COMMENTS ON THE HIEROGLYPHIC TEXTS OF THE B-GROUP BALLCOURT MARKERS AT CARACOL, BELIZE

Christophe Helmke[1], Harri Kettunen[2] and Stanley Guenter[3]
[1] Institute of Archaeology, University College London
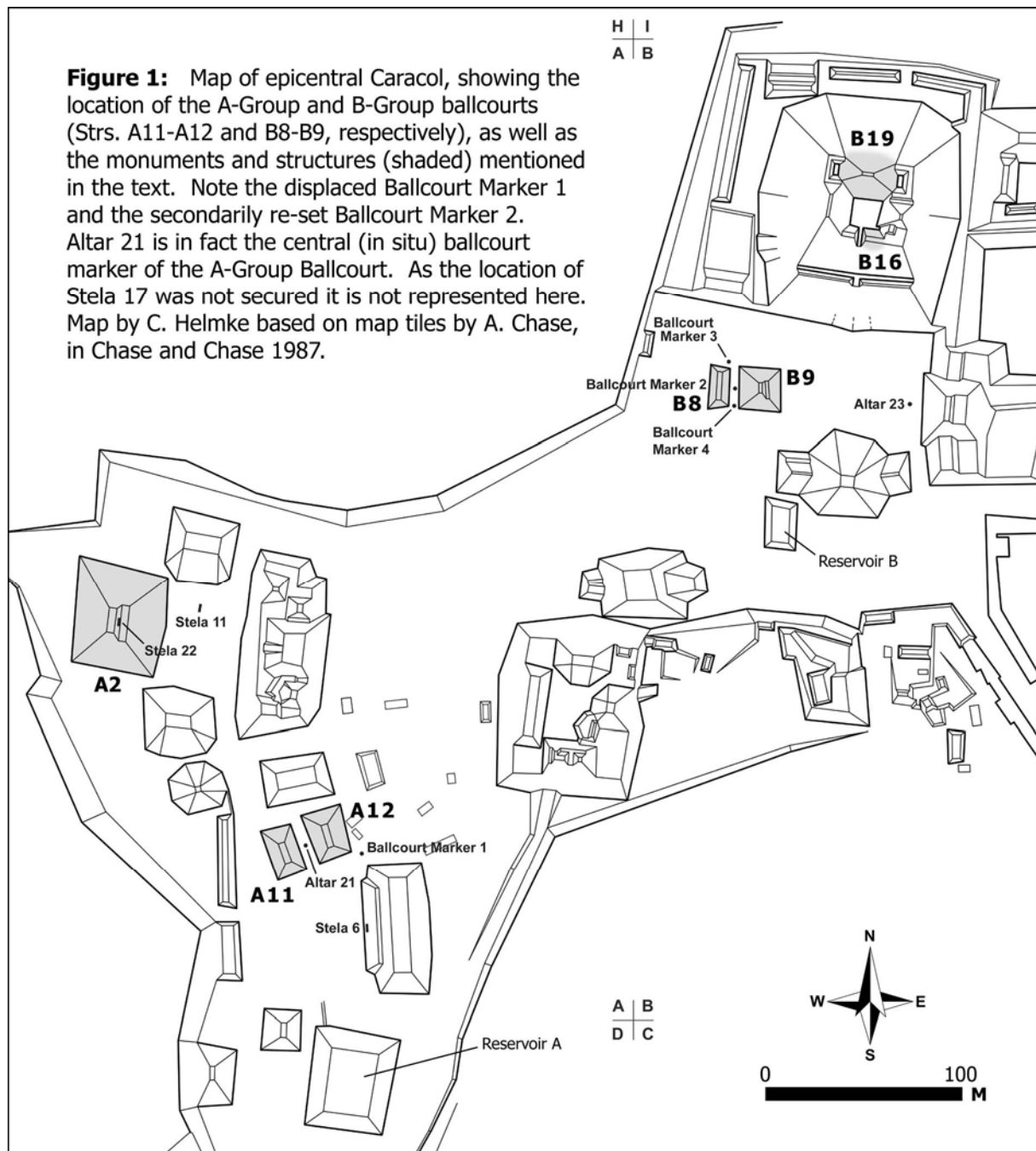[2] Renvall Institute, University of Helsinki
[3] Department of Anthropology, Southern Methodist University

Introduction

One of the most recent additions to the hieroglyphic corpus of Caracol, Belize is the monument designated as Ballcourt Marker 4. Here we provide an analysis of the glyphic texts of Ballcourt Marker 4 (Grube and Martin 2004a: II-75) and Ballcourt Marker 3 (Chase et al. 1991). We present evidence to suggest that the two extant markers originally formed part of a set of three axial markers and offer a provisional reconstruction of the still-missing third marker of the set. The two known ballcourts of Caracol (Figure 1) witnessed refurbishment in antiquity during the site's decline as is evidenced by the displacement and secondary resetting of ballcourt markers. Considering this evidence, a case is made for the original layout and textual content of the markers in the B-Group ballcourt.

Background

Ballcourt Marker 3 was discovered by the Caracol Archaeological Project (1985-present) under the direction of Arlen and Diane Chase in February 1990. A summary of the archaeological context of the ballcourt marker and an analysis of its glyphic text was published shortly thereafter by the directors and project epigrapher Nikolai Grube (Chase et al. 1991). Ballcourt Marker 4 was discovered as part of archaeological investigations conducted at Caracol by the Tourism Development Project (2000-2004) under the direction of Jaime Awe in November 2002. At the request of Sherry Gibbs, field director of the Tourism Development Project investigations, a preliminary epigraphic analysis of the text of Ballcourt Marker 4 was produced (Helmke and Kettunen 2002) for citation in the semestral field reports. This note is based in part on that foregoing report.

Figure 1: Map of epicentral Caracol, showing the location of the A-Group and B-Group ballcourts (Strs. A11-A12 and B8-B9, respectively), as well as the monuments and structures (shaded) mentioned in the text. Note the displaced Ballcourt Marker 1 and the secondarily re-set Ballcourt Marker 2. Altar 21 is in fact the central (in situ) ballcourt marker of the A-Group Ballcourt. As the location of Stela 17 was not secured it is not represented here. Map by C. Helmke based on map tiles by A. Chase, in Chase and Chase 1987.

Ballcourt Marker 4 was first publicized at the XXVIIIth Texas Maya Meetings (Grube and Martin 2004a: II-75) and will receive detailed treatment within the broader context of Caracol inscriptions in a forthcoming volume (Grube in press). The results and findings of the archaeological investigations of Caracol conducted by the Tourism Development Project will also be published as part of another venue, though some preliminary summaries have already been provided in the Caracol Archaeological Project excavation reports (e.g. Chase and Chase 2004).

Method
The method employed in the reading and analyses of the glyphic inscriptions presented below, follows the guidelines set forth by Stuart (1988), with modifications by Lacadena and Zender (2001), Kettunen, Helmke and Guenter (2002), as well as Kettunen and Helmke (2005).

The first order of analysis is termed the "transcription", which aims at rendering the manner in which a glyphic text was written. The second stage is the "transliteration" in which a text is rendered according to its presumed original pronunciation and reading.

Truncations brought about by abbreviated spellings or 'underspellings' (see Zender 1999) are reconstructed as part of the transliterations. The same holds true for phonological details of words that were not represented in ancient Maya writing, but which linguists stipulate should be present, based on the evidence of historical comparative linguistics (see Lacadena and Wichmann 2004).[1]

"Morphological segmentation" of each glyph block constitutes the third level of analysis; here discrete morphemic clusters are segregated by means of hyphens and so-called zero morphemes (represented by the symbol Ø) are reconstructed.

Having segregated all affixes of verbs and nouns these are then identified as to the grammatical function they serve –by use of three or four letter, uppercase acronyms or abbreviations (see Kettunen and Helmke 2005: 97-98)– while literal translations are provided for noun and verb roots. This fourth phase of analysis is termed the "morphological analysis".

We have undertaken the full set of analyses in order to arrive at the readings and interpretations provided in this report, with detailed tabulations of the results presented elsewhere (Helmke and Kettunen 2002).

Ballcourt Marker 4

Ballcourt Marker 4 has the same format as the previously discovered Ballcourt Marker 3, that is: three paired columns, the leftmost and rightmost pairs being truncated at the top and bottom to conform to the circular form of the monuments. In the analyses of Ballcourt Marker 3 it was determined that despite its idiosyncratic layout, the original reading order was in keeping with the standard double-column reading order (Chase et al. 1991). Based on syntactical attributes of Ballcourt Marker 4 as well as the complete Long Count date (LC) that opens its text, it is clear that the same reading order is in effect for that monument as well. The reading order for both monuments therefore is: B2, A3, B3, A4, B4, B5, C1, D1, C2, D2 ... C5, D5, C6, D6, E2, E3, F3, E4, F4, and E5 (see Figures 2 and 5).

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[1] Here it should be pointed out the various brackets that are used in the body of the paper: < ... > frame and designate graphemes, while [...] refer to phonetic sounds and / ... / to phonemes (see e.g. Carr 1993). In the context of transcriptions [...] are used to designate infixed graphemes, while in the transliteration the same brackets are used to offset reconstructed elements. In addition { ... } are used in the transcriptions to refer to reconstructed elements that have weathered away (or otherwise damaged beyond recognition). In the literal translations (...) frame elements that are present in the original Maya text, but for which there are no ready equivalents in English.
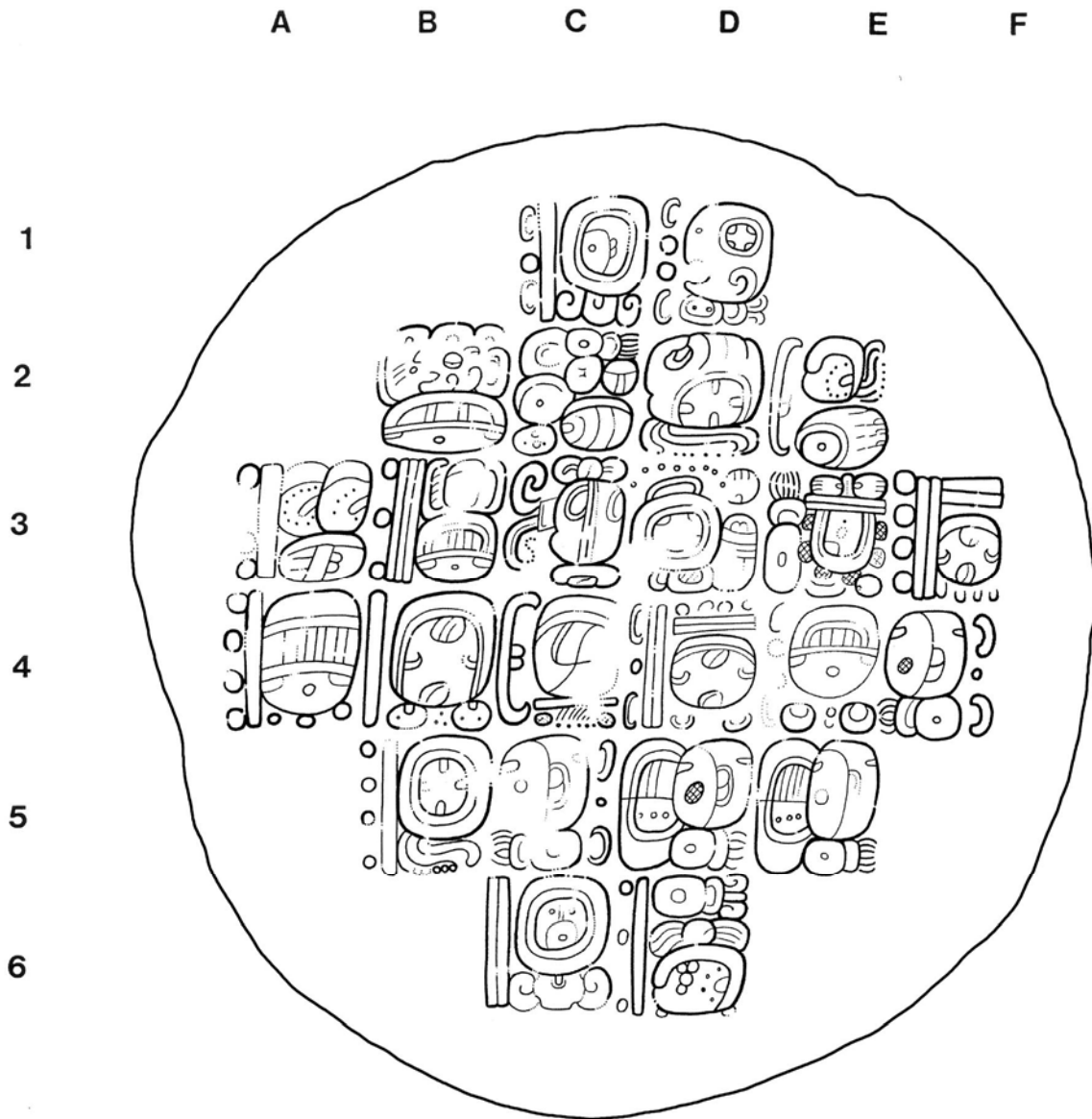
Figure 2: Ballcourt Marker 4 (drawing by N. Grube, in Grube and Martin 2004a: II-75; with minor amendments made by C. Helmke based on inspections of the original; maximum diameter c. 52 cm).

Clause 1

The text of Ballcourt Marker 4 (Figure 2) is initiated by an Initial Series Introductory Glyph (ISIG). Following this sign is the complete Long Count date. The first sign (A3) refers to the B'aktun coefficient, which here is represented by a vertical bar (for units of 5) with partly chipped off 'disks' (each corresponding to a unit of 1), but representing at least three (and in combination in excess of 8). Despite the partly weathered B'aktun coefficient, it was clearly intended to represent the number 9 (with two incised disks partly weathered away), based on the firm anchor provided by the ensuing Calendar Round (CR) date (see below), the contemporaneous

reference to K'inich Joy K'awil[2] (who is known to have lived and reigned in the Terminal Classic period), as well as the overall style of the carving, which is clearly Late Classic (unlike a coefficient of 8 that would place the monument in the Early Classic). Based on this reconstruction the Long Count date borne by the ballcourt marker is 9.18.9.5.9 – 6 Muluk 2 K'ayab', corresponding to December 12th, AD 799 (using a 584 285 GMT correlation constant) (Grube and Martin 2004a: II-75). This takes up a third of the entire text.

Immediately following, is the verb that took place at this date (C2a). The verbal glyph –while compressed– is clearly underspelled as **CHUM-la** yielding *chumlaj* or "sat" (based on the root *chum*, "to sit" and the positional suffix –*laj*). Standing in *lieu* of the object of the clause is the second half of that same glyph block (C2b), which reads *ti ajawlel* (**ti-AJAW-le** with the final /l/ underspelled). Based on the syntax of clauses with positional verbs and the preposition *ti*, this segment can be seen as a prepositional statement adjoined to the verbal expression. Together with the verb, the prepositional statement yields "sat into kingship" a common expression for royal accession. Nonetheless, as the –*lel* suffix of *ajaw* ("king") is a non-specific abstractivizing suffix, the compound *ajawlel* can refer to either the office or the realm (i.e. "king-ship" or "king-dom") (Lacadena and Zender 2001: 4), thereby adding nuance to the translation, but not the overall meaning. To date, this is the only reference to K'inich Joy K'awil's accession and before the discovery of Ballcourt Marker 4 it remained unknown.

The agent of this seating action is named in the next two glyph blocks (D2, C3) and his title provided at D3, therewith ending the first clause of the text. The nominal sequence is that of Caracol's Terminal Classic ruler K'inich Joy K'awil (Martin and Grube 2000: 96-97). The title ascribed to this agent is Caracol's equivalent of an Emblem Glyph[3], which reads *K'uhul K'antu Maak*, or "Divine K'antu Person" (Martin

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[2] The *joy* segment (the so-called "toothache" glyph) of the nominal sequence (as well as any bound glyph occurring in other nominal contexts) remains a problematical aspect. If it functions as a verb, a suffix would be expected, as is typical (even in affective cases such as *b'ajlaj* or in stative participles). Similarly if *joy* is understood as a derived noun, a suffix would still be expected (vid > noun: -*al*; vt > noun: -*aj*). A visual clue to the meaning of *joy* comes from the Dresden Codex (page 67), where we have a verbal statement reading *johyaj K'awiil*, accompanied by an image of K'awiil being encircled by what looks like a rope, held by one of the manifestations of Chaahk. Whether the *joy* part in the name of K'inich Joy K'awil is verbal or not, it does seem to correspond to Ch'olan concepts of being encircled, enclosed, surrounded, fenced in, walled in, girded, or turned (around). Nonetheless, in the absence of clear suffixation, it is possible that the targeted word is adverbial rather than verbal as none of the parallel names (e.g. [K'inich] K'an Joy Chitam, Joy Chitam, and Joy B'ahlam) incorporating the logogram **JOY** are accompanied by any suffix. Conversely, Nikolai Grube, commenting on an earlier version of this paper notes that the underlying concept behind the verbal root *joy* is "to walk in a circle", which he likens to the 819-day count and the movements of the deity *K'awiil* as part of New Years celebrations. Consequently, he favors viewing *joy* as a verbal root that has become fossilized in a compound noun name phrase.

[3] What is here termed the Caracol 'Emblem Glyph' was referred to by Beetz (1980: 7) as the 'Caracol Glyph' in 1981, eschewing the use of the term 'emblem' altogether on the basis of the salient graphic differences between this exalted royal title and other typical Emblem Glyphs (see Houston 1986: 2, 10). The same collocation was later referred to by Stone et al. (1985: 269-270) as the 'Caracol Lineage Title' again noting its similarities and differences to Emblem Glyphs. We view this collocation to function in exactly the same manner as other Emblem Glyphs (as the exalted title of rulers), but add that it has overtones of an ethnonym (based on the inclusion of the Yukatek term *maak* for "man" or "person"), comparable in all respects to the *K'uhul Chatahn Winik* title documented on Codex-style

and Grube 2000: 87). With the title, the first clause occupies precisely half of the length of the text.

For the root *k'an-* (of *k'antu* in the 'Emblem Glyph') it is difficult to ascertain which meaning was targeted. Nonetheless, in other more typical occurrences of this term in Maya inscriptions it functions as an adjective referring to the color "yellow" or to "ripe" fruits (cf. Boot 2002: 48; Lacadena and Zender 2001). Conversely, the term may in fact refer to *k'a[h]n*, "seat / throne" another attested use of this glyph (Lacadena pers. comm. 2001; Kaufman 2003: 956; Lacadena and Wichmann 2004: 146). It is represented by the same exact sign, but requires the reader to add the infixed /h/ to create the distinct meaning. Tentatively, the *–tu* element may function as a suffix which is otherwise rendered as *–tu'* (written **tu-u**), which gains great prominence and spatial distribution during the Terminal Classic through its incidence in the term *y-a[h]k'u-tu'* (3SE-give-SUF) on Molded-carved vases (Helmke 2000: 17, 24, Fig. 5; cf. Boot 2002: 16, 77).[4] In this interpretation, the putative term *k'ahn-tu'* (seat-SUF) may thus be at least morphologically comparable to *chum-ib'* (sit-INST) another term for "seat", where the common instrumental suffix *-ib'* is used, which derives CVC verbal roots into nouns. This interpretation would yield a full translation of the Caracol 'Emblem Glyph' as "Divine Throne Person". Nonetheless, as supporting evidence is not forthcoming, it is best to leave *k'antu*, *k'antu'* or *k'ahntu'* without translation at present, bearing the possibilities suggested, in mind.

Consistent with other previously discovered monuments erected under the patronage of Terminal Classic lords (cf. Chase et al. 1991; Grube 1994; Martin and Grube 2000), the K'awil part of his name is spelled with a **–li** phonetic complement. While this is a shared feature of other contemporary nominals, as in the case of the last known Naranjo ruler Waxaklajun Ub'ah K'awil (see Martin and Grube 2000: 80, 83), it stands in contrast to foregoing Late Classic 'K'awiil-names' that are complemented with a **–la** sign. This change in syllabic complementation has been taken as an indication of vowel-shortening during the Terminal Classic (i.e. > AD 750), as attested in the inscriptions of Caracol and neighboring sites such as Naranjo, Ixtutz and Najtunich (cf. Stuart et al. 1999: II-16; Lacadena and Zender 2001; Houston et al. 2004: 91-92, 96-97; Lacadena and Wichmann 2004: 116-119; Zender 2002).

In sum, the Long Count date refers directly to the date of K'inich Joy K'awil's accession. These data thus allow firm placement of that king's short rule as extending from AD 799 onwards up until a point prior to AD 810 at which point the successor K'inich Tob'il Yo(p)aat is already in place (Martin and Grube 2000: 96, 98-99).

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vessels from Nakbe and the Mirador basin (see Boot 2005: 507), or the Late Classic innovation at Naranjo of the title *Wak Kab'nal Winik*.

[4] Nikolai Grube views these elements as derivational suffixes that take the form *–Vt* or *–ut*, which appear in many Maya languages, deriving nouns from adjectives. Thus we see, for example, *sem-et* "comal", *k'op-ot* "monte", *ot-ot* "casa", *b'ahk'-ut* "fear", *tz'ono'-ot* "cenote", and *pet-et* "spindle". Related is the term *muk'-ut* seen on the mace scepter from Naranjo (K7966) that appears to derive from *muk'-* "strong, powerful". As such, the root *k'an-* or *k'ahn-* in the Caracol 'Emblem Glyph' would serve as an adjective, and *k'an-ut* or *k'ahn-ut* as nouns derived from these adjectives.

Clause 2

The second clause is introduced by a so-called Distance Number Introductory Glyph (DNIG) now read fully as *utz'akaj* (C4). It has been understood as "completed" (Stuart 2003: 3-4), or as a nominalized form of the transitive verb, hence "the count of" (Dmitri Beliaev pers. comm. 2006), referring to the number of days, months, and years that have elapsed between the first and the ensuing event. Following at D4 is the Distance Number (DN) proper representing 11 days and 12 'months' for a total of 251 days (i.e. 11x1+12x20). The Anterior Date Indicator (ADI) coupled with the Posterior Date Indicator (PDI) follow suit (C5, D5), both preceding the CR date (C6, D6), culminating the sequence of 251 days that have elapsed since the accession. This DN thus brings us to the date 9.18.10.0.0 in the Long Count and to its matching 10 Ajaw 8 Sak CR date, corresponding to the 19th of August, AD 800. This 'even' date ending with zero *k'in*, zero *winal* and ten *tun* (read *haab'* in antiquity) was a lesser, but celebrated station in the procession of time, as recorded in the Long Count, and the first period-ending that followed the accession of the new king.

Appropriately, the event associated with this date reads either *uk'altuun* or *uk'alawtuun*, lit. "stone-binding of" or "he bound the stone", respectively (E2). This perhaps refers to a ceremony in which stelae and other stone monuments were temporarily concealed from view, by being wrapped in ropes or strips of cloth (Stuart 1994). Alternatively, the verbal expression can be understood as referring to the "presentation" of a monument (another attested meaning of the verbal root *k'al-*). In addition, *uk'altuun* may be viewed as a noun stemming from an object-incorporating nominalized noun (Stuart 2006a: 67-68), in which case the noun would be possessed by an unnamed subject. This event is stated to have taken place *ti tahn lamaw* (E3), "at the middle *lamaw*," a somewhat poorly understood expression referring specifically to this type of calendrical station. This 'period-ending' has been referred to as a 'lahuntun' (lit. "ten-tun") (see Thompson 1950: 192–194, Figs. 32.46-32.55; Wichmann 2004), and was deemed by the ancient Maya to be the 'middle of the elapsed (k'atun)'. The agent of this ceremony is not referred to directly, however, on both Stela 11 and Altar 23 at Caracol (two monuments that were evidently commissioned by K'inich Joy K'awil and that record the same date 9.18.10.0.0 [cf. Houston 1987 and Grube 1994]) the period-ending celebrations are clearly credited to K'inich Joy K'awil. Thus, despite his omission in that segment of Ballcourt Marker 4, he is the unspecified (oblique) agent of the second clause.

Lack of reference to any intervening event on Ballcourt Marker 4 (as well as on Stela 11 and Altar 23), suggest that few events deemed worthy of relating in permanent media took place between his accession and the period-ending of AD 800. However, Altar 23 records the capture of two kings from the neighboring sites of *B'ital* and *K'anwitznal* (modern-day Ucanal) (Chase et al. 1991: 7-11; Grube 1994: 84) that seem to have been "seized" before the 9.18.10.0.0 period-ending. The raids that led to the seizure of these captives do not appear to have been recorded, but the short span of time that separates the accession of K'inich Joy K'awil from the lahuntun period-ending, implies that it took place sometime in the earlier half of his first regnal year or perhaps shortly before his accession (as suggested by the "He of 8 Captives" title that he bears in the text of Stela 11).

Clause 3

The third and final clause of Ballcourt Marker 4 is introduced by another DN (F3, E4), representing a lapse of time of 14 days, 10 'months', and 2 'years', totaling 934 days (i.e. 14x1+10x20+2x360). The next event thus takes place two and a half years later on the date 9.18.12.10.14 – 8 Hix 7 Sip, corresponding to March 11th, AD 803.

As with the previous DN interval, the time lapse is followed by a couplet that precedes the ensuing CR date and which is formed by the ADI (F4) and the PDI (E5). Though somewhat rare this pairing has been documented on Caracol's Stela 17 (cf. Grube & Martin 2004: II-88) as well as in the texts of several other sites, including Machaquila (Stela 4), Cancuen (Panel 1), Itzan (Hieroglyphic Stair, Block E), Ixkun (Stela 2), Copan (Stela J & Altar Q), Quirigua (Frieze of Str. 1B-1), Yaxchilan (HS3, Steps 1 & 5), and Site Q (Glyphic Panel C). Based on these examples, Ballcourt Marker 4 appears to be the only case in which two pairings of the ADI and PDI are observed in the same text. Here the ADI refers to the time coefficients that precede it, while the PDI refers –in more typical fashion– to the ensuing CR date, in keeping with the structure observed at the beginning of the preceding, second clause. Lloyd Anderson (pers. comm. 2005) notes that the syllabograms **ti** in these collocations point 'backwards' and 'forwards' respectively, as if each graphically conveys its temporal reference. This feature is at odds with the other documented examples of paired ADI and PDI where **ti** signs tend to be pointed the same way (either to the left or right). Consequently, if the orientations of the **ti** syllabograms are significant, then the examples seen on Ballcourt Marker 4 and Copan's Altar Q appear to be idiosyncratic, scribal play.

This coupling is of note as the insertion of the ADI is not entirely necessary here, since the counting of time is forward, not backward through time. In this pairing the ADI seems to refer to the passing of time in the DN proper, while the PDI refers to the occurrence of the CR date that results from the DN. This is interesting because it seems that the joint incidence of the ADI and PDI here is a deliberate means of creating a contrasting and uneven couplet, a common poetic trope of Maya literature

Figure 3:   The B-Group Ballcourt of Caracol, as consolidated by the Tourism Development Project, seen from the south, looking north. From foreground to background, Ballcourt Markers 4, 2 and 3, can be seen respectively. Composite photo mosaic by C. Helmke (2005).

(see Lacadena in press; Hull 2004). Despite the varied examples of this ADI-PDI pairing we have not been able to find a coherent, underlying pattern that would explain their incidence.

Despite the anticipated CR date that can be projected from the DN, the third clause ends abruptly, as if in mid-sentence, awaiting not only the 8 Hix 7 Sip date (corresponding to 9.18.12.10.14 or 7th of March 803), each in their respective glyph blocks, but also the event that took place on this date. Ballcourt markers usually come in sets of three, and since this monument served as a ballcourt marker, it may be stipulated that there are three in total, each set along the central transversal axis of the playing alley of a ballcourt (Figure 3), the glyphic text running continuously between the three (see Scarborough and Wilcox 1991; Whittington 2001). This interpretation finds strong support in the analogous Ballcourt Marker 3. Although discovered displaced approximately 2 meters northwest of the central axis of the playing alley of the B-Group ballcourt (Chase et al. 1991:4) –apparently moved in antiquity– Ballcourt Marker 3 seems to form part of the same set, by virtue of the style of its carving, size, text layout, and contemporary reference to K'inich Joy K'awil. Contrarily, Ballcourt Marker 3 does not start off with the CR 8 Hix 7 Sip and thus does not appear to display the continuation of the third clause. Interestingly, the text on Ballcourt Marker 3 also seems to start off in mid-sentence, as if a third, still undiscovered ballcourt marker filled the textual sequence between both monuments. Additionally, Ballcourt Marker 4 was found at the southern end of the playing alley of the B-Group Ballcourt, while Ballcourt Marker 3 was found at the northern end. This in turn suggests that the intervening monument must have marked the center of the playing field, where instead the unrelated and secondarily-placed Ballcourt Marker 2 was found (Figure 4). As Ballcourt Marker 3 records the end of the glyphic text (with its last clause ending with a title), the still undiscovered, central, and intervening third ballcourt marker would go on to record as yet unknown highlights of the short and still murky reign of K'inich Joy K'awil. In order to gain a better grasp of the complete text that spanned the three ballcourt markers we turn to the text of Ballcourt Marker 3.
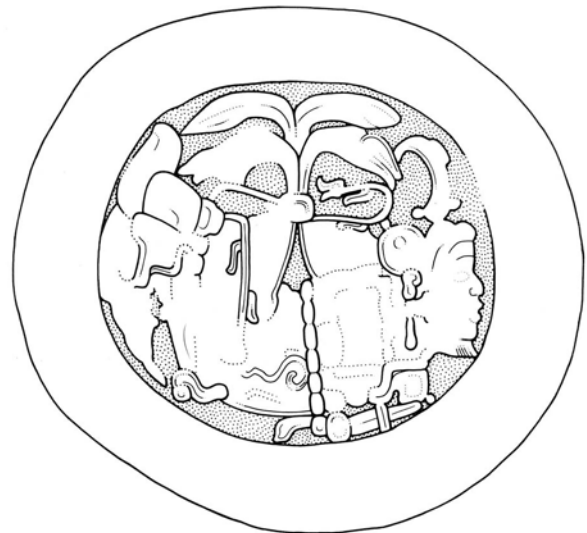

Figure 4: Caracol Ballcourt Marker 2 (drawing by S. Houston, in Chase and Chase 1987: Fig. 25; maximum diameter 69 cm).

Ballcourt Marker 3

Clause 1

The first sentence of Ballcourt Marker 3 (Figure 5, Table 3) starts off with a poorly understood collocation (B2) as the second grapheme that it contains remains
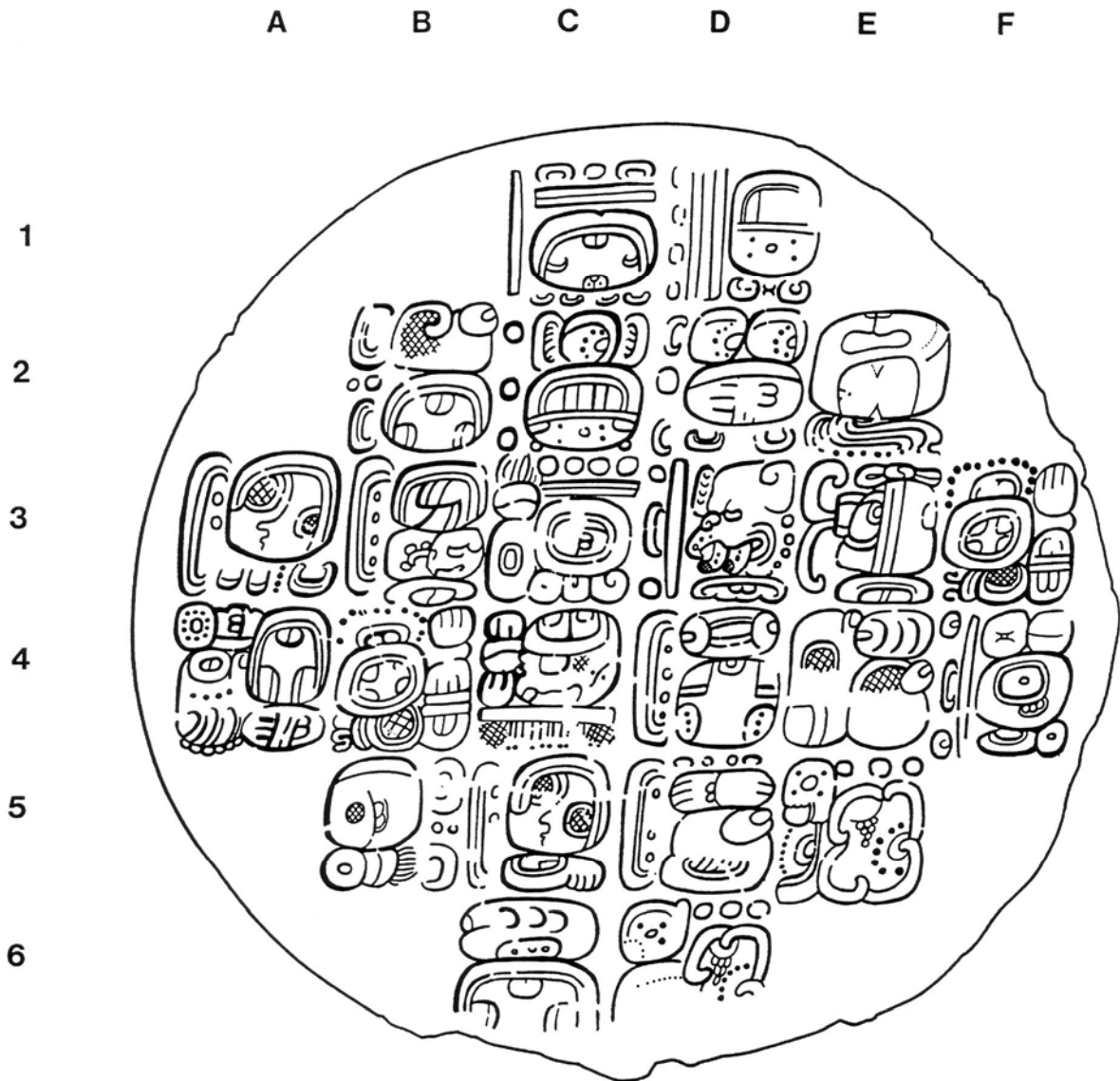
Figure 5: Ballcourt Marker 3 (drawing by N. Grube, in Chase et al. 1991: Fig. 3; maximum diameter 52 cm).

undeciphered to date. The collocation is written as **ya-?-**T520 in which the last grapheme is typically attributed the syllabic value of **cha** and/or **se**, though the former is better-attested, more commonplace and more likely (Figure 6a). Nonetheless, the T520 grapheme can appear with the two values in the same text (as seen in the text of Altar 12 at Caracol), and consequently, this may also be the case on Ballcourt Marker 3.[5] The undeciphered sign of this collocation is marked off

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[5] It should be remarked that the only well-documented use of T520 as syllabic **se** at Caracol is in spellings of the month Sek as **ka-se-wa** (on monuments dated to between AD 534 and 849). Conversely, the use of T520 as **cha** at Caracol is comparatively late with the three known examples of its use (i.e. Alt. 12, Alt. 23 and BCM3) dated to the Terminal Classic (c. AD 803 to 820). Interesting is the fact that T520 as **cha** appears to have been only used to spell the theonym Chaahk (God B) as **cha-ki**. This indicates that though polyvalent, the respective values of T520 were invoked in clearly segregated contexts. Dmitri Beliaev (pers. comm. 2006) has pointed out the eroded "antennae" attached to T520 on Stela 22 (L11; see Figure 6c) that would represent the full-form of **cha**, again arguing in favor of that value in this context.

with the question mark since it was not attributed a reference number in the Thompson catalog (1962).[6]

The same collocation is known from two other textual references at Caracol, namely Stela 22 (L11) and the recently discovered stucco text adorning the eastern façade of Structure B19-2nd (pC1-pD1) (Figure 6b, 6c) (see Chase and Chase 2002; Grube and Martin 2004a: II-34, II-38; Grube and Martin 2004b: 85-86). Both of these examples date to reign of Caracol's king K'an II and based on our recent analyses of these texts it seems possible that another contemporary mention is made on La Rejolla Stela 1 (E10-E13) (Figure 6d) (see Grube and Martin 2004a: II-37).[7]

Based on these examples we can see that a specialized 'ordinal expression' always precedes the collocation at hand (Grube and Martin 2004b: 82, 83, 85-86).[8] We can therefore conclude that the expression that initiates the text on Ballcourt Marker 3 should also have been accompanied by such an ordinal expression, and consequently this collocation should close the text of the intervening –and still missing– central ballcourt marker. As the collocation and the ordinal expression are typically preceded by a CR date, this allows further reconstruction of the missing text.

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[6] All numbers prefixed by the letter T (e.g. T520) refer to "Thompson numbers"; that is reference numbers to individual glyphs in his 1962 catalog. The sign in question exhibits diagnostic elements of several signs though these do not productively contribute a reading. Graphic elements include diagnostics of the syllabogram **lu**, a large scroll element near the top left, as well as a prominent cross-hatched area. Though the constituent graphic parts can be identified we doubt that these cue their usual values in this context. Instead, it seems more probable that this is a compound sign or 'digraph' targeting a disassociated phonetic value. The sign may appear in 'Miscellaneous Texts' 42a and 42b of Tikal (Burial 116) where it forms part of a collocation written **tz'u-?-B'AK** where it refers to a type of bone implement (though in this case the cross-hatching is absent). In addition, the sign in question shares several elements of T834 that occurs in the texts of Palenque, where it may have the phonetic value **ne**. These parameters suggest that the undeciphered main sign serves as an as yet undeciphered syllabogram (CV) of value Ca, Cu or even Ce.

[7] The CR date recorded in the stucco text of Str. B19-2nd is preserved as **# Ajaw 8 Sak**. The eroded Tzolk'in coefficient surely corresponds to six, based on the symmetry of the remaining bar, dot and fragmentary crescent "filler" (though it should be noted that the 'dot' had not been rendered on Nikolai Grube's drawing it was originally present during excavations). Nikolai Grube has reconstructed this CR as [6] Ajaw 8 Sak, and correlated it to the 9.10.7.14.0 LC date, during the reign of K'an II. Arlen Chase (pers. comm. 2006), however, has reconstructed the date as [1] Ajaw 8 Sak and suggested that this date corresponds to 9.16.1.6.0 or even 9.18.14.1.0 (Chase and Chase 2002), dates that accord well to the Late to Terminal Classic dating of this building on archaeological grounds. In addition, Arlen Chase (pers. comm. 2006) sees no reason to assume that the reference made in the stucco text of Str. B19 is a retrospective reference to K'an II and suggests that it may be a reference to a later, similarly-named individual.

[8] The specialized 'ordinal expression' that precedes the **ya-?-**T520 expression is also seen in the texts of Caracol Stela 6 and the stucco texts of Str. B16-2nd (Nikolai Grube pers. comm. 2004; Grube and Martin 2004b: 82, 83, 85-86). The ordinal expression has been interpreted by Nikolai Grube as a numerical classifier written as **u-#-AT-li** yielding *u-#-aatil* (where # stands for a numeral between 2 and 4). Based on the entry *aat* in Tzotzil and Tzeltal the term is understood as the word "count" (Grube and Martin 2004b: 82). The whole expression would thus indicate that it is the "second", "third" or "forth count" that the verbal expression took place (Grube and Martin 2004b: 82, 85). Terrence Kaufman in turn has suggested that the ordinal expression was rendered in abbreviated form and that it may need to be reconstructed as *–ahtaal* (based on the root *ah-* "to count" followed by a transitivizing suffix *–tal*) (Grube and Martin 2004b: 86; cf. Brown and Wichmann 2004: 166).

In the other examples of this expression K'an II is given unequivocally as the agent of these actions. The clearest example –that recorded in the stucco text of Str. B19-2nd– is said to be the "second" time that this action was conducted. The text in question has been dated to AD 640 (9.10.7.14.0 – 6 Ajaw 8 Sak; Grube and Martin 2004a: II-38) near the middle of the reign of K'an II. Puzzling is the reference to this event on Stela 22 where it seems to be referred to as the "fourth" time that K'an II conducted this action (cf. Grube 1994: 89). Based on the chronological parameters of Stela 22 as they are understood at present, the event may have taken place between 9.9.14.0.0 and 9.10.0.0.0 (cf. Grube 1994: 89; Grube and Martin 2004a: II-38), that is anywhere between 7 and 13 years prior to the more securely placed "second" event. These irreconcilable data mean that the underlying patterning of these **ya-?-**T520 expressions remains obscure.[9]

It is tempting to view the **ya-?-**T520 collocation as verbal based on its syntactical position at the start of a clause. However, the expression is not provided with a clear thematic suffix (such as *–aj* or *–aw*). In addition, Dmitri Beliaev points out (pers. comm. 2006) that constructions involving 'ordinal expressions', such as the one that we have here, typically involve a noun and not a verbal expression. Based on this interpretation the **ya-?-**T520 expression should be seen as a noun referring to a specific action, preceded by a specialized numeral classifier specifying the number of times this type of event has transpired. The syntax of the other clauses in

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Since then, David Stuart has proposed an alternate interpretation of these count expressions (2005: 70, Fig. 41) in which the main sign is seen as a crouching human figure (see the text of Tonina Monument 159, B2). Based on phonetic complementation with a **ti** subfix and a possible parallel clause on Dos Pilas Stela 16, he sees the logogram as having the value of **PAT** (for "person's back" in accord with the iconographic attributes of the sign). In light of this interpretation we draw attention to the productive gloss of "anadir, aumentar, multiplicar" that is provided for the Yukatek reflex *pach* (Barrera Vasquez 1990: 616). The example of this ordinal expression on Str. B19-2nd may thus be understood as the "second time" (**u-2-PAT-li** > *ucha' paatil*) that the particular action was conducted.

[9] The weathered state of Caracol Stela 22 means that the **ya-?-**T520 event recorded on that monument has not been securely dated. The text ends with a reference to the 9.10.0.0.0 – 1 Ajaw 8 K'ayab' period-ending and the last securely dated event in the text before that is the second defeat of the so-called Ko-Bent-Kawak locality on 9.9.13.8.4 – 11 K'an 2 Ch'en (cf. Grube and Martin 2004a: II-32-34). The intervening extant DNs twice span more than 12 K'atuns and once more than 2 K'atuns. As a result it seems clear that the text fluctuates between the distant past and the narrative present, as well as between early episodes of K'an II's life and the narrative present. Though the DNs are quite eroded, rough calculations suggest that the clause immediately preceding (L7-L8) the apparent "fourth" **ya-?-**T520 event (L9-K12) took place sometime near the middle of the fourth century AD. This placement is roughly contemporaneous to the AD 331 mention to Te'k'ab' Chaahk on Ballcourt Marker 3. That the same event may have been recorded on Stela 22 and Ballcourt Marker 3 is suggested further by the reference to the subject of the clause, who is named *#-chaahk*. Inspection of the original monument also suggests that the possible "fourth" **ya-?-**T520 event is in fact but the "second" with two eroded and intervening crescent "fillers". The events on Stela 22 and the stucco text of Str. B19-2nd may thus refer to the same 9.10.7.14.0 – 6 Ajaw 8 Sak date as may the eroded reference on La Rejolla Stela 1 (E10-E13). This interpretation may explain the putative reference to the toponym of La Rejolla as part of the same clause the records the **ya-?-**T520 event on Stela 22 (see Grube 1994: 89), though there rendered as **4-**"Altar" rather than the expected **8-**"Altar". The overall impression that we get, is that the contemporary "second" event conducted by K'an II may somehow be tied to the distant past where the "first" such event would have taken place. As a result we feel that these events are tied to dynastic founding rituals –in keeping with Grube's (1994:84) original interpretation. This in turn suggests that K'inich Joy K'awil also compared his actions to those of Te'k'ab' Chaahk on Ballcourt Marker 3 in the same manner as K'an II did on Stela 22. Nonetheless, we await decipherment of the verb for corroboration or refutation.

which this expression occurs makes it clear that these do not include an object. Consequently, the syntax should be intransitive and since the **ya-?-**T520 reference appears to be non-verbal, the whole may this be seen as a simple possessive statement in which the numbered event is possessed by its actor.

Figure 6: The **ya-?-**T520 verb. **a**) Caracol, Ballcourt Marker 3 (drawing by N. Grube); **b**) Caracol, Str. B19-2nd stucco text (drawing by N. Grube with minor amendments by C. Helmke); **c**) Caracol, Stela 22 (drawing by N. Grube with amendments by C. Helmke); **d**) La Rejolla, Stela 1 (drawing by I. Graham with minor amendments by C. Helmke).
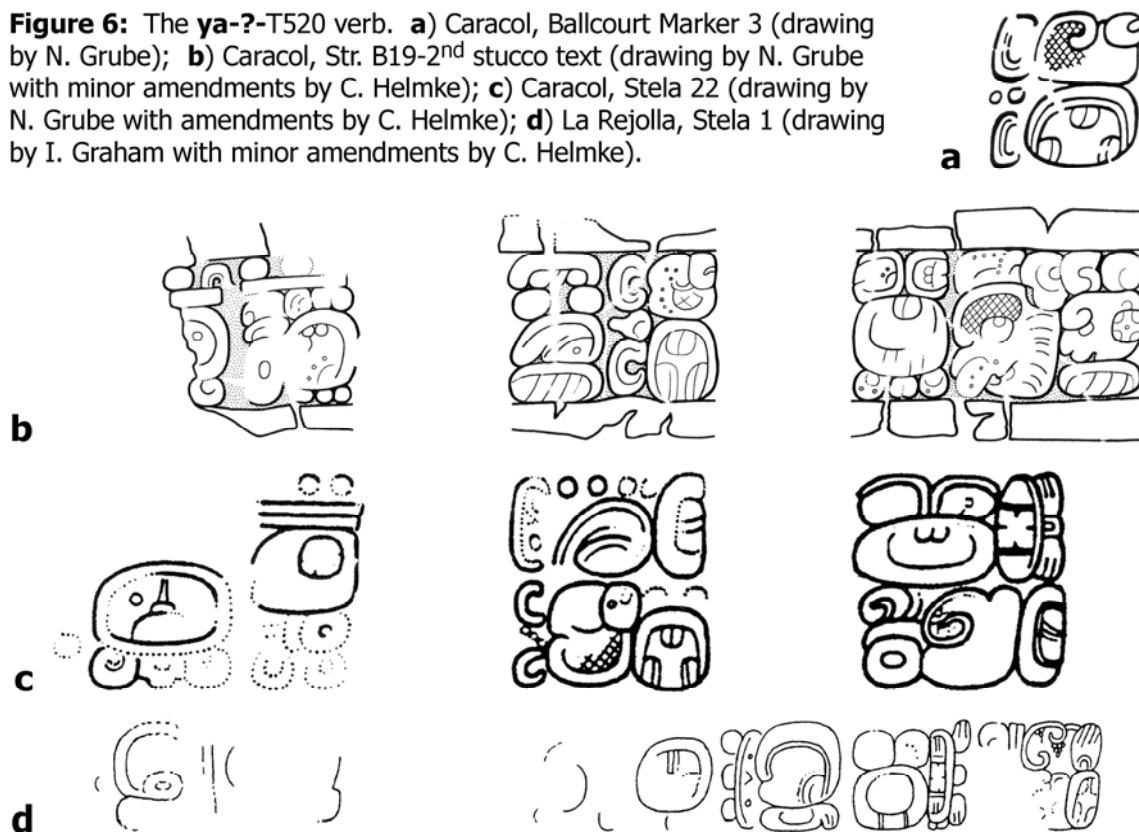
The event is credited to an agent introduced by means of an 'agency expression' (A3) read *ukab'ijiiy* or *ukab'jiiy* for "the action of" (cf. Grube and Martin 1998: 29-30; Wald 2004: 228 no. 158, 257). The agent is only obliquely referred to as a "successor" (i.e. *utz'akb'uil* or *utz'akb'ujil* [10]) of an elusive early Caracol ruler named Te'k'ab'[11] Chaahk (i.e. "Tree-Branch God B"; Chase et al. 1991: 6; Grube 1994: 84; Martin and Grube 2000: 86; Grube and Martin 2004a: II-5) bearing the local 'Emblem Glyph'.

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[10] The latter transliteration was suggested to us by Erik Boot (pers. comm. 2006) based on examples of similar expressions at Naranjo, Tikal and Copan, where it is spelled **–b'u-ji** apparently as underspellings of the more complete form *–b'uji[l]*. As diphthongs do not occur in Maya languages the former transliteration seems less probable.

[11] Note here that the initial logogram of this nominal construction, that here is read with the value **TE'** exhibits small drilled "dots" within the inner perimeter of its circular element. This differs from more typical renditions of the **TE'** logogram and thus several researchers have cautiously treated this grapheme with an indeterminate value (as it may represent an infixed element or another altogether different sign). As this is the only clear rendition of this individual's name in the inscriptions of Caracol we lack the parallel clauses that could provide evidence in support of one or the other position, and consequently caution that this portion of the name is liable to change in the future.

Clause 2

The second clause is initiated by an ADI (B5) read *uhtiiy* ("happened [ago]) followed by a lengthy distance number (C1-D2) spanning 5 K'in, 11 Winal, 19 Tun, 3 K'atun, and 1 B'aktun (here again written as *pik*) thereby totaling 472 years and 272 days (i.e. 5x1+11x20+19x360 +3x7200+1x144000). This long DN brings us to the CR date 9 Muluk 7 Muwan (C3-D3). The large DN must refer to the amount of time that separates the Terminal Classic narrative present from a foregoing Early Classic event. Based on this observation, other analyses of this text have placed the 9 Muluk 7 Muwan CR at the 9.18.8.3.9 LC date, corresponding to the 3rd of November, AD 798 and the foregoing event at 8.14.13.10.4 – 3 K'an 2 Mak, or January 14th, AD 331 (Chase et al. 1991: 6; Grube 1994: 84). Nonetheless, an alternative is to see the 9 Muluk 7 Muwan CR as the Early Classic event, which would be placed at 8.14.13.12.9, or the 1st of March, AD 331. In this scenario, the preceding first clause of Ballcourt Marker 3 would thus be placed in the contemporary Terminal Classic at 9.18.13.5.14 – 8 Hix 7 Pax, or the 26th of November, AD 803. At present, in the absence of a CR date clearly fixing the **ya-?-**T520 event in time, it is difficult to resolve, which of these two scenarios is more likely.

Naturally, the LC placement of the CR dates has great implications for understanding the chronological placement of agents and their respective deeds, and would also clarify who was intended as the 'successor to Te'k'ab' Chaahk'. We think it possible that this 'successor' was K'inich Joy K'awil, since such an oblique reference should target an agent that is already well-known to the reader at that point in the narrative. As we have seen in the text on Ballcourt Marker 4 K'inich Joy K'awil is the predominant and in fact sole agent cited, thereby making it likely that he is indeed referred to here. If this is the case, then the 9 Muluk 7 Muwan date should be placed in the Early Classic, in keeping with the alternate LC placement mentioned above. As a consequence, the numbered **ya-?-**T520 event cited in the first clause could thus be seen as that of K'inich Joy K'awil and to precede the close of his fourth regnal year, by a matter of 16 days.

An interesting feature of the 'month' sign used as part of the lengthy DN is the infixation of a **la** syllabogram that may cue the reading of this logogram as **WINAL** (written as **WINAL[la]-ji**) rather than the more commonplace term **WINIK** (see Lacadena and Wichmann 2002: Table 4). This in turn implies that the other occurrences of this logogram on Ballcourt Marker 4 should also be read using the eastern Ch'olan-based term *winal* (see Lacadena and Wichmann 2002: 291-293; Dmitri Beliaev pers. comm. 2006).

The month Muwan (D3) in the CR date is of interest too as it is written with a phonetic complement **–na** rather than the more usual **–ni**. This attribute has (as in the case of the theonym K'awil discussed above) been taken as loss of vowel-length in the Terminal Classic (cf. Stuart et al. 1999: II-16; Lacadena and Zender 2001; Houston et al. 2004: 91-92, 96-97; Lacadena and Wichmann 2004: 116-119). The spelling of *Muwan* here in the text of Ballcourt Marker 3 is in fact the earliest dated example to exhibit vowel-shortening from *muwaan > muwan* (in much the same way perhaps as the spelling of the K'ayab' 'month' on Ballcourt Marker 4).

The clause proper is headed by an independent demonstrative pronoun (C4) written **ha-a** for *ha'* (Zender 2005a). Earlier examples of this pronoun are written as **ha-i**

for *haa'* (Zender 2005a; Brown and Wichmann 2004: 168), which in turn may indicate that the texts on the B-Group ballcourt markers exhibit pervasive vowel-shortening.[12] Regardless of phonological variations these function as the third person singular demonstrative pronoun "he/she/it", here serving to underline the agent of the verbal expression that follows.

The verb is written as **u-ko-b'o** (D4), but in other attested examples (Figure 7) it is written with the syllabogram **–wa** as a subfix. This spelling indicates that the *kob'*-root is verbal and targets the active suffix *–ow* in *u-kob'-ow* (Grube 2004: 19) that also seems intended here on the ballcourt marker, though apparently underspelled as seen elsewhere (Figure 7). The root *kob'*– has been related to Yukatek and Tzotzil entries that target references to 'sexual intercourse' or 'male genitals,' and consequently has been understood as denoting 'procreation' events (Grube 2004: 19).
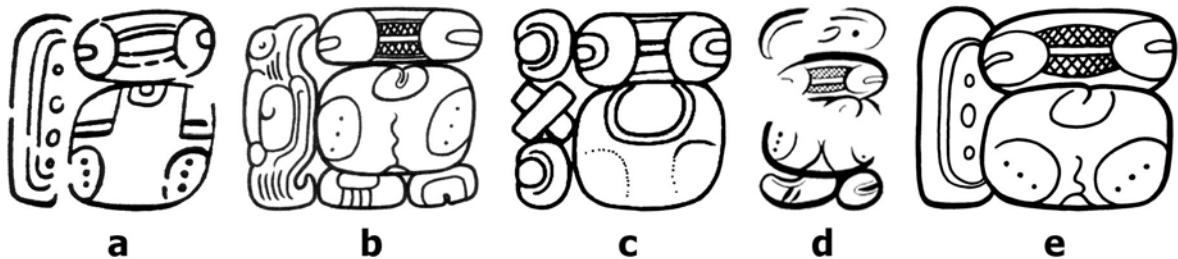

Figure 7: Examples of the *ukob'(ow)* glyphic collocations in Classic Maya inscriptions. **a)** Caracol, Ballcourt Marker 3 (drawing by N. Grube); **b)** Palenque, Temple of the Foliated Cross, Main Panel, subsidiary caption (drawing by H. Kettunen); **c)** Naranjo, Stela 35 (drawing by I. Graham); **d)** Palenque, Panel of the 96 Glyphs (drawing by S. Martin); **e)** Palenque, doorjamb texts of Temple 18 (drawing by C. Helmke). Note that another example (not illustrated here) occurs on Quirigua, Stela I at D1b1.

Nonetheless, other clear examples of these verbs rendered in the texts of Palenque and Naranjo suggest that the *ukob'ow* verb may serve another function. In the Palenque (Temple 18 and Panel of 96 Glyphs) and Naranjo (Stela 35) examples as well as the text of Ballcourt Marker 3, the verb serves as a focal point linking an event of the narrative present with one that occurred in the distant past (cf. MacLeod 2004: 297, 303). Interestingly, the events that frame the *kob'* verb appear to refer to the same or similar actions, though obviously undertaken by different agents, distantly-separated in time (Figure 8). In fact, in two of the cases the initial event refers to mythical episodes in the distant past (see Grube and Martin 2004b: 150, 152). The contemporary event thus seems to be related to a foregoing event, not so much in terms of a reenactment, but as a like-in-kind action. A relevant entry in Yukatek is *kobol* that is glossed as "cosa semejante" or "thing that is alike" (Barrera Vasquez 1990: 324). In turn, we wonder whether this term may not derive from a

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[12] The synharmonic renditions of otherwise disharmonically-spelled collocations attested on the ballcourt markers –which have been taken as evidence for vowel-shortening– should be contrasted against the theonym Chaahk (**cha-ki**) that retains its traditional, disharmonic spelling as do the terms *maak* (**ma-ki**) and *haab'* (**HAB'[b'i]**). Whether this is a reverential treatment or due to another underlying rational remains opaque at present. In fact, the phonological implications of disharmonic spellings remain widely debated at present and are liable to change over the coming years.

verbal root *kob- targeting "semejar" ('to be alike' or 'to be similar'). Thus *ha' ukob'ow* may well target "HE likened", "THIS is alike", or "likewise HE..." in which the two agents and their respective actions are equated.[13] As such, the actions linked by the *ukob'ow* verb are either analogous (Palenque Temple 18 and Caracol Ballcourt Marker 3), or refer to two different verbs that are deemed to be thematically-related (Palenque Panel of 96 Glyphs and Naranjo Stela 35) (Figure 8).[14]

Based on the structural analyses of the phrases that include the *kob'* expression headed by a demonstrative (Figure 8) we can see that there is a pattern with regards to the agency expressions employed that introduce each of the respective agents. In the former event the agent is introduced by *ukab'-*, which is suffixed by *–ijiiy* or *–jiiy* (spelled out in full or abbreviation). In contrast the latter agent is introduced by *ukab'-* suffixed by *–ij* as seen in the example on Ballcourt Marker 3 (C5). These suffixes may target deictics that refer to the temporal distance separating two events in a narrative (as has been suggested by Wald 2004). In turn the individual named as the 'successor of Te'k'ab' Chaahk' appears as the initial agent of the **ya-?-**T520 expression, while the one headed by *ukab'ij* must be another agent who enacted the same action.

The construction seen on Ballcourt Marker 3 exhibits another remarkable similarity to the examples cited before (Figures 8). For several of these texts the locations where the events transpired are specified in toponymic constructions (i.e. NAR St. 35: *Nah Ho'chan*; PAL T.18: *Matwiil*; PAL P. 96 Glyphs: *Sak Nuhkul Naah*). Similarly, on Ballcourt Marker 3, a toponymic statement also occurs, which can be translated literally as "the middle of the Uxwitza' cave" (D6) (i.e. *tahn ch'een/ch'e'n uxwitza'*). This statement apparently refers to 'epicentral Caracol' as the locality where this event first took place, in which Uxwitza' is the ancient toponym of Caracol, meaning 'Three Mountain(s) (place)' (Chase et al. 1991: 7; Houston and Stuart 1994: 52, Figs. 62 & 63; Martin and Grube 2000: 87). This toponym was used as part of the royal *Uxwitza' Ajaw* title (i.e. "Caracol King") that was preferred during the Early and Middle Classic (before the end of the reign of K'an I; see Martin and Grube 2000: 87) over the habitual *K'uhul K'antu Maak* title of the Late Classic. Parenthetically, the *K'uhul K'antu Maak* 'Emblem Glyph' appears as an innovation during the reign of Yajawte' K'inich II (ca. AD 553-593? Stone et al. 1985: 268-270; Martin and Grube 2000: 88-90), at which point *Uxwitza'* serves a toponymic function once more.

Thus, turning to the intervening collocations between the agency expression and the toponymic statement (D5-C6), we should refer to another agent who also conducted

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[13] We should point out, however, an interesting pattern seen in clauses that include the *kob'* verb. In all those cases that are immediately preceded by the demonstrative pronoun, the *kob'* statement is written without a **-wa** syllabogram. This may suggest that we are dealing with two different manifestations of the *kob'-* term, one functioning purely as a verbal root, the other perhaps functioning as an adjective (*kob'ol?*). Whatever the case, we feel that if two different terms exist, these would both target the same semantic domain even if each provides subtle differences in the original phrasing of the clauses.

[14] Nikolai Grube draws our attention to the possibility that the underlying value of the term *kob'* stems from the Yukatek and Cholan reflexes, *koh* and *choh*, respectively for "to appreciate, care", in which the *–b'* suffix may stand for a type of causative. Consequently we see the Ch'orti' term *chohb'* for "to take care, be in charge of, etc." that may be analogous to the term *kob'* under scrutiny here. If so then the term should be rendered as *ko[h]b'* in transliteration.

Figure 8: Structural analysis of *ukob'* phrases. **a)** Caracol, Ballcourt Marker 3 (drawing by N. Grube); **b)** Naranjo, Stela 35 (drawing by I. Graham); **c)** Palenque, doorjamb texts of Temple 18 (drawing by L. Schele). Note that for the sake of clarity the toponymic references have not been rendered above. The Naranjo example refers to the demise of the 'Black Jaguar' at the hands of Chante' Ajaw –a mythical action– that is likened to the maiming of a Yaxha king at the hands of Naranjo's king Itzamnaaj K'awil (Martin and Grube 2000: 82; Grube and Martin 2004b: 150-154). The Palenque example cites the accession of the mythical 'Triad Progenitor' (Stuart 2006b:105), an action which the young K'inich Ahkul Mo' Naahb' compares to his own accession.

a **ya-?-**T520. This agent, however, is referred to by an appellation that remains poorly understood. The first collocation is rendered as **u-2-su-lu**, in which the numeral preceded by the ergative pronoun /u/ may function as the ordinal "second". The root *–sul* has been understood as a titular form meaning "dependent" based on the many examples of *Ajsul* in the texts of Palenque (Chase et al. 1991: 6-7; Chase and Chase 2001: 125; cf. Boot 2002: 12). The second term (C6) is written with two graphemes: what appears to be a penis sign atop a T520. If the penis sign has its typical logographic value it may cue **AT**, followed by T520, which typically stands for either **cha** or **se**. These possibilities, however, do not yield productive results and other readings of this collocation will have to be sought. Other suggestions have been put forth (Chase et al. 1991: 7; Marc Zender pers. comm. 2004), but these have not met with considerable support.[15] Consequently, this segment remains only partly intelligible, but should somehow refer to an Early Classic dynast who also undertook a **ya-?-**T520 action.

The text is closed with an extensive nomino-titular string (E2-E5) in which the agent of the contemporary action, who was only named obliquely before (as the 'successor'), is named more explicitly. The first two collocations (E2-E3) clearly name the agent as K'inich Joy K'awil in the same manner as on Ballcourt Marker 4. His title is given as the exalted *K'uhul K'antu Maak* 'Emblem Glyph' (F3). The following three glyph blocks (E4-E5) attribute K'inich Joy K'awil with additional references, the first of which (E4) remains difficult to understand. It is written **k'a-le-?** in which the final question mark refers to either a syllabogram **lu** or the same undeciphered sign seen in the **ya-?-**T520 expression. Neither yields particularly productive results, though the verbal root *k'al-* may somehow be targeted.[16] If the verbal root *k'al-* is indeed targeted then the last three glyph blocks of the text appear to form another sub-clause. The second collocation refers to 27 Kings and is written **7-[WINAK/K'AL]AJAW-wa**, in which the main sign is the logogram for "twenty", but in the absence of phonetic complementation it is unclear which of the two possible, competing words was intended (i.e. *(jun)winak* vs. *(jun)k'al*). This type of collocation may be related to titular expressions including the numeral 28 that are seen in the texts of the eastern part of the Central Lowlands (Grube and Martin 2004a: II-72) (e.g. Naranjo, Dos Pilas, Machaquila, and Nim Li Punit). If this example is to be understood in the same manner, then it may have been intended with K'inich Joy K'awil as the twenty-eighth king of such a grouping. As a result, the earlier interpretation of this collocation as a type of dynastic count specifying K'inich

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[15] In an earlier analysis it was suggested that the penis may stand for as **ACH**, in which the penis sign is rendered in a Yukatekan form rather than the more usual Ch'olan form *aat* (typically written as **AT-ti**), where the **–cha** would here serve as a complement to cue this otherwise exceptional phonetic value (see Chase et al. 1991: 7). This identification would be well in keeping with the other Yukatekan features observed in the ballcourt marker texts, such as the use of the term *maak* for "person" and *winal* for "month" (both instead of the usual term *winik*).

A similar penis sign has, however, been identified as a possible syllabogram **me** by Marc Zender (pers. comm. 2004) in texts at Palenque and Copan where it forms part of the verbal root *mek'-* "embrace" (see MacLeod 2004: 297, 298, 299). If this is the case, T520 may serve as the syllabogram **se** to form a synharmonic term *mes* (that otherwise remains undocumented in the corpus). Nonetheless, the sign attributed the value **me** does not typically render the three dots in the circular element that is otherwise a diagnostic element of the penis sign, and thus seems unlikely here.

[16] Note the term written **u-k'a-le** for *u-k'aal-e* on Capstone 6 (C1) from Ek Balam, where it refers to "room" with a possible Yukatekan *–e* focalizer (Lacadena 2002), **u-K'AL-le?** on Step 3, HS 3 at Yaxchilan, and *k'al-e* <cale> "hacer" in Ch'olti' (Morán 1695: 124; Sattler 2004: 371).

Joy K'awil as the twenty-seventh king of Caracol (Chase et al. 1991: 7), now seems unlikely. The final glyph block (E5) again includes a reference to Caracol as *Uxwitz(a')*. This collocation has been understood as an added appellative of K'inich Joy K'awil written **a-3-WITZ**, read *a[j]uxwitz[a']*, and loosely translated as 'He of Caracol'.[17] This interpretation would indicate that K'inich Joy K'awil is said to be a native of Caracol, though such statements are otherwise rare in the corpus of Lowland inscriptions.

Reconstruction of the Missing Ballcourt Marker

Based on the chronological parameters established by Ballcourt Markers 3 and 4, the events recorded on the intervening and missing ballcourt marker can be reconstructed in part, assuming that the missing ballcourt marker had the same size, layout and configuration as the other two. While we cannot be certain of the events that were commemorated on these dates, the content of the known inscriptions do provide us with clues and constraints. Overall, the reconstruction provided here serves as a hypothetical model of the missing text, which awaits testing against the actual monument if it were to be recovered during a future season of investigations (Table 1).

The final distance number on Ballcourt Marker 4 brings us to the CR date 8 Hix 7 Sip (9.18.12.10.14 or the 7th of March, AD 803) that would start off the missing text. This date has not been recorded on other monuments of K'inich Joy K'awil's reign and the mention made on the missing ballcourt marker may thus be the sole reference to the event that transpired on that day. As we have said in the analyses of Ballcourt Marker 3, using the extant DN, the CR date 8 Hix 7 Pax (9.18.13.5.14 or the 26th of November, AD 803) can been worked out by counting from the 9 Muluk 7 Muwan anchor (8.14.13.12.9 or the 1st of March, AD 331). The last clause of the missing ballcourt marker thus should be headed by the 8 Hix 7 Pax CR date and an ordinal count expression conducted by K'inich Joy K'awil. These reconstructions have the advantage of providing a continuous temporal frame to the narrative. In addition, the two CR dates cited on the missing ballcourt marker separated by an 'even' distance number of 0 K'in and 13 Winal, corresponding to 260 days (0x1+13x20) or a full Tzolk'in cycle. Events separated by that amount of time –as rendered in the examples at other sites– are typically related, in which the latter serves as a type of Tzolk'in anniversary.

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[17] Nonetheless it should be remarked that alternate reading of this collocation is possible. It is possible that the logogram **TAN** was infixed into the vocalic sign **a**, thereby rendering a toponymic construction written **[TAN]a-3-WITZ**, for *tahna['] uxwitz[a']* understood as "the middle of Caracol". If this is the case the toponym may refer to the locality where the later of two **ya-?-**T520 events event was conducted, set in parallel to the *tahn ch'een/ch'e'n* reference seen earlier in the text. The locative expression *tahn-a'* can be analyzed as "middle-LOC" in which the suffix serves as a locative derived from acrophonically-reduced noun *ha'* for "water". Analogous examples can be seen on Lintel 25 of Yaxchilan where these are rendered as *tahn-ha'* (I3b, M2 & U2a). The distribution of the *-ha'* and *-a'* suffixes is in fact geographically discrete, a point made explicit by Marc Zender (2005b), who on the basis of toponyms recorded in the glyphic corpus, identified two major linguistic zones: a large northern area (encompassing the majority of the Yucatan peninsula) exhibiting the more Yukatek-based examples with an *–a'* suffix and the remaining belt to the south of this area where the more Ch'olan-based *–ha'* suffix occurs. Zender clearly identified Caracol as occurring within the *-a'* suffix zone (2005b), thereby supporting this possible reading and analysis of this locative compound.

BM4

A3-D1	9.18.9.5.9	6 Muluk 2 K'ayab' (12 December, AD 799)
		Accession of K'inich Joy K'awil
D4	+ 12.11	
C6-D6	(9.18.10.0.0)	10 Ajaw 8 Sak (19 August, AD 800)
		Celebration of the period-ending
F3-E4	+ 2.10.14	

BM#

B2-A3	[(9.18.12.10.14)]	[8 Hix 7 Sip (7 March, AD 803)]
		Dedication of the B-Group Ballcourt?
F3	+ [13.0]	
E4-F4	[(9.18.13.5.14)]	[8 Hix 7 Pax (26 November, AD 803)]
		A numbered *ya?ch* event by K'inich Joy K'awil?

BM3

C1-D2	− 1.3.19.11.5	
C3-D4	(8.14.13.12.9)	9 Muluk 7 Muwan (1 March, AD 331)
		Like-in-kind event of K'inich Joy K'awil
		credited to Te'k'ab' Chaahk

	n.b.:	(...)	not expressed but implied or derived.
		[...]	reconstructed date based on known parameters.

Table 1: Summary of the chronology of the texts on the B-Group ballcourt markers.

With these parameters established we can see that the temporal structure of the narrative on the ballcourt markers moves forward in time from the start of Ballcourt Marker 4, up to Ballcourt Marker 3, at which point the narrative retreats backwards to the Early Classic, culminating with the **ya-?-**T520 event that K'inich Joy K'awil likened to that of his Early Classic predecessor. Furthermore, each of the known ballcourt markers record two or parts of two clauses. It can thus be presumed that the middle missing marker also exhibited this structure. Of the two CR anchors (and their corresponding LC stations) that we have for the missing ballcourt marker, only the first (i.e. 8 Hix 7 Sip) refers to a clause that is actually cited on that monument. The latter (i.e. 8 Hix 7 Pax) as we have seen obviously refers to the clause that is inscribed at the start of Ballcourt Marker 3. Consequently, most of the text of the intervening ballcourt marker would thus have been devoted to rendering the clause initiated by the 8 Hix 7 Sip CR date. The 8 Hix 7 Pax date refers to the possible dynastic 're-founding' event credited to K'inich Joy K'awil, as the 'successor of Te'k'ab' Chaahk' (see Grube 1994: 84), in keeping with the precedent provided on Stela 22 where K'an II may have also likened his **ya-?-**T520 action to that of Te'k'ab' Chaahk's.

As the texts are recorded on ballcourt markers it would be well in keeping if the foregoing clause recorded the dedication of the ballcourt on the date 8 Hix 7 Sip (see Grube and Martin 2004a: II-78) as most glyphic texts do refer to the actual dedication of the monuments on which they are inscribed (see Stuart 1998). The whole terminal phase architecture of the B-Group ballcourt thus seems to date to an early part of K'inich Joy K'awil's fourth regnal year, thereby testifying to the

importance of the ballgame in dynastic ritual and political rhetoric. The putative reference to the dedication of the ballcourt (or the first ball-playing event to take place therein)[18] may replicate that documented on Caracol Altar 21, the central ballcourt marker the A-Group Ballcourt (cf. Houston 1991: 39, 41), in terms of content, layout as well as placement within the narrative structure (Figure 9). The implication, in turn, is that the dedication of the ballcourt may have served as prerequisite to the **ya-?**-T520 event recorded in the following clause (Figure 10), based on the 260-day period that separates the two events.
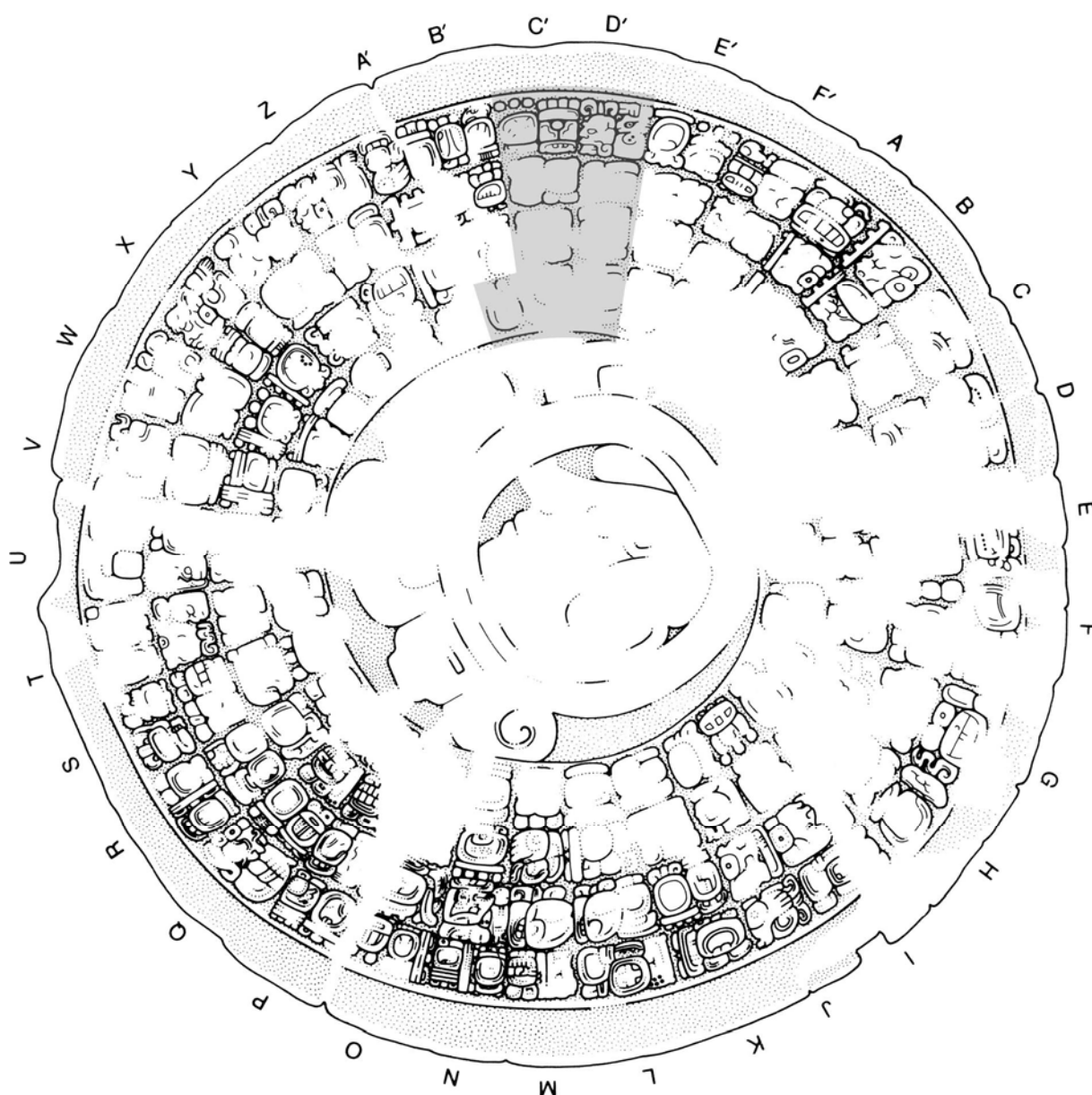
Figure 9: Caracol, Altar 21, dated to the reign of Yajawte' K'inich II. The Clause referring to ball-playing event is shaded in light gray (drawing by S. Houston, in Chase and Chase 1987: Fig. 27 adapted by C. Helmke).

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[18] A common dedicatory verb for ballcourts is based on the root *jatz'* "to strike" in a reference to the solid rubber ball that was struck into play. The ballcourt dedicatory statements recorded at several sites, including Copan, Yaxchilan and El Peru (Zender 2005c: 8, Fig. 13) make use of the verb *jatz'-n-aj*, which is followed by a reference to the undeciphered logogram for ballcourt (phonetically complemented by **na** or **ni** subfixes; see Stuart 1998).
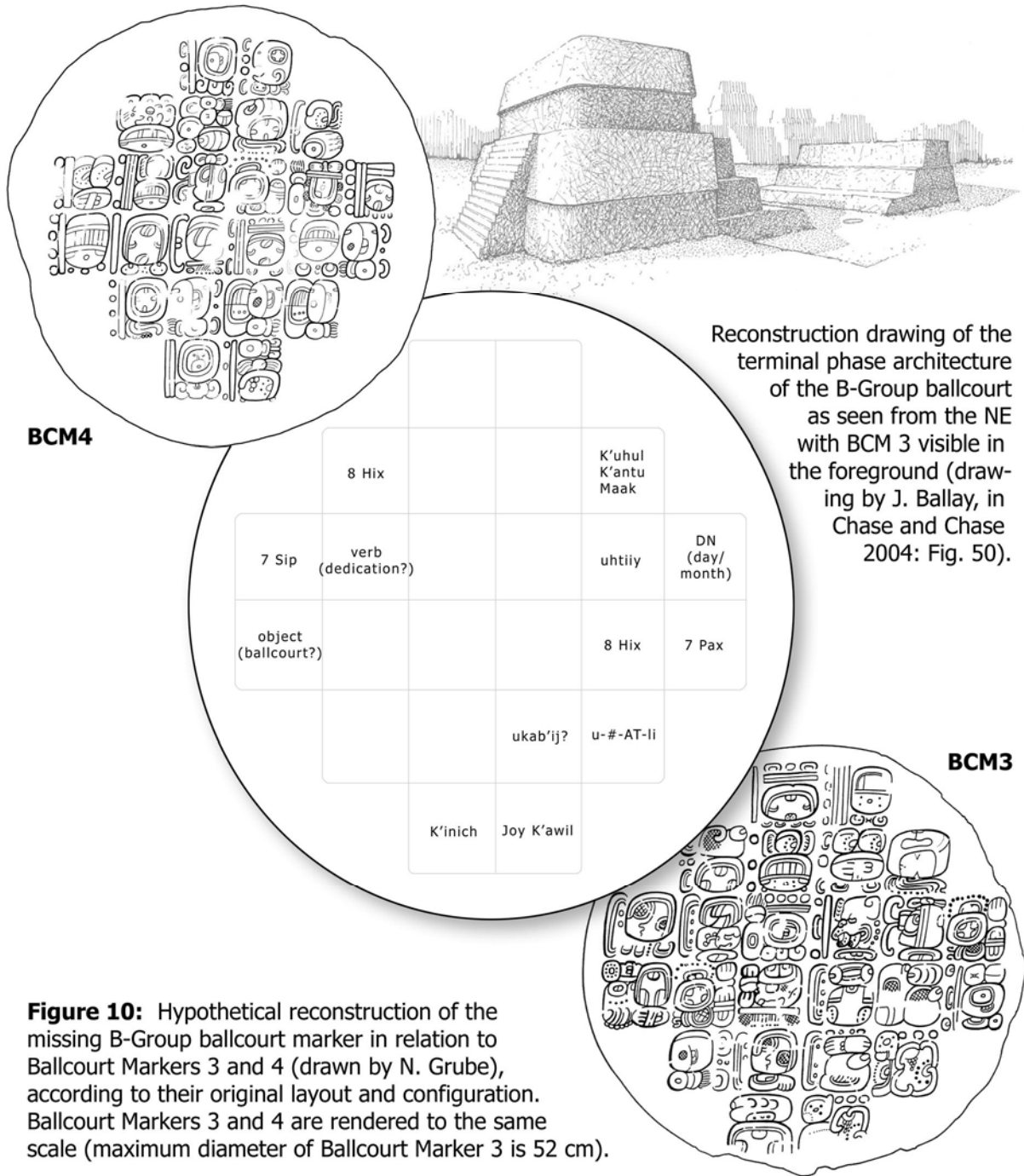
BCM4

	8 Hix		K'uhul K'antu Maak	
7 Sip	verb (dedication?)		uhtiiy	DN (day/month)
object (ballcourt?)			8 Hix	7 Pax
		ukab'ij?	u-#-AT-li	
	K'inich	Joy K'awil		

Reconstruction drawing of the terminal phase architecture of the B-Group ballcourt as seen from the NE with BCM 3 visible in the foreground (drawing by J. Ballay, in Chase and Chase 2004: Fig. 50).

BCM3

Figure 10: Hypothetical reconstruction of the missing B-Group ballcourt marker in relation to Ballcourt Markers 3 and 4 (drawn by N. Grube), according to their original layout and configuration. Ballcourt Markers 3 and 4 are rendered to the same scale (maximum diameter of Ballcourt Marker 3 is 52 cm).

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