

Sweet Cacao and Sour Atole: Mixed Drinks on Classic Maya Ceramic Vases

Dmitri Beliaev, Albert Davletshin, and Alexandre Tokovinine

Deciphering Classic Maya Recipes

Many Classic Maya painted vessels feature a genre of inscriptions known as the “dedicatory formula” or the “primary standard sequence” (PSS). These texts usually mention the vessel type, its contents, and its owner’s name. The decipherment of the PSS on Classic Maya ceramics in the 1980s (Houston and Taube 1987; Houston et al. 1989; MacLeod 1989; Stuart 1988, 1989) opened the first page in the Ancient Maya cook book. The two main ingredients mentioned in the contents section of the PSS were cacao and atole (maize gruel), but the list of additives and flavors quickly expanded.

First of all, it was shown that different kinds of cacao and maize gruel beverages were in use in the Classic period. David Stuart (1989:152) identified two kinds of cacao. The first one was spelled as **tzi-te-le** or **'i-tzi-te-le**, and Stuart compared it to the Yukatek botanical term *itzimte* or *itzinte* (Stuart 1989:152). The second kind of cacao, read **yu-ta-la**, was left without translation (Stuart 1989:152). Subsequently, Nikolai Grube (1990:326; see also Stuart 2006:196) discovered the collocation **tzi-hi-li ka-wa** on Chochola ceramics and suggested that *tzihil* was an adjective “fresh.” Another term for fresh chocolate – ‘*ach*’ *kakaw* or “fresh cacao” – was identified by Marc Zender in 2002 (see Stuart 2006:199, Fig. 9.15).

Some ingredients mentioned in the PSS have proved to be notoriously hard to transcribe, translate, and understand. The initial interpretation of the **'i-tzi-te-le** sequence was refuted by Miguel García Campillo (1994) who read it as **'i-IX-te-le** or **IX-te-le** and proposed that *'ixte* corresponded to an unknown plant species. Alfonso Lacadena (personal communication 2005) suggested that *'ixte* could be the name of the “gogo tree.” However, the discussion did not end as Stuart (2006:197–198) revised the transcription of **IX-te-le** to **(i)-IXIM-TE'-le** for *'iximte'el kakaw*.

D. Beliaev (✉)

Knorozov Center for Mesoamerican Studies, Russian State University for the Humanities,
Moscow, Russia
e-mail: beliaev@wayeb.org

Stuart (2006:198) also noted that there were at least two plant species named 'iximte', *Karwinskia calderoni* and *Casearia nitida*, both used for medicinal and ceremonial purposes, although there was no ethnographic evidence that their leaves or fruits were added to drinks. An alternative interpretation of 'iximte'el kakaw has been proposed by Simon Martin (2006) who argues that 'iximte'el kakaw refers to mythic origins of maize and chocolate and does not identify any specific ingredient or flavor called 'iximte'.

One may say that the discussion of the PSS has come full circle. Back in those days when the glyphs were not deciphered and the only clue was the funerary context of some vases, the PSS was interpreted as a ritual chant or a mythical narrative (Coe 1973). Today these texts, now read phonetically, are seen by some epigraphers as a collection of metaphors and not literal references to vessels' contents. Nevertheless, we believe that the potential of the PSS to reveal more about the consumption of exquisite foods and drinks at the courts of Classic Maya rulers has not been fully realized. In this chapter, we shall identify a number of new additives and flavors mentioned in dedicatory inscriptions on drinking vessels with a particular emphasis on mixed beverages.

Fruity Cacao

The most common kind of cacao mentioned in dedicatory inscriptions on Classic Maya ceramics is *yutal kakaw*, which is usually spelled **yu-ta-la** or **yu-ta** (Fig. 1). Barbara Macleod interpreted it as "cacao food/sustenance" based on reconstructed root **ut* "food" (Reents-Budet et al. 1994b:75, 161). This interpretation is widely accepted among the epigraphers.

Alfonso Lacadena (personal communication 2005) has suggested a new translation of **yu-ta-la ka-ka-wa** as *y-ut-al kakaw* "3SE-seed-POSS cacao" or "the seeds of cacao." However, this interpretation is not supported by the obvious function of the *yuch'ib* as a vessel for liquids nor the linguistic data. There is no doubt that *yuch'ib* vessels were used for liquids, not for seeds or other hard foods.

Moreover, the reconstruction of **ut* is not supported by linguistic data. The only relevant entry is Ch'orti' *yutir* "fruit, berry, pinecone" recorded by Charles Wisdom (n.d.:772). Wisdom noted that *yutir* appears only with ergative 'u- and analyzed it as compound *u-yut-ir* related to *ut* for "eye, any small opening or passage... any



Fig. 1 Example of the *yuch'ib' ta yutal kakaw* clause in a dedicatory inscription (after Stuart 1989:Fig. 5; this and subsequent drawings by Alexandre Tokovinine)

round fruit (especially seed, nut or berry)” (ibid.:749). Full-sentence examples provided by Pérez Martínez et al. (1996:268) include *e murak dyalma uyutir* (“*el jocotal dio muchos frutos*”) and *uterar e naranja yaja, ayutiri me’yra* (“*aquel palo de naranja produce muchos frutos*”). It appears that the intransitive verb *ayutiri* and the participle *yutiria’ar* for “fruitful” given by Wisdom (n.d.:772) are derived from the noun stem *yutir*. The first-person possessive form of this word is *niyutir* and not *niwutir* (Pérez Martínez et al. 1996:268). Therefore, *y-* cannot be an ergative pronoun.

This observation is corroborated by the field data generously provided to us by Kerry Hull (personal communication, 2008). In the intransitive verb *yutiri*, *y-* is part of the root as in the following sentence: *ka’y yutiri e sandía* (“*la sandía empezó a echar fruta*”). The Set C pronoun *a-* would appear in the noncompletive (e.g., *aka’y ayutiri*), but it is absent in the completive form presented above, proving that *y-* is not epenthetic but rather part of the root. *Yutir* is attested in compounds as *yutir* and not as *utir*: *e ajchonyutirob’ ujuxrwo’b’ e yutir twa’ achonpa* (“*los vendedores de fruta cortaron las frutas para vender*”). The definite article before *yutir* in *e yutir* above suggests that the root must be *yut-*. Finally, *y-* does not disappear in other derived forms such as *yutur* for “*aguado*”: *intix yutur ninak’* (“*siento que mi barriga está muy dentenida*”). The only way to explain these data is that the root is *yut-*.

In the Jocotan dialect recorded by Pérez Martínez et al., *ut* seems to have a more general meaning and is greatly grammaticalized. Ergative markers are added to the second part of the compounds with *ut*: *ut ixim* “*maíz en grano*” – *ut niwixim*; *ut k’ab’* “*brazo*” – *ut nik’ab’*; *ut k’u’m* “*nixtamal*” – *ut nik’u’m*; *ut mangu* “*pepita de mango*” – *ut nimagu*; *ut tzaput* “*zapuyul, pepita de zapote*” – *ut nitzaput* etc. (ibid.:242–243). The same pattern is noted in Wisdom’s materials where *ut* more frequently means “small piece, seed” and “front, face” than “fruit”. As Hull suggests (personal communication, 2008), when the ergative *u-* is added to *ut*, the vowels elide resulting in *u’t*. This rearticulation was attested for all speakers interviewed by Hull.

All other dictionaries of Ch’orti’ also contain *yutir* as “fruit.” Hull (2005:21, 23, 60, 61, 98, 100) included it among his examples like *ute’rar e chi’ ak’a’wan i atak’a uyutir tame’ septiembre* (“the nance tree produces fruit, and its fruit matures in September”) or *e chuch axana tu’k’ab’ e te’ i uwya’r ja’x uyutir e te’* (“the squirrel walks on the branch of the tree, and its food is the fruit of trees”). Moreover, these examples show that *yutir* can be used with all kinds of trees – nance, mango, cacao, gourd – as well as in a general sense of “tree fruit.”

A rare nominal form *yutar* is attested in the Ch’orti’ dialect recorded by Wisdom (n.d.:468, 696) as in examples like *inte’ chacha’r uyutar* “a cluster of its fruit” and *inhini uyutar nite’* “I pluck the fruit of my tree.” In one case (*chichi’ u yutar* “sweet fruit, tasty fruit”), Wisdom noted that it “could be *yutir*” (ibid.:704).

There is no doubt that Ch’orti’ *yutir/yutar* is related to pan-Mayan #(h)ut “face, fruit” (Kaufman and Justeson 2003:324 reconstructed it as **Haty* with weak /h/). This is corroborated by other Cholan languages: CHL *wut* “fruta”, *wut taj* “*piña de pino*”, *wut te’* “*fruta de árbol*” (Aulie y Aulie 1978:132); CNT *jut* “*fruta (cuando el árbol o la planta está en contexto)*”, *juti* “*echar fruta, dar fruta*” (Keller y Luciano

1997:144–145). Even in Moran’s dictionary of Cholti, the closest relative of Ch’orti’, there is an entry <u ut te> “fruta” (Moran 1935[1695]:16). However, Ch’orti’ data clearly demonstrate that *yutir* and *ut* are different words.

In the PSS, we find at least fourteen examples where another attributive is inserted between *yutal* and *kakaw*. In twelve cases, it is *iximte’el* and in one case it is *ho’ kab’* – a reference to a mixture of “five honeys” or a place name associated with the archeological site of Ixtutz (Stuart 2006:194, Fig. 9.10). The inscription on the unprovenanced vessel photographed by Justin Kerr (Kerr n.d.:K625; Stuart 2006:194–196, Fig. 9.11) is of particular significance because it contains an expanded version of the collocation: *yuch’ib’ ta yuta[l] k’an kakaw* “his drinking vessel for *yutal* ripe cacao.” In this context, *yutal* clearly functions as an adjective. Consequently, *-al* can be analyzed as an adjectival suffix or as a nominal suffix deriving a noun that designates a more specific or general category of fruits. Both *yutir* and *yutar* for “fruit” are attested in Ch’orti’ (see above). Therefore, we believe that the phrase *ta yutal kakaw* should be translated “for fruity cacao” or “for fruit cacao.”

Stuart (2006:188) expressed doubts that *yutal* could mean “fruity” because of a rare phrase *’uyutal kelem* (“the *yutal* of the young man”) on the carved vessel from Yucatan published by Dütting (1992: Fig. 17). However, this is clearly part of the owner’s title: *chak-ch’ok winik ’u-yutal kele’m*. A similar title appears on the unprovenanced plate (Kerr n.d.:K6080) that probably came from El Zotz. The inscription on plate K6080 explicitly states that its content has nothing to do with cacao or drinking because this is an “eating utensil” (*we’ib’*) for tamales with deer meat (Zender 2000). Consequently, these instances of *yutal* are not counterexamples for translating *yutal kakaw* as “fruit(y) cacao” because their contexts are vastly different.

What kind of drink might a “fruity cacao” be? The common assumption about Classic Maya cacao beverages is that those were various kinds of chocolate or drinks made from cacao beans. In line with this assumption, a “fruity cacao” would be a kind of chocolate drink with some fruit flavors. There can be other interpretations. One of the common forms of traditional cacao drinks in Highland Guatemala today is the so-called “*refresco de pocha*” or a beverage made from the pulp of the cacao pod itself that can be consumed fresh or allowed to ferment (McNeil 2006:345–346). If Classic Maya “fruity cacao” is a drink from fresh or fermented cacao pods, then it is not chocolate at all. However, this hypothesis would have to be proved by means of residue analysis or other techniques applied to “fruity cacao” vessels found in secure archeological context (e.g., McNeil et al. 2006). Unfortunately, most known Classic Maya painted vessels have been looted and do not have provenance.

Sweet Chocolate

A rare qualifier for cacao beverages is attested on a lidded tripod (TIK MT 4) from Burial 10 at Tikal (Culbert 1993:Fig. 19a). The inscription on the lid of the vessel can be read as **yu-UCH’ tza** ^[2]**ka-wa yu-ne B’OLON-TZ’AK-b’u-’AJAW**



Fig. 2 *Tzah kakaw* on Tikal MT 4

y-uch' [ib'] [ta] tzah kakaw y-unen b'olon tz'akb'uul 'ajaw “It is the drinking vessel for sweet cacao of the son of *B'olon Tz'akb'uul 'Ajaw*”.

We believe that *tzah kakaw* in this inscription (Fig. 2) can be translated as “sweet cacao.” *Tzah* is a common adjective meaning “sweet” in Maya languages: pM **tzah*, pCH **tzah* “sweet” (Kaufman and Norman 1984:133). It is attested in all Ch'olan languages: CRT *tzah* “tasty, savory, anything tasty, tasty fruit”, *tzah ha'* “any fruit beverage”; CHL *tzaj* “dulce” (Aulie y Aulie 1978:117); CNT *tzaj* “dulce” (Keller y Luciano 1997:254).

The significance of this decipherment is that it allows for a more precise translation of *kaab'il kakaw* or *chaab'il kakaw* (“honey cacao”) which has been translated simply as “sweet cacao” (e.g., Stuart 2006:195–196). As we have demonstrated, if a term for “sweet” already exists in the inscriptions, there is no apparent reason to use a more generalized meaning of the word “honey.” Another implication is a possibility of identifying a non-honey sweetener in residues. At the very least, lack of evidence for honey in residues should not automatically imply that no sweeteners were present. For instance, the sweetener could be extracted from maize stalks (Smalley and Blake 2003:679–681).

Cherry Chocolate

Another uncommon additive to cacao drinks appears on four Early Classic vessels (Fig. 3). It is consistently spelled with an undeciphered sign vaguely resembling a syllable **tzi**. However, the real **tzi** appears to be a phonetic complement to this sign and is present in three out of four spellings. The first example of the term on an Early Classic lidded vessel (Kerr n.d.:K8458) that once belonged to the ruler of El Zotz (Houston 2008:2–3, Fig. 4) appears in a clause **yu-ch'i-b'i ta-²ka-wa ta-'AJAW ta-[?]-ka-wa**, *y-uch'ib' ta kakaw ta 'ajaw ta [?] kakaw* “his drinking vessel for cacao, for the lord, for [?] cacao.” The inscription on the unprovenanced lidded vessel that could be from Xultun (Kerr n.d.:K5367) contains a more abbreviated version with only **yu-ch'i-b'i tzi-[?] ka-wa** *y-uch'ib' [ta] [?] kakaw* (Fig. 3a). A nearly identical clause appears on a tripod (TIK MT 5) from Burial 10 at Tikal (Culbert 1993:Fig. 19b): **yu-'UCH' ta-tzi-[?] ¹²ka-wa** *y-uch'[ib'] ta [?] kakaw*



Fig. 3 References to *suutz kakaw*: (a) K5367; (b) Tikal MT 5; (c) K8042



Fig. 4 Variants of the SUUTZ logogram: (a) K8042; (b) Tikal MT 5; (c) K5367; (d) K8458

(Fig. 3b). Finally, an unprovenanced vase possibly looted from Naranjo (K8042) features a similar passage where the phonetic complement *tzi* appears below the undeciphered logogram (Fig. 3c): *ch'i-b'i ta-[?]-tzi ka-wa [yu]ch'ib' ta [?] kakaw*. The occasional absence of *tzi* suggests that it functions as a phonetic complement to a logogram. The last example is of particular importance because it shows that *tzi* complements the end of the unknown word. Therefore the undeciphered sign is a logograph that ends in *-tz*. It is clear that the word in question should refer to some kind of flavor added to cacao drinks. In Ch'orti', we find *suutz* for "any cherry-like fruit (capulín)" (Wisdom n.d.:644). Capulín or black cherry (*Prunus serotina*) is a North American wild cherry with round black, sour, edible fruit. In the absence of a full phonetic substitution, this decipherment is by no means certain, but it does offer a plausible interpretation of those clauses. The logograph probably depicts a *capulín* berry (Fig. 4). The disharmonic phonetic complement *tzi* implies that in the Classic period, this word likely had a long vowel and sounded like *suutz*.



Fig. 5 Example of the *yuch'ib' ta pa[h] 'ul* clause on K5465

Sour Atole

An important beverage mentioned in the contents section of the PSS is atole ('*ul, sa', sak ha'*). Nikolai Grube was the first scholar to identify a variety of atole – **ch'a-ja-'u-lu** *ch'aj 'ul* “bitter atole” – in PSS texts (Grube 1990:325). *Kakawal 'ul* or “chocolaty atole” is another kind of atole that has been recently discovered by epigraphers (Houston et al. 2001:32–34, Fig. 15c, Table 9). We believe that this list can be expanded thanks to a Middle Classic El Zotz-style bowl from Marianne Fevre Collecton (Kerr n.d.:K5465; see Coe 1973:No. 39; Houston 2008:4). The dedicatory inscription identifies it as **yu-ch'i b'i ta pa 'u lu** *y-uch'ib' ta pa[h] 'ul* or “the drinking cup for sour atole” (Fig. 5). A similar collocation appears on another unprovenanced El Zotz-style vase (Kerr n.d.:K8418) and on the vessel MN16318 in Tikal National Park (Houston et al. 2006:Fig. 3.1e). The text on the third bowl (Kerr n.d.:K8780) attributed to the lord of El Pajalar or Zapote Bobal identifies its contents as just **pa-ja paj** (Fig. 5).

The spelling **pa-'u-lu** likely corresponds to *pah 'ul* or *paj 'ul* for “sour atole”. *Pah* is a common Mayan word for “acid, sour” which is reconstructed for proto-Mayan. The relevant glosses include CLT *pa* “*agrio, amargo*” (Moran 1935[1695]:6, 9); CRT *pah* “sour, sourness,” *pahpah* “sour,” *pahpah sa'* “unsweetened atol (atolagrio)” (Wisdom n.d.:119); CHL *paj* “*agrio*,” *paj sa'* “*pozole agrio*” (Aulie y Aulie 1978:91); CNT *paj* “*agrio*” (Keller y Luciano 1997:179); TZN *pagh* “*cosa aceda*” (Ara 1986:356); YUC *pah* “*cosa agría o áceda*,” (Barrera Vásquez 1995:618); ix *pah sa'* “*atole agrio*” (Barrera Vásquez 1995:661). Therefore, there is ample linguistic evidence to interpret the collocation *pah 'ul* as a reference to sour atole.

Atole with Sweet Potatoes

A previously unknown kind of Classic Maya mixed drink is mentioned on the unprovenanced vessel currently located in the Santo Domingo Museum in Antigua. The dedicatory inscription along the rim of this bowl identifies the contents as **'i-si 'u-lu** or *'is 'ul* – “sweet potato atole” (Fig. 6). The gloss *'is* for “sweet potato” (Spanish *batata* or *camote*) is attested in Ch'olan languages (e.g., CHT *iz* “*batata, camote*” [Ringle n.d.:#417,#607], CHR *is* for “sweet potato” [Wisdom n.d.:485]). Colonial and Modern Yukatek has the same gloss and various terms for mixed



Fig. 6 'Is 'ul in the dedicatory text on the bowl in the Santo Domingo Museum

drinks of sweet potatoes and atole (iz “*batatas o camotes*” (CMM:222r); ‘iis “*sweet potato*” (Bricker et al. 1998:13); *coppen* “*puchas o atol azedo y sabroso echo de maiz viejo con mezcla de batatas*” [CMM:82v]; š ‘iisi’-sa’ “gruel made from corn and sweet potatoes” (Bricker et al. 1998:13, 238); sa’ is ul “atole de maíz nuevo, hecho el mismo día con camote molido” (Barrera Vásquez 1995:702). Brown and Wichmann (2004:169) reconstruct the corresponding proto-Mayan gloss as *‘ihs. Therefore, it seems plausible to interpret this otherwise unique example as a reference to a mixed atole–sweet potato beverage.

The shape of this bowl corresponds to one of the two subsets of Classic Maya atole vessels. In the initial analysis of the Classic Maya classification of serving vessels, Houston et al. (1989):722, Fig. 2) suggested that atole vessels with contents labeled as ‘ul and *sak ha’* tended to be globular. However, the most common form of a painted Classic Maya atole vessel is a shallow bowl with straight and then slightly flaring walls (Stuart et al. 2005). A vast majority of these atole vessels belong to the Chinos Black-on-cream ceramic type found at sites in Eastern Peten and Western Belize (Reents-Budet et al. 1994a, 2000). The same kind of bowl is depicted on the recently discovered Calakmul murals (Carrasco Vargas and Colon Gonzalez 2005) where the inscription identifies the contents as ‘ul. However, the ‘is ‘ul bowl corresponds to the first, less common group of vessels. In our opinion, this may indicate that the consistency and/or temperature of the atole with sweet potatoes were different from a generic atole.

Sa’, sa’al kakaw, and sak sa’[al] chih

Until recently, the discussion of atole-based beverages mentioned in the dedicatory texts on Classic Maya vessels centered on instances of the gloss ‘ul (spelled ‘u-lu) (Houston et al. 1989; Stuart 1989; Grube 1990). However, ‘ul is not the only term for maize gruel beverages in Maya languages including Yukatek, Ch’ol, Ch’olti’, Ch’orti’, Tzotzil, and Tzeltal, which have so far provided the most important insights for understanding Classic Maya inscriptions.

In the earliest dictionaries of Colonial Yukatek, the common word for atole is *sa’* (Ciudad Real 1995:150, 342; Pérez 1976:424; Acuña et al. 1993:811). It is used as a designation for atole beverages in general and is combined with the names of

additional ingredients to designate mixed or flavored drinks. On the other hand, *'ul* is the name of a “sweet” atole made out of “fresh” and “tender” maize (Ciudad Real 1995:763; Pérez 1976:386). Contemporary Yukatek maintains the distinction between *sa'* as a general term for atole beverages and *'ul* for atole from green corn. For example, Bricker et al.'s dictionary contains *sa'* for “gruel” and “corn gruel” (1998:238) and *'is-ùul* for “gruel made from green corn with a bit of salt” (1998:13, 21). Redfield and Villa give the same term for this kind of atole in Chan Kom (1934:39).

Early colonial Ch'olan languages are far less documented than Yukatek. Moran's Ch'olti' compilation features *matz'* as a “common drink” (Ringle n.d.:#1606). This gloss likely corresponds to Yukatek *matz'* for “maize gruel from which posole is made” and “atole gruel” (Ciudad Real 1995:487). The terms *sa'* and *'ul* are noticeably absent. However, *sa'* appears as a generic term for maize gruel-based beverages in Wisdom's dictionary of twentieth century Ch'orti' (Wisdom n.d.:453, 481, 483, 488, 630, 690, 694, 695). The more recent Ch'orti' dictionary research by Hull suggests that *sa'* may also stand for gruel in general, e.g., *sa'rum* for “daub,” literally “gruel earth” (Hull 2005:100). In contrast to Ch'olti' and Ch'orti', Ch'ol preserves both terms *sa'* and *'ul*: *'ul* for “atole” and *sa'* for “gruel” (Aulie y Aulie 1978:103, 126).

As for Tzeltalan languages, the term *'ul* is attested in Tzeltal, where it denotes a special sweet drink made of the *matz'* corn gruel and commonly consumed during religious ceremonies (Berlin et al. 1974:116). *Sa'* for “gruel” is not present in Tzeltal. Either *sa'* or *'ul* is absent in Tzotzil.

In summary, whenever one or both glosses are attested in the Maya languages discussed above, *sa'* appears to be a generic term for maize gruel drinks or even gruel-like substances, whereas *'ul* corresponds to more refined and exclusive beverages consumed on special occasions. This difference in meaning is relevant to the classification of drinks in Classic Maya inscriptions where *'ul* is the term of choice in dedicatory texts on the vessels, which belonged to those on the very top of the society.

The term *sa'* is also attested in Classic Maya texts. It is usually spelled with the T278:553 logogram that has been deciphered as **SA'** based on the phonetic substitutions in the emblem glyph of Naranjo rulers (Tokovinine and Fialko 2007:1). We also know that **SA'** may designate beverages because of the scene on *Yik'in Chan K'awiil's* drinking vessel found in Burial 196 at Tikal (Culbert 1993:Fig. 84) where **SA'** is inscribed on the body of a jar offered to God D by a hummingbird (Fig. 7b; see Beliaev and Davletshin 2006:33–34). This way of marking the contents of jars and bundles is well attested in Classic Maya imagery (Stuart 2006:190; Stuart et al. 2005; Houston et al. 2006:116–117). It is also significant that the dialog between God D and the hummingbird involves **ch'a-ja ch'aj** (Fig. 7c) – a term for pinole in Ch'olan languages (Kaufman and Norman 1984:119). If *sa'* is the most general term for maize gruel drinks, as we have argued above, then *ch'aj* is a kind of *sa'* or is made from *sa'*. This is consistent with the difference in meaning between *sa'* and *'ul*. The term *sa'* never appears alone in the dedicatory texts on drinking vessels with the exception of an unprovenanced vase published in Justin Kerr's data base

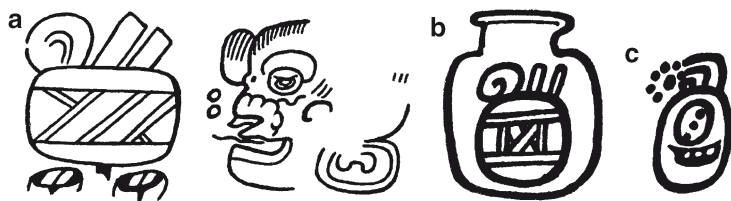


Fig. 7 SA' as a designation for beverages: (a) *sa'al kakaw* on K7529; (b) SA' inscribed on a jar in the scene on the vessel from Burial 196 at Tikal; (c) *ch'aj* mentioned in the dialog related to the jar inscribed with SA'

(Kerr n.d.:K5041). However, this inscription contains so many pseudoglyphs that it cannot be considered reliable.

Where we do find *sa'* or, strictly speaking, an adjective *sa'al* derived from *sa'*, is the term for mixed beverages (Fig. 7a). Until recently, the prevailing interpretation of combinations like *sa'al kakaw* was that they gave the provenance of the ingredients because of the SA' logogram in the Naranjo emblem glyph (Stuart 2006:193–195). However, the only relationship between the adjective *sa'al* on vessels and the place name *Sa'aal* or *Sa'il* in the Naranjo emblem glyph is that both are derived from the same noun (Tokovinine and Fialko 2007:1). The combination *sa'al kakaw* found on some unprovenanced vases (Kerr n.d.:K6813, K7529) and a vessel from Tikal (TIK MT003) should be translated as “gruel-ish chocolate” – a reference to a mixed beverage of chocolate and maize gruel or to a drink of gruel-like consistency. Different kinds of traditional mixed drinks based on atole and cacao are still widespread in Guatemala (McNeil 2006:349–351). We also can contrast *sa'al kakaw* to another Classic Maya mixed drink of maize gruel and cacao – *kakawal 'ul* or “chocolaty atole” mentioned on the unprovenanced vase photographed by Justin Kerr (Kerr n.d.:K2777; see Houston et al. 2001:Fig. 15c, Table 9). Whereas *kakawal 'ul* apparently refers to an *'ul* kind of atole with some cacao flavor, *sa'al kakaw* denotes a predominantly cacao beverage of gruel-like consistency and/or with some generic maize gruel. The existence of both terms implies that Classic Maya scribes, at least sometimes, strove for semantic precision in designating vessels' contents.

Sa'al kakaw was also presumably distinct from *sak ha'*, which was also a mixed beverage of cacao and maize mentioned in ethnohistoric (Villagutierre Soto-Mayor 1983:66; Ciudad Real 1995:256; Ringle n.d.:#2327) and ethnographic sources (Redfield and Villa Rojas 1934:39; McNeil 2006:351). *Sak ha'* is attested as SAK HA' in the PSS on two unprovenanced vases from Petén (Kerr n.d.:K4995; Hellmuth 1987:Fig. 411). *Sak ha'* is a cold beverage made of cooked maize kernels mixed with water and some cacao. It also appears that the consumption of *sak ha'* was reserved for important social or religious occasions.

Sa'al kakaw is not the only known mixed drink with the maize gruel. Copan Altar K mentions drinking *yu-ta-la SAK-SA'-chi-hi* (Fig. 8). We can either transcribe this spelling as *yutal sak sa' chih* or assume an underspelt *-al* and read it as *yutal sak sa'al chih*. *Chih* surely refers to pulque (Houston et al. 2006:116–122).

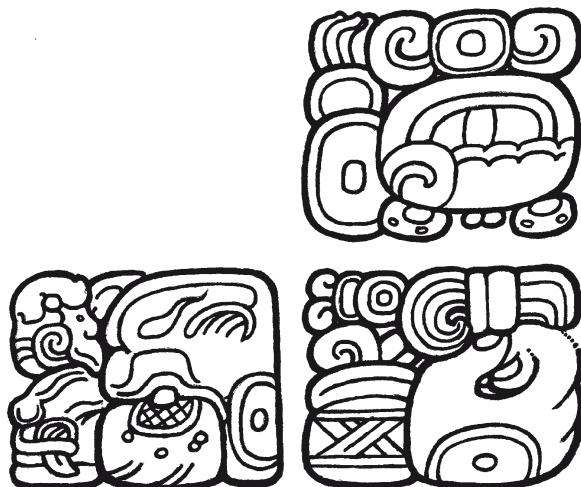


Fig. 8 Drinking *yutal sak sa' chih* mentioned on Copan Altar K:M2-N2

Therefore, the name of the beverage can be translated as “fruity white (maize) gruel pulque” or “fruity white gruel-ish pulque.” The practice of adding different kinds of fruit punch or sour atole to pulque is well-attested in Central America (Orozco y Berra 1855:360–361; Carrasco 2001:87). Therefore, there are some ethnographic analogies of the drink mentioned at Copan.

Discussion and Conclusions

As we have seen above, new types of beverages can still be discovered in the PSS on Classic Maya vessels and it seems likely that even more varieties of flavored or mixed drinks will be found as our corpus of painted pottery expands. We have identified and discussed seven mixed beverages: *yutal kakaw*, *tzah kakaw*, *suutz kakaw*, *pah 'ul*, *is 'ul*, *sa'al kakaw*, and *yutal sak sa' chih*. Besides some immediate consequences of identifying new flavors of Classic Maya drinks for fields like residue analysis, there are some important implications for our understanding of the role of certain foods in the fabric of the Classic Maya society, which are worth discussing.

Even a brief look at the lists of ingredients of modern or ethnohistorically documented mixed beverages (e.g., McNeil 2006:Tables 17.1 and 17.2) suggests that the collocations in the PSS cannot be full recipes. They are surely missing essential ingredients. Therefore, we are dealing with a classification of beverages in which certain ingredients (*iximte'*, *suutz*, *yutal*, *'is*) or qualifiers of taste or color (*tzah*, *pah*, *sak*) are mentioned as the most distinct aspects of various drinks. It remains to be seen if clauses like *suutz kakaw* and *'is 'ul* should be transcribed as *suutz[il] kakaw* and *'ihs[il] 'ul* based on examples such as *'iximte'el kakaw*, *kakawal 'ul*,

chaab'il kakaw, and *sa'al kakaw*, where adjectives are derived from the names of the ingredients. We may never know why these ingredients and attributes are highlighted or what was the ingredients' essential function with respect to the properties of drinks: whether they were flavors added to improve the taste or had some medicinal or ritual purposes.

When it comes to understanding the significance of PSS inscriptions, we need to consider two essential functions of Classic Maya painted pottery. On one hand, these vessels contained exquisite foods and beverages consumed at Classic Maya royal courts. Some of these occasions of exclusive consumption were likely feasts that took place in the courtly setting and involved elites from different polities (Reents-Budet 2000, 2001), although the frequency and the scope of such events can be brought into question because the available evidence is rather limited (Houston et al. 2006:127–130). On the other hand, the vessels were an important social and political currency in themselves, as they changed hands during feasts, royal audiences, and presentations of tribute, resulting in vast social networks maintained through the distribution of prestigious items (Adams 1971; Houston et al. 1992; Tokovinine 2006a,b:361–362; Valdés 1997). Therefore, the PSS may reflect the content of the vessel on the occasion for which it was dedicated, but it may also represent a desired or an ideal content that would fit well with the place of the object and its owner in the Classic Maya society.

It has been noted before (Houston et al. 2006:108) that the variety of the most commonly mentioned foods and drinks in the dedicatory texts is much more restricted even when compared to foods and drinks depicted in the scenes on the very same vessels. We have also seen in the case of *sa'* vs. *'ul* that drinks mentioned in the PSS correspond to most exquisite and not commonly consumed varieties of same classes of beverages. Consequently, the appearance of additional rare varieties of mixed drinks in dedicatory texts is intriguing. Does it represent actual drinking preferences of certain nobles? Does it reflect local shifts in the notion of acceptable exquisite drinks worth mentioning in the PSS? Are we merely dealing with a sampling error?

If we consider the geographical distribution of references to rare mixed drinks on vessels with known or suspected provenance, we do see some patterns (Fig. 9). Early Classic *suutz kakaw* vessels appear to be restricted to Tikal's political sphere of influence (Martin and Grube 2008:29–37). Sour atole is mentioned west of Tikal. *Sa'al kakaw* appears to be a beverage of choice east of Tikal. Tikal itself has the greatest variety of rare mixed drinks, a situation that nicely corresponds to its role as one of the Classic Maya "superordinate" royal courts (Martin 2001) with the largest sociopolitical network, the place of innovations and of meeting of different traditions of exquisite consumption.

Some data also suggest that shifts in consumption preferences at certain royal courts might have had something to do with personal preferences of their rulers. For example, three out of four rare mixed drinks at Tikal are mentioned on vessels from the same tomb. References to *sa'al kakaw* (Kerr n.d.:K6813; vessel fragment from the special deposit at the Central Acropolis [Vilma Fialko, personal communication 2006]) and to *kab'il* or *chab'il kakaw* (Kerr n.d.:K681 K1288, K5042, K5362, K5746, K8245) at Naranjo are restricted to vessels commissioned for the ruler

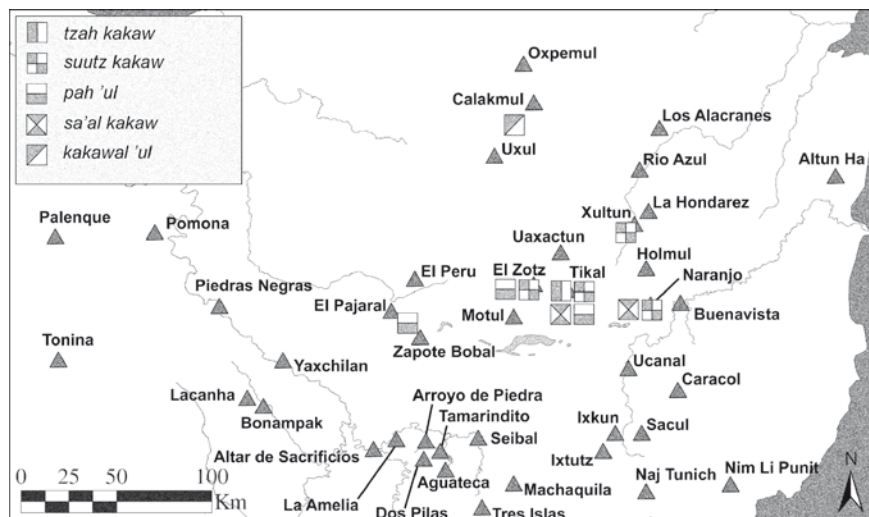


Fig. 9 Geographic distribution of rare terms for mixed drinks on vases with known or suspected provenience

“Aj Wosaj” *Chan K’ihnich*. We wonder whether such shifts in preferences for exquisite drinks during the reigns of individual rulers were a common phenomenon of Classic Maya courtly life.

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References

- Acuña, R., Bolles, D., and Reyes Coria, S. (1993) *Bocabulario de Maya Than; Codex Vindobonensis N. S. 3833: Facsímil y transcripción crítica anotada*. Universidad Nacional Autónoma de México; Instituto de Investigaciones Filológicas Centro de Estudios Mayas, México.
- Adams, R. E. W. (1971) *The Ceramics of Altar de Sacrificios*. Peabody Museum, Cambridge.
- de Ara, D. (1986). *Vocabulario de lengua Tzeldal segun el orden de Copanabastla*. Universidad Nacional Autónoma de México, México.
- Aulie, W. H. and Aulie, E. W. (1978). *Diccionario Chol – Español, Español – Chol*. Instituto Lingüístico de Verano, México.
- Barrera Vásquez, A. (1995). *Diccionario Maya: Maya-Español: Español-Maya*. Porrua, México.

- Beliaev, D. and Davletshin, A. (2006) Los sujetos novelísticos y las palabras obscenas: los mitos, los cuentos y las anécdotas en los textos mayas sobre la cerámica del período clásico. In: *Sacred Books, Sacred Languages: Two Thousand Years of Ritual and Religious Maya Literature*, edited by Rogelio Valencia Rivera and Genevieve Le Fort, pp. 21–44. Acta Mesoamericana, 18. Verlag Anton Saurwein, Markt Schwaben.
- Berlin, B., Breedlove, D. E. and Raven P. H. (1974) *Principles of Tzeltal Plant Classification; an Introduction to the Botanical Ethnography of a Mayan-Speaking People of Highland Chiapas*. Academic Press, New York.
- Bricker, V. R., Po'ot Yah, E., and de Po'ot Dzul, O. (1998) *A Dictionary of the Maya Language: As Spoken in Hocobá, Yucatán*. University of Utah Press, Salt Lake City.
- Brown, C. H. and Wichmann, S. (2004) Proto-Mayan Syllable Nuclei. *International Journal of American Linguistics* 70(2):128–186.
- Carrasco, D., ed. (2001) *The Oxford Encyclopedia of Mesoamerican Cultures: The Civilizations of Mexico and Central America*. Oxford University Press, New York.
- Carrasco Vargas, R. and Colon Gonzalez, M. (2005) El reino de Kaan y la antigua ciudad maya de Calakmul. *Arqueología Mexicana* 13(75):40–47.
- Ciudad Real, A. de (1995) *Calepino de Motul: Diccionario Maya-Español*. Universidad Nacional Autónoma de México Dirección General de Asuntos del Personal Académico Instituto de Investigaciones Antropológicas, México.
- Coe, M. D. (1973) *The Maya Scribe and his World*. The Grolier Club, New York.
- Culbert, T. P. (1993) *The Ceramics of Tikal*. University Museum, University of Pennsylvania, Philadelphia.
- Dütting, D. (1992) Hieroglyphic Texts of Chichén Itzá. *Baessler Archiv* 40(1):101–160.
- García Campillo, J. M. (1994) La “Planta del Cacao” en los textos glíficos sobre cerámica. *Mayab* 9:59–61
- Grube, N. (1990) Primary Standard Sequence in Chochola Style Ceramics. In: *The Maya Vase Book, Volume 2*, edited by Justin Kerr, pp. 320–330. Kerr Associates, New York.
- Hellmuth, N. M. (1987) *Monster und Menschen in der Maya-Kunst: Eine Ikonographie der Alten Religionen Mexikos Und Guatemalas*. Akademische Druck- u. Verlagsanstalt, Graz, Austria
- Houston, S. D. (2008) The Epigraphy of El Zotz. *Mesoweb*: <http://www.mesoweb.com/zotz/articles/ZotzEpigraphy.pdf>.
- Houston, S. D., Stuart, D., and Taube, K. A. (1989) Folk Classification of Classic Maya Pottery. *American Anthropologist* 91(3):720–726.
- Houston, S.D. and Taube, K. A. (1987) “Name Tagging” in Classic Mayan Script: Implications for Native Classifications of ceramics and jade ornaments. *Mexicon* 9:38–41.
- Houston, S. D., Taube, K.A., and Stuart, D. (1992) Image and Text on the “Jauncy Vase.” In: *Maya Vase Book Vol. 3: A Corpus of Rollout Photographs of Maya Vases*, edited by Justin Kerr, pp. 498–512. Kerr Associates, New York.
- Houston, S. D., Robertson, J., and Stuart, D. (2001). Quality and quantity in glyphic nouns and adjectives. *Research Reports on Ancient Maya Writing* 47. Washington.
- Houston, S. D., Stuart, D., and Taube, K. A. (2006) *The Memory of Bones: Body, Being, and Experience among the Classic Maya*. University of Texas Press, Austin.
- Hull, K. (2005) *An Abbreviated Dictionary of Ch'orti' Maya; a Final Report for the Foundation for the Advancement of Mesoamerican Studies, Inc. (FAMSI), Grant #03031, 2005*.
- Kaufman, T. and Norman W. M. (1984) An Outline of Proto-Cholan Phonology, Morphology, and Vocabulary. In: *Phoneticism in Mayan Hieroglyphic Writing*, edited by John Justeson and Lyle Campbell, pp. 77–166. Publication 9. State University of New York at Albany, Institute for Mesoamerican Studies, Albany.
- Kaufman, T. and Justeson, J. (2003) A Preliminary Mayan Etymological Dictionary. URL: www.famsi.org/reports/01051/pmed.pdf
- Keller, K. C., and de Luciano, P. (1997) *Diccionario Chontal de Tabasco*. Instituto Lingüístico de Verano, Tucson.
- Kerr, J. (n.d.) Maya Vase Database. An Archive of Rollout Photographs. URL: <http://famsi.famsi.org:9500/dataSpark/maya>

- MacLeod, B. (1989) Writing on the Curved Page: A Reading for the Manik Collocation in the Primary Standard Sequence. *Mexicon* 11:27–30.
- Martin, S. (2001) Court and Realm: Architectural Signatures in the Classic Maya Southern Lowlands. In: *Royal Courts of the Ancient Maya, Volume One: Theory, Comparison, and Synthesis*, edited by Takeshi Inomata and Stephen D. Houston, pp. 168–194. Westview Press, Boulder.
- Martin, S. (2006) Cacao in Ancient Maya Religion: First Fruit from the Maize Tree and Other Tales from the Underworld. In: *Chocolate in Mesoamerica: A Cultural History of Cacao*, edited by Cameron L. McNeil, pp. 154–183. University Press of Florida, Gainesville.
- Martin, S. and Grube, N. (2008) *Chronicle of the Maya Kings and Queens: Deciphering the Dynasties of the Ancient Maya* (second edition). Thames & Hudson, New York.
- McNeil, C. L. (2006) Traditional Cacao Use in Modern Mesoamerica. In: *Chocolate in Mesoamerica: A Cultural History of Cacao*, edited by C. L. McNeil, pp. 341–366. University Press of Florida, Gainesville.
- McNeil, C. L., Hurst, W. J., and Sharer, R. J. (2006) The Use and Representation of Cacao During the Classic Period at Copan, Honduras. In: *Chocolate in Mesoamerica: A Cultural History of Cacao*, edited by Cameron L. McNeil, pp. 224–252. University Press of Florida, Gainesville.
- Moran, P. (1935). Arte y diccionario en lengua Cholti: A manuscript copied from the *Libro Grande* of Fry Pedro Moran. *Linguistic Society*, Vol. 25, No. 25. Baltimore.
- Orozco y Berra, M., ed. (1855) *Diccionario Universal de Historia y de Geografía Apéndice. Colección de Artículos Relativos á la Republica Mexicana*. Andrade y Escalante, Mexico.
- Pérez, J. P. (1976) *Diccionario de San Francisco*. Akadem. Druck- u. Verlagsanst, Graz, Austria.
- Pérez Martínez, V., García, F., Martínez, F., and López, J. (1996). *Diccionario Ch'orti', Jocotán, Chiquimula*. Proyecto Lingüístico Francisco Marroquín, La Antigua Guatemala.
- Redfield, R., and Villa Rojas, A. (1934) *Chan Kom, a Maya Village*. Carnegie institution of Washington, Washington, D. C.
- Reents-Budet, D. J. (2000) Feasting among the Classic Maya: Evidence from the Pictorial Ceramics. In: *The Maya Vase Book, 6*, edited by Barbara Kerr and Justin Kerr, pp. 1022–1037. Kerr Associates, New York.
- Reents-Budet, D. J. (2001) Class Maya Concepts of the Royal Court: An Analysis of Renderings on Pictorial Ceramics. In: *Royal Courts of the Ancient Maya: I. Theory, Comparison, and Synthesis*, edited by Takeshi Inomata and Stephen D. Houston, pp. 195–233. Westview Press, Boulder.
- Reents-Budet, D. J., Bishop, R. L., and Fahsen, F. (1994) Cerámica maya Negro-Sobre-Crema del periodo clásico tardío de la región oriental de Petén y Belice. In: *VII Simposio de Investigaciones Arqueológicas en Guatemala*, pp. 49–67. Ministerio de Cultura y Deportes, Guatemala.
- Reents-Budet, D. J., Ball, J. W., and Kerr, J. (1994) *Painting the Maya Universe: Royal Ceramics of the Classic Period*. Duke University Press, Durham, N.C.
- Reents-Budet, D. J., Bishop, R. L., Taschek, J. T., and Ball, J. W. (2000) Out of the Palace Dumps: Ceramic Production and Use at Buenavista Del Cayo. *Ancient Mesoamerica* 11(1):99–121.
- Ringle, W. (n.d.) Concordance of the Morán Dictionary of Ch'olti'. Digital File in Possession of Authors.
- Smalley, J. and Blake, M. (2003) Sweet Beginnings: Stalk Sugar and the Domestication of Maize. *Current Anthropology* 44(5):675–703.
- Stuart, D. (1988). The Rio Azul Cacao Pot: Epigraphic Observations on the Function of a Maya Ceramic Vessel. *American Antiquity* 62 (1): 153–157.
- Stuart, D. (1989). Hieroglyphs on Maya Vases. In *The Maya Vase Book: A Corpus of Rollout Photos of Maya Vases, vol. 1*, edited by Justine Kerr, pp. 149–160. Kerr Associates, New York.
- Stuart, D. (2006). The Language of Chocolate: References to Cacao on Classic Maya Drinking Vessels. In *Chocolate in Mesoamerica: The Cultural History of Cacao*, edited by Cameron L. McNeil, pp. 184–201. University Press of Florida, Gainesville.
- Stuart, D., MacLeod, B., Polyukhovich, Y., Houston, S.D., Martin, S., and Reents-Budet, D. J. (2005). Glyphs on Pots: Decoding Classic Maya Ceramics. In *Sourcebook for the 29th Maya Meetings at Texas, The University of Texas at Austin*, edited by David Stuart, pp. 110–197. University of Texas at Austin, Austin.

- Tokovinine, A. (2006a) Reporte epigráfico de la temporada de 2005. In: *Investigaciones Arqueológicas en la Región de Holmul, Petén, Guatemala. Informe Preliminar de la Temporada 2005*, edited by Francisco Estrada Belli, pp. 347–365: Vanderbilt University; URL: <http://www.vanderbilt.edu/estrada-belli/holmul/reports/>.
- Tokovinine, A. (2006b) Reporte preliminar del análisis epigráfico e iconográfico de algunas vasijas del Proyecto Atlas Arqueológico de Guatemala, Dolores, Petén. In: *Reporte 20, Atlas Arqueológico de Guatemala: Exploraciones Arqueológicas en el sureste y centro-oeste de Petén*, edited by Juan P. Laporte and Héctor E. Mejía, pp. 364–383. Dirección General del Patrimonio Cultural y Natural, Ministerio de Cultura y Deportes, Guatemala. URL: <http://www.atlasarqueologico.com/pdf/reportes/Seccion%2011%20-%20Tokovinine.pdf>
- Tokovinine, A. and Fialko, V. (2007) Stela 45 of Naranjo and the Early Classic Lords of Sa'aal. *The PARI Journal* 7(4):1–14.
- Valdés, J. A. (1997) Tamarindito: Archaeology and Regional Politics in the Petexbatun Region. *Ancient Mesoamerica* 8(2):321–335.
- Villagutierrez Soto-Mayor, J. de (1983) *History of the Conquest of the Province of the Itza : Subjugation and Events of the Lacandon and Other Nations of Uncivilized Indians in the Lands from the Kingdom of Guatemala to the Provinces of Yucatan in North America* (translated by Robert D. Wood; edited and commented by Frank E. Comparato). Labyrinthos, Culver City.
- Wisdom, C. (n.d.). *Chorti Dictionary*, Transcribed and transliterated by Brian Stross, University of Texas at Austin. Unpublished manuscript.
- Zender, M. (2000) A Study of Two Uaxactún-Style Tamale-Serving Vessels In *The Maya Vase Book: A Corpus of Rollout Photos of Maya Vases*, vol. 6, edited by Justine and Barbara Kerr, pp. 1038-1055. Kerr Associates, New York.