

# Christophe Helmke, Jaime Awe

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# ANCIENT MAYA TERRITORIAL ORGANISATION OF CENTRAL BELIZE: CONFLUENCE OF ARCHAEOLOGICAL AND EPIGRAPHIC DATA

CHRISTOPHE HELMKE<sup>1</sup>, JAIME AWE<sup>2</sup>

<sup>1</sup> *University of Copenhagen, Denmark*

<sup>2</sup> *Institute of Archaeology, Belize*

## Abstract

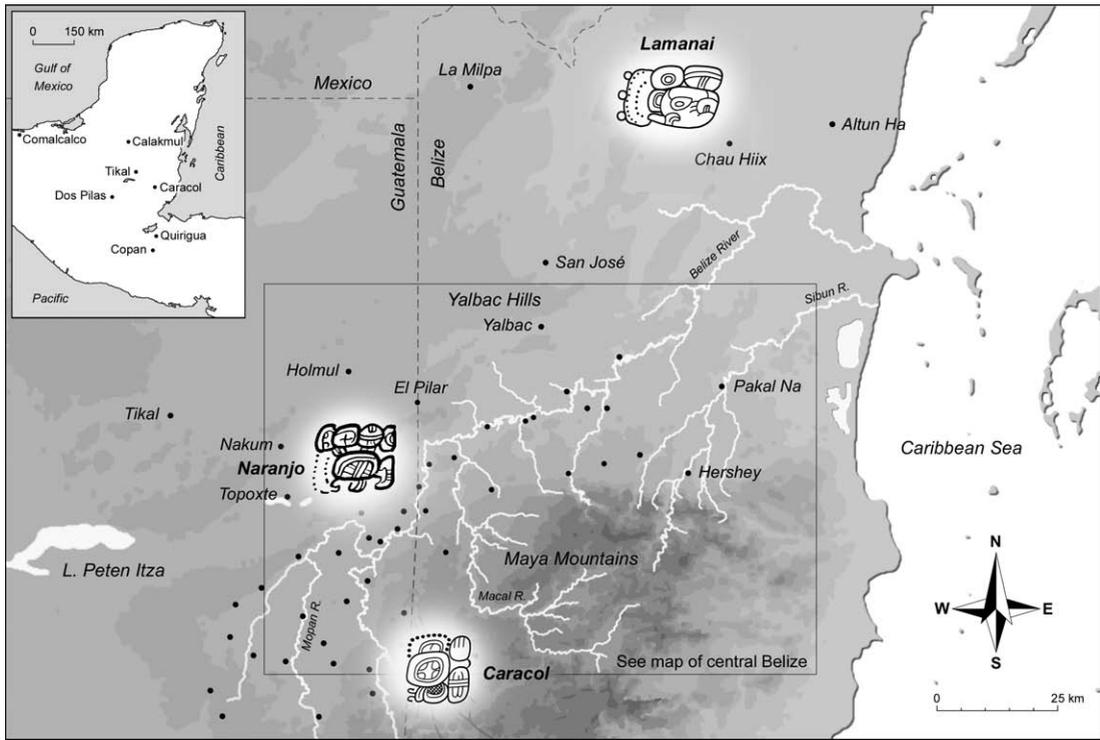
The models proposed for ancient Maya territorial organization in central Belize differ significantly from one researcher to another. Due to the relative dearth of hieroglyphic data, most models have been formulated on the basis of archaeological data alone and are predominantly site-specific assessments. Investigations in central Belize over the past four decades have, however, brought to light several key pieces of epigraphic data, including Emblem Glyphs. When viewed in conjunction, the archaeological and epigraphic data provide a new vantage for determining the structure of the Classic-period socio-political landscape of the Belize Valley.

## Resumen

Los modelos propuestos para la organización territorial de los mayas del Período Clásico en Belice Central difieren significativamente de un investigador a otro. Debido a la escasez de datos jeroglíficos, la mayoría de los modelos se han formulado teniendo en cuenta tan solo datos arqueológicos y se centran predominantemente sobre cada sitio investigado. Las exploraciones en Belice Central de las cuatro últimas décadas, sin embargo, han sacado a la luz numerosas piezas clave que aportan datos epigráficos, incluyendo Glifos Emblema. Vistos en conjunto, los datos arqueológicos y epigráficos proporcionan una posición más ventajosa en la determinación de la estructura del paisaje socio-político del Período Clásico del Valle de Belice.

## INTRODUCTION

A variety of models of ancient Maya territorial organisation have been proposed for the Belize Valley over the past four decades. In part, the quantity of such models can be explained by the fact that the Belize Valley stands out as one of the most intensively and continuously investigated areas of the Maya Lowlands (Garber 2004; Chase & Chase 2004: 9-13). The diversity of models proposed may also be a direct consequence of the various archaeological projects that have operated and continue to operate in the area. An interesting peculiarity is that these models are – for the most part – centred on the sites investigated by a particular project, and few have attempted to merge all extant data coherently into a unitary model. In addition, since the Belize Valley is well known for its dearth of



**Figure 1.** Map of the eastern Central Maya Lowlands, indicating major physiographic features that frame the greater Belize Valley, including the Maya Mountains, the Yalbac Hills and the Caribbean coastline. Note how the dominant sites of Caracol, Naranjo and Lamanai define the cultural boundaries of the research area. Only major centres are represented (rendered as dots), and only the fluvial system pertaining to central Belize are depicted. The inset map shows the entirety of the Maya area and other sites mentioned in the text. The frame within the map outlines the more detailed view of central Belize provided in Fig. 2. Modern national borders are indicated. Map by Christophe Helmke (unless otherwise noted all the figures, photos and drawings presented in this paper are those of the senior author).

hieroglyphic texts (e.g. Chase 2004: 329), no model formulated to date has really integrated any of the few – but crucial – available epigraphic data.<sup>1</sup> The implication is that no model formulated can adequately account for all the archaeological and epigraphic data of the Belize Valley. In an effort to

<sup>1</sup> Nevertheless, foregoing treatments of glyphic data from the Belize Valley include: Stela 6 at Pacbitun (Healy 1990; Healy *et al.* 2004: 213-214; Helmke *et al.* 2006), the ‘Jauncy Vase’ (K4464) and other texts on portable objects discovered at Buenavista del Cayo (Houston *et al.* 1992: 511-518; Taschek & Ball 1992; Reents-Budet 1994: 294-311; Reents-Budet *et al.* 2000; Helmke *et al.* 2008; Helmke 2012), Stela 1 at Blackman Eddy (Garber 1992; Garber *et al.* 2004: 63-67), Stela 1 at Actuncan (McGovern & Grube 1996), Stela 9 at Cahal Pech (Awe & Grube 2001), ceramic materials from Baking Pot (Colas *et al.* 2002; Reents-Budet *et al.* 2005), and the passing mentions made to the Naranjo Emblem Glyph on Stela 8 at Xunantunich (Ashmore 1998: 173; Houston *et al.* 1992: 506-507; LeCount *et al.* 2002: 43; Leventhal 1996: 10; Martin & Grube 2000: 83; Leventhal & Ashmore 2004: 171). More synthetic treatments of the glyphic data from the Belize Valley have been conducted by the authors in collaboration with Nikolai Grube and Harri Kettunen (Helmke *et al.* 2003, 2006, 2010).

redress these shortcomings this paper will examine the glyphic texts and, by combination with the archaeological data of the Belize Valley, present a new perspective on the ancient Maya territorial organisation for this area of the central Lowlands. The purpose is not to critique or evaluate the validity of previously-established models. Instead our aim is to present the data relevant to the issue of ancient territorial and socio-political organisation for the Belize Valley and, as such, it is hoped that this paper may serve as the basis for further research and future models.

## THE RESEARCH AREA

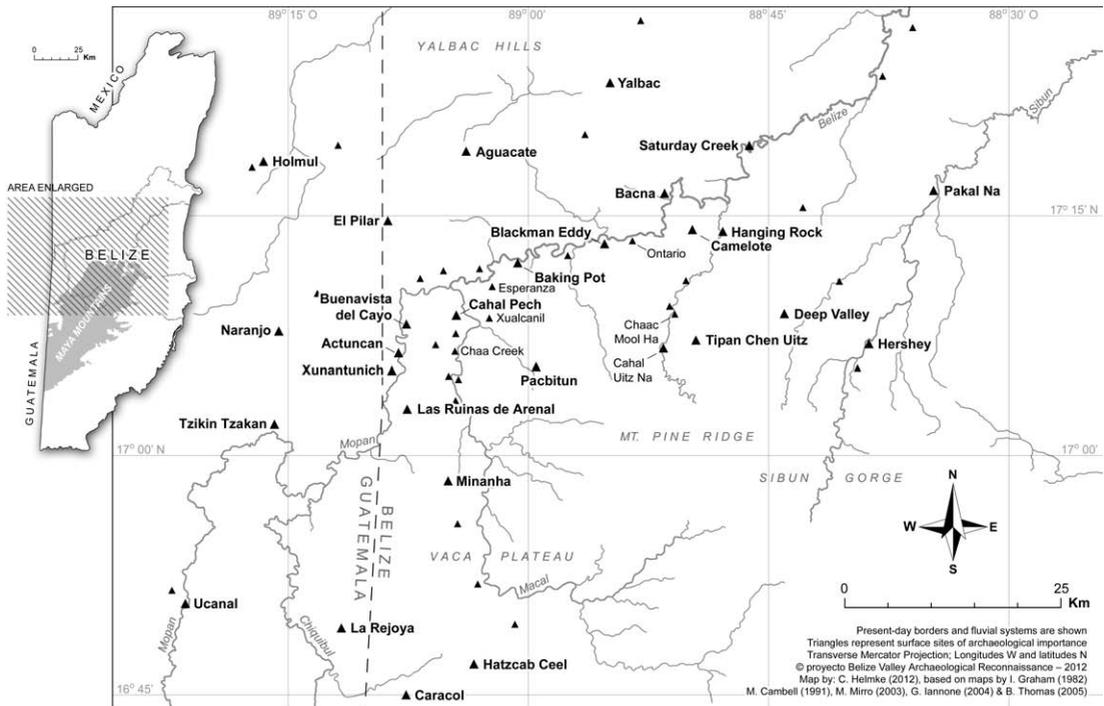
The principal physiographic feature defining the greater Belize Valley is the Belize River and its many tributaries (Fig. 1). Geologically the greater Belize Valley area of central Belize is bordered by the granitic Maya Mountains to the south and the rolling limestone Yalbac hills to the north. To the east, the Belize River courses through perennial salt marches before flowing into the Caribbean Sea. The eastern boundary of the Belize Valley is thus eventually defined by the Caribbean shoreline. The western boundary of the Belize Valley is difficult to define but can be attributed to the point of confluence of the Mopan and Chiquibul Rivers. Here the Macal and the Sibun Valleys are thus deemed part of the central Belize area.

As a means of defining this cultural sub-region we have found that it is aptly framed in relation to large neighbouring sites, namely Caracol to the south, Naranjo to the west and Lamanai to the north. These sites stand as major territorial capitals, or nodes in their own right, and are identified in the glyphic inscriptions by what are known as Emblem Glyphs (see Berlin 1958; Mathews 1991). These sites also differ from those of the Belize Valley in terms of ceramic and architectural types as well as in their imposing size. It is in these terms that we conceptualise the ‘greater Belize Valley area’ of central Belize.

## “MAJOR CENTRES” IN THE BELIZE VALLEY

The first empirical attempt to derive territorial organisation from material remains can be attributed to the pioneering settlement surveys conducted by Gordon Willey and colleagues (1965) in the Belize Valley and by William Bullard Jr. (1960) in northeastern Peten (Grube 2000: 548). Their analyses of settlement size and distribution formed the basis of a three-tiered model of ancient settlement, with residential housemounds and small *plazuela* groups at the bottom and “major centres” at the top (Driver & Garber 2004: 287-293; Iannone 2004). The intermediate type referred to “minor centres” and encompassed all intervening sites. These studies, as with many subsequent models, however, failed to address the great disparity in size between centres. Nonetheless, as part of this original site ranking or typology, Xunantunich (Leventhal & Ashmore 2004), Cahal Pech (Awe 1992; Taschek & Ball 2004) and Baking Pot (Bullard & Bullard 1965; Ricketson 1931; Audet & Awe 2004) were all attributed the label of ‘major centres’ (Willey *et al.* 1965: 573, 577, 579-580) (Fig. 2).

Following Willey’s pioneering work many additional sites have been discovered, reported, mapped, and/or investigated in the Belize Valley, some of sizes comparable to those previously identified by as ‘major centres’. Among these are the important sites of Buenavista del Cayo (Ball & Taschek 2004), El Pilar (Ford 2004), Pacbitun (Healy *et al.* 2004), Blackman Eddy (Garber *et al.* 2004), Yalbac (Lucero *et al.* 2004: 96-97), Cahal Uitz Na (Conlon & Ehret 1999), Camalote (Garber *et al.* 2004: 49), Deep Valley (Davis 1980; Wrobel *et al.* 2010), Saturday Creek (Lucero *et al.* 2004: 91-93), Bacna (Helmke *et al.* 2005), Hershey (McAnany *et al.* 2004), and most recently Tipan Chen Uitz (Wrobel *et al.* 2012), Lower Dover (Hoggarth *et al.* 2010), and Aguacate (Figs. 1 and 2). To these should be added sites

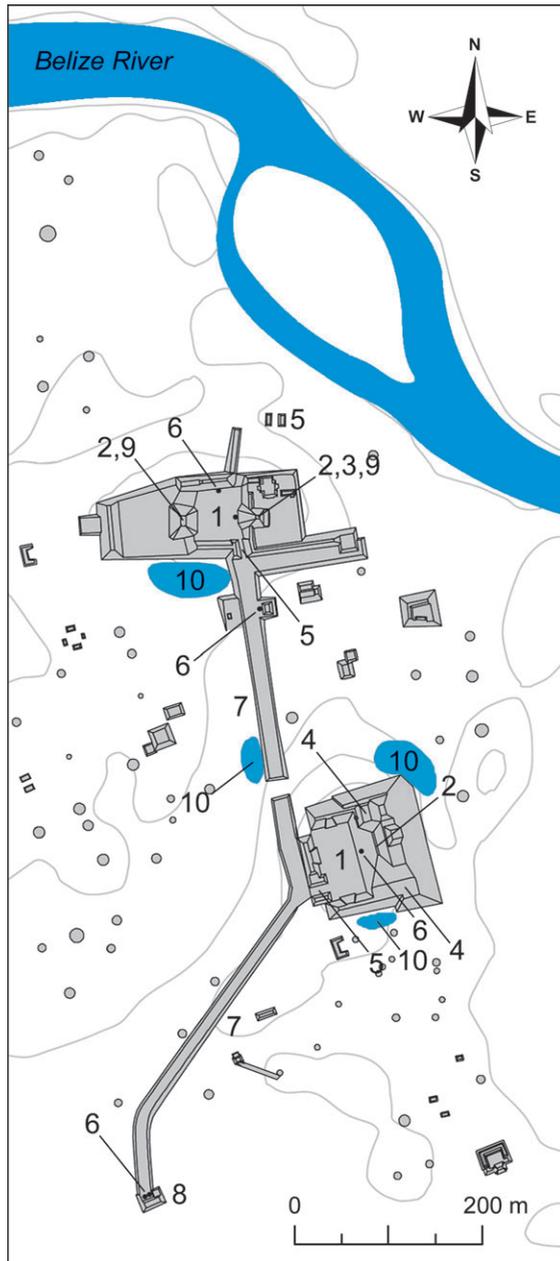


**Figure 2.** Map of central Belize or the greater Belize Valley showing the sites discussed in the text. Note how ‘major centres’ are rendered larger than ‘minor centres’ (map courtesy of the Belize Valley Archaeological Reconnaissance project).

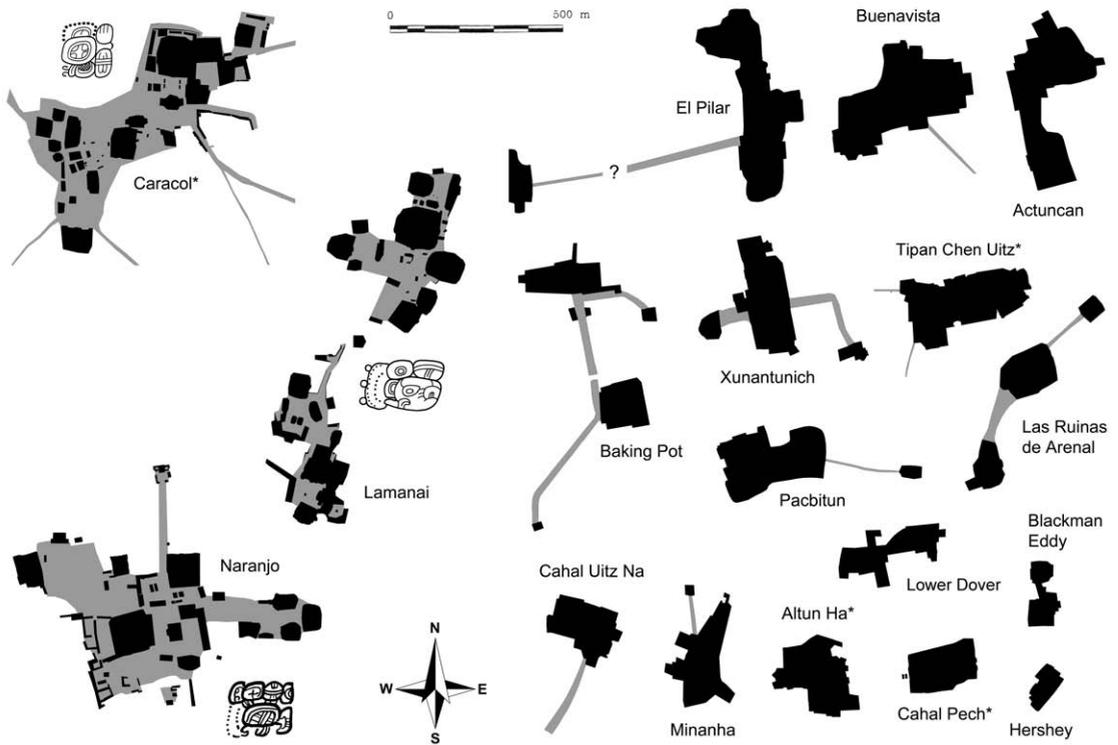
that were initially reported nearly a century ago, which have since become foci of investigations once more. These are Las Ruinas de Arenal (Taschek & Ball 1999), Actuncan (McGovern 2004; LeCount & Blitz 2005) and Minanha (a.k.a. Mucnal Tunich) (Iannone 2005). More peripherally-related are the sites of San José (Thompson 1939), Altun Ha (Pendergast 1979-1990), and Chau Hiix (Pyburn 1991), which share several architectural and ceramic attributes in common with greater Belize Valley sites.

Several of these sites have served as the basis of recent models of territorial organisation. For many the size of sites – and therefore their presumed importance – has been emphasised (e.g. Ball & Taschek 1991, 2004; Ford 2004). Others have stressed the attributes of ‘major centres’ that are found at smaller sites, which would otherwise be classed as ‘minor centres’ (Garber *et al.* 1993a, 1993b, 2004; Colon & Ehret 1999; Helmke *et al.* 2005).<sup>2</sup> Such cases urge us to re-evaluate the sometimes blurred boundary between ‘minor’ and ‘major centres’ as well as between ‘major centres’ of greatly differing size (Iannone 2003, 2004). Nonetheless, and despite the great variability in quantity and quality, all these ‘major centres’ of the greater Belize Valley area exhibit (to varying degrees): 1) nucleated monumental epicentres, 2) pyramidal temple structures, 3) eastern triadic temples (such as

<sup>2</sup> Xualcanil (a.k.a. Cayo Y) for example has a ballcourt and a causeway terminus with a plain stela and altar (Iannone 2003: 16), the similarly-sized minor centre of Chaac Mool Ha also exhibits a ballcourt (Helmke *et al.* 2003; Helmke 2009: 210-216), as do the sites of Ontario (Driver & Garber 2004: 298) and Hershey (McAnany *et al.* 2004: 297, 302) while the small Chaa Creek sites exhibit stelae (Connell 2003: 29-30) and Esperanza has an uncarved altar (Driver & Garber 2004: 295).



**Figure 3.** The site of Baking Pot, which exemplifies all the attributes that are typically associated with ‘major centres’ in the Maya Lowlands in general and central Belize in particular (adapted by Christophe Helmke and Andrew Bevan from maps and surveys by James Conlon). In addition to monumental architecture, housemounds, and the Belize River, 5-meter contour intervals are indicated. Numbered items represent the following attributes: 1) nucleated monumental epicentre; 2) pyramidal temple structures; 3) eastern triadic temple structures (“E-Groups”); 4) royal palatial groups; 5) ballcourts; 6) monuments such as stelae and altars; 7) intrasite processional *sacbeob*; 8) *sacbe* terminus group; 9) royal tombs; 10) reservoirs.



**Figure 4.** The primary major centres of Caracol, Naranjo and Lamanai in comparison to various ‘major centres’ of central Belize. For Caracol, Naranjo and Lamanai the grey-shaded areas represent plazas and causeways, black represent structures. For the smaller Belizean sites, only causeways are shaded in grey, treating structures and plazas in black. All maps to scale. Asterisks indicate that causeway terminus complexes are not rendered here.

E-Group-like configurations), 4) royal palatial groups, 5) ballcourts, 6) monuments such as stelae and altars (some of which were carved), 7) intrasite processional *sacbeob* (causeways), or ‘vias’, 8) *sacbe* termini groups, and 9) in some cases royal tombs (Fig. 3) (see Awe 1992, Ball & Taschek 2004; Bullard & Bullard 1965; Conlon & Ehret 1999; Ford 2004; Garber *et al.* 2004; Healy *et al.* 2004; Helmke *et al.* 2005; Iannone 2004: 280-282, 2005; Leventhal & Ashmore 2004; McGovern 2004; Taschek & Ball 1999).

The typological problem, however, arises when one contrasts, for example, the ‘major centres’ of Blackman Eddy and Altun Ha against the ‘major centres’ of Caracol, Naranjo and Lamanai that delimit the Belize Valley in cultural terms (Fig. 4).<sup>3</sup> Can such greatly differing sites really have served

<sup>3</sup> This difference is underscored all the more if one compares the area occupied by the monumental architecture of the epicentre of major sites. Based on the best available published maps, the monumental epicentre of Naranjo (Quintana & Wurster 2004: Fig. 10) and Caracol (Chase & Chase 1987: Figs. 46, 47, 50, 51, 52) amount to just under 20 hectares, with Lamanai (Pendergast 1981: Fig. 3) encompassing approximately 15 hectares. In contrast all the monumental architecture of ‘major centres’ of the Belize Valley fluctuate in areal extent between c. 1.2 and 7.3 hectares, for Blackman Eddy (Garber *et al.* 2004: Fig. 4.1) and El Pilar (Ford 2004: Fig. 15.2) respectively. The epicentres of Altun Ha (Pendergast 1979: Fig. 1, 1982: Fig. 1) and Chau Hiix (Pyburn 1991) both comprise approximately 3.5 hectares of monumental architecture and therefore fall within the parameters of



**Figure 5.** The nominal and titular sections closing the glyphic texts of Vessel 2 from Burial 2, Structure 2, Bedran Group, Baking Pot.

the same function in antiquity and be treated equally as ‘major centres’? The epigraphic data from the Belize Valley provide some tantalising evidence to suggest that the ancient Maya lords inhabiting these sites indeed wished to be seen – at least nominally – as equals in a network of city-states (see Trigger 2003: 92-103).

## EPIGRAPHIC DATA FROM THE BELIZE VALLEY

Despite the rarity of glyphic texts in the Belize Valley several sites have produced carved monuments and inscribed or painted ceramic vessels. In rough chronological order from earliest to latest these sites are: Cahal Pech, Actuncan, Pacbitun, Blackman Eddy, Baking Pot, Altun Ha, Buenavista del Cayo and Xunantunich. It is noteworthy that these sites have been independently identified as ‘major centres’ by archaeologists (Awe 1992; Audet & Awe 2005; Ball & Taschek 1991, 2004; Garber *et al.* 1993a, 1993b, 2004; Healy *et al.* 2004; McGovern 2004; Taschek & Ball 1991; Willey *et al.* 1965). We will focus on particulars of the glyphic texts of Baking Pot, Xunantunich and Pacbitun as these have the most bearing on the present study.

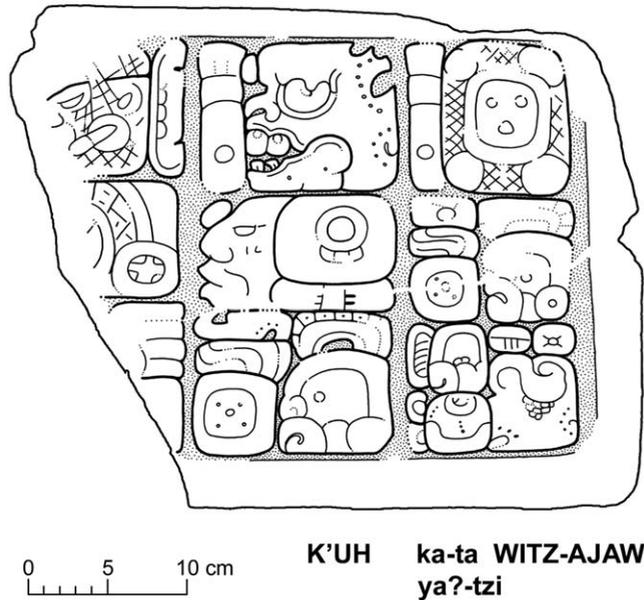
### *Baking Pot*

The first glyphic evidence for royal activity at the site of Baking Pot comes in the latter half of the Early Classic (c. AD 450-650) in the form of two inscribed ceramic vessels (Colas *et al.* 2002). Interestingly, these were not found in the site core proper but in a burial at an elite *plazuela* group in the southwestern periphery of the site approximately 2.5-km from the epicentre (see Conlon & Powis 2004). Though known for some time, the implications of the texts have, however, heretofore never been addressed.

The texts on the vessels present early examples of dedicatory expressions known as Primary Standard Sequences, or as Standard Dedicatory Expressions, and cite the names and titles of their

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‘major centres’ in the upper Belize Valley. Note that in order to make these figures comparable, only the surface areas of monumental structures and plazas has been computed, excluding intrasite and intersite causeways, such the ones at Caracol (Chase & Chase 2001). In addition, though the most recent map of El Pilar (Ford 2004: Fig. 15.2) was used for these computations, it was scaled to fit the average of all pre-1996 maps, since the scale presented in the 2004 publication is incompatible with all previously-released maps and grossly exaggerates the size of the site. These surface areas were calculated by Andrew Bevan (Institute of Archaeology, University College London) using digitised outlines of the monumental site cores as vector polygons in a GIS.



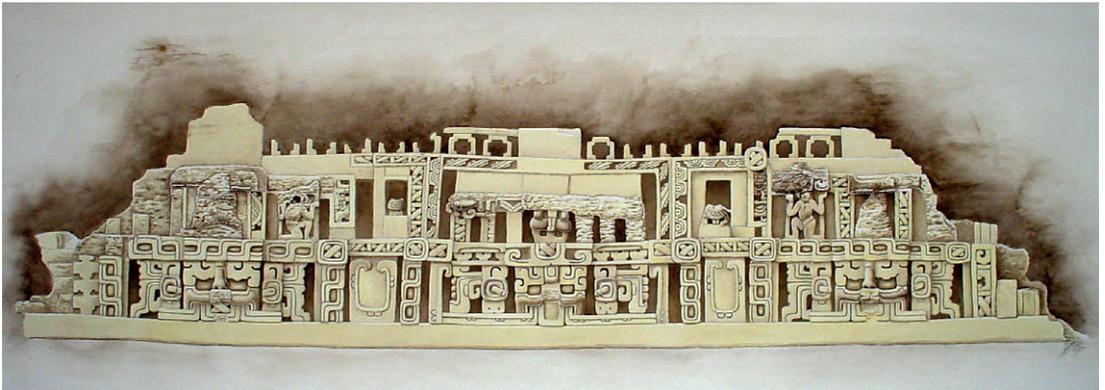
**Figure 6.** Xunantunich, Structure A-32, Panel 2. Note the transcription of the Emblem Glyph at the end of the glyphic text.

owners (Fig. 5). The titles are the aspects of greatest interest. On Vessel 2 is an early dynastic title written as **9-TZ'AK-AJAW**, possibly read *b'aluun tz'akb'u ajaw* (Dmitri Beliaev, pers. comm. 2006).<sup>4</sup> The main sign of this title is composed of two logograms: a stylized and upside down *olla* besides the logogram **HA'** 'water'. Together these two signs form the relational pair with the logographic value **TZ'AK**, following the evidence presented for such sign pairings (Stuart 2003). This exalted, though somewhat rare title is known from Early Classic texts where it bestows on the bearer a regnal title approximating 'the ninth in succession'. Although this is the literal meaning of the title, considering its occurrence throughout the Lowlands in the Early Classic it remains doubtful that it presented an actual dynastic count. Nevertheless, the title is clearly royal and restricted to the highest echelons of society. As a result if it can be demonstrated that the vessels recovered at Baking Pot are actually local, this would serve as evidence for the presence of a royal dynasty at the site that was active and well-established by the latter portion of the Early Classic.

### *Xunantunich*

Less well-known are the two fragmentary carved panels that have been discovered at Xunantunich over the past decade. Of these, the glyphic text of Panel 2 is the more telling (Fig. 6). Based on style and paleographic attributes it has been dated to between AD 780 and 820 (Helmke *et al.* 2010: 101-107). The first legible segment represents a variant of the 'flint and shield' couplet that is used as part

<sup>4</sup> The same compound had previously been erroneously transliterated as **4-li-TE'-HA'-AJAW**, read *Chanilte' Ha' Ajaw* and treated as a so-called problematic Emblem Glyph (Colas *et al.* 2002). In light of the new interpretation the preliminary readings and implications of this sign no longer apply.



**Figure 7.** The eastern stucco frieze of the Castillo (Structure A-6-2<sup>nd</sup>) at Xunantunich. Note how the *witz* monsters are flanked by young maize sprouting from the earflares, denoting the locative suffix *-nal*. Watercolour rendition by Gustavo Valenzuela, courtesy of the Belize Institute of Archaeology.

of expressions referring to war or martial actions. In this case the expression is written as **ti-TOK' ti-PAKAL** for *ti to[o]k'ti pakal*, or 'with flint [and] with shield'.

Following this the subject of the clause is expressed as a series of three toponyms. The first two belong to a particular class of toponyms suffixed by *-nib'* (Helmke *et al.* 2006: 154-157, 178 n. 2)<sup>5</sup>. Several examples of this type of toponym are known, with three great renditions on a slate mirror backing discovered in Burial 49 at Topoxte (Fialko 2000:144-149, Figs. 102-103; see Helmke *et al.* 2006: Fig. 7c-d). These examples include a toponym for Naranjo that is possibly read as *Chuwaajnib'*<sup>6</sup> as well as a place name read *Te'nib'* for "Tree (Place)" and another read *Took'nib'* for "Flint (Place)". The last two may also be represented in the text of Xunantunich Panel 2. These toponyms have not been correlated to specific archaeological sites and thus their exact location remains unknown, though they are thought to be located in the greater Naranjo area that may well include parts of the Belize Valley.

The last toponym in the text is undoubtedly the most important and represents a complete and hitherto unknown Emblem Glyph. Its main sign is the glyph for **WITZ** or 'mountain' and is prefixed by syllabic signs that together may yield *katyaatz* (written **ka-ta-ya?-tzi**). The whole titular expression may thus be read *K'uhul Katyaatz Witz Ajaw* or 'Godly *Katyaatz Witz* King'. While we cannot be

<sup>5</sup> Alfonso Lacadena (pers. comm. 2006) has suggested that this *-nib'* suffix is analogous to the *-lib'* suffix seen in the inscriptions of the western Lowlands. Accordingly, the *-lib'* suffixes would represent the western Ch'olan manifestation, while *-nib'* would represent the eastern Ch'olan version of this toponymic suffix. Both suffixes serve to qualify places where something occurs or takes place. As such the reference to **CHAK-li-b'i** at Tonina would thus have served as a toponym, probably 'place where seizure takes place', if *chak* is the verbal root 'to seize'. Similarly **TE'-ni-b'i** could be translated as 'place where trees occur'. Analyzed as *-nib'* and *-lib'*, the *-n-* and *-l-* particles must serve to verbalise nouns so that these may in turn be instrumentalized with an *-ib'* suffix (Helmke *et al.* 2006: 178, n. 2).

<sup>6</sup> Luis Lopes (2003) has suggested, based on the pattern of phonetic complementation for the 'Jaguar God of the Underworld' (JGU) logogram, that it may have had the value of **CHUHAJ** ~ **CHUWAJ** and read *chuwaaj*. This reading is reinforced in the case of the Topoxte mirror backing and an unprovenanced vessel attributed to Naranjo's ruler "Ajwosaaj" (K0681) by the presence of a **ji** suffix, serving as phonetic complement, and producing a long terminal vowel. In Yucatek *chuwaj* has been understood to target 'scorpion' as seen in the entry *ek' chuwaj* (Barrera Vásquez 1980:151), though Classic-period iconographic depictions of this entity are decidedly feline.

certain of the exact meaning, in this context the most productive gloss for *Katyaatz Witz* is ‘Clay-bearing Mountain’<sup>7</sup>. As such the prominent hilltop upon which Xunantunich is sited and the abundance of high-quality sources of clay in the vicinity all suggest that the toponym is that of the site proper. In addition, the famous frieze that decorates the side of Xunantunich’s most imposing structure, known as *El Castillo* (Structure A-6), provides some further clues (Fig. 7). The remains of the frieze depict small cosmograms with the corresponding earthly realm represented by a series of mountain creatures known as “Witz Monsters”. These are also marked by young maize sprouts that together spell out *witznal* or ‘mountainous place’. The iconography of the stucco frieze may thus mark the structure as an artificial emulation of *Katyaatz Witznal*.

At this juncture it bears reminding that the central element of Emblem Glyphs are frequently the principal toponym of a site and this pattern seems to be applicable here also (compare the toponyms presented in Stuart & Houston 1994: 107 against the Emblem Glyphs tabulated by Martin & Grube 2000: 19).

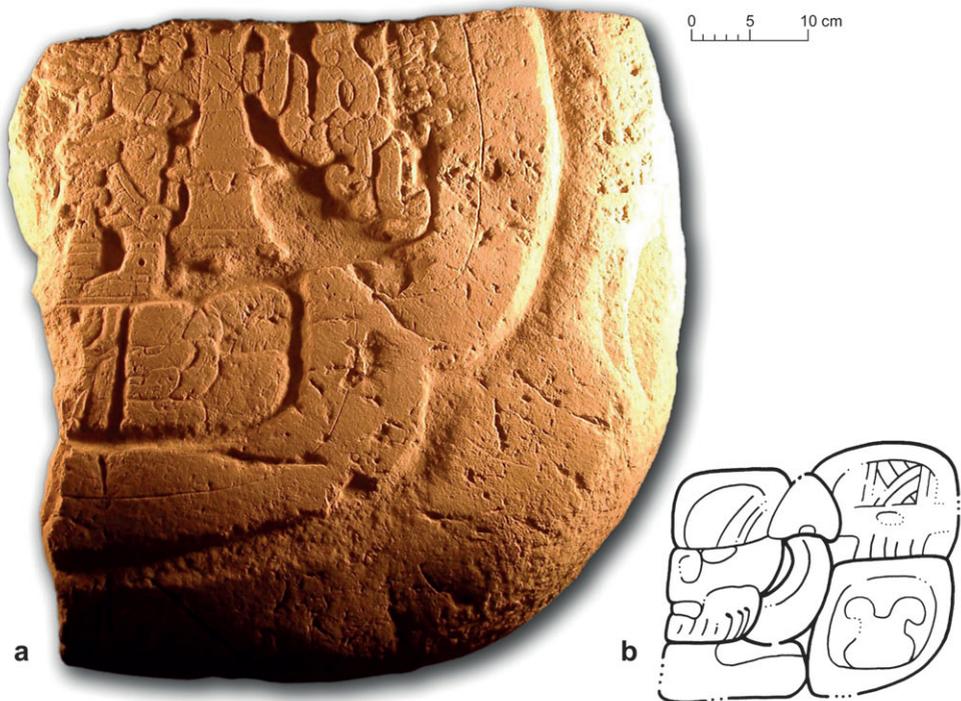
### *Pacbitun*

During the first half of the Early Classic the site of Pacbitun began its sculptural tradition. The monument known as Altar 3 was discovered broken and cached in later architectural core of Structure 1 (Paul Healy pers. comm. 2005). Like the Xunantunich panels, it also has been dated stylistically as no accompanying date was found. It shows a standing ruler holding a bicephalic ceremonial bar across his chest, enclosed within the remains of a quatrefoil cartouche (Fig. 8a). The pose is rigid and the iconography stylized, a characteristic that places the monument somewhere in the latter half of the fifth century AD. In addition, the ruler is shown standing atop two glyphs (Fig. 8b).

Based on the overall reconstruction of the monument’s figurative scene it seems that these two glyph blocks (pY1 and pZ1) may have been the only glyphic text adorning this monument. The better-preserved of the two glyphs (Fig. 8b) represents the ancient toponym of Pacbitun, as part of a “Sky-Cave” or *Chan Ch’e’n* locative expression (Stuart 2002, Helmke 2009: 83-86). In the absence of additional examples and due to the early style in which it is rendered we are hesitant to provide a reading. Nonetheless, the main sign appears to render a gopher head with a mirror sign infixed into its forehead, followed by two syllabic signs. The whole collocation was possibly written as [CELT]B’AH-*ja-ni*?, or more simply as B’AH-*ja-ni*? since mirror signs frequently form integral part of Early Classic gopher logograms.

Though tentative, the Pacbitun toponym may be rendered as part of a complete Emblem Glyph in the texts of Caracol. This possible example is rendered on Stela 21 in the caption to the bound captive kneeling at the feet of Caracol’s then current king (Fig. 9a). Though the name of the Caracol monarch is now lost, the dedicatory date of this finely carved slate stela clearly corresponds to AD 702 (as rendered in the 9.13.10.0.# 3 Kumk’u date on the monument; Houston 1987: 100; Martin &

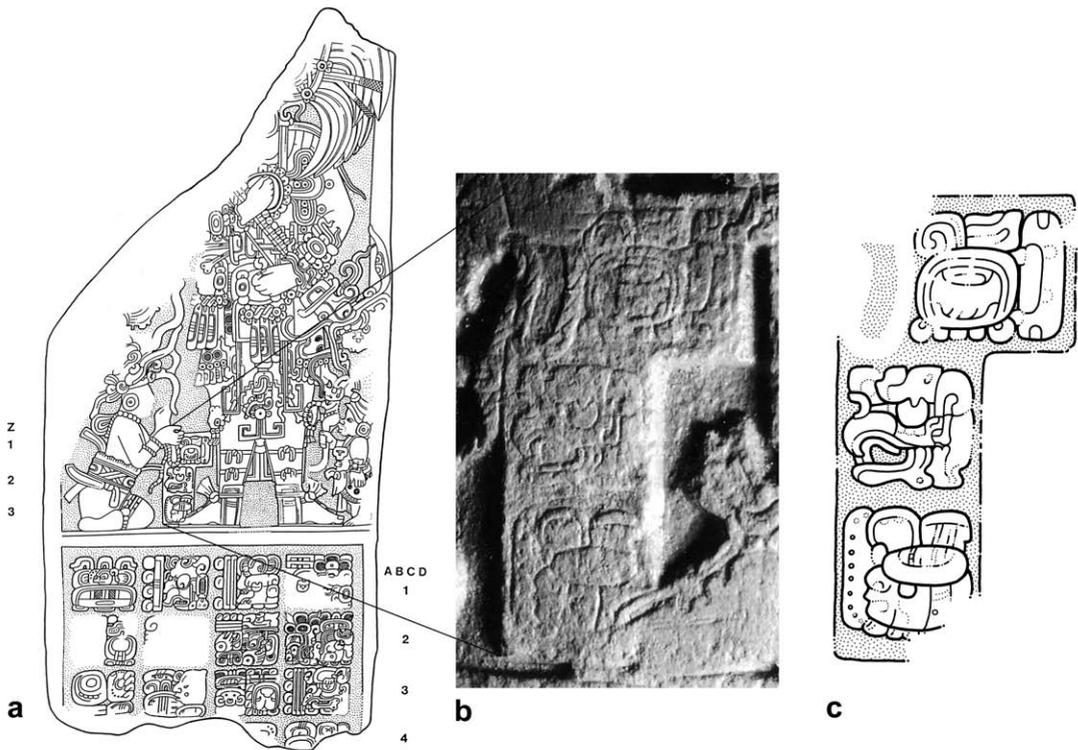
<sup>7</sup> The modifier of *witz* is preserved as *ka-ta-#-tzi*, in which the questionable element compares to a *ya* syllabogram. In this interpretation the resulting term can be segmented morphologically as: *kat-y-aatz*. Among other possible glosses (including referents to a type of plant), the root *kat* (otherwise *káat*) is most productively understood as ‘clay’ in Yukatek (Barrera Vásquez 1980: 303; Bastarrachea Manzano 2005), where we see in terms such as *pak’ kat* and *káat* for ‘small jar’, ‘olla’, and ‘apaste’ (Barrera Vásquez 1980: 626; Bastarrachea Manzano 2005). In the second segment we see the root *atz* that occurs in compound expressions referring to the ‘giving’ and ‘granting’ of charity or alms as *yatz* (Barrera Vásquez 1980: 970) and as the root *atz* in terms for ‘payment’ (Barrera Vásquez 1980: 19). Though tentative, the whole toponymic expression *Katyaatz Witz* could thus be roughly translated literally as ‘clay are the alms of the mountain’ and more loosely as ‘Clay-bearing Mountain’ (Helmke *et al.* 2006: 156).



**Figure 8.** Pacbitun, Structure 1, Altar 3. a) General view; b) detail of the toponymic expression referring to Pacbitun (photograph and drawing by Christophe Helmke, courtesy of Paul Healy). Scale bar refers to the whole of the altar, not the glyphic detail.

Grube 2000: 94). The captive's regalia and his title identify him as being of royal status. The caption marking the defeated king names him as *Chanal Chak Chapaht/Wak* or 'Celestial Great Centipede' (see Guenter 2007) (Fig. 9c). His royal title is identified by the Emblem Glyph that closes the caption. The Emblem Glyph shares many details of the Pacbitun toponym seen on the Early Classic Altar 3. The two examples may differ in the details, but considering the temporal span that separates both, it is a reasonable match. If our interpretation is correct, the text of Stela 21 would relate that the current king of Caracol attempted to expand the northern reaches of his domain sometime around AD 702. It is as part of these actions that Pacbitun would have fallen prey to Caracol.

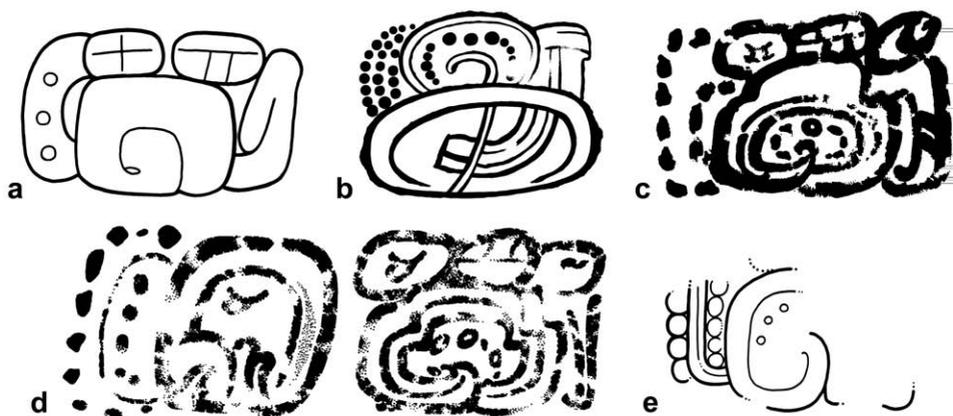
In sum, the few royal titles discovered in the Belize Valley are all associated to sites that archaeologists have independently identified as 'major centres'. To this should also be added the probable Emblem Glyph of Altun Ha (Fig. 10), though it too requires additional supporting evidence (cf. Martin & Grube 2000: 19; Mathews 1991: 20). These findings suggest that perhaps all 'major sites' in the Belize Valley originally claimed such Emblems though preservation, sampling and lack of inscriptions may be faulted for patchy representation elsewhere. The close congruity between archaeological and epigraphic data on this point suggests that these alternate approaches have nonetheless produced closely intermeshing results. Before proceeding, however, we review Emblem Glyphs and their original function.



**Figure 9.** Caracol, Stela 21. a) Overall view of the front face (drawing by Nikolai Grube); b) glyphic caption to the captive (adapted from a photo, by A. Hamilton Anderson, courtesy of the Belize Institute of Archaeology); c) drawing of the glyphic caption, rendered at the same scale as the photo.

## EMBLEM GLYPHS AND MODELS OF ANCIENT MAYA TERRITORIAL ORGANISATION

What is now known and agreed upon by epigraphers is that Emblem Glyphs primarily served as the exalted title of the most prominent members of royal courts (Grube 2000: 549-550; Martin & Grube 2000: 17-19; Martin 2004). It is precisely because most royal Maya lineages resided in the same place over the course of history that many Emblems *appear* to refer to a particular site (cf. Mathews 1991). Nonetheless, the variable component of Emblem Glyphs in many if not most cases actually is the principal toponym of the site as we have seen for the Belize Valley. In all cases, however, Emblem Glyphs served as titular referents to monarchs of particular royal courts, not sites or toponyms *per se*. Supporting this view is the *Mutu'l* Emblem Glyph that was divided between Tikal and Dos Pilas (Martin & Grube 2000: 42, 55, 56-57), as well as the *B'aake'l* Emblem shared between Palenque, Tortuguero and Comalcalco (Chase 2004: 324; Martin 2004; Martin & Grube 2000: 165). These illustrative cases demonstrate that Emblem Glyphs were liable to geographic dispersal when dynasties fissioned (i.e. Tikal vs. Dos Pilas) or ruling dynasties expanded their territories (i.e. Tortuguero over Comalcalco). This conclusion has recently been furthered by the identification that the *Kaanu'l* or “Snake-Head” Emblem, which came to be used at Calakmul in the Late Classic, superseded a “Stone Bat” Emblem that was used locally at the site in the Early Classic (Martin 2005: Figs. 1 and 6). The



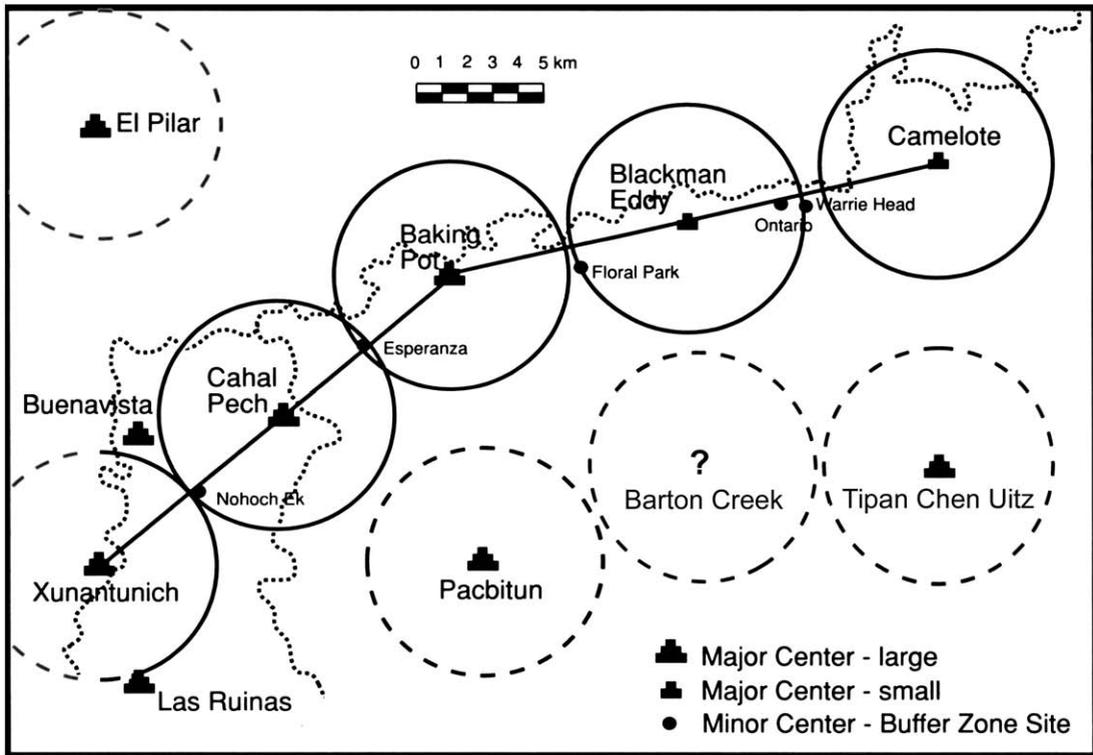
**Figure 10.** Various attestations of the probable Emblem Glyph of Altun Ha. a) Altun Ha, jadeite plaque from Tomb B-4/6 (RP 256/3) (based on a drawing by David Findlay and inspection of the original); b) unprovenanced, limestone effigy of God N (K3331) (based on a photograph by Donald Hales, courtesy of Phil Wanyerka); c) Najtunich, Drawing 34 (based on a photo by Chip and Jennifer Clark); d) Najtunich, Drawing 65 (based on a photo by Chip and Jennifer Clark); e) Altar de los Reyes, Altar 3 (based on a drawing by Nikolai Grube).

sharing of Emblem Glyphs between distant sites clearly negates whatever connotations of ‘place’ that may have accrued over the course of their use at a particular site and conclusively demonstrates that these did not serve toponymic functions.

Consequently, it is clear that Emblem Glyphs functioned primarily as exalted royal titles. In theory each Emblem Glyph represents the same exact title and thus ancient Maya kings claimed to be at least nominally equal in rank and status.<sup>8</sup> It is precisely on this *emic* basis that it makes sense to produce maps of the Maya area in which sites associated with distinct Emblem Glyphs can be seen as capitals of city-state territories under the administration of equally-distinct royal courts, as this is the view of political realms that was recorded glyphically by the ancient Maya themselves.

However, research conducted by Simon Martin in collaboration with Nikolai Grube over the past decade has shown that not all royal courts were equal in status (Martin & Grube 1995, 2000: 17-21). The key here is to recognise the dichotomy between the “title” and “status” of particular institutions or incumbents thereof, in anthropological terms (see Trigger 2003: 71-74, 75-76). Thus, while all lords bearing Emblems Glyphs claimed nominally-equal titles, their respective power, charisma and

<sup>8</sup> Though it must be remarked that the *ajaw* title was only one of many by which nobles were able to distinguish themselves and invoke prerogatives of their social position. Indeed, the modifying prefix *k’uhul* (“godly/divine”) to the title *ajaw* that became standard in the Late Classic is an innovation dating to the middle Classic. This innovation was apparently motivated by the desire to reinstate original hierarchies amongst a growing proliferation of *ajawtaak* ‘kings’ between those that were deemed “godly” and those that were not (see Houston 1986; Grube 2005: 87, 97, 98). In the late Early Classic we also see the introduction of the *kalo’mte*’ title, perhaps under the influence of Teotihuacan. Though the meaning of this title remains elusive it is clear that it is superordinate to *k’uhul ajaw* and that the title of *kalo’mte*’ was only gained by a second enthronement into the appropriate institution. This title and its associated practices were reserved for the most prominent royal courts in the Lowlands and thus stands as another means of creating title-based inequalities between persons of noble birth. In addition, we see a proliferation of other lesser titles that are restricted to particular regions or sites, such as the *sak chuwe’n* title of Naranjo.



**Figure 11.** The ancient Maya territorial organisation of the Upper Belize Valley as proposed by Garber *et al.* (1993a, 1993b; Driver & Garber 2004) and amended by Conlon and Ehret (1999) (map modified by Christophe Helmke, based on Map 4 in Driver & Garber 2004 and the map presented by Conlon & Ehret 1999).

influence differed quite noticeably over the course of Maya history. The model builds upon that of Peter Mathews (1988; 1991), but adds a historically-specific dimension in which many lesser kings were drawn into hierarchical networks of alliance and vassalhood below the auspices of a more powerful king. As part of these allegiances overlords would supervise and endorse vassal kings when they took office; vassals and overlords also conjointly partook in ritual actions together; and alliances were cemented by ritualised gift exchange and marital unions (Martin & Grube 1995, 2000: 17-19). As such the territorial model initially formulated by Peter Mathews remains intact, but the small nominally-independent kingdoms within that model were variably held under the sway of one superior lord or another. This epigraphically-devised model finds a close match in the “tributary systems” as defined by Bruce Trigger, in which royal capitals exerting influence over others are classed as ‘hegemonic city-states’ (Trigger 2003: 94-103, 114-115).

## ARCHAEOLOGICAL MODELS OF ANCIENT MAYA TERRITORIAL ORGANISATION

Of the many archaeological models formulated to date, the one that is most inclusive of Belize Valley data and that agrees most to that formulated by Mathews, is the one initially proposed by James Garber and colleagues in 1993 and subsequently revised (Garber *et al.* 1993a, 1993b; Driver & Garber 2004;

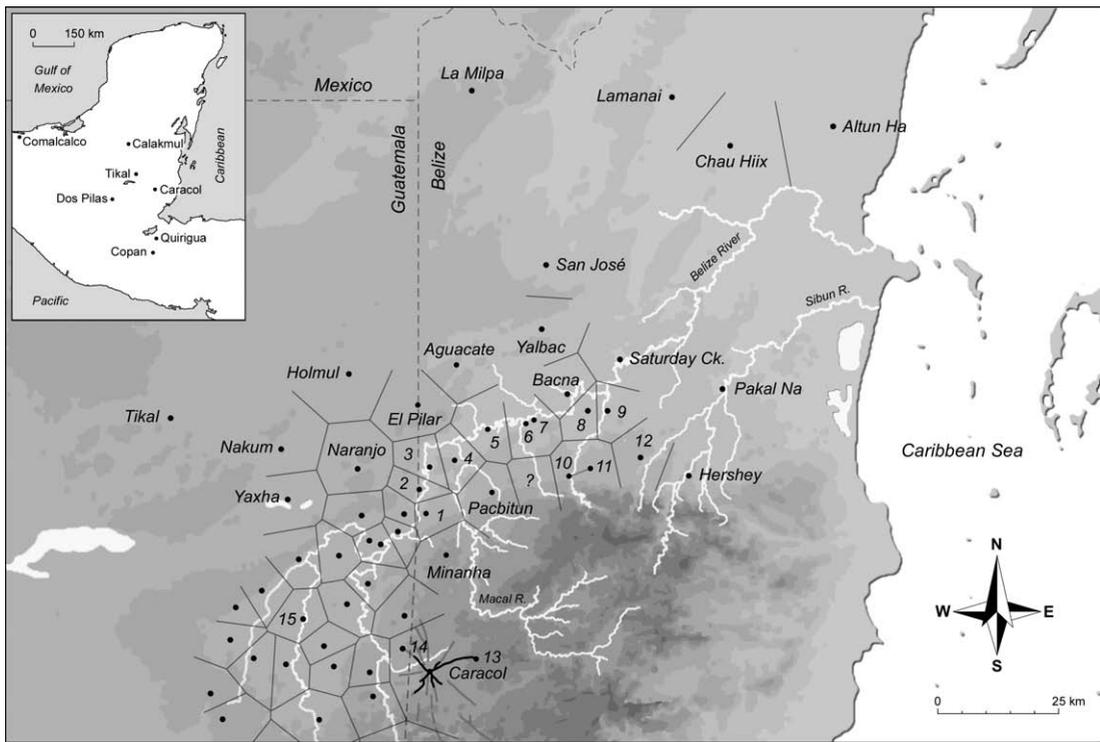
Conlon & Ehret 1999).<sup>9</sup> In this model each ‘major centre’ of the Belize Valley (or site that exhibits the attributes of ‘major centres’, irrespective of absolute size) is viewed as a separate territorial node. In so doing Garber and his colleagues have found that there is a regular spatial patterning in which most ‘major centres’ in the Belize Valley are spaced at nearly equal intervals of 9.9 km on average (Fig. 11).

The model, however, fails when applied to the headwaters of the Belize Valley where the concentric arcs of Cahal Pech, Buenavista, Actuncan and Xunantunich grossly intersect. In large part this may be due to the riverine course of the Macal and Mopan Rivers, which in that area predispose for asymmetrically-shaped territories. The important point to stress here is that the prominent periods of occupation at several of these sites is successive and that a synchronic territorial model for this part of the Belize Valley is thus difficult to achieve. Based on available data it would seem that for sites along the Mopan River the sequence is as follows: Actuncan (Early Classic), Buenavista (Middle and Late Classic), and Xunantunich (Terminal Classic) (Leventhal & Ashmore 2004; McGovern 2004; Taschek & Ball 2004). As such these sites should be treated as ‘major centres’ or territorial nodes during the most important phases of their occupation, though it has to be conceded that a certain degree of overlap has also been documented. Nonetheless, based on this sequentiality, Actuncan, Buenavista and Xunantunich should be viewed conjointly as alternating nodes for this westernmost polity in the Belize Valley, which would have extended around these sites in antiquity. Similarly, the newly discovered site of Lower Dover is so close to Blackman Eddy that is hard to hypothesize that both should be independent nodes of two different polities. Again there may be some diachronic sequentiality here since Blackman Eddy is well-known for its very early occupation and Preclassic architecture (Garber *et al.* 2004), whereas all the evidence gathered for Lower Dover to date is entirely Late Classic (see Hoggarth *et al.* 2010). As such Lower Dover appears in large measure to be the successor and inheritor of what might be termed the Blackman Eddy polity.

According to the model of Garber and his colleagues (1993a, 1993b; Driver & Garber 2004), several ‘minor centres’ are located anywhere between 4 and 5 kilometres along arcs traced around ‘major centres’, thereby supporting the spatial coherence that this model projects. This finding provides some insight into the function of ‘minor centres’ in the Belize Valley as lesser nodes maintaining the extent of the territory under the control of a ‘major centre’ (cf. Iannone 2003). As such ‘minor centres’ can be seen as provincial administrative seats managing the exaction of surplus production from the surrounding realm for eventual redistribution to the central royal ‘major centre’ (see Lacadena García-Gallo 2008; Helmke *et al.* 2004). In addition, the regular-spacing of ‘major centres’ implies a certain consistent underlying territorial structure that reinforces the identification of these sites, in spite of their small size and spatial distribution. Supporting this conclusion is the fact that the 9.5-km long earthworks surrounding the large site of Tikal are spaced approximately 4.5km from the epicentral core (Chase & Chase 2003: 114; Haviland 2003: 134-142; Puleston & Callender 1967). Similarly, the “interior ring” of ‘minor centres’ surrounding Caracol occurs on an arc of approximately 3.0 km

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<sup>9</sup> It should be reiterated here that most models for territorial organisation in the Belize Valley are site-specific. Thus Ball and Taschek (1991; Taschek & Ball 2004) have focused on Buenavista del Cayo, but have suggested that Xunantunich and Cahal Pech formed part of the polity centred on Buenavista. Ford (2004: 242, 248-250) has preferred seeing El Pilar as the pre-eminent site in the Belize Valley on account of its size and preferential environmental setting. In turn, the investigators of Xunantunich and Cahal Pech have refuted the models of Ball and Taschek as well as Ford and have argued for the autonomy of these sites and the discrete polities they reconstruct (Ashmore 1998; Iannone 2003; Leventhal & Ashmore 2004). Other researchers have opted for reconstructing discrete polities around the major centres that they have investigated, without attempting to integrate other such sites (Awe 1992; Audet & Awe 2005; Conlon & Ehret 1999; Driver & Garber 2004; Garber *et al.* 2004; Healy *et al.* 2004; Helmke *et al.* 2005; Iannone 2005; Lucero *et al.* 2004; McGovern 2004; Taschek & Ball 1999).

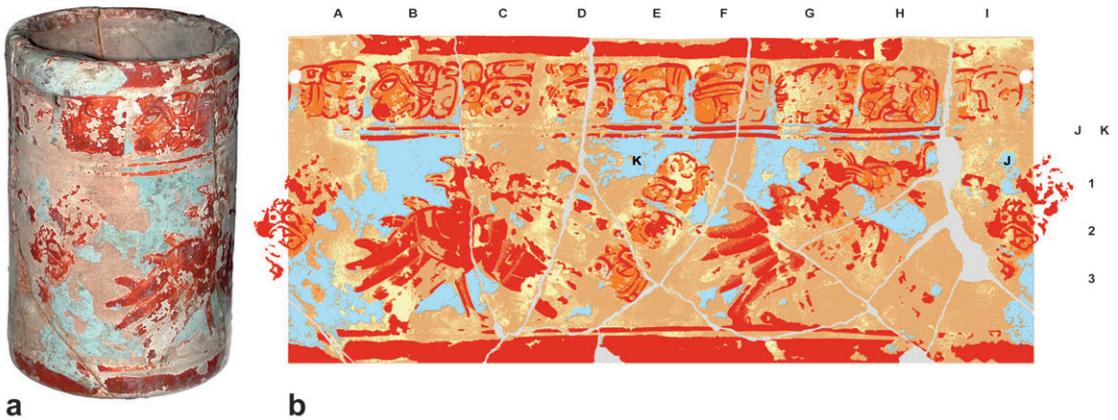


**Figure 12.** Thiessen polygons rendering the reconstructed territorial organisation for the eastern Central Maya Lowlands. Data for the Mopan and Chiquibul Valleys of south-eastern Peten are based on the results of the Atlas Arqueológico de Guatemala project (Laporte 2001; Laporte *et al.* 2003; Laporte & Mejía 2006); data for the Upper Belize Valley are based on the present study. Numbered site designations are as follows: 1) Las Ruinas de Arenal, 2) Xunantunich, 3) Buenavista del Cayo, 4) Cahal Pech, 5) Baking Pot, 6) Lower Dover, 7) Blackman Eddy, 8) Camalote, 9) Hanging Rock (a.k.a. Irish Creek), 10) Cahal Uitz Na, 11) Tipan Chen Uitz, 12) Deep Valley, 13) Hatzcab Ceel (a.k.a. Mountain Cow), 14) La Rejoia, 15) Ucanal. Note the causeways extending from Caracol, which neatly define the territory under its direct control.

(Chase 2004: 113, 114) whereas at La Milpa, satellite sites occur at a distance of c. 3.5 km (Tourtellot *et al.* 2000). The relative consistency of minor centres at boundaries between 3 and 5 km distant, in the central Maya Lowlands, irrespective of site size, implies that there is a logistically-motivated reasoning behind this pattern, which cannot be overstated (see Chase & Chase 2003; Iannone 2003).

### THE INFLUENCE OF NARANJO AND CARACOL ON THE BELIZE VALLEY

The melding of archaeologically – with epigraphically – devised models produces a highly “balkanised” view of the Belize Valley, which is entirely in keeping with conclusions reached for the adjoining Mopan and Chiquibul Valley sites in the south-eastern Peten (Fig. 12) (Laporte 2001; Laporte *et al.* 2003; Laporte & Mejía 2006). As a patchwork of small and medium ‘major sites’, the Belize and Mopan Valley areas contrasts sharply with the highly centralised and even territorially-gregarious Caracol (Fig. 12). The network of causeways at Caracol not only defines the limits of the territory under its direct control (economic and/or political), but clearly indicates that its evolutionary



**Figure 13.** Miniature Cabrito-cream Polychrome vase, Burial 1, Structure B, Baking Pot. Height of vessel is c. 9 cm. The whistle-like component modelled into the rim is visible in the upper left portion of the photo and the whistle’s “window” is marked by circular void in the drawing, at the start of the next. a) Photograph (by Carolyn Audet); b) roll-out drawing of the vase, at the same scale as the photo, with red paint rendered as black. For clarity, orange wash and blue-tinted gesso are not rendered (drawing based on composite photo mosaic by Christophe Helmke and inspection of the original).

trajectory differs quite radically from that of adjacent sites in the Belize Valley (see Chase & Chase 2001; Trigger 2003: 355-358). Though the Emblem Glyphs of the Belize Valley suggest that local lords claimed independence we know from statements of overlordship in the remainder of the Lowlands that all sites were part of overlord-vassal networks (see Martin & Grube 1995, 2000: 17-21) or ‘tributary networks’ (Trigger 2003: 94-103, 114-115) at one point or another. In this political climate it is difficult to imagine the small sites of the Belize Valley remaining completely independent throughout the course of their history. Indeed, we think that it can be readily said that these sites must have been drawn under the sphere of influence of Caracol, Naranjo, or Lamanai during at least parts of their histories. Even if matters of local politics and administration remained the autonomous prerogative of Belize Valley kings, many other aspects including diplomacy, trade, tribute and warfare were undoubtedly managed indirectly from abroad.

### **Naranjo**

In this regard the epigraphic data of the Belize Valley provide us with additional clues. The extensive evidence for Naranjo’s influence has already been well-documented for Xunantunich (Ashmore 1998: 173; Houston *et al.* 1992: 506-507; LeCount *et al.* 2002: 43; Leventhal 1996: 10; Martin & Grube 2000: 83; Leventhal & Ashmore 2004: 171) and Buenavista in particular (Helmke 2012; Houston *et al.* 1992: 511-518; Taschek & Ball 1992; Reents-Budet 1994: 294-311; Reents-Budet *et al.* 2000). To these should be added finds made at Baking Pot, a cave near Las Ruinas de Arenal, Cahal Pech, Hershey, and possibly even Altun Ha, which all exhibit glyphic references to Naranjo or its kings.

The Baking Pot evidence consists of a miniature cylinder vase with a small whistle-like component modelled into the rim (Fig. 13a-b). This cream-polychrome vase was discovered in Burial 1 of Structure A1 (formerly Str. B) along with ten other ceramic vessels (Audet & Awe 2005: 361-362; Helmke & Awe 2008). Though made of highly friable ‘volcanic ash’, it is clear that it represented two waterfowls, as is typical of “Holmul Style” ceramics from Naranjo-area workshops (Reents-Budet 1994: 179-186). The

glyphic texts adorning this small vase are arranged in a single row along the rim, and two short diagonal columns separating the avian figures. The text is opened by a dedicatory Primary Standard Sequence,<sup>10</sup> and the remainder is closed by an extensive nomino-titular string referring to the ancient owner of the vessel.<sup>11</sup> Though eroded in several key parts, the remaining details are in keeping with the *K'ahk' X Chan Chaahk* (H1-I1; Fig. 13b) names that were typical for Naranjo monarchs in the Late Classic, between AD 693 and sometime after 780 (see Martin & Grube 2000: 74-81). In addition, referents to Naranjo's royalty are present in the form of the prestigious *Sak Chuwe'n* (K3) ("Pure Artisan") title, here prefixed – as was customary – by *Elk'in 28* (K1-K2) (see Naranjo Stelae 13, 21, and the reverse of Altar 2). Another partly legible collocation (J2) may record the ethnonym of Naranjo as *Wak Kab'nal Winik* 'Six Earth-place Person'. The remaining elements of the nomino-titular sequence find its best match with the king known as *K'ahk' Ukalaw Chan Chaahk* (Audet & Awe 2005: 362; Grube & Martin 2004: II-67), who reigned between AD 755 and c. 780 (Martin & Grube 2000: 80-81; Grube 2004: 204-205).<sup>12</sup>

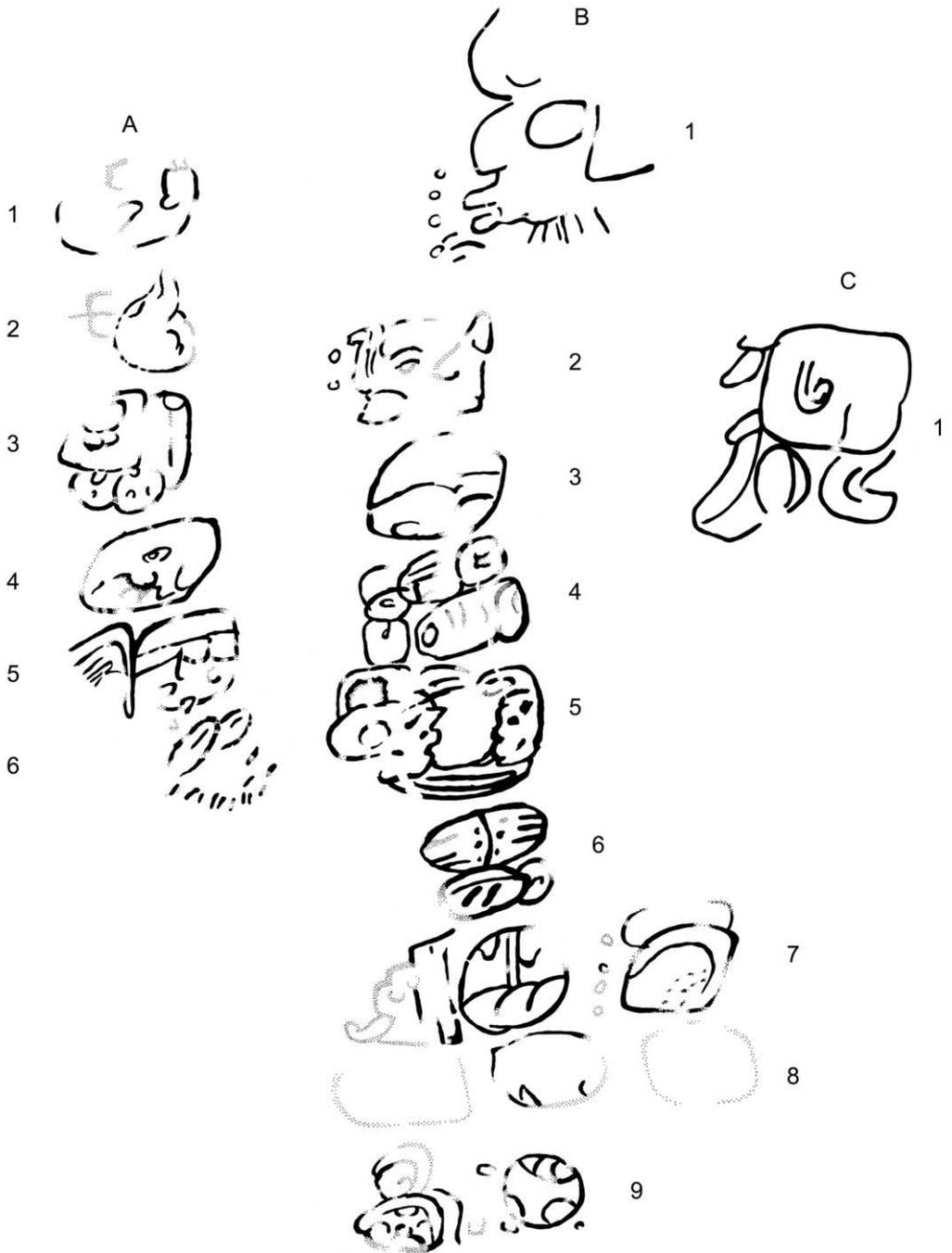
Similarly, a cream-polychrome vase depicting a Holmul Dancer scene rendered in pure Naranjo-area style (see Reents-Budet 1994: 179-186) was found in a cave "near Benque Viejo" (Gann 1925: 72) that is to say, near Xunantunich (as it is now known). Little of the glyphic text adorning this vase was recorded in the original silver-print with the exception of the Calendar Round date, which appears to read 8 Ajaw 8 Woj (Gann 1925: 72). Based on the vessel's style this date probably commemorates the period-ending of 9.13.0.0.0, or the 14<sup>th</sup> March, AD 692. This temporal placement would make the vase contemporaneous to the reign of Naranjo's "Lady Six Sky" and precede the accession of her son *K'ahk' Tiliw Chan Chaahk* by about a year (see Martin & Grube 2000:74; Grube 2004: 200-201). Gann's description of the cave's location is wanting, though due to geological conditions, caves occur predominantly to the south of Xunantunich in the karstic foothills of the Vaca Plateau. Gann appears to have investigated several caves in the area and those that have since been relocated are situated in the vicinity of the cave known as Chechem Ha (approximately 10 km southeast of Xunantunich) (Cameron Griffith pers. comm. 2003). As such, the original find spot of this vase was probably in an area proximate to Las Ruinas de Arenal (or c. 20-25 km from Naranjo).

The reference to Naranjo that has been found at Cahal Pech is of a different sort (Fig. 14). In a central northern room of the Late Classic (c. AD 700-800) Structure A-1, in the palatial complex at the site, the plastered rear wall over the throne was inscribed with three short glyphic clauses (Helmke *et al.* 2003). Though viable, the execution of the glyphs is in keeping with graffiti seen elsewhere in the Maya Lowlands, such as at Tikal (Triuk & Kampen 1983: Figs. 29c, 31d, 32a, 42, 69d, 78a) and Nakum (Hermes *et al.* 2001). The clause of interest is the final one (B7-B9), which is headed by a weathered non-standard

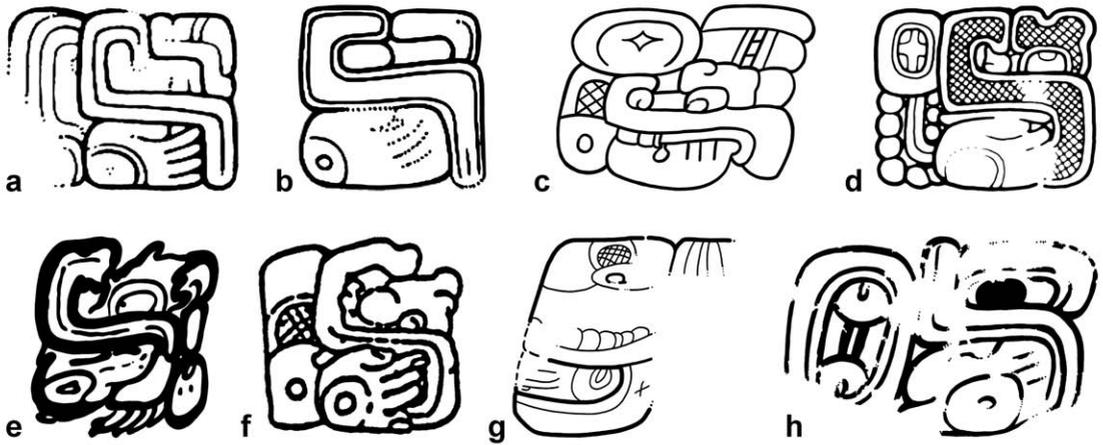
<sup>10</sup> The Primary Standard Sequence can be analysed as: **a-AY?-ya** GOD.N-**yi** **yu-k'i-b'i** **ti-yu-ta** **IX TE'-le ka-  
{ka}-wa** > *ay ?Vvy yuk'ib' tiyuta[l] ix[im] te'[e]l kakaw* > "here got "dedicated" the drinking-impliment for the  
'fruit' of maize-cacao".

<sup>11</sup> The names and titles of the ancient owner of the vessel have been analysed as follows: **K'AK'-KAL? #cha-#  
#ch'a?-#NAL[WINIK] #EL-K'IN-ni {8}-20 SAK-CHUWEN?** > *k'a[h]k'[u]kal[aw] [chan] cha[ahk] ? ?-nal  
winik ? elk'in a[j] k'al sak chuwe[']n*.

<sup>12</sup> Thus by the time the local lord of Baking Pot was gifted the miniature vase of *K'ahk' Ukalaw Chan Chaahk* (AD 755-780+), Naranjo's sphere of influence extended by as much as 30 km to the east. This is nearly double the distance when compared to that of his predecessor *K'ahk' Tiliw Chan Chaahk* (AD 693-728+), who clearly maintained a particular relationship with Buenavista del Cayo (c. 15 km distant). In contrast *K'ahk' Tiliw Chan Chaahk's* relation to the contemporary Ucanal king "Itzamnaaj" *B'ahlam* (as documented as part of the unprovenanced vase K1698; see Houston *et al.* 1992: 511-512) indicates that the sphere of influence at the time extended more to the south towards Caracol (as Ucanal is located as much as 30 km to the south), rather than being focused on the Belize Valley. It is apparently, under the reign of *K'ahk' Ukalaw Chan Chaahk*, once the Naranjo dynasty had redressed itself from the military failures of *Yax Mayuy Chan Chaahk* (AD >730-744), that the Belize Valley would once more receive Naranjo's attention.



**Figure 14.** Graffito etched into the north wall of Room 2, Structure A-1, Cahal Pech (drawing based on photographs by Jaime Awe and field sketches; the original no longer exist).

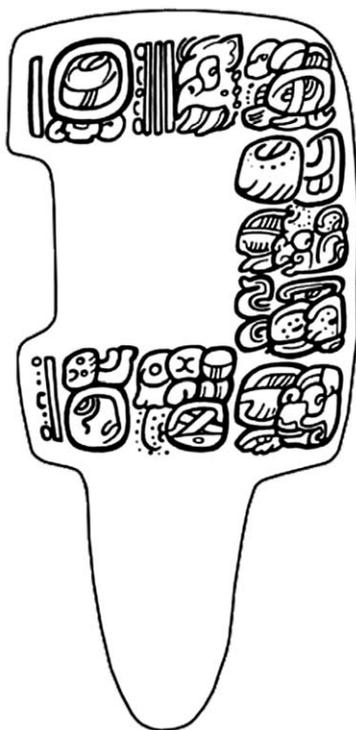


**Figure 15.** Examples of the mythical and so-called ‘Square-Nosed Beastie’. a) Naranjo, Stela 24 (drawing by Ian Graham); b) Naranjo, Stela 13 (drawing by Ian Graham); c) Naranjo, Altar 1 (drawing based on a photograph by Christophe Helmke); d) Tikal, Temple IV, Lintel 2 (drawing by Simon Martin); e) Unprovenanced ceramic vase, K2358 (drawing based on a photo © Justin Kerr); f) Copan, Stela J (drawing by Linda Schele); g) Altun Ha, incised ceramic Vessel RP 595/161 (drawing based on photos by Christophe Helmke and inspections of the original); h) Altun Ha, Petkanche ceramic Vessel RP 595/56 (drawing based on photos by Christophe Helmke and inspections of the original).

Type V Calendar Round date (#-AK’AB’? 4-#-SIHOM at B7). The three intervening glyph blocks are too eroded to read, but the final two do retain some diagnostic elements. The penultimate collocation (B9) is composed of the **WINIK** main sign, and is surmounted by what may be the **KAB’** logogram, from the base of which appear to emanate vegetal swirls that may cue the locative -**NAL**. Together this would yield *kab’nal winik*, forming part of the Naranjo ethnonym seen earlier. Only the main sign of the final collocation remains (T520, at B9), though on account of its size and placement it would be consistent with the central glyphic element of the title *Sak Chuwe’n*. As such it seems clear that the last clause of the text refers to an individual of Naranjo, though the context and type of reference remains unknown. This reference to Naranjo is all the more intriguing since the preceding second clause (B1-B6) of the graffiti refers to a royal accession (B3-B4), presumably that of the local Cahal Pech lord (B5-B6) (Helmke *et al.* 2003). Thus unlike the ceramic vessels that imply gifting and diplomatic relations, the references at Cahal Pech may have recorded interactions of a different nature.

Much further to the east, in the Sibun River Valley, is the Hershey site where another key piece of evidence has recently been uncovered, in the form of another portable ceramic vessel, or in this case as a sherd thereof (McAnany *et al.* 2004: 297, Fig. 3). Here the reference to Naranjo appears as an incised glyphic text in which all that remains is a fragmentary mention to the site’s Emblem Glyph, possibly read *Sa’u’l* (‘place where *atole* abounds’) (see Lacadena & Wichmann n.d.: 20-28; Helmke & Kettunen 2011; Tokovinine & Fialko 2007: 1, n. 1). That the text was incised rather than rendered in polychrome suggests that the specimen dates to the latter facet of the Late Classic, when incising became the dominant decorative mode. Based on this small piece of evidence it does seem as though Naranjo’s sphere of influence may have extended as much as 70 km to the east, even if the vessel in question was obtained down-the-line by indirect gifting.

Almost on the Caribbean shore is Altun Ha, where two ceramic vessels have been recovered that may refer to the mythological founder of the Naranjo dynasty, the so-called ‘Square-Nosed Beastie’ (Fig. 15)

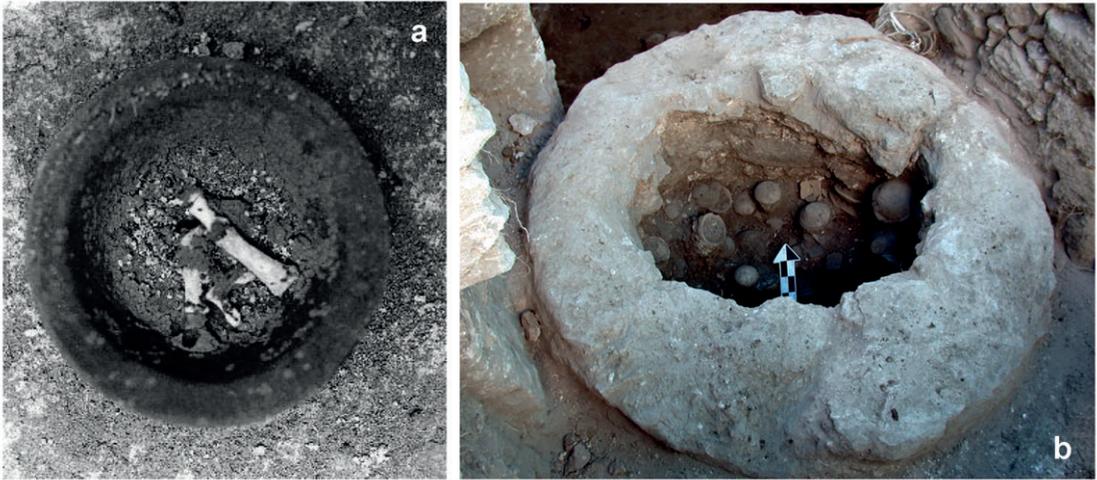


**Figure 16.** Unprovenanced, limestone mace sceptre (K7966), originally from Naranjo and referring to actions of *K'ahk' Ukalaw Chan Chaahk* (drawing based on photographs © Justin Kerr).

(see Martin & Grube 2000: 70, 71-72; Schele 1992: 140-141). The deposit from which these vessels stem was associated with the royal residence at Altun Ha and has been dated to the early Late Classic, Kankin Phase (ca. AD 650-700) (Pendegast 1979). The principal identifying features of the logogram that may refer to the dynastic founder of Naranjo is the squared snout and the human hand that is clenched in its jaw. This mythical beast is known from other contexts, such as the inscriptions of Palenque and Copan where the texts make it clear that it was an important supernatural entity in the distant mythic past. But it is at Naranjo where texts make it clear that royalty traced its ancestry directly to this mythical entity. In other examples we also have the logogram **MIH** for 'nothing, none', or **IK'** 'black' as a modifying prefix (Fig. 15c and f).<sup>13</sup> In the Altun Ha examples (Fig. 15g-h) we have the same identifying features and in one case (RP 595/56) the logogram has a **ko** syllabogram as a prefix (possibly as a rare initial phonetic complement). The references to this supernatural figure at Altun Ha remain unclear, but it is highly probable that these are also retrospective references to mythological figures. Whether the references to this figure at Altun Ha formed part of wider network of shared mythologies or was introduced under the Late Classic influence of Naranjo, however, remains to be elucidated.

The important ritual mace sceptre (K7966; Fig. 16) produced during the reign of one of Naranjo's kings (Martin 2008) also testifies to the fluctuating relations that Naranjo maintained with sites of

<sup>13</sup> A mythological reference to this character is also made on the verso of Stela J at Copan, where it too has *ik'* "black" as a prefix, in a retrospective passage dated to [13.12].8.0.18.0.0. 2 Ajaw 18 Woj of the previous creation, or c. 5066 BC.



**Figure 17.** ‘Finger bowl’ caches at Caracol and Baking Pot. a) Example of a cache from Caracol, Str. B-19 (photograph by Arlen Chase); b) cache below the masonry altar of Str. 190, Baking Pot (photograph by Carolyn Audet).

the Belize Valley. The patron of the slate sceptre remains to be properly identified since the inscribed dates fall either on AD 720, 772 or even as late as 824 (Martin 2008: 4). As such it is either that of a predecessor or successor *K’ahk’ Ukalaw Chan Chaahk*. As is well-known the preferred raw material of these maces was slate (see Healy *et al.* 1995; Willey *et al.* 1965: 479-482, Figs. 295a-f, 299, 300; Martin & Grube 2000: 91). The greater Belize Valley has several high-quality sources of this material while none are known for Naranjo (indeed the geology of the Naranjo area is not the type that would likely contain slate deposits). That this implement was made of fine-grained limestone (Justin Kerr pers. comm. 2003) rather than the expected slate bespeaks of an inability to procure the appropriate raw material, presumably during a time of hostilities. The fleetingness of political alliances is underlined all the more when we consider that the slate mace may well have been produced for a predecessor or successor of the Naranjo king whose name appears on the polychrome vase found at Baking Pot.

### *Caracol*

Caracol also maintained ties with Belize Valley sites, though these relations are less obvious and apparently more intermittent. In fact, as we have seen, the pervasiveness of Naranjo’s influence on the Belize Valley is attested by the many ceramic vessels that were distributed via networks of ritualised gift-exchange. Considering that the royal court of Caracol does not appear to have maintained ceramic workshops specialised in the production of highly-decorated polychrome vessels that would have been suitable for gifting (see Houston 1987: 97), it is not surprising that Caracol’s influence on the Belize Valley appears to be underrepresented. In addition, distance may have been a determining factor, since Naranjo is literally at the threshold of the Belize Valley, whereas Caracol is more distantly-sited to the south.

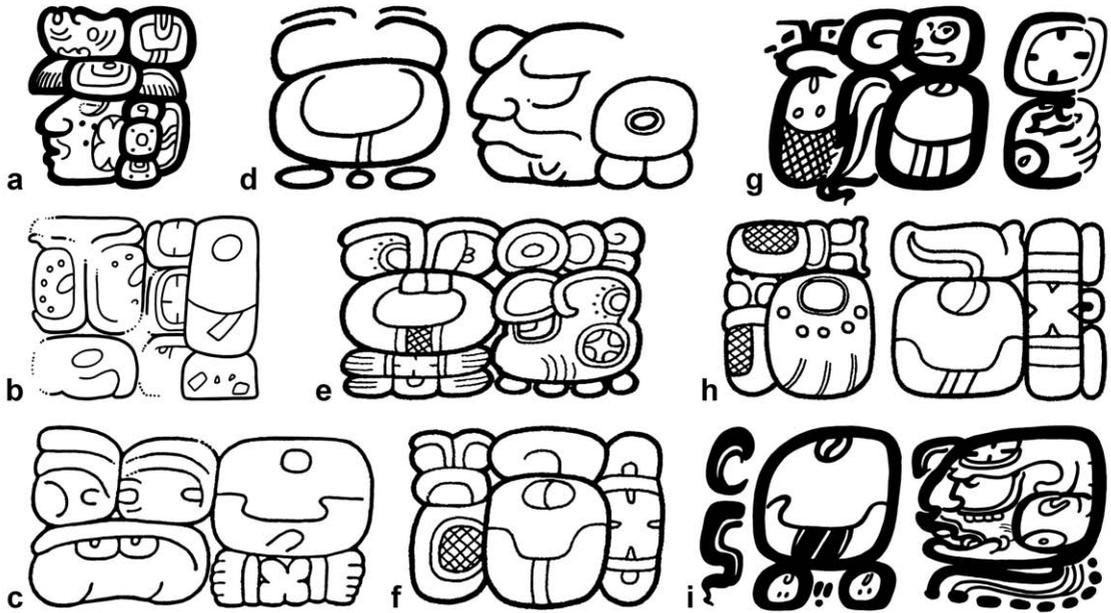
Arlen Chase (2004: 328-330), however, points to the introduction of ritual features that clearly originated at Caracol and eventually appear at select sites in the Belize Valley. Notable among these attributes are the so-called ‘finger bowl caches’ (Fig. 17a) at Cahal Pech (Cheetham 2004: 137, 145), as well as the appearance of funerary attributes (i.e. slate capstones for tombs dated to the Coc phase,

or AD 550-700) at Pacbitun (Healy *et al.* 2004a: 214-215, 2000b: 230, 235), which are in keeping with practices observed at Caracol (Chase 2004: 328-330). Recent research at the ‘major centre’ of Minanha, located nearly midway between Cahal Pech and Caracol has uncovered additional evidence, including the construction of tombs with passages designed for multiple re-entries, in keeping with the known funerary practices at Caracol (Iannone 2005: 32). Again, based on relative distance, it is not surprising to see that the influence of Caracol is attested at Minanha to a great degree and in a manner unlike any found in the Belize Valley.

Investigations at Baking Pot, focusing on Structure 190 (the causeway terminus complex for the *sacbe* that originates in Group 2 in the monumental site core) has also produced additional new evidence for connections between the Belize Valley and Caracol, stretching back to the Early Classic (Audet & Awe 2004: 55-56; Awe & Helmke 2005: 44). Excavations of Str. 190 exposed two uncarved stelae at the base of the platform, and testing at the structure’s summit revealed the presence of a large circular masonry altar dating the earliest documented phase of construction (Fig. 17b). Search for sub-stela caches revealed an imposing dedicatory offering comprising the deliberately-shattered remains of numerous ceramic vessels, including several censers with typological affinities to early facet Early Classic Candelario Appliquéd specimens as well as stylistic similarities to specialised cache containers known as ‘face pots’, both of which are typical of the ceramic assemblage of Caracol. Testing of the masonry altar uncovered a dedicatory cache consisting of 186 unslipped ceramic vessels, dated to the later facet of the Early Classic. Of these vessels, 26 are unslipped miniature bowls, some set lip-to-lip and containing human phalanges, constituting the earliest reported example of ‘finger bowl’ caching in the Belize Valley. These findings reiterate the connections to the ritual practices of Caracol and suggest much earlier interactions with, or influences on at least some sites of the Belize Valley.

Another link to Caracol can be seen in the realm of onomastics. The so-called Vessel 2 from Baking Pot records the name of its ancient owner as *Yo’hl K’inich* (Colas *et al.* 2002: 37) (Fig. 18a). Names conforming to this structure predominate at Caracol (Martin & Grube 2000: 86-99 *passim*) and are otherwise only known from Najtunich (Martin & Grube 2000: 97), Mountain Cow (Martin & Grube 2000: 96, 99), Comalcalco (Grube *et al.* 2002: II-42), Quirigua (Martin & Grube: 216-217) and the site known from the epigraphic record as *Yootz* (Boot 1999, 2002: 23) (Fig. 18). These types of names refer to epithets of the solar deity *K’inich* in its various guises, with each name targeting a specific manifestation of that supernatural entity’s central essence as marked by the initial element of the name (Pierre Robert Colas pers. comm. 2002). Thus, for example, *k’ahk’ yo’hl k’inich* can be translated literally as “fire is the heart of the Sun”.

Site	Transliteration	Transcription
Baking Pot	?-OL-K’INICH	? yo’hl k’inich
Comalcalco	T351-na-[OL-la]K’INICH	?-n yo’hl k’inich
Mountain Cow	T351-na OL-K’INICH	?-n yo’hl k’inich
Caracol	T351-OL-la K’INICH	?-n yo’hl k’inich
Caracol	T351-OL-K’INICH ...	?-n yo’hl k’inich
Caracol	tu-mu-OL-K’INICH	tum yo’hl k’inich
Najtunich	<sup>2</sup> tu-mu-yo-OL K’IN-chi	tutum yo’hl k’inich
Quirigua	tu-tu-ma yo-OL K’INICH	tutu’m yo’hl k’inich
<i>Yootz</i>	K’AK’-OL-la K’IN[chi]-ni	k’ahk’ yo’hl k’inich



**Figure 18.** Examples of *yo'hl k'inich* regnal names in the Maya Lowlands. a) Baking Pot, Bedran Group, Vessel 2 (drawn from the original); b) Comalcalco, Modelled Brick 2 (drawn from a photo by Michel Zabé); c) Hatzcab Ceel, Altar 1 (drawing by Nikolai Grube); d) Caracol, Stela 16 (drawing by Simon Martin); e) Caracol, Stela 3 (drawing by Simon Martin); f) Caracol, Altar 23 (drawing by Simon Martin); g) Najtunich, Drawing 82 (drawn from a photo by Chip and Jennifer Clark); h) Quirigua, Stela C (drawing by Simon Martin); i) Unprovenanced ceramic tripod plate (K4669 / MS1421), referring to a lord from *Yootz* (drawn from a photograph © Justin Kerr).

These names are restricted geographically and occur preferentially at sites that together form a nucleated area in the middle of the eastern Central Lowlands (with Quirigua and Comalcalco as outliers). As such the presence of this type of name at Baking Pot, where it may refer to a local ruler is all the more suggestive, since it is really at Caracol that the *yo'hl k'inich* names were most prevalent and favoured. This pattern is especially significant since the vessel that bears this name is contemporaneous to the Early Classic proliferation of 'finger bowls' at Baking Pot in prominent ritual settings.

## SUMMARY AND CONCLUSION

In this synthetic study the few – but crucial – glyphic texts of the Belize Valley have been scrutinised for evidence of ancient territorial organisation in the area. These analyses have resulted in the identification of the possible Emblem Glyphs of Altun Ha, Pacbitun and Xunantunich and an exalted royal title at Baking Pot. Furthermore, the evidence for Naranjo and Caracol's interactions with Belize Valley sites has also been outlined. The references made to the Emblem Glyphs identified in the Belize Valley span anywhere between AD 450 and 820, which imply that sites in the area already formed a network of city-states during the last facet of the Early Classic (c. AD 450-650). At the other end of the temporal spectrum we have the late ascendancy of Xunantunich in the Terminal Classic (c.

AD 780-890) (LeCount *et al.* 2002) and the coeval appearance of its Emblem Glyph. The latter case attests to the rise of royal courts in the wake of waning centralised powers such as Naranjo (Helmke *et al.* 2010: 120-121).

The apparent autonomy of Belize Valley major centres as heralded by their Emblem Glyphs was undoubtedly tempered by the royal courts of Naranjo and Caracol, which – as we have seen – maintained diplomatic ties and may have engaged in martial actions against their smaller neighbours throughout the Classic period. More specifically, we have been able to demonstrate that it was the Late Classic kings of Naranjo who engaged in relations with the Belize Valley (AD 692-820). In contrast, ritual behaviour that conforms to Caracol religious practices is known for the Belize Valley during the Early Classic (c. AD 250-650) and the middle of the Late Classic (c. AD 700). Nonetheless these relationships appear to be inconsecutive and changing, with portable high-quality ceramic vases at Buenavista and Baking Pot signalling ritualised gift-exchange, while the last reference to Naranjo at Xunantunich commemorates a dance performance between the local lord and the contemporary Naranjo king (Helmke *et al.* 2010: 107-110). The fluctuating nature of these relationships is highlighted all the more by the dual evidence for Naranjo and Caracol influence at Cahal Pech and Baking Pot. At Baking Pot the interactions with Caracol and Naranjo are sequential and temporally-discrete, suggesting a change in political orientation and alliances that was subsequently maintained. At Cahal Pech, however, the evidence is apparently contemporaneous and Caracol's Late Classic influence at the site may mark the northernmost effects of its martial actions against Pacbitun.

Consequently, the royal courts of the Belize Valley appear to have been caught in a tug-of-war between the imposing centres of Naranjo and Caracol throughout much of the Classic period. Though the results presented here are provisional we hope that our hypotheses may eventually be refined by forthcoming glyphic data and believe that they provide a useful basis for future research to build upon.

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## REFERENCES

- ANDRES, CHRISTOPHER, GABRIEL WROBEL, SHAWN MORTON, JASON GONZALEZ & REBECCA SHELTON  
2010 Status and Power: Investigations in Socio-political Relationships of the Caves Branch River Valley. Paper presented at the 8<sup>th</sup> Annual Belize Archaeology Symposium. Belize: San Ignacio.
- ASHMORE, WENDY  
1998 Monumentos políticos: Sitios, asentamiento, y paisaje por Xunantunich, Belice. In: *Anatomía de una Civilización: Aproximaciones Interdisciplinarias a la Cultura Maya* (Publicaciones de la SEEM No. 4), edited by Andrés Ciudad Ruiz, Yolanda Fernández Marquinez, José M. García Campillo, A. Josefa Iglesia Ponce de León, Alfonso L. García-Gallo and Luis T. Sanz Castro: 161-183. Madrid: Sociedad Española de Estudios Mayas.
- AUDET, CAROLYN M. & JAIME J. AWE  
2004 What's Cooking at Baking Pot: A Report of the 2001 to 2003 Seasons. *Research Reports in Belizean Archaeology* 1: 49-59.  
2005 The Political Organization of the Belize Valley: Evidence from Baking Pot, Belize. *Research Reports in Belizean Archaeology* 2: 357-364.
- AWE, JAIME J.  
1992 *Dawn in the Land between the Rivers: Formative Occupation at Cahal Pech, Belize and Its Implications for Preclassic Occupation in the Central Maya Lowlands*. PhD dissertation. London: University College London.
- AWE, JAIME J. & NIKOLAI GRUBE  
2001 La Estela 9 de Cahal Pech: Un Monumento Preclásico del Valle del Río Belice. *Los Investigadores de la Cultura Maya* 9 (2): 55-64.
- AWE, JAIME J. & CHRISTOPHE HELMKE  
2005 Alive and Kicking in the 3rd to 6th Centuries A.D.: Defining the Early Classic in the Belize River Valley. *Research Reports in Belizean Archaeology* 2: 39-52.
- BALL, JOSEPH W.  
1993 Pottery, Potters, Palaces, and Politics: Some Socioeconomic and Political Implications of Late Classic Maya Ceramic Industries. In: *New Perspectives on Classic Maya Civilization: Lowland Societies in the Eighth Century A.D.*, edited by Jeremy A. Sabloff and John S. Henderson: 243-272. Washington D.C.: Dumbarton Oaks Research Library and Collection.
- BALL, JOSEPH W. & JENNIFER T. TASCHEK  
1991 Late Classic Lowland Maya Political Organization and Central-Place Analysis. *Ancient Mesoamerica* 2 (2): 149-165.  
2004 Buenavista del Cayo: A Short Outline of Occupational and Cultural History at an Upper Belize Valley Regal-Ritual Center. In: *The Ancient Maya of the Belize Valley: Half a Century of Archaeological Research*, edited by James F. Garber: 149-167. Gainesville: University Press of Florida.
- BARRERA VÁSQUEZ, ALFREDO (EDITOR)  
1980 *Diccionario Maya Cordemex: Maya-Español, Español-Maya*. Mérida: Ediciones Cordemex.
- BASTARRACHEA MANZANO, JUAN RAMÓN  
2005 *Diccionario Aulex: Español - Maya*. Mérida: Universidad de Yucatán.
- BERLIN, HEINRICH  
1958 El Glifo Emblema en las inscripciones Maya. *Journal de la Société des Américanistes de Paris* 47: 111-119.
- BOOT, ERIK  
2002 *A Preliminary Classic Maya-English/English-Classic Maya Vocabulary of Hieroglyphic Readings*. Mesoweb: <http://www.mesoweb.com/resources/vocabulary/vocabulary.pdf>  
1999 A New Naranjo Area Toponym: *Yo:ts*. *Mexicon* 21 (2): 39-42.
- BULLARD, WILLIAM R., JR.  
1960 The Maya Settlement Pattern in Northwestern Peten, Guatemala. *American Antiquity* 25 (3): 355-372.

BULLARD, WILLIAM R., JR. & MARY R. BULLARD

1965 *Late Classic Finds at Baking Pot, British Honduras*. (Art and Archaeology Occasional Papers, No. 8). Toronto: Royal Ontario Museum.

CHASE, ARLEN F.

2004 Politics, Political, and Social Dynamics: 'Contextualizing' the Archaeology of the Belize Valley and Caracol. In: *The Ancient Maya of the Belize Valley: Half a Century of Archaeological Research*, edited by James F. Garber: 320-334. Gainesville: University Press of Florida.

CHASE, ARLEN F. & DIANE Z. CHASE

1987 Appendix I: Map of the Archaeological Ruins of Caracol. In: *Investigations at the Classic Maya City of Caracol, Belize: 1985-1987* (Monograph 3), edited by Arlen F. Chase, and Diane Z. Chase: 63-84. San Francisco: Pre-Columbian Art Research Institute.

2001 Ancient Maya Causeways and Site Organisation at Caracol, Belize. *Ancient Mesoamerica* 12 (2): 273-281.

2003 Minor Centers, Complexity, and Scale in Lowland Maya Settlement Archaeology. In: *Perspectives on Ancient Maya Rural Complexity* (Monograph 49), edited by Gyles Iannone, and Samuel V. Connell: 108-118. Los Angeles: Cotsen Institute of Archaeology, University of California.

2004 The Archaeology of the Belize Valley in Historical Perspective. In: *The Ancient Maya of the Belize Valley: Half a Century of Archaeological Research*, edited by James F. Garber: 1-14. Gainesville: University Press of Florida.

CHEETHAM, DAVID

2004 The Role of 'Terminus Groups' in Lowland Maya Site Planning. In: *The Ancient Maya of the Belize Valley: Half a Century of Archaeological Research*, edited by James F. Garber: 125-148. Gainesville: University Press of Florida.

COLAS, PIERRE ROBERT, CHRISTOPHE HELMKE, JAIME J. AWE & AND TERRY G. POWIS

2002 Epigraphic and ceramic analyses of two Early Classic Maya vessels from Baking Pot, Belize. *Mexicon* 24 (2): 33-39.

CONLON, JAMES M., & JENNIFER J. EHRET

1999 Initial Investigations at the Recently Discovered Major Center of Cahal Uitz Na, Cayo District, Belize. Paper presented at the 64<sup>th</sup> Annual Meeting of the Society for American Archaeology, Chicago.

CONLON, JAMES M., & TERRY G. POWIS

2004 Major Center Identifiers at a Plazuela Group near the Ancient Maya Site of Baking Pot. In: *The Ancient Maya of the Belize Valley: Half a Century of Archaeological Research*, edited by James F. Garber: 70-85. Gainesville: University Press of Florida.

CONNELL, SAMUEL V.

2003 Making Sense of Variability among Minor Centers: The Ancient Maya of Chaa Creek, Belize. In: *Perspectives on Ancient Maya Rural Complexity* (Monograph 49), edited by Gyles Iannone, and Samuel V. Connell: 27-41. Los Angeles: Cotsen Institute of Archaeology, University of California.

DAVIS, CLINT E.

1980 *Archaeological investigations in the Caves Branch, Deep Valley Region of Belize*. MA thesis. Austin: University of Texas at Austin.

DRIVER, W. DAVID & JAMES F. GARBER

2004 The Emergence of Minor Centers in the Zones between Seats of Power. In: *The Ancient Maya of the Belize Valley: Half a Century of Archaeological Research*, edited by James F. Garber: 287-304. Gainesville: University Press of Florida.

FIALKO, VILMA

2000 El espejo del Entierro 49: morfología y texto jeroglífico. In: *El sitio maya de Topoxté: investigaciones en una isla del lago Yaxhá, Petén, Guatemala*, edited by Wolfgang W. Wurster: 144-149. Mainz am Rhein: Verlag Phillip von Zabern.

FORD, ANABEL

2004 Integration among Communities, Centers, and Regions: The Case from El Pilar. In: *The Ancient Maya of the Belize Valley: Half a Century of Archaeological Research*, edited by James F. Garber: 238-256. Gainesville: University Press of Florida.

GANN, THOMAS W. F.

1925 *Mystery Cities: Exploration and Adventure in Lubaantun*. London: Duckworth.

GARBER, JAMES F. (EDITOR)

2004 *The Ancient Maya of the Belize Valley: Half a Century of Archaeological Research*. Gainesville: University Press of Florida.

GARBER, JAMES F.

1992 A Baktun 8 carved Stela from the Lowland Maya Site of Blackman Eddy, Belize. Paper presented at the 57<sup>th</sup> Annual Meeting of the Society for American Archaeology, Pittsburgh.

GARBER, JAMES F., M. KATHRYN BROWN, W. DAVID BROWN, DAVID M. GLASSMAN, CHRISTOPHER J. HARTMAN, F. KENT REILLY III & LAUREN A. SULLIVAN

2004 Archaeological Investigations at Blackman Eddy. In: *The Ancient Maya of the Belize Valley: Half a Century of Archaeological Research*, edited by James F. Garber: 48-69. Gainesville: University Press of Florida.

GARBER, JAMES F., W. DAVID DRIVER & LAUREN A. SULLIVAN

1993a Medium Sized Ceremonial Centers in the Belize Valley: The Blackman Eddy Example. Paper presented at the 58<sup>th</sup> Annual Meeting of the Society for American Archaeology, St. Louis.

1993b Site Alignments and Sociopolitical Systems of the Valley. In: *The Blackman Eddy Archaeological Project: Results of the 1992 Field Season*, edited by James F. Garber, W. David Driver and Lauren A. Sullivan: 15-22. San Marcos: Southwest Texas State University.

GRUBE, NIKOLAI

2000 The City-States of the Maya. In: *A Comparative Study of Thirty City-State Cultures* (Historisk-filosofiske Skrifter 21), edited by Mogens Herman Hansen: 547-565. Copenhagen: Det Kongelige Danske Videnskabernes Selskab.

2004 La historia dinástica de Naranjo, Petén. *Beiträge zur Allgemeinen und Vergleichenden Archäologie* 24: 195-213.

2005 Toponyms, Emblem Glyphs, and the Political Geography of Southern Campeche. *Anthropological Notebooks* 11 (1): 87-100.

GRUBE, NIKOLAI & SIMON MARTIN

2004 *Patronage, Betrayal and Revenge: Diplomacy and Politics in the Eastern Maya Lowlands: Notebook for the XXXVIIIth Maya Hieroglyphic Forum at Texas*, edited by Nikolai Grube: II.1-II.95. Austin: University of Texas at Austin.

GRUBE, NIKOLAI, SIMON MARTIN & MARC ZENDER

2002 Palenque and Its Neighbors. In: *Notebook for the XXVIth Maya Hieroglyphic Forum at Texas*, edited by Nikolai Grube: II.1-II.66. Austin: University of Texas at Austin.

GUENTER, STANLEY

2007 On the Emblem Glyph of El Peru. *The PARI Journal* 8 (2): 20-23.

HAVILAND, WILLIAM A.

2003 Settlement, Society, and Demography at Tikal. In: *Tikal: Dynasties, Foreigners, and Affairs of State*, edited by Jeremy A. Sabloff: 111-142. Santa Fe: School of American Research Press.

HEALY, PAUL F.

1990 An Early Classic Monument at Pacbitun, Belize. *Mexicon* 12 (6): 109-110.

HEALY, PAUL F., JAIME J. AWE, GYLES IANNONE, & CASSANDRA BILL

1995 Pacbitun (Belize) and Ancient Maya Use of Slate. *Antiquity* 69 (263): 337-348.

HEALY, PAUL F., BOBBI HOHMANN & TERRY G. POWIS

2004a The Ancient Maya Center of Pacbitun. In: *The Ancient Maya of the Belize Valley: Half a Century of Archaeological Research*, edited by James F. Garber: 207-227. Gainesville: University Press of Florida.

HEALY, PAUL F., JAIME J. AWE & HERMANN HELMUTH

2004b Defining Royal Maya Burials: A Case from Pacbitun. In: *The Ancient Maya of the Belize Valley: Half a Century of Archaeological Research*, edited by James F. Garber: 228-237. Gainesville: University Press of Florida.

## HELMKE, CHRISTOPHE

2009 *Ancient Maya Cave Usage as Attested in the Glyphic Corpus of the Maya Lowlands and the Caves of the Roaring Creek Valley, Belize*. PhD thesis. London: Institute of Archaeology, University of London.

2012 Appendix II: Preliminary Comments on the Glyphic Sherds of Buenavista del Cayo. *The Integration and Disintegration of Ancient Maya Urban Centres: Charting Households and Community at Buenavista del Cayo, Belize*, by Meaghan Peuramäki-Brown, pp. 613-627. Calgary: Department of Archaeology, University of Calgary.

## HELMKE, CHRISTOPHE &amp; JAIME AWE

2008 New Site Description and Structure Designations of Baking Pot, Belize. *The Belize Valley Archaeological Reconnaissance Project: A Report of the 2007 Field Season* 13: 81-102.

## HELMKE, CHRISTOPHE, JAIME AWE &amp; NIKOLAI GRUBE

2010 The Carved Monuments and Inscriptions of Xunantunich: Implications for Terminal Classic Sociopolitical Relationships in the Belize Valley. In: *Classic Maya Provincial Politics: Xunantunich and Its Hinterlands*, edited by Lisa J. LeCount and Jason Yaeger: 97-121. Tucson: University of Arizona Press.

## HELMKE, CHRISTOPHE, JAIME AWE &amp; HARRI KETTUNEN

2003 Hieroglyphic Inscriptions of the Belize Valley: Implications for Socio-political Landscape and Dynastic Interaction. Paper presented at the *XXVIII<sup>th</sup> Annual Texas Maya Meetings*. Austin: University of Texas at Austin.

## HELMKE, CHRISTOPHE, JOSEPH W. BALL, PATRICIA T. MITCHELL &amp; JENNIFER T. TASCHEK

2008 Burial BVC88-1/2 at Buenavista del Cayo, Belize: Resting Place of the Last King of *Puulul?* *Mexicon* 30 (2): 43-49.

## HELMKE, CHRISTOPHE, ANDREW BEVAN &amp; JAIME AWE

2004 Everyday Maya: Life along the Roaring Creek Valley. *Current World Archaeology* 4: 10-16.

## HELMKE, CHRISTOPHE, NIKOLAI GRUBE &amp; JAIME AWE

2006 A Comprehensive Review of the Carved Monuments and Hieroglyphic Inscriptions of Xunantunich, Belize. In: *The Belize Valley Archaeological Reconnaissance Project: A Report of the 2005 Field Season*, edited by Christophe Helmke and Jaime J. Awe: 143-186. Belmopan: Institute of Archaeology, National Institute of Culture and History.

## HELMKE, CHRISTOPHE, NIKOLAI GRUBE, JAIME J. AWE &amp; PAUL F. HEALY

2006 A reinterpretation of Stela 6, Pacbitun, Belize. *Mexicon* 28 (4): 70-75.

## HELMKE, CHRISTOPHE, HARRI J. KETTUNEN &amp; JAIME J. AWE.

2005 Discovery of the site of Bacna and a high relief sculpture in the Belize River Valley, Cayo District, Belize. *Mexicon* 27 (4): 68-73.

## HELMKE, CHRISTOPHE &amp; HARRI KETTUNEN

2011 *Where Atole Abounds: Naranjo during the Reign of K'ahk' Tiliw Chan Chahk*. 1<sup>st</sup> Cracow Maya Conference: The Archaeology and Epigraphy of the Eastern Central Maya Lowlands. Cracow: Jagiellonian University.

## HERMES, BERNARD, JUSTYNA OLKO &amp; JAROSŁAW ŻRAŁKA

2001 En los confines del arte: Los *graffiti* de Nakum (Petén, Guatemala) y su contexto arquitectónico, arqueológico e iconográfico. *Anales del Instituto de Investigaciones Estéticas* 79: 29-69.

## HOGGARTH, JULIE, JAIME J. AWE, PATRICK WILKINSON &amp; RAFAEL GUERRA.

2010 Shedding New Light on an Old Topic: Reassessing Ancient Maya Settlements in the Belize River. Paper presented at the *8<sup>th</sup> Annual Belize Archaeology Symposium*. San Ignacio, Belize.

## HOUSTON, STEPHEN D.

1986 Problematic Emblem Glyphs: Examples from Altar de Sacrificios, El Chorro, Río Azul, and Xultun. *Research Reports on Ancient Maya Writing* 3: 1-11.

1987 Appendix II: Notes on Caracol Epigraphy and Its Significance. *Investigations at the Classic Maya City of Caracol, Belize: 1985-1987* (Monograph 3), edited by Arlen F. Chase and Diane Z. Chase: 85-100. San Francisco: Pre-Columbian Art Research Institute.

## HOUSTON, STEPHEN D., DAVID STUART &amp; KARL TAUBE

1992 Image and Text on the 'Jauncy Vase'. In: *The Maya Vase Book* (Volume 3), edited by Justin Kerr: 503-523. New York: Kerr Associates.

## IANNONE, GYLES

2003 Rural Complexity in the Cahal Pech Microregion. In: *Perspectives on Ancient Maya Rural Complexity* (Monograph 49), edited by Gyles Iannone, and Samuel V. Connell: 13-26. Los Angeles: Cotsen Institute of Archaeology, University of California.

2004 Problems in the Definition and Interpretation of 'Minor Centers' in Maya Archaeology with Reference to the Upper Belize Valley. In: *The Ancient Maya of the Belize Valley: Half a Century of Archaeological Research*, edited by James F. Garber: 273-286. Gainesville: University Press of Florida.

2005 The Rise and Fall of an Ancient Maya Petty Royal Court. *Latin American Antiquity* 16 (1): 26-44.

## LACADENA GARCÍA-GALLO, ALFONSO

2008 El título Lakam: Evidencia epigráfica sobre la organización tributaria y militar interna de los reinos mayas del clásico. *Mayab* 20: 23-43.

## LACADENA, ALFONSO &amp; SØREN WICHMANN

n.d. *Harmony Rules and the Suffix Domain: A Study of Maya Scribal Conventions*. Unpublished typescript in possession of the authors.

## LAPORTE, JUAN PEDRO

2001 Dispersión y estructura de las ciudades del sureste de Petén, Guatemala. In: *Reconstruyendo la ciudad Maya: el urbanismo en las sociedades antiguas* (Publicaciones de la SEEM, No. 6), edited by Andrés Ciudad Ruiz, María Josefa Ponce de León and María del Carmen Martínez Martínez: 137-162. Madrid: Sociedad Española de Estudios Mayas.

## LAPORTE, JUAN PEDRO &amp; HÉCTOR E. MEJÍA

2006 La Cuenca Baja del río Mopan: el asentamiento arqueológico en Guatemala y Belice. *Mexicon* 28 (3): 52-57.

## LAPORTE, JUAN PEDRO, HÉCTOR E. MEJÍA &amp; JORGE E. CHOCÓN

2003 La cuenca del río Chiquibul en Petén, Guatemala: su asentamiento prehispánico. *Mexicon* 25 (3): 78-87.

## LECOUNT, LISA J. &amp; JOHN H. BLITZ

2005 The Actuncan Early Classic Maya Project: Progress Report on the Second Field Season. *Research Reports in Belizean Archaeology* 2: 67-77.

## LECOUNT, LISA J., JASON YAEGER, RICHARD M. LEVENTHAL &amp; WENDY ASHMORE

2002 Dating the Rise and Fall of Xunantunich, Belize. *Ancient Mesoamerica* 13 (1): 41-63.

## LEVENTHAL, RICHARD M.

1996 The End at Xunantunich: The Architecture and Setting in the Terminal Classic. In: *Xunantunich Archaeological Project: 1996 Field Season* (Report on file at the Institute of Archaeology, Belmopan), edited by Richard M. Leventhal: 10-16. Los Angeles: University of California.

## LEVENTHAL, RICHARD M. &amp; WENDY ASHMORE

2003 *Some notes on the Jaguar God of the Underworld*. Manuscript in possession of the authors.

2004 Xunantunich in a Belize Valley Context. In: *The Ancient Maya of the Belize Valley: Half a Century of Archaeological Research*, edited by James F. Garber: 168-179. Gainesville: University Press of Florida.

Lopes, Luis

## LUCERO, LISA J., SCOTT L. FEDICK, ANDREW KINKELLA &amp; SEAN GRAEBNER

2004 Ancient Maya Settlement in the Valley of Peace Area. In: *The Ancient Maya of the Belize Valley: Half a Century of Archaeological Research*, edited by James F. Garber: 86-102. Gainesville: University Press of Florida.

## MARTIN, SIMON

2004 Identity and Distinction in the Classic Maya Polity. Paper presented at the 9<sup>th</sup> European Maya Conference, Bonn.

2005 Of Snakes and Bats: Shifting Identities at Calakmul. *The PARI Journal* 6 (2): 5-13.

2008 *A New Naranjo King*. Unpublished typescript in possession of the authors.

## MARTIN, SIMON &amp; NIKOLAI GRUBE

2000 *Chronicle of the Maya Kings and Queens: Deciphering the Dynasties of the Ancient Maya*. London: Thames & Hudson.

1995 Maya Superstates: How a few powerful kingdoms vied for control of the Maya Lowlands during the Classic period (A.D. 300-900). *Archaeology* 48 (6): 41-46.

## MATHEWS, PETER

- 1988 *The Sculpture of Yaxchilan*. PhD dissertation. New Haven: Department of Anthropology, Yale University.  
 1991 Classic Maya Emblem Glyphs. In: *Classic Maya Political History: Hieroglyphic and Archaeological Evidence* (School of American Research Advanced Seminar Series), edited by T. Patrick Culbert: 19-29. Cambridge: University of Cambridge Press.

## MCANANY, PATRICIA A., SATORU MURATA, BEN S. THOMAS, SANDRA L. LÓPEZ VARELA, DANIEL FINAMORE &amp; DAVID G. BUCK

- 2004 The Deep History of the Sibun River Valley. *Research Reports in Belizean Archaeology* 1: 293-308.

## MCGOVERN, JAMES O.

- 2004 *Monumental Ceremonial Architecture and Political Autonomy at the Ancient Maya City of Actuncan, Belize*. PhD Dissertation. Los Angeles: University of California.

## MCGOVERN, JAMES O. &amp; NIKOLAI GRUBE

- 1996 A Late Preclassic Stela from Actuncan, Cayo, Belize. *Journal for Belize Archaeology* 1 (1): 83-89.

## PENDERGAST, DAVID M.

- 1979 *Excavations at Altun Ha, Belize, 1964-1970*, Volume 1. Toronto: Royal Ontario Museum.  
 1981 Lamanai, Belize: Summary of Excavation Results, 1974-1980. *Journal of Field Archaeology* 8 (1): 29-53.  
 1982 *Excavations at Altun Ha, Belize, 1964-1970*, Volume 2. Toronto: Royal Ontario Museum.  
 1990 *Excavations at Altun Ha, Belize, 1964-1970*, Volume 3. Toronto: Royal Ontario Museum.

## PULESTON, DENNIS E. &amp; DONALD W. CALLENDER, JR.

- 1967 Defensive Earthworks at Tikal. *Expedition* 9 (3): 40-48.

## PYBURN, K. ANNE

- 1991 Chau Hiix: A New Archaeological Site in Northern Belize. *Mexicon* 8 (5): 84-86.

## QUINTANA, OSCAR &amp; WOLFGANG W. WURSTER

- 2004 Un nuevo plano del sitio Maya de Naranjo, Petén, Guatemala. *Beiträge zur Allgemeinen und Vergleichenden Archäologie* 24: 149-178.

## REENTS-BUDET, DORIE (EDITOR)

- 1994 *Painting the Maya Universe: Royal Ceramics of the Classic Period*. Durham: Duke University Press.

## REENTS-BUDET, DORIE, JOSEPH BALL, JENNIFER TASCHEK &amp; RONALD L. BISHOP

- 2000 Out of the Palace Dumps: Ceramic Production and Use at Buenavista del Cayo, Belize. *Ancient Mesoamerica* 11 (1): 99-121.

## REENTS-BUDET, DORIE, RONALD L. BISHOP, CAROLYN AUDET, JAIME AWE &amp; M. JAMES BLACKMAN

- 2005 Act Locally, Think Internationally: The Pottery of Baking Pot, Belize. *Research Reports in Belizean Archaeology* 2: 365-386.

## RICKETSON, OLIVER G.

- 1931 *Excavations at Baking Pot, British Honduras*. (Contributions to American Archaeology, No. 1). Washington D.C.: Carnegie Institution of Washington.

## SCHELE, LINDA

- 1992 The Founders of Lineages at Copan and Other Maya Sites. *Ancient Mesoamerica* 3 (1): 135-144.

## STUART, DAVID

- 2002 Mountains, Caverns and Waters: The Ancient Maya Underworld as Ritual Landscape. Paper presented at the 7<sup>th</sup> *European Maya Conference*, London.  
 2003 On the Paired Variants of **TZ'AK**. *Mesoweb*: <http://www.mesoweb.com/stuart/notes/tzak.pdf>

## STUART, DAVID &amp; STEPHEN HOUSTON

- 1994 *Classic Maya Place Names*. (Studies in Pre-Columbian Art and Architecture No. 33). Washington, D.C.: Dumbarton Oaks Research Library and Collection.

## TASCHEK, JENNIFER T. &amp; JOSEPH W. BALL

- 1992 Lord Smoke-Squirrel's Cacao Cup: The Archaeological Context and Socio-Historical Significance of the Buenavista 'Jauncy Vase'. In: *The Maya Vase Book*, Volume 3, edited by Justin Kerr: 490-502. New York: Kerr Associates.

- 1999 Las Ruinas de Arenal, Belize: Preliminary Report on a Subregional Major Center in the Western Belize Valley (1991-1992 Excavations). *Ancient Mesoamerica* 10 (2): 215-235.

- 2004 Buenavista del Cayo, Cahal Pech, and Xunantunich: Three Centers, Three Histories, One Central Place. In: *The Ancient Maya of the Belize Valley: Half a Century of Archaeological Research*, edited by James F. Garber: 191-206. Gainesville: University Press of Florida.
- THOMPSON, J. ERIC S.  
1939 *Excavations at San José, British Honduras*. (Carnegie Institution of Washington, Publication No. 506). Washington D.C.: Carnegie Institution of Washington.
- TOKOVININE, ALEXANDRE & VILMA FIALKO  
2007 Stela 45 of Naranjo and the Early Classic Lords of Sa'aal. *The PARI Journal* 7(4): 1-14.
- TOURTELLOT, GAIR III, MARC WOLF, FRANCISCO ESTRADA-BELLI & NORMAN HAMMOND  
2000 Discovery of two predicted Ancient Maya sites in Belize. *Antiquity* 74 (285): 481-482.
- TRIGGER, BRUCE G.  
2003 *Understanding Early Civilizations: A Comparative Study*. Cambridge: Cambridge University Press.
- TRIK, HELEN & MICHAEL E. KAMPEN  
1983 *The Graffiti of Tikal*. Tikal Report No. 31. (University Museum Monograph, No. 57). Philadelphia: University Museum, University of Pennsylvania.
- WILLEY, GORDON R., WILLIAM R. BULLARD JR., JOHN B. GLASS & JAMES C. GIFFORD  
1965 *Prehistoric Maya Settlements in the Belize Valley*. (Papers of the Peabody Museum of Archaeology and Ethnology, No. 54). Cambridge: Harvard University.
- WROBEL, GABRIEL D., CHRISTOPHER R. ANDRES, SHAWN G. MORTON & REBECCA SHELTON  
2010 An Introduction to the First Season of the Caves Branch Archaeological Survey. *Research Reports in Belizean Archaeology* 7: 73-84.
- WROBEL, GABRIEL D., CHRISTOPHER R. ANDRES, SHAWN G. MORTON, REBECCA SHELTON, AMY MICHAEL & CHRISTOPHE HELMKE  
2012 Ritual Landscapes of the Caves Branch River Valley. *Research Reports in Belizean Archaeology* 9: 233-244.