/aoa/y/yaxchil%C3%A1n_lintel_25.aspx

[2] For orthographic conventions in transliteration see Fox & Justeson, (1984); Stuart, (1988) and more recently Kettunen & Helmke, (2005).

Yaxchilan Lintel 25 - Primary Text Analysis

Transcription

F1a: **HO IMIX** / F1b: **KAN ma-ka** / E1a: **u-TZ'AK-wa** / E1b: **u-KAWIIL[wi]-la-li** / D1a: **u** / D1b: **to-k'a PAKAL** / C1b: **aj-K'AK** / C1b: **o'-CHAK-ki** / B1a: **u-K'UH-ju-lu** / B1b: **tza-ku** / A1: **CHAN-AJAW-KATUN** / A2: **ITZAMNAAJ-B'ALAM** / A3a: **u-CHAN-nu** / A3b: **aj-NIK-ki** / A4a: **K'UL-AJAW-?** / A4b: **b'a-ka-b'a**

Transliteration
ho imix kan mak / utzakaw / uk'awiilaal / uto[o']k' / upakal / ajk'ak/ o'cha[ah]k/ uk'uh jul / tza[h]k / chan katun ajaw / itzamnaaj b'alam / uch'an / ajnik / k'uh?ajaw / bakab

Morphological Segmentation

ho imix / kan mak / u-tzak-wa-Ø / u-k'awiil-aal / u-too'k' / u-pakal / aj-k'ak / o'-chak / u-k'uh jul / tzahk / chan katun ajaw / itzamnaaj b'alam / u-ch'an / aj-nik / k'uh-?-ajaw / bakab

Morphological Analysis

Numerical coefficient-tzolkin / numerical coefficient-haab / 3SE-conjure-thematic-ABS / 3SE-power/energy-PC-PC-abstractive / 3SE-flint / 3SE-shield / AGT-fire / (theonym) / 3SE-holy-spear / conjure(nominal) / NC-katun-lord / shield-jaguar / 3SE-captor / AGT-flower / holy-(toponym)-Lord / bakab

Translation

"On 5 Imix 4 Mak, it was conjured, the power and the flint and shield of aj k'ak o'chak, the holy-spear manifest, by the four katun lord, shield Jaguar, the captor of Aj nik, the holy lord of Yaxchilan and bakab."

References

For an introduction to reading Maya hieroglyphs, the interested reader is referred to Coe & Van Stone (2001) and Montgomery (2002b).

The field has become more and more specialised and can seem like an insurmountable barrier to the beginner. A number of workshops are held with introductory courses in the reading of hieroglyphs through to advanced groups discussing specific grammatical points. Of particular note are the Texas Maya Meetings and, in Europe, the European Mayanist Conference (EMC), details of which can be found on www.utmesoamerica.org and www.wayeb.org. Each conference also produces a handbook every year, with the latest developments in the field. A seminal paper that not only provided important decipherments but also demonstrated the decipherment process is David Stuart's *Ten Phonetic Syllables* (1987).

For an important paper on the language represented by the inscriptions, the interested party is referred to Houston et al. (2000). *The Language of the Classic Maya Inscriptions.*

As noted in the footnotes, the conventions for transliterating Maya hieroglyphs can be found in Fox & Justeson, (1984), Stuart, (1988), Coe & Van Stone (2001) and updated in Kettunen & Helmke, (2005).

Dictionaries

A number of dictionaries of hieroglyphic signs are now in existence. The Thompson Catalogue (1962) allocated a T- number for each sign, a system that is still in use for referring to signs, though the catalogue is outdated. Of particular use, especially to the novice, is Montgomery's (2002a) *Dictionary of Hieroglyphs*, also available online at www.famsi.org. Macri and Looper's *New Catalog of Maya Hieroglyphs* (2003), is a useful tool, which brings together different interpretations of individual signs and references past decipherments.

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