Standing by the hole in the ground that the Spaniards had re-worked into a colonial noria mouth, a narrow stone well fades into darkness as it drops vertically some 45 feet into the stony crust of the Yucatan. When I find out we will be lowered through that very hole with a rope manned by a couple of helpers, my excitement at diving in a cenote once used for ancient Maya rituals falters somewhat.

I have come here hired as a photographer by Archaeology magazine to help them in covering the exploration work carried out in a large number of cenotes by underwater archaeologist Guillermo de Anda. De Anda’s project, which started some years ago as a survey of cenotes that may have been ritually used in ancient times, is taking a very exciting turn: it is zeroing in on the possibility of finding evidence specific to rituals that were documented at the beginning of the colonial period.

It is fairly well known that friar Diego de Landa, realizing Franciscan efforts to mass convert the Maya of Yucatan were not being very successful and that the new converts had never really abandoned their old religious practices, started a brutal persecution aimed at terrorizing the populace into Christian compliance. Scores of people were rounded up. Confessions were exacted even from those less than willing to come forward with testimonials of their acts of heresy. What earned this persecution its notorious place in history was the infamous auto da fé, cel-

1 A noria is a water-extracting mechanism worked by a mule (or sometimes a human) circling around a wellhead.

2 The word cenote is a Spanish corruption of the Mayan word dzonot, meaning a sinkhole that occurs naturally in the karstic landscape of the Yucatan. Cenotes were considered, among other things, to be entrances into the watery underworld and, as such, were the focus of much ritual activity and offerings for at least the past two millenia.
ebrated by Landa at the town of Maní, in which an unknown number of Maya holy books were mercilessly burned, an action that not only caused the Maya enormous grief, but also deprived the world of incalculable information regarding ancient Maya civilization.

De Anda is working with the confessions recorded by the Spanish interrogators working in the towns of Homun and Sotuta. His team is painstakingly scanning these documents for references to cenotes and ceremonies carried out in connection with them. Their main aim is to try and find mentions of cenotes and their names. The tricky second step is to then try and identify which are the actual cenotes mentioned, so as to look for evidence in them that will link the content of the historical documents to actual finds.

Our diving day starts with picking up the air tanks that have been filled the previous night at the only place in town that provides the service. Then we set out in a van filled to the gills with diving equipment, ladders and ropes. It takes a while to leave behind the fast growing sprawl of busy Mérida, but once we do we plunge straight into the timeless space of rural Yucatan. Narrow but well kept roads lead us through charming villages. The one thing they all have in common is spartan stone churches built with a limited architectural repertoire, but limitless fantasy in the way of using it.

The cenotes we are diving in this week are normally not far from some of these towns, but to get to most of them we still have to go through unpaved dirt tracks to places that are really out of the way. So normally we don’t reach a particular day’s cenote before one or even two in the afternoon, and then a good hour and a half goes by while access gear is assembled. This typically consists of some sort of makeshift timber structure for lowering both divers...
A Glimpse into the Watery Underworld

Figure 4. Ancient skull resting on the sandy bed of a cenote once used by the Maya for ritual offerings, among other things. It is also usual to find pottery in cenotes with evidence of ritual usage.

Figure 5. Mandible that possibly once belonged to the skull shown in Figure 4.
and diving gear with a pulley. Another good deal of time goes into tying the four sections of ladder that will allow us to climb out once the dive is over. When everything is in place, we suit up, check our lights and photo gear for one last time and we’re off, riding the “Maya elevator” (i.e., the rope) deep into the guts of the Earth until we reach the water table. Equipment goes down after us and we put it on while floating in the gloom of these fantastic flooded caves. While we wait for the diving gear to be lowered, the beams of our diving lights reveal glimpses of the cave’s high ceilings, overhung with stalactites and the enormous roots of thirsty trees that reach down to the water. When we are finally all ready, we let the air out of our buoyancy compensators and begin our incredible journey into the very real watery Underworld of the Maya.

Depending on the importance that each cenote may once have had, we are able to find more or less abundant evidence of the presence of the ancient Maya. The most isolated one we dove in during my brief week as the project’s photographer was a spectacular crack in the earth, out of which huge trees grew, pushing upward at the sky. Nobody had ever dived in it, so it was thought to be quite promising. Yet, perhaps because of its isolation, next to no cultural remains were evident on the bottom’s sediment. Other cenotes that have been known forever are littered in varying degrees with bones, wood, ceramics, even carved stones. We once found a clearly readable “3 Ix” date on a large stone block that was part of a large pile of dressed stones which inexplicably found their way deep into the water (see Figure 3). One cenote even had a handsome pair of time-darkened skulls with very evident tabular elongation that gave them away as belonging to Late Classic people, most probably elite. What was even more striking about this was the fact that they seemed arranged on a natural underwater stone “shelf,” which would seem to suggest they...
were carefully placed there by ancient Maya…

collectors. Cenote archaeology is probably the trickiest kind of archaeology. Aside from the obvious technical limitations of having to operate while wearing cumbersome equipment, cenote bottoms almost always have heavy layers of silt and sediment, so most of what could be in them lies buried, hidden from the eyes of divers. Moving this sediment in water without creating utter chaos and losing all possibility of scientific recording is extremely tricky. Then there is the problem of conserving any artifacts that may be worth retrieving. Not only do they have to be decompressed, but they also have to be physically stabilized, lest they disintegrate when removed from the water they have become accustomed to in the last several centuries.

And yet, despite its very real difficulties, this is a very promising subfield worth exploring for answers to the greater Maya puzzle. The survival of wood artifacts, for example, is fairly rare above water, because of the action of the tropical environment that actively promotes the decay of this kind of material. Nonetheless, water preserves wood so well that finding it in cenotes is not a rare event at all. One of the things in the confessions De Anda’s team is very excited about is the well attested enthusiasm for crucifixion as a form of sacrifice by the contact-period Maya. It would seem to bear a close resemblance to the so-called “scaffold sacrifice” which is known because of artifacts from Classic times. This practice is a prime example of what careful, scientific cenote exploration could uncover: a direct physical connection (in the form of wood, nails and human remains with certain, specific markings) between the historical texts and the evidence that could be retrieved from these watery time capsules. In a very real way, cenote archaeology is an exciting frontier: the frontier between our world and the Maya Underworld.
Scholars are routinely struck by the number and variety of animals depicted in Classic Maya art. While the more visually distinct animals, such as the jaguar and macaw, yielded up their identities early in the last century (e.g., Stempel 1908; Tozzer and Allen 1910), the plethora of rodents, mammals and birds have proven more difficult to disambiguate, even in the highly pictorial art of the Maya. The complexities of zoological representation, coupled with the strong formal similarities of nevertheless distinct animals, have occasionally led scholars to confuse the imagery and even the hieroglyphic signs of one animal for another. Such misidentifications have been especially common in the absence of phonetic evidence for a sign’s reading.

One infamous case is that of the T757 BAAH “gopher”, which was thought to represent a “jaguar” (Tozzer and Allen 1910:pl. 35, no. 6), then a “dog” (Thompson 1962:350-354) and still later a “rabbit” (Schele and Miller 1983:23-60).1 In recent years, phonetic and substitutional evidence have demonstrated an unequivocal BAAH value for this sign (Houston and Stuart 1998; Houston et al. 1998) as well as a later acrophonic reduction to ba in the early eighth century (Stephen Houston, personal communication 2000). These observations intersect with iconographic observations, such as the paired frontal incisors in early examples (Proskouriakoff 1968:248) and frequent depictions of the creature nibbling on leafy vegetation. Together, epigraphic and iconographic evidence suggest that the sign depicts a rodent, specifically the baah “pocket gopher” (Orthogeomys spp.), an identification now accepted by most epigraphers.2

The purpose of this paper is the identification of another entity in this category: the hieroglyph for “raccoon” (Figure 1). One point of confusion has been a plethora of formal features shared with T765 OOK, the tenth day sign. Such features include a black supraorbital area (cross-hatched in incised texts), a black cheek spot, a prominent conical tooth and, occasionally, the realistic depiction of fur (see Thompson 1950:fig.8). Given these pronounced similarities, it is perhaps not too surprising that the “raccoon” sign has been frequently confused with OOK (e.g., Freidel et al. 1993:69-60, fig. 2.7; Macri and Looper 2003:74; Thompson 1962:366-267) and that it remains poorly understood even today. Yet there are both iconographic and phonetic reasons to tease the OOK and “raccoon” signs apart, and much of interest emerges when one makes the attempt.

To begin with, the “raccoon” glyph has a long, down-turned, and dotted muzzle (Figure 1). This is quite unlike T765 OOK, but similar to the “rodent”

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1 In addition, Thompson (1962:354) proposed the term “jog,” a non-committal label which references both “jaguar” and “dog.” Hence the odd designation “18 Jog” for the thirteenth king of Copan.

2 Macri (in Macri and Looper 2003:75-76) compares two well documented uses of T513 — as the day sign Muluk and as phonetic u — with the occasional use of T757 BAAH as a Muluk glyph (first noted by Thompson 1950:fig.8.8). This leads her to suggest an u reading for T757, which she in turn argues is derived acrophonically from Tzeltalan “tayox” “kinkajou.” Yet her argument conflates two distinct script contexts. Not only do “shark” and other bonafide u signs never appear as the day Muluk, but “gopher” never appears as phonetic u. Rather than narrowly phonetic, the occasional usage of “gopher” as Muluk may have been motivated by semantic connections between the root mul “to pile up” (cf. also Proto-Ch’olan “muhl” “mound,” Kaufman and Norman 1984:126) and the burrowing habits of the pocket gopher (see Rätsch and Probst 1985).

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**Figure 1.** The “raccoon” glyph: a) Tortuguero Monument 6, A10a; b) Tortuguero Monument 6, H10b; c) Black-on-Cream Vessel, Private Collection; d) The Blowgunner Pot, K1226 (after a photograph by Justin Kerr in Robicsek and Hales 1982:57). All drawings by the author.
family of signs (BAAH, ch’o and the still undeciphered “rabbit” sign). Further, its eye markings are frequently larger and more complex than OOK. In painted texts, these markings can be elongated and mask-like, greatly resembling those of the American raccoon (Procyon lotor). Yet it is phonetic evidence that most clearly links these depictions to the raccoon. Thus, on a Xultún-style vessel from a private collection (Figure 2), the glyph in question is suffixed by -ma. Similarly, as pointed out by David Stuart (2005:53), the glyph appears on Tortuguero Monument 6 in an extended reference to Tortuguero’s patron deities (Figure 3), where it is prefixed with the number four and suffixed by both -ma and -cha. Neither of these spellings makes sense on a root like OOK. Rather, they suggest a word ending in -Vm or even, in the case of the Tortuguero example, -Vmach.

A review of relevant lexical sources discloses the following interesting items:

Ch’orti’ ejmach “mapache (raccoon)” (Hull 2005:35)
Ch’ol ejmech “mapache; mamífero (raccoon; mammal)” (Aulie and Aulie 1998:43)
Yucatec ee’muuch “Animal cuatro perdedo el tamaño de un perro doméstico, de color negro. Es carnívoro y habita en cuevas. (Quadrupedal animal the size of a domestic dog, black in color. It is carnivorous and lives in caves.)” (Bastarrachea et al. 1992:88)
Poptí’ eman “mapache (raccoon)” (Kaufman 2003:557)

The close agreement of the Tortuguero spelling (Figure 3) and the Ch’orti’ term is interesting, and comprises another small piece of evidence for the affiliation of Classic Maya writing with Eastern Ch’olan languages (see Houston et al. 2000). Yet the solitary -ma complement on the Xultún-style vessel (Figure 2), coupled with the chaotic terminations of the “rac-
coon” term in the languages (e.g., -ach, -ech, -uuch, -an), suggest that the logograph may merely have recorded EHM, the root of the “raccoon” term. That ehm had an infixed glottal-ḥ, at least in the Ch’olan languages, is demonstrated by the cognates in Ch’orti’ and Ch’ol. As such, the EHM-ma spelling on the Xultún-style vessel probably cues ehm only, with the disharmonic -ma signaling the vocalic complexity of the root (i.e., its infixed ḥ; see Houston et al. 1998). By contrast, the EHM-ma-cha spelling on Tortuguero Monument 6 more narrowly implicates ehmach, the Eastern Ch’olan form of the word for “raccoon”, indicating that this innovation was present by at least the late seventh century.

Little is known of the significance of the raccoon in Maya culture, for the animal is only cursorily mentioned in stories and songs. Yet we find numerous references to the raccoon as a Maize pest in dictionaries. Thus, Hull (2005:35) provides the Ch’orti’ sentence e ejmach ayan uch’en i e ejmach uk’uxyo’b’ e tzijtzi a’n, “raccoons have holes and eat unripened corn.” Similarly, Wisdom (1950:655) informs us that e ejmach uxxuch’i ka nar, “the raccoon steals our maize,” while Attinasi (1973:263) notes that the raccoon is “a mammal which raids the cornfield.” The outcome of the raccoon’s banditry is frequently an unhappy one, as indicated by occasional references to “raccoon traps” (Wisdom 1950:561) and to the killing of raccoons by irate farmers (Scott and Warkentin 1960:94). Thus despite the absence of the raccoon from song and story, the animal is likely to have been a profound practical concern for Classic Maya agriculturalists, and so it is hardly surprising to see it referenced in ancient writing.

While this discovery of references to the raccoon in Late Classic times is interesting, it pales in significance to other uses of the “raccoon” glyph in the inscriptions. Intriguingly, the EHM sign is often used to write the verbs ehm-(i)-Ø and ehm-ey-Ø, “he descends, goes down,” in which contexts the subjects are occasionally winged deities and messengers, or kings on their way to war.

The ehm-i-Ø and ehm-ey-Ø verbs

Identification of the “raccoon” glyph as a verb meaning “to descend, go down” begins with the famous mythological scene on the Blowgunner Pot, now in the collections of the Boston Museum of Fine Arts (Figure 4). Following Blom’s (1950) discussion of a similar scene on a polychrome plate, Robicsek and Hales (1982:56-57) were among the first to propose that this vase depicted the shooting of “Seven Macaw” by the Hero Twins, an interpretation which is now widely accepted (Cortez 1986; Freidel et al. 1993:69-71; Taube 1987:4-5).

Figure 4. The avian form of God D “comes down (from) the sky.” The Blowgunner Pot, Boston Museum of Fine Arts, K1226 (after a photograph by Justin Kerr in Robicsek and Hales 1982:57).

6 It is unclear to me why Kaufman and Norman (1984:120) reconstruct Proto-Ch’olan *ehmäch, “raccoon,” since only Ch’orti’ and Popti’ provide any evidence of -a in the suffix, but no evidence of the sixth-vowel ä (which I regard as a recent innovation in Western Ch’olan). Elsewhere, Kaufman (2003:557) suggests a Western Mayan reconstruction of *ṭehmäC, where -C represents an undetermined consonant. Since he only lists the Ch’orti’ and Popti’ cognates, it is clear that he has been swayed by the presence of a in both. Yet this does not take adequate account of the Ch’ol and Yucatec cognates, which suggest a more complex picture. Although the cognates are spotty, I think they best support a Western Mayan reconstruction of *ehm, with subsequent and independent innovations of suffixes in various daughter languages. Similar innovations have clearly affected the native terms for “armadillo” and “coati”.

7 Neither Ch’orti’ nor Ch’ol distinguish between velar (j) or glottal (h) spirants, so the j in ejmach and ejmech is purely orthographic.
Nevertheless, there remains some doubt about the identification of the “Principal Bird Deity” with “Seven Macaw” of the Popol Vuh. As Karen Bassie (2002:24) has pointed out, Bardawil (1976) conflates at least two distinct entities in his classic discussion of the “Principal Bird Deity.” As Hellmuth (1987:364-5) has noted, the first is clearly a bird of prey rather than a macaw or parrot, and Bassie (2002:31-34) amasses considerable evidence for his identification with the waco or laughing falcon (Herpetotheres cachinnans). This bird is clearly the avian form of God D (Hellmuth 1987:364-6; Taube 2003:471-2) and sports the same AK'AB mirror and cut-shell YAX diadem worn by this god. He frequently appears perched atop the world tree, and is often associated with sacrifice and accession to high office (Taube 1987). It is this bird that appears on the Blowgunner Pot and kindred scenes. By contrast, the second entity is never associated with the symbols of God D, but is nevertheless depicted biting off the arm of Juun Ajaw (the Classic Jun Junahpu) in a number of scenes (see Fash 1997:26, fig. 5 and Yadeun 1992:10-11). Further, this entity is explicitly depicted as a macaw at Copan, and carries the name Chan Mo’ Nal, or “Four Macaw Maize” at Tonina and on page 40b of the Dresden Codex.

Given the foregoing, we are faced with the enigma of two distinct birds, each associated with the Hero Twins in various scenes. Bassie (2002:31) has contended that since the Hero Twins shoot at least two distinct birds in the Popol Vuh (the laughing falcon and “Seven Macaw”), but only one is said to have bitten off the arm of Junahpu (“Seven Macaw”), it would seem best to identify the Chan Mo’ Nal entity with this bird, and the avian form of God D with the laughing falcon. If she is correct, then the Blowgunner Pot does not depict the slaying of “Seven Macaw” at all, but rather the shooting of the avian avatar or messenger of God D. As will be seen, there is some reason to favor this interpretation. Texts associated with the Blowgunner Pot and cognate scenes frequently associate a “descending” bird with God D, and at least once describes the bird as his ebeet, or “messenger”.

To return to the Blowgunner Pot (Figure 4), Juun Ajaw clearly shoots his blowgun at the bird form of God D, who appears to float, with wings spread, just above a tall fruit-bearing tree. The text immediately above the blowgun is a fairly standard PSS, naming the owner of the vessel in question. The text below the blowgun would therefore appear to describe the scene. It opens with the Calendar Round date 1 Ajaw 3 K’ank’in, followed by the “raccoon” glyph (in the verbal position), the “sky” sign (CHAN-na) and the name glyphs of the avian avatar of God D.8 The date is almost certainly mythological rather than historical, and there is insufficient evidence for its placement in real time. Linda Schele read the verb as ok chan or och chan, “enters (the) sky” (Freidel et al. 1993:69-71). Yet this does not appear to fit the imagery particularly well, since the bird is oriented downward, apparently headed toward the tree rather than away from it.

Given the EHM reading for the “raccoon” glyph discussed above, we might wonder whether there is a suitable verbal meaning in the relevant languages. As it turns out, ehm is a widespread root intransitive verb for “to descend” and “to go down, come down”:

<table>
<thead>
<tr>
<th>Ch’ortí’</th>
<th>ehm</th>
<th>iv.</th>
<th>“bajarse (to get down)”</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>(Kaufman 2003:1279; Wisdom 1995:457)</td>
</tr>
<tr>
<td></td>
<td>ekm-ay</td>
<td>iv.</td>
<td>“to go down, descend”</td>
</tr>
<tr>
<td></td>
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<td></td>
<td>(Hull 2005:35)</td>
</tr>
<tr>
<td>Ch’ol</td>
<td>ejm-el</td>
<td>n.</td>
<td>“derrumbe (cliff, precipice)”</td>
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<td></td>
<td></td>
<td></td>
<td>(Aulie and Aulie 1998:43)</td>
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<tr>
<td>Chontal</td>
<td>ém</td>
<td>iv.</td>
<td>“to go down”</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(Knowles 1984:399)</td>
</tr>
<tr>
<td>Yucatec</td>
<td>éem</td>
<td>iv.</td>
<td>“descend”</td>
</tr>
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<td></td>
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<td></td>
<td>(Bricker et al. 1998:8)</td>
</tr>
<tr>
<td>Mopan</td>
<td>eem</td>
<td>iv.</td>
<td>“bajarse (to get down)”</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(Kaufman 2003:1279; Ulrich and Ulrich 1978:88)</td>
</tr>
</tbody>
</table>

8 These name glyphs have been read as Ixtem-Yeh by Linda Schele (Freidel et al. 1993), but there are significant problems with this proposal. Specifically, the initial sign in the last glyph group is not ye but rather a pars pro toto representation of the cranial plate of the avian form of God D (see Tonina M.159, A4; Martin and Grube 2000:188). More generally, there is still no certain linkage of God D’s name to the Colonial term Itzamna, and his Classic cognomen is actually a complex congeries of forms, including the still undeciphered AK’AB mirror, an avian head (possibly TZ’IKIN, especially in the codices), the aged God N head (MAM), and the optional adjuncts YAX, NAH and MU(T) (see Bassie 2002:25-31 for a recent overview of these spellings). The puzzle of God D’s names is still far from resolved, and must be saved for a future study.

Figure 5. The Palenque patron god G1 “comes down from the sky.” Palenque, Tablet of the Cross, D7-D8 (after a drawing by Linda Schele).
Other than the interesting development of a secondary, related form *ekm-ay in Ch’orti’ (probably via the fortition of ‘h to k), these forms are very similar, and each shows the expected phonological developments from an earlier form *ehm (Brown and Wichmann 2004:168). Given these data, Kaufman and Norman (1984:119) reconstruct Proto-Ch’olan *ehm vi. “go down, come down”.

Like other root intransitive verbs in Maya writing (e.g., cham “to die”, och “to enter”, hul “to arrive”), we would expect *ehm to be inflected most frequently as ehm-i-Ø, where -i is the single argument predicate marker and -Ø the third person singular absolutive pronoun. Since the script frequently represents such verbs by their logographic roots alone (e.g., CHAM, OCH, HUL), the apparently “bare” EHM spelling on the Blowgunner Pot is also expected. As will be seen below, however, there are also some uniquely inflected forms of ehm which seem to prefigure the innovative Ch’orti’ form.

At this point, we can return once more to the Blowgunner Pot. Considered together with the following “sky” sign (CHAN-na), the verbal sequence can now be read as EHM-CHAN-na, ehm-(i)-Ø chan, “he de-
scends (from) the sky” or “he comes down (from) the sky.” As mentioned earlier, this seems a reasonable description of the scene, where the avian aspect of God D indeed seems to be descending or coming down from the heavens. The absence of an explicit preposition (“from”) is typical of statements involving verbs of motion, both in modern Mayan languages and in the script, though it is interesting to note that a parallel statement (without associated iconography) does mark the preposition explicitly.

Thus, in a passage from the Tablet of the Cross (Figure 5), we read that the Palenque patron god G1 “comes down from the sky” (EHM-TA-CHAN-na, ehm-[i]-Ø ta-chan). This event is juxtaposed with another where G1 apparently “goes up (to) Six Sky, (to) the northern Eight-G1 Edifice, (which is) the name of the house of the north” (T’AB?-yi 6-?-CHAN-na NAAH-la 8-?-NAAH U-K’ABA’ yo-OTOOT-ti xa-MAN?-na, t’ab-aly-i-Ø wak ?-chan naahal wakak?-naah, u-k’aba’ y-otoot xaman). Although the latter part of this phrase remains somewhat enigmatic, it is interesting that a descent is here partnered with an ascent. Might it be that G1 came down from the heavens to receive offerings, and then returned, as it were, to set his heavenly house in order? Whatever their ultimate significance, it is perhaps noteworthy that these events are said to have taken place on 0.0.1.9.2 13 Ik’ 0 Ch’en (March 3, 3112 BC), just five hundred and forty two days after the “Creation” date (Freidel et al. 1993:69-70, fig. 2.7b). That G1 was indeed an inhabitant of the “sky” (rather than some other domain) is likewise suggested by the new bench text from Palenque Temple XIX, which recounts his accession “in the jeweled sky” at the behest of the evidently celestial God D almost two hundred years earlier (see Stuart, in press).

One Late Classic vase contains two distinct references to the “descent” of God D, and helps to place these events in a larger mythological context. In the first panel (Figure 6), we see a seated supernatural figure whose facial features, dress and accouterments identify him as the deity jocularly known as Casper. His hands are stretched heavenward, and his gaze is fixed on the descendant avian form of God D. The associated text is short and to the point:

1-AJAW 8-TE’ UUN-ni-wa EHM juun-ajaw waxak-te’-uniw ehm-(i)-Ø
“(On) 1 Ajaw 8 K’an’i’ he descends.”

With the exception of the haab coefficient, the date is identical to that on the Blowgunner Pot. Given the frequent variation in such coefficients on Codex Style vessels (Martin 1997:853), it may be worth considering that these two vessels portray essentially contemporaneous events. As Grube (2004:125) notes, ambiguous and fluctuating dates of this type seem to symbolize events set in a remote, mythological past.

A second panel on the same vessel not only restates this event, but goes on to more fully describe its actors and location (Figure 7). The scene is apparently set in the palace of God D, marked as taking place in a mountain cave by the regularly spaced TUUN or WITZ diadems on the flanking walls (and see Figure 9 for a somewhat less stylized example of the same convention). Now in his anthropomorphic form, God D sits atop a sumptuously appointed throne and receives the Casper deity, who kneels before him and probably brings tribute in the form of textiles (in front of God D) and codices (below the throne). A short, two-glyph greeting is connected to his mouth by means of a dotted speech scroll, but the text eludes understanding. Thankfully the larger text is more readily discernible (Figure 8):

Figure 8. The descent of God D at the behest of Casper and the Hero Twins. Main text from K7821 (after a photograph by Justin Kerr).

10 Linda Schele gave this nickname to the second ruler of Palenque (ruled AD 435-487). His name glyphs demonstrate that the “Casper” element is just the pars pro toto mouth of T1077 (see Martin and Grube 2000:156-157), itself the probable portrait of this deity. While uncommon, depictions of the Casper entity typically highlight sacrificial themes. On K1254, he beats a deer to death with a stone, while on K1207 he is shown pouring out a large olla which mimics the shape of his mouth. Other scenes demonstrate militaristic overtones and connections with hummingbird iconography, as on K7716 and Lintel 2 of Tikal’s Temple IV (see Martin 1996, Martin and Grube 2000:79), where Casper appears as a god effigy decorating Naranjo’s ceremonial litters. This litter is called a “hummingbird litter” in the Tikal text (Simon Martin, personal communication 2000), and given the close association between militarism and hummingbirds in ancient Mesoamerica, the Casper deity may actually have been thought of as an anthropomorphic hummingbird.
1-AJAW 8-UUN-ni-wa EHM-ye GOD D
juun-ajaw waxak-uniiw ehm-ey-Ø GOD D
“(On) 1 Ahau 8 K’an’in, ‘God D’ descends.”

U-KAB-ya CASPER yi-ta-ja 1-AJAW-wa
YAX-BALUUN
u-kab-iiy-Ø Casper, y-itaj Juunajaw Yaxbaluun
“Casper oversaw it, along with Juunajaw (and)
Yaxbaluun.”

u-ti-ya 13?-HAAB-ya
uht-iiy-Ø uhxlajuun?-haab-iiy
“It happened (at) Uhxlajuun Haabiiy,” or
“It happened, thirteen years earlier.”

While the inflection of the ehm verb is somewhat different here, the text is clearly a restatement of the event from the first panel, and it therefore seems reasonable to consider it as essentially the same verb. Moreover, the spelling is explicable if we take account of Ch’ort’i’ ekm-ay, the innovative form discussed earlier. As John Robertson has shown, Eastern Ch’olan languages have innovated a -Vy suffix on verbs of motion and change of state (e.g., T’AB?-yi, t’ab-ay-i-Ø, “he goes up,” LOK’-yi, lok’-oy-i, “he exits, leaves”). The provenience of this suffix is the mediopassive voice (also -Vy), itself ultimately from an earlier passive (see Houston et al. 2000). If the EHM-ye spellings do indeed cue ehm-ey-Ø, then this form would be intermediate between wider Ch’olan ehm-i-Ø and modern Ch’ort’i’ ekm-ay-Ø, and

Figure 9. The court of God D and his winged messenger. Sculpted Throne Back, Museo Amparo, Puebla (after a photograph by Michel Zabé in Miller and Martin 2004:plate 1).

Figure 10. The text on the Amparo Throne.
would provide another important piece of evidence for the essentially Eastern Ch’olan nature of the Classic script.11

To return to the text (Figure 8), it is intriguing that Casper takes primary responsibility for the “descent” of God D, along with the Hero Twins. Did they summon him? The consideration that Casper and the Hero Twins supervised the arrival of God D, coupled with the supplicating Casper in the associated palace scene, does much to belie any association between God D and “Seven Macaw” of the Popol Vuh. Rather, as suggested by Bassie, it would seem that God D’s avian avatar is probably a messenger and mouthpiece of this deity, able to traverse the realms of sky, earth and underworld by virtue of its wings (another prevalent theme in the Popol Vuh).

These suggestions are amply borne out on a magnificent sculpted throne back, now in the collections of the Museo Amparo in Puebla (Figure 9). Although at least a third of the original composition is missing, the surviving portions show a scene remarkably cognate to that on K7821. God D again holds court in a cavernous chamber, so marked by repeated profiles of a stalactite-toothed WITZ monster. As noted by Miller and Martin (2004:28-29) he is attended by a goddess and a small, winged supernatural who elsewhere appears as a personified tree (TE’), and as the patron of the month Pax (SIBIK-TE’). The associated text opens with the Calendar Round date 9 Eb 0 Sotz’ (Figure 10), a mythological date which cannot be confidently placed in linear time. This is followed by the verb (EHM-ye), a probable place name (6-CHAN-na-NAL), the name of the winged messenger (TE’), and then the formula ye-be-ta ‘God D’. The whole can be read as:

EHM-ye 6-CHAN-na-NAL TE’? ye-be-ta GOD D
ehm-ey-Ø Wakchannal Paax God; ye-beet God D
“The Paax God comes down (from) the Six Sky Place; he is the messenger of God D.”

Both Houston (2002) and Miller and Martin (2004:29) have discussed the significance of the term ebeet “messenger” in this context, as well as its wider resonance with regard to the avian messengers of gods so well known from the Popol Vuh and the Dresden Codex:12 Yet

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11 It is important to note that the mediopassive voice is typically indicated by a yi syllable in the Maya script (e.g., ju-bu-yi, jub-uy-i-Ø, “falls,” ja-tz’a-yi, jatz’-ay-i-Ø, “gets hit”), not ye or any other yV syllable. Were the scribes perhaps making an effort in this case to disambiguate the mediopassive (with -yi) from verbs of motion and change of state (with -ye, or perhaps -yV signs)? More work on this novel verb class will be needed before this question can be answered.

12 The ebeet term was deciphered by David Stuart (personal communication 2000).

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Figure 11. Events on the day 9.15.12.12.12 6 Eb 0 Pop. Tikal Temple IV, Lintel 2, B3-A8 (after Jones and Satterthwaite 1982:fig.73).
the verb has hitherto remained elusive, and it is now clear that the main event is the descent of the winged messenger of God D from the heavens. As in the text from the Tablet of the Cross, this descent is paired with a subsequent ascent:

T'AB-yi tu-CH'EEN-na K'UH-na-AJAW

"He (the Pax God) goes up into the cave of the Divine Lord."

It seems likely that this text refers to the return of the winged messenger to the court of God D (both iconographically and textually identified as a “cave”), to whom he likely brings tidings from his travels abroad. This wonderful text thus gives us a privileged look at the mechanisms of governance employed by the celestial God D, who presumably relied on his messengers (surely more than one) to monitor affairs on the world below, perhaps only rarely sallying forth in his own avian form to deal with more important matters (such as, presumably, the events depicted on the Blowgunner Pot).

Two final occurrences of the ehm-ey-Ø verb are in purely historical contexts, apportioning considerable information on the conduct and sequence of Classic Maya warfare. The first occurs in a passage from Lintel 2 of Tikal’s Temple IV. The text and imagery of this lintel have been rather thoroughly discussed by Simon Martin (1996), especially its record of a “star war” waged by Tikal’s Ruler B against Naranjo on 9.15.12.11.13 7 Ben 1 Pop (February 4, 744), and the subsequent capture of its king, Yax Mayuy Chan Chahk (see also Martin and Grube 2000:49-50). Here I wish only to augment Martin’s insightful analysis with a discussion of the passage immediately preceding this account of warfare.

The lintel opens with a record of the half-period ending on 9.15.10.0.0 3 Ajaw 3 Mol, which serves as the anchor for an event taking place 2.11.12 later, on 9.15.12.11.12 6 Eb 0 Pop (February 3, 744) (Figure 11a). As Martin (1996:223) has noted, this is just one day before the warfare events recorded in the next passage. The verb (at B4, Figure 11b) is clearly the “raccoon” glyph EHM (here conflated with the ye hand), followed by a place name (?-SAK-?-la) and the lengthy nominal phrase of Ruler B (A5-B5), including the Tikal Emblem Glyph (at A6). Then (at B6, Figure 11c), another verb (HUL) and place name (tu-ba-la) appear. Finally, a one-day distance number connects to the date of the “star war” (Figure 11d). The main passage can thus be read as follows:

EHM-ye-?-SAK-?-la  Ruler B HUL-tu-ba-la
ehm-ey-Ø ?-Sak-...-al Ruler B hul-(i)-Ø Tuubal
“Ruler B came down (from) ?-Sak-...-al (and) arrived (at) Tuubal”

It is possible that the first toponym (?-Sak-...-al) represents a place located on high ground, such as the escarpment which separates Tikal from the lake district to its south. If so, this might have motivated the use of ehm-ey-Ø to record the king’s descent from a height. Alternately, we might consider a somewhat more colloquial or directional significance for ehm-ey-Ø in this context. Given the location of Naranjo to the south and east of Tikal, it is possible that the verb references a movement “southwards” or even “away from the center,” both typical extensional meanings of “down” (and see Stuart 2004a:4 for a similar point about the verb t’ab, “to go up”). In any event, the close pairing with hul-i-Ø leaves little doubt that these verbs record travel from one location to another.

With respect to the second toponym (Tuubal), Martin and Grube (2000:76-77) have shown that this must have been located in the vicinity of Naranjo. This would perhaps have made it a reasonable staging ground for Tikal’s attack against that polity. In fact, given the “dawn” glyph (at A7), it is quite possible that Ruler B attacked Naranjo at first light the next morning. Seen from this perspective, the opening passages of Lintel 2 record nothing less than the mobilization and encampment of Tikal’s forces in preparation for a “star war” attack. That the Tikal forces reached the site in but two days despite an intervening distance of forty kilometers (by air), and that these events evidently took place during New Year’s celebrations (Stuart 2004b), suggests that surprise may have been an important factor.

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13 Tikal Stela 5 records the same place name as the subject of the obscure T550 verb. As Martin (1996) has shown, this monument was also commissioned by Ruler B and records the capture of Yax Mayuy Chan Chahk of Naranjo.
in this encounter.\textsuperscript{14}

Equally informative is a short passage from Tortuguero Monument 6 (Figure 12), which provides further suggestive details on the prelude to warfare:

I-EHM-ye U-NAAH-U-TOOK’-PAKAL
i-ehm-ey-O u-nah u-took’ (u)-pakal
“then Bahlam Ajaw came down (from) the house of his flints, his shields”

Dated to 9.10.11.9.6 13 Kimi 14 Sek (June 1, 644), and immediately preceding a “star war” waged by Bahlam Ajaw of Tortuguero against the site of Uxte’k’uh, this passage suggests the military preparations for waging war. Read literally, Bahlam Ajaw may have taken weapons from an armory before marching off to war. Read somewhat more metaphorically, in a context where took’ pakal might cue a diphrasic kenning for “warriors” or even “army” (Simon Martin, personal communication 2000), this passage might be seen to record the amassing of troops in preparation for an attack. Without further parallels, it will be difficult to choose between these two possibilities.

Many more animals lurk unidentified in Maya writing, and there are still other distinct signs routinely confused by scholars. If this discussion has succeeded in teasing apart the “dog” and “raccoon” glyphs, and in motivating the nominal and verbal usages of the latter, then it is because of the highly pictorial nature of Maya script, and the rare but important appearance of phonetic complements. More work needs to be done in justifying the equations we so often make between signs, for the Maya script was a supple script, and other signs as yet unidentified have the potential to communicate nominal and verbal meanings equally as complex and significant as the “raccoon” glyph.

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\textsuperscript{14} Richard Adams (1978:27) indicates that “[s]omething between 2 and 3 km. per hour is typical of travel through the rain forest today. This is on unimproved trails, full of obstacles and with detours around fallen trees, etc. In ancient times, it is safe to assume that at least the main routes of travel were kept cleared, open, and bridged. Thirty-one to thirty-five km. can be covered in ten hours if one urges the party on.” Even a hastening party should have required a night’s rest between Tikal and Naranjo, then, especially if they expected to arrive in any condition for battle.
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