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The Primary Standard Sequence: Database Compilation, Grammatical Analysis, and Primary Documentation

With Addenda: Description of Digital Database of PSS Texts Database of PSS Texts



Research Year: 2003

Culture: Maya

Chronology: Late Pre-Classic

Location: Maya Area

Site: Naranjo, Tikal, Uaxactún, Motul de San José, Calakmul

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Introduction

The project summarized here is titled *The Primary Standard Sequence (PSS): Database Compilation, Primary Documentation, and Grammatical Analysis* (#02047). The project, which was funded by FAMSI in its entirety, has consisted of the following stages: (1) the compilation of an extensive database of dedicatory texts; (2) the analysis of specific glyphs with problematic readings; (3) the analysis of the structure of the texts

in the database; (4) the preparation of a set of synopses based on the database entries to be posted online in the Justin Kerr Archives at www.famsi.org; and (5) the primary documentation of a few selected previously unpublished texts¹. In this report I summarize the main results and present the following conclusions: (1) the PSS originated in the Late Preclassic period and was standardized in its graphic format by the middle Early Classic period; (2) there are several additional subcomponents of the PSS which have not been properly identified or studied as such (e.g. **u-B'AH, che-'e-na**); (3) there are several PSS glyphs whose readings need revision or further clarification (e.g. Initial Sign, GOD.N, STEP, **ji-chi, yu-lu-BAT.HEAD(-li)**); and (4) the grammatical structure of the PSS can be classified into at least fifteen structure types, thirteen of which are basic.

Stage 1: Database Compilation

The database of PSS texts compiled for this project now contains more than 550 entries. Each entry consists of several fields: (1) Kerr Number; (2) Crosslisting (if artifact is found in another archive or catalog); (3) Type of Artifact; (4) Transliteration of PSS text; (5) Text Type; (6) Linguistic Analysis; (7) Translation; (7) Additional Remarks; (8) Sources. The full database, parts of which still require much editing, will be included with the monograph (see Stage 2). Most of the entries are of texts on pottery containers, but I have included texts on other media as well, such as jade pendants and statuettes, slate mirrorback disks, bone needles, et cetera. A sample entry follows²:

¹ For the opportunity to study the inscribed objects in question I am indebted to a private collector who very generously allowed me full access to study an artifact in his care. I am also grateful to Stacey Goodman and Kornelia Kurbjuhn, who helped me locate one of the artifacts of interest, to Julie Jones and Amy Chen at the Metropolitan Museum of Art in New York, and to Jeffrey Quilter, Loa Traxler, and Jennifer Younger at the Dumbarton Oaks Research Library and Collection in Washington, D.C. I am especially grateful to Justin Kerr and Jessica Costa at FAMSI, who have been very helpful whenever I needed additional information, as well as very understanding, whenever I had minor problems to sort out. And finally, I also want to thank my wife, Heather Bruce; without her support I would have never found the time to complete this project. Some of the texts discussed here were studied and documented with support of a previous FAMSI grant (#99049).

² The following abbreviations are used here and in Mora-Marín (2004): 3s = third person singular; ABS = absolutive (agreement marker); APPL = applicative marker; CMP = completive status marker; ERG = ergative/possessive (agreement marker); EXIST = existential particle; INSTR = instrumental noun marker; NMNLZR = nominalizer; POSS = possessive (nominal marker); PREP = preposition; PROX = proximal (deictic marker).

Sample Database Entry	
Kerr Number	578
Crosslisting(s)	MS 1392
Artifact Type	Vase
Transliteration	a-IS-ya GOD.N-yi u-tz'i-b'a-li-wa u-tz'i-b'a yu-k'i-b'i ta-tzi-hi-li-wa
Text Type	Type 7 + Type 13
Linguistic Analysis	a[y]+[i]lay-Ø [GOD.N]-i-Ø u-tz'ihb'-al +wa' EXIST-PROX-3sABS VERB-?CMP-3sABS 3sERG-writing-POSS PROX u-tz'ihb'-ä-Ø-Ø y-uk'-ib' tä tzih-il +wa' 3sERG-write-APPL-CMP-3sABS 3sERG-drink-INSTR PREP fresh-NMLZR PROX
Translation	'Here the writing/painting was GOD.Ned. S/he wrote/painted the cup for <i>tzihil</i> here'.
Additional Remarks	It is possible that T130 wa at the end of each clause represents Proto-Ch'olan *wa'(i) 'here'.
Sources	Reents-Budet (1994:Fig. 6.50)

The database was originally compiled between the fall of 1998 and the spring of 1999. At that time it consisted of 240 text transliterations. In March of 1999, after using the database to sort and co-index the most important and frequent glyphs of the PSS, I wrote a short, hand-written essay on the structure of PSS texts while visiting in Austin, Texas. In this essay, which has been available through Kinko's (UT-Austin, Maya Files) since at least March of 2000, I proposed a classification of PSS texts into at least twelve structure types (Mora-Marín 1999a). During the summer of 1999 I expanded the article and distributed the longer version among several epigraphers during the Texas Meetings of March 2000 (Mora-Marín 1999b); a summary of the findings in this manuscript is presented in Mora-Marín (2001).

In my more recent work on the PSS I have followed most of the conventions I used in the two articles I wrote in the spring and summer of 1999. And more importantly, I have more than doubled the total number of entries in the database. This last task was achieved with the support of FAMSI between January of 2003 and January of 2004. At present the database consists of 553 entries, 475 of which are based on texts present in the Justin Kerr Archives at www.famsi.org. The rest are found in a number of publications, including the following compilations, among others: Coe (1973, 1978, 1982), Robicsek and Hales (1981), Kerr (1989-1997), Reents-Budet (1994), Proskouriakoff (1974). The database of PSS texts will be included in Mora-Marín (2004a), and it will be the basis for the synopses of PSS texts to be included in the Justin Kerr Archives (see Stage 5).

The database can be used for the following purposes: (1) to list all occurrences of specific searchable units, such as individual segments (e.g. /p/, /b/, /m/, /w/), signs (e.g. **pi**, **b'i**, **mi**, **wi**), collocations (e.g. **u-tz'i-b'i**, **yu-k'i-b'i**, **na-ja-la**), phrases (e.g. **yu-k'i-b'i ta-yu-ta-la ka-wa**), and clauses (e.g. **a-IS-ya K'AL-la-ja GOD.N-yi tz'i-b'i**); and (2) to examine all affixational and syntactic contexts within the sample database for every searchable unit of interest. It is thus possible to search for all occurrences of the sign T563 **tz'i**, for all occurrences of the sequence **tz'i-b'** (which would call up cases of both T563:585 **tz'i-b'i** and T563:501 **tz'i-b'a**), or more narrowly, for all occurrences of **tz'i-b'i**, **tz'i-b'a**, **u-tz'i-b'i**, **u-tz'ib'a**, **u-tz'i-b'a-li**, or **u-tz'i-b'i-li**, for example, depending on the search terms. It is possible to search for phrases (e.g. **a-IS GOD.N**, **a-IS-ya GOD.N**, **a-IS GOD.N-yi**, **a-IS-ya GOD.N-yi**, et cetera) and entire clauses (e.g. **a-IS-ya**

GOD.N-yi u-tz'i-b'a-li-wa, **a-IS-ya GOD.N-yi u-tz'i-b'i na-ja-la yu-k'i-b'i ti-tzi-hi CHAK-ch'o-ko ?-WITZ-AJAW b'a-ka-b'a**). Neutral mnemonic labels such as IS for “Initial Sign” and “GOD.N” are used for several signs whose reading is not entirely clear. Whenever a sign could not be positively identified due to damage to the artifact or low resolution of an available photograph, for example, I used a question mark to indicate this (e.g. **?-k'i-b'i**). In some cases I could offer a good guess as to what the sign in question might be; if so, I would use a question mark preceding the suggested sign reading (e.g. **?yu-k'i-b'i**).

Stage 2: Analysis of PSS Glyphs

The analysis of the texts in the database is complete for the most part. The orthographic analysis and the grammatical analysis, however, differ in the number of texts taken into account. Sometimes an incomplete text can still shed light on the orthographic analysis and linguistic interpretation of a given glyph. However, oftentimes an incomplete text precludes a proper grammatical analysis. Thus some texts that are used for orthographic analysis may need to be excluded from the grammatical analysis. The database must be used with these and other factors in mind, as I explain in my monograph (see Mora-Marín 2004a). The use of the database for analytical purposes is advantageous on two fronts. First, it allows for quick reference of individual signs and glyphic collocations. If I were interested in the so-called lu-Bat glyph I could search for all occurrences in the database by entering **BAT.HEAD**. And second, the database allows for quick reference of sign and glyph sequences, facilitating the analysis of phrases and clauses and sentences.

There are several signs and glyphs in the PSS that have not been properly accounted for to date (see Addendum).³ In Mora-Marín (2004a) I explore the spelling patterns and

³ In addition, there are various glyphs that have not been properly studied in the past, much less accounted for epigraphically and linguistically. In Mora-Marín (2004) I discuss some of these, including several glyphs that belong to the “Flat Hand Substitutes” set (cf. MacLeod 1990), such as T1016 and

syntactic contexts of the following glyphs more fully than I can carry out here (Stuart 1984, 1986, 1987, 1988, 1989; Grube 1986, 1990, 1991; MacLeod 1990; Reents-Budet and MacLeod 1994):

(1) GOD.N verb; (2) STEP verb; (3) **(y)u-lu-BAT.HEAD(-li)** glyph; (4) **na-ja(la)**; (5) T1001a **na/NAL**; (6) **ji-chi**; and (7) Initial Sign (T616/617, along with its numerous variants). For now suffice it say that there is evidence from spelling, affixation, and substitution patterns to support the following readings: (1) **HU'UY/U'UY** for the GOD.N verb; (2) **JU'UY/HU'UY** for the STEP verb; (3) **UL** 'to cut' for the BAT.HEAD glyph; (4) T1000a/1002a **NAL** and T1000a.181:534 **NAL/na-ja-la** as a modifier or predicate possibly based on *náahal* 'winnings, earnings; to win, earn'⁴; (5) T1000a.181:534 **na/NAL-ja-la** as a modifier or predicate also possibly based on *náahal* 'winnings, earnings; to win, earn' (and thus just a variant of the previous glyph).⁵

Also, in the case of the (6) **ji-chi** ~ **yi-chi** glyph, there appear to be contexts where this sign occurs clause-initially that suggest a function not as an enclitic, but as a predicate;

T1017, as well as T1000a/1002a. In this report I do discuss briefly my proposed reading and interpretation of the last example.

⁴ The T1000a/1002a depicts the head of the Maize God. The reading **NAL** may be based both on the term of 'ear of corn', Proto-Ch'olan **näl*, and the Ch'ol term *ñá'al* 'el dios de la abundancia de plantas y animales (Se dice que aparece en forma concreta en maíz, frijol, puerco y puercos. Los ídolos antiguos de los choles fueron hechos para este dios)' (Aulie and Aulie 1978:85). However, the glyph also has a phonetic reading **na**, like the T1002b glyph, which depicts a woman's head. Interestingly, Ch'ol also has a term *ñá'al* 'hembra de animal' that may very well be based on *ñá'* 'mother'. Thus, perhaps the two signs T1000a/1002a and T1002b were confused on purpose by scribes, who began to include the "IL" markings of the Maize God in the T1002b female head glyph by the end of the Early Classic period; up until then, it seems, the former had "IL" markings and the latter had "II" markings. On the Early Classic vase K4331 a glyphic caption reading *u-B'AH-? NAL-TE' ? ch'o-ko-KAN-?* is located inside a cartouche that also bears a portrait of the Maize God, only here he seems to be in the form of a cacao-bearing being, rather than a corn-bearing being. Perhaps whatever special relationship was maintained between the terms **NAL-TE'** (i.e. **NAL(-ja-la) TE'(-'e-le)**) and **ka-ka-wa** for cacao, given their frequent occurrence next to each other in PSS texts on drinking cups, was in part the subject matter of vase K4331.

⁵ The term *náahal* is found in the following entries: (1) modern Yukatek *náahal* 'winnings, earnings' (noun with ownership possession with -Ø), *náahal* 'to win' (antipassive), *náahalt* 'to win, earn' (derived transitive) (Bricker et al. 1998:193); (2) Itzaj *naal* 'profit; profit, salary' (noun), *naal* 'to win, earn, profit' (active verbal noun root), *naala'an* 'earned' (participle 1); *naalb'äl* 'be earned' (passive 1), *naalb'il* 'earned' (participle 2), *naalmaj* 'has earned' (perfective), *naalpaJal* 'be earned' (passive 2), *naaltik* 'to gain, profit, earn, win' (derived transitive) (Hofling and Tesucún 1997:469); (3) <nahal> 'merecer y merecimiento; ganar; ser dichoso, tener dicha y ventura', <nahalil> 'fruto o provecho que se saca de una obra' (Acuña 1984:321-322); (4) Mopan *naala'an* 'earned' (participle), *naalbi* 'was won/earned' (completive passive), *naalbäl* 'be earned/won' (incompletive passive), *naaltic* 'to win/earn' (derived transitive) (Ulrich and Ulrich 1976:136-137). It is possible that this term might be related to the term *nah* 'obligation': (1) modern Yukatek *nah* 'obligation' (noun with ownership possession with -Ø) (Bricker et al. 1998:193); (2) colonial Yukatek <nah> 'merecer, ser digno; aprovechar' (Acuña 1984:321). The entries in the Mutul dictionary (Acuña 1984) support such a relationship. There is abundant morphosyntactic evidence suggesting that **na-ja(-la)** was not used to represent *-n-aj* 'passivizer' in the PSS, as discussed in Mora-Marín (1999a, 1999b, 2001). That evidence, as well as additional evidence compiled since then, are reviewed in Mora-Marín (2004a).

the precise nature of this term in such contexts is not yet clear, but previous suggestions by MacLeod (1990) that it refers to ‘surface’ and by Mora-Marín (1999b, 2001) that it refers to ‘brushing’ or ‘face’ may bear some relevance. At the same time, there are contexts where the **ji-chi** ~ **yi-chi** glyph may represent an enclitic, a word that is bound to another word or to a specific place within a sentence. This enclitic particle may be *+ich* (< Proto-Mayan **+ik* ‘already’) as proposed by Terrence Kaufman (personal communication 2004).⁶ In addition, the evidence also supports the reading and analysis of (7) Initial Sign ((**a**)T616/617(-**ya-la**) or (**a-la**)T616/617(-**ya**)) glyph as based on the contracted phrase *a[y]-[i]lay*, composed of Proto-Ch’olan **ay(-an)* ‘existential particle’ and Proto-Ch’olan **ilai* ‘here’. This is based on the independent proposals by Barbara MacLeod and Yuriy Polyukhovych in late 2000, and more recently by Erik Boot (2003).⁷

Stage 3: Analysis of the Structure of PSS Texts

The grammatical analysis of PSS texts that I have conducted is in general agreement with the analysis that I had previously carried out in Mora-Marín (1999a, 1999b, 2001). There are a few differences, including the addition of two major types and several subtypes, as well as alternative analyses for some of the previously described types and subtypes. Irrespective of the accuracy of my analysis and interpretation of each type and subtype, this typology constitutes a strong contribution to the study of the

⁶ I have yet to evaluate Kaufman’s (2004) proposal thoroughly. I intend to incorporate a brief overview and discussion of his proposal in Mora-Marín (2004a).

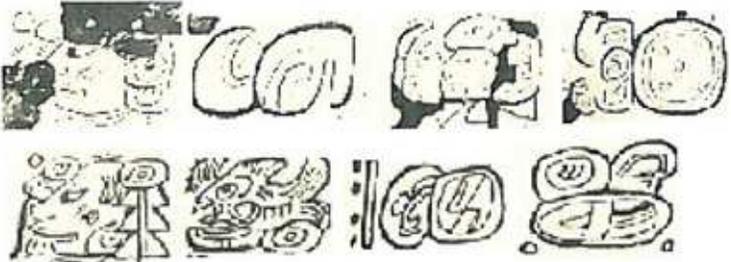
⁷ However, in the case of the Initial Sign glyph, the evidence is not completely clear, to me at least, as to the precise reading of the T616/617 sign or its variants: Was it **ALAY**, **AY.ILAY**, **AY(AN)**, **LAY**, **la**, or all of these depending on context? Cases where one finds simply IS-**ya** (Dumbarton Oaks quartzite pectoral, Balakbal Stela 5), **la-SI-ya** (K8009), and **a-la-IS-ya** (K5458) would support a logographic reading of **LAY**. At the same time, however, other spellings such as IS-**la** (Cenote tubular bead in Proskouriakoff 1974:110-111, Plate 45-3), IS-**ya-la** (Tikal Stela 31), **a-IS-la** (Berjonneau et al. 1985:230-231, No. 352), **a-IS-ya-la** (Tikal Stela 31), and **a-ya-IS** (e.g. K3844, Tikal Stela 26:zB1) suggest the possibility that the **la** sign that is often found on top of T616/617 (e.g. in **a-la-IS-ya** spellings) was placed there for graphic reasons (i.e. same reason T168 **AJAW** is found on top of the main sign in an Emblem Glyph, in contradiction of the actual reading order, rather than after it), and that consequently the IS was meant to be read **AY** or **AY(AL)**, given the fact, too, that the preceding sign **a** was clearly optional. Moreover, the **a-la-ya** spelling found on K8123 (Boot 2003) could likewise be explained as a graphic strategy: T534 **la** is a graphic main sign, while T126 **ya** is not, and so maybe T534 **la** took the place, graphically, of T616/617, also a main sign, leaving T126 **ya** in its characteristic position as a graphic suffix to T616/617. This is what one sees on vase K4379, where the spelling of *muyal* is attested as **MUY-la-ya** instead of **MUY-ya-la**, the expected reading order. T534 **la** takes the place of a main sign, as **MUY.la:ya**, something T126 **ya** cannot do, despite the fact that the correct reading order is **MUY-ya-la**. Another similar example is found on K1815. On that vase the verb that is usually spelled **ya-AL-ja** or **ya-la-ja** with T126 **ya** as a graphic prefix (i.e. T126.534:181) is found spelled **la-ya-ja** with T534 **la** occupying the main sign position and T126 **ya** as its graphic suffix (i.e. T534:126.181). Thus, the **a-la-ya** spelling on K8123 cannot be relied upon as evidence for the reading order; however, it is important because it tells us that the spelling was intended as either **a-ya-la** or **a-la-ya**. While I now tend to agree that the contracted phrase *a[y]-[i]lay* is in fact what the Initial Sign collocation as a whole usually represents, I think that the precise reading of T616/617 requires more research.

dedicatory formula, and can serve as a basis for future research on the structure of dedicatory and non-dedicatory texts in general.

The methodology I have applied is as follows. First, I used the T1/62.77:585/501 **(y)u-k'i-b'(i/a)** glyph, for *(y-)uk'-ib'* ((3sERG-)drink-INSTR) '(his/her) drinking cup', as the basis of the typology, since it is the most common of any object label in the database (with 320 occurrences), and since to my knowledge instrumental nouns cannot be used as stems for the derivation of words of other grammatical functions (e.g. verbs, adjectives). Thus, I have used this glyph as a grammatical anchor, so to speak, that can be used to determine more accurately how other glyphs around it are behaving (i.e. like verbs or nouns). And last, due to its unambiguous function as a noun, it is possible to assess whether other glyphs that appear in the same syntactic context as the 'drinking cup' glyph are also functioning as nouns. This approach led to the following typology, which I have detailed to some extent (minor recent revisions and additions) in Mora-Marín (1999a, 1999b, 2001)⁸:

⁸ The following abbreviations are used in this report and in Mora-Marín (2004): { } = clause, [] = phrases; () = optional constituents; POSS = possessed noun; PRED = predicate. The first type, Type I, shows a text written not on a cup but on an ink container; unfortunately I am not able to confirm the occurrence of Type I texts with the glyph **u-k'i-b'i/b'a**. Nevertheless, given that such texts are attested for other artifact types, such as jade pendants that sometimes bear only the T503 **IK'(NAL)** glyph as a label, it is possible that such a text only with **u-k'i-b'i/b'a** as a label might yet exist.

Type	Structure and Example
I	<p data-bbox="293 310 834 342">[[OBJECT]PRED]CLAUSE 'It is a(n) [OBJECT]'</p>  <p data-bbox="293 548 516 600">K6580 ?KUCH-?SAB'AK</p> <p data-bbox="293 606 818 632">[[carry=ink]PRED]CLAUSE 'It is an ink-carrier'</p>
I	<p data-bbox="293 636 748 667">[[y-cup]PRED]CLAUSE 'It is his/her cup'</p>  <p data-bbox="293 806 488 869">K5466 u-ja-yi yu-k'i-b'i</p> <p data-bbox="293 875 964 898">[[u-jay(-il), y-uk'-(i)b'(-il)]PRED]CLAUSE 'It is a JAY, a cup'</p>
II	<p data-bbox="293 903 1198 934">[[[y1-cup]POSS + [POSSESSOR]1]PRED]CLAUSE 'It is the cup of [So-and-so]'</p>  <p data-bbox="602 1079 894 1110">Drawing by David Stuart</p> <p data-bbox="293 1125 984 1188">K4332 yu-k'i-b'i ch'o-ko ch'a-T1077 K'UHUL-B'AKEL-la-AJAW</p> <p data-bbox="293 1194 1325 1245">[[[y1-cup] + [Sprout ? Divine Lord of Palenque]1]PRED]CLAUSE 'It is the cup of [Sprout ? Divine Lord of Palenque]'</p>
IV	<p data-bbox="293 1249 1365 1312">[[TYPE 2 + [(+ ti) [(+ MOD) [CONT]NP]NP]PP]PRED]CLAUSE 'It is his/her cup for [TYPE.OF] [CONTENT]'</p>  <p data-bbox="293 1499 1357 1591">K1371 [[yu-k'i-b'i + [(+ ta) [(+ NA(JA)L-la TE'-le-la) [²kawa]NP]NP]PP]PRED]CLAUSE 'It is his/her cup for [NAL, TE'EL] cocoa'</p>
V	<p data-bbox="293 1596 1333 1627">[[TYPE 4 + POSS]PRED]CLAUSE 'It is the cup for [TYPE.OF] [CONTENT] of [So-and-so]'</p>  <p data-bbox="293 1751 1398 1831">K4991 [[yu-k'i-b'i ta-NAL TE'-le ka-wa + CHAK-ch'o[ko] ke-KELEM]PRED]CLAUSE 'It is the cup for [NAL, TE'EL] cocoa of Great Sprout Youth'</p>

Type	Structure and Example
VI	<p>[[NP]PRED + [[u-DIVINE-NAME]POSS + [TYPE 5]POSSESSOR]SUBJ]CLAUSE 'The divine name of the cup of [So-and-so] is [NP]'</p>  <p>[[NAL ja-yi]PRED + [[u-K'UHUL-K'AB'A']POSS + [yu-k'i-b'i NAL-?TE' kawa 9-TZ'AK-b'u AJAW-?la]POSSESSOR]SUBJ]CLAUSE 'The divine name of the cup for [NAL-?TE'EL] cocoa of [9-Tz'ak-b'u Ajaw(al)] is [NAL JAY(IL)]'</p>
VII	<p>[[(IS +) VERB]PRED + [TYPE I/II/III/IV/V/VI]SUBJ]CLAUSE 'The cup [for ...] of [Soand-so] was/got GOD.Ned here'</p>  <p>K4464 [[a-IS + GOD.N-yi]PRED + [yu-k'i-b'i ta-NAL TE'-le ka-wa TIL-wi CHANna CHAK K'UHUL-sa-hi-AJAW-wa SAK-CHUWEN 6-KAB'-NAL]SUBJ]CLAUSE 'The cup for [NAL TE'EL] cocoa of [Tilwi Chan Chahk, Divine Naranjo Lord, Sak Chuwen 6-Kab'-Na] was/got GOD.Ned here'</p>
VIII	<p>[[(IS +) GOD.N]PRED-1 + [cup]SUBJ-1]CLAUSE-1 + [[TYPE III]PRED-2]CLAUSE-2 'The cup was/got GOD.Ned here. It is the cup [for ...] of [So-and-so]'</p>  <p>K6997 [[a-IS + GOD.N]PRED-1 + [u-k'i-b'a]SUBJ-1]CLAUSE-1 + [[yu-k'i-b'i ch'o-ko b'a-ka-b'a]PRED-2]CLAUSE-2 'The cup was/got GOD.Ned here. It is the cup of [Sprout B'a=Kab]'</p>
IX	<p>[[(IS +) GOD.N]PRED-1 + [cup]SUBJ-1]CLAUSE-1 + [[na-ja(-la)]PRED-2 + [TYPE (I/II/III/IV)/V(/VI)]SUBJ]CLAUSE-2 'The cup was/got GOD.Ned here. The cup [for ...] of [So-and-so] is/was NAJALed'</p>  <p>K4379 [[a-IS-ya + GOD.N-yi]PRED-1 + [u-k'i-b'i]SUBJ-1]CLAUSE-1 + [[na-jala]PRED-2 + [yu-k'i-b'i ta-yu-ta NAL TE'-le ka-wa CHAK-ch'o-ko ke-KELEM MUY-ya-la ?-?-nu-?-b'u]SUBJ]CLAUSE-2 'The cup was/got GOD.Ned here. The cup for [NAL TE'EL] of [Great Sprout Youth...] is/was NAJALed'</p>

Type	Structure and Example
X	<p data-bbox="289 275 1382 338"> {[(IS +) tz'i-b'i (+ na-ja) + ji-chi] PRED} CLAUSE 'Here it is inscribed, <i>NAJALed</i>, and <i>JICHILed</i>' or 'It was inscribed already here' </p>  <p data-bbox="289 485 370 512">K2285</p> <p data-bbox="289 516 1300 573"> {[a-IS-ya + tz'i-b'i + na-ja + ji-chi] PRED} CLAUSE 'Here it is inscribed, (<i>NAJALed</i>), and <i>JICHILed</i>' </p>
XI	<p data-bbox="289 573 1333 636"> {[TYPE 10] PRED + [TYPE (I/II/III/IV) V] SUBJ} CLAUSE 'The cup for [...] of [So-and-so] was inscribed already here' </p>  <p data-bbox="289 894 370 921">K3433</p> <p data-bbox="289 926 1404 1041"> {[a-IS-ya + tz'i-b'i (+ na-ja) + ji-chi] PRED + [yu-k'i-b'i ta-yu-ta ka-wa to-b'o-ti B'ALAM] SUBJ} CLAUSE 'The cup for finished cocoa of <i>Tob'ot(il) B'ahläm</i> was inscribed already here' or 'Here it is inscribed, (<i>NAJALed</i>), and <i>JICHILed</i>. It is the cup for finished cocoa of <i>Tob'ot(il) B'ahläm</i>'. </p>
XII	<p data-bbox="289 1073 1390 1178"> {[TYPE 10] PRED-1} CLAUSE-1 + {[ji-chi(-la)] PRED-2 + [TYPE (I/II/III/IV) V] SUBJ} CLAUSE-2 'It was inscribed already here. The cup [for...] of [So-and-so] is <i>JICHILed</i>' or 'Here it is inscribed, <i>NAJALed</i>, and <i>JICHILed</i>. The cup [for...] of [So-and-so] is <i>JICHILed</i>' </p>  <p data-bbox="289 1478 370 1505">K3366</p> <p data-bbox="289 1509 1365 1646"> {[a-IS-ya + tz'i-b'i + na-ja + ji-chi] PRED-1} CLAUSE-1 + {[ji-chi] PRED-2 + [yu-k'i-b'i ta-yu-ta ka-wa] SUBJ} CLAUSE-2 'It was inscribed already here. The cup [for...] of [So-and-so] is <i>JICHILed</i>' or 'Here it is inscribed, <i>NAJALed</i>, and <i>JICHILed</i>. The cup [for...] of [So-and-so] is <i>JICHILed</i>' </p>

In addition to the preceding structures, there are two other types of structures worth discussing.⁹ One is based on the glyphic collocation **che'e-na**.¹⁰ This sign most likely represents a quotative particle of the form *che'-en* 's/he/it said' (Mora-Marín 1999; Stuart et al. 1999). This sign may be clause-, sentence-, or text-final, and it may be found in both primary and secondary text contexts (Coe 1973).¹¹ It probably was intended as the last component of a PSS text, given that: (1) it conveys a meaning that fits naturally at the end of a discourse (i.e. 's/he/it said'); (2) it is rare, probably due to the limited amount of space on which to paint a PSS text; and (3) when it is present in full it comes after all the standard components of the PSS.¹² In any case, this glyph may be followed by glyphs that refer to either the inscribed object itself, or the writing on the inscribed object itself, although not all the clauses begun by this glyph are syntactically transparent. For example, the glyph **u-tz'i-b'a** may follow **che'e-na**.

⁹ These additional structures are not different in general from the twelve main structures I have already presented. However, they are worth discussing separately for they are based on signs that have not been studied in detail as components of the PSS but which are clearly part of the PSS.

¹⁰ In at least three situations the glyphs **che-'e** (Arroyo de Piedra Stela 1:C1-C2) and **che** (K595, K3924) are attested in contexts where one otherwise finds **che-'e-na**. While these examples are probably spelling the same root *che'* present in *che'-en*, it is not clear that they translate the same. In fact, *che'*, by itself, may be simply 'thus, so'. Two of these examples, furthermore, are in a text-final context that suggests that the scribe may have run out of space and simply did not finish spelling **che-'e-na**. For these reasons these three cases are equivocal, and thus I do not include them in my study.

¹¹ The "primary" versus "secondary" text description was not necessarily an emic category in those terms; dedicatory texts typical of the Primary Standard Sequence are often found in secondary text contexts (e.g. **yu-k'i-b'i** [...]), and vice versa (e.g. **u-B'AH** [...]).

¹² Regarding (2), often there was not enough room to write the full name of the vase's owner, much less to include components of the PSS that by convention (defined in functional or arbitrary terms) would follow if there had been room. There is evidence, in fact, that PSS texts were sometimes left incomplete due to a lack of space. I provide additional support in Mora-Marín (2004a) for this assertion, but for now one example will suffice. On vase K1355 one finds the text **a-IS-ya tz'i-b'i na-ja ji-chi yu**. Now, MacLeod (1990) has argued that the sequence **a-IS-ya tz'i-b'i na-ja ji-chi** in this and other texts is a constituent by itself; in Mora-Marín (1999a, 1999b, 2001) I support this conclusion. However, what can be made of the last sign, T62 **yu**, occurring by itself? Interestingly, this sign is found at the end of the rim where the text was painted, and the next thing after it was the beginning of the text, the **a-IS-ya** glyph. There are three possible explanations for the presence of the **yu** sign at the end of this example. First, it may have been used as a "filler," as Coe and Kerr (1998:143) have suggested. Second, it may have been in anticipation of the sign that would have followed (i.e. **yu-k'i-b'i**) had there been more space left in between the **ji-chi** glyph and the Initial Sign. This is supported by the existence of examples like K1227 (i.e. **a-IS-ya + tz'i-b'i + na-ja + ji-chi + yu-k'i-b'i + ta-yu-ta + ka-wa + a**), in which the **ji-chi** is immediately followed by **yu-k'i-b'i**. And third, it could have been due to both of the above; i.e. rather than leave an empty space, the scribe filled in the remaining space with the sign that would have followed had she or he had enough room to write more. There are other instances in the database (e.g. K1211, K1227) where the last collocation of a PSS dedicatory text was apparently left unfinished due to lack of space, suggesting that the scribe chose to fill it in with the beginning of what would have been the next full glyphic collocation, rather than leave an empty space. For instance, going back to K1227, on that text one finds **a** as the last sign. This may very well have been intended as the so-called 'male proclitic' that probably began the glyphic expression for the name of the owner of the vase, since the glyph **ka-wa** for **kākāw* 'cacao' was commonly followed immediately by the name of the owner of the vase.

Orthographically, **u-tz'i-b'a** is ambiguous: it may stand for *u-tz'ihb'-a(l)* (3sERG-writing-POSS) 'his/her writing/written.thing', or for *u-tz'ihb'-ä-Ø-Ø* (3sERG-writing-APPL-CMP-3sABS) 's/he wrote it'. While the rarity of this type of clause precludes a full disambiguation of the pertinent structures, a preliminary typology of sentence structures based on this glyph, which I discuss in more detail in Mora-Marín (2004a), follows:

Type XIII: che-e-na ...	
Subtype XIIIa	{ [che-e-na] PRED}CLAUSE 'S/he/it said'. K2695, K5456
Subtype XIIIb	{ [che-e-na] PRED + [u-tz'i-b'a] SUBJ}CLAUSE 'So said her/his/its writing'. K1775
	{ [che-e-na] PRED}CLAUSE-1 + {[u-tz'i-b'a]PRED}CLAUSE-2 'S/he/it said. S/he/it wrote it'. K1775
Subtype XIIIc	{ [che-e-na] PRED}CLAUSE-1 + {[u-tz'i-b'a]PRED + [AGENT]SUBJ}CLAUSE-2 'S/he/it said. [AGENT] wrote it'. K3395, K4572
	{ [che-e-na] PRED + {[u-tz'i-b'a]POSS + [POSSESSOR]SUBJ}CLAUSE 'The writing of [POSSESSOR] said'. K3395, K4572
Subtype XIIId	{ [che-e-na] PRED + {[u-yu-lu]POSS + [ti-tz'i-b'a]MOD [POSSESSOR]}CLAUSE-2 'So said the yul(ul) with/for writing of [POSSESSOR]'. K7459
Subtype XIIIe	{ [che-e-na] PRED + [AGENT]SUBJ}CLAUSE-1 '[AGENT] said'. Examples: K1256, K4931, K5745
Subtype XIIIf	{ [che-e-na] PRED + [tu-b'a-ki]LOCATIVE}CLAUSE-1 'It said on his bone'. 190 Burial from Structure 7F-30.
Subtype XIIIg	{ [che-e-na] PRED + {[ti-yu-lu-BAT.HEAD]POSS + [POSSESSOR]}LOCATIVE}CLAUSE 'It said on the carving/cutting/incising of [POSSESSOR]'. Seibal Tablet 9:AAA1-BBB2
Subtype XIIIh	{ [che-e-na] PRED + [AGENT]SUBJ + [ti + [ADDRESSEE]]ADJUNCT}CLAUSE '[AGENT] said to [ADDRESSEE]' { [che-e-na] PRED + [b'a-lu]SUBJ + [ti + [MAM ITZAMNAJ] ADJUNCT]}CLAUSE '[B'alu...] said to Mam Itzamnaj'. American Museum of Natural History vessel.

And the last major sentence type found in PSS texts is based on the glyph T(1.)757 (**u-B'AH** 'self/head/top/image'. The PSS contexts suggest that the glyph **u-B'AH** is generally intended as 'the image of' (Houston and Stuart 1996, 1998). However, there are several contexts, both in the PSS texts and elsewhere in the monuments, where T757 appears without a prefixed T1 **u**. The syntactic analysis of such instances is not transparent, and requires further research. The following are the basic structures based on this glyph:

Type XIV: (u-)B'AH ...	
Subtype XIVa	{[B'AH(-ya)]PRED + [NAME]SUBJ}CLAUSE '[NAME] is a [B'AH]'. K1392, K7997, K7999
Subtype XIVb	{[[B'AH(-ya)]NP + [ti + VERB:GERUND...]]COMPLEMENT + [NAME]NP}PRED + [NAME]SUBJ}CLAUSE '[VERBing] [NAME] is a [B'AH]'. K2784
Subtype XIVc	{[[u-B'AH(-hi)(-li)]POSS + [POSSESSOR]]PRED}CLAUSE 'It is the image of [POSSESSOR]'. K504
Subtype XIVd	{[[u-B'AH(-hi)(-li)]POSS + [tz'i-b'a]? + [POSSESSOR]]PRED}CLAUSE 'It is the image of ? [POSSESSOR]'. K504
Subtype XIYe	{[[u-B'AH(-hi)(-li)]POSS + [ti + VERB:GERUND...]]COMPLEMENT ([ti + INSTRUMENT...] + [POSSESSOR]]PRED}CLAUSE 'It is the image of [POSSESSOR] [a-VERBing] with [INSTRUMENT]'. K504
Subtype XIVf	{[[u-B'AH(-hi)(-li)]POSS + [?]MODIFIER + [ti + VERB:GERUND...]]COMPLEMENT + [POSSESSOR]}CLAUSE 'It is the image of [POSSESSOR] as [TITLE/STATUS]'. K504
Subtype XIVg	{[[u-B'AH(-hi)(-li)]POSS + [ti + tzi-hi]COMPLEMENT + [POSSESSOR]}CLAUSE 'It is the image of [POSSESSOR] as [TZIH(IL)]'. K2803
Subtype XIIIh	{[NOUN/VERB/ADJECTIVE]PRED + [[u-B'AH(-hi)(-li)]POSS + [POSSESSOR]]SUBJ}CLAUSE 'The image of [POSSESSOR] is [PREDICATE]'. Bagaces slate disk.
Subtype XIIIi	{[VERB]PRED + [[u-B'AH]POSS + [POSSESSOR]]SUBJ}CLAUSE Stone cylinder text in Houston and Stuart (1998).

Below I discuss some of the implications of this last set of PSS structures based on T757 B'AH (see History of the PSS). Here I will only point out that these are among the most ancient components of the PSS, and in fact, among the most ancient examples of Mayan writing known.

Stage 4: Synopses of PSS Texts in Justin Kerr Archives

One of the most valuable resources available to scholars and the public alike through the FAMSI website is the Justin Kerr Archives, which consists of a database of photographs and descriptions of thousands of artifacts, many of them unpublished. Many of the database entries contain links to short synopses, sometimes even short articles, submitted by epigraphers. These usually pertain to the hieroglyphic texts present on the artifacts themselves, providing a transliteration and translation, as well as discussion of other interesting aspects of the piece in question. One of the

objectives of my project was to contribute with as many of these synopses as possible. These are of course not definitive, as I do not consider my work on the PSS in any way definitive. In fact, some of my findings are presented in the form of questions for future research, rather than proposed solutions to known problems; and in many cases I do not even have plausible answers to some of the known questions. Nevertheless, these synopses will likely stimulate continuing research on PSS texts. The following is a sample synopsis for vase K531 (Figure 1). I have so far prepared 100+ synopses. I will continue to prepare more during the next few months until I have completed a synopsis for each of the inscribed artifacts present in the Justin Kerr Archives that I have included in my study; this represents a total of at least 475 texts.

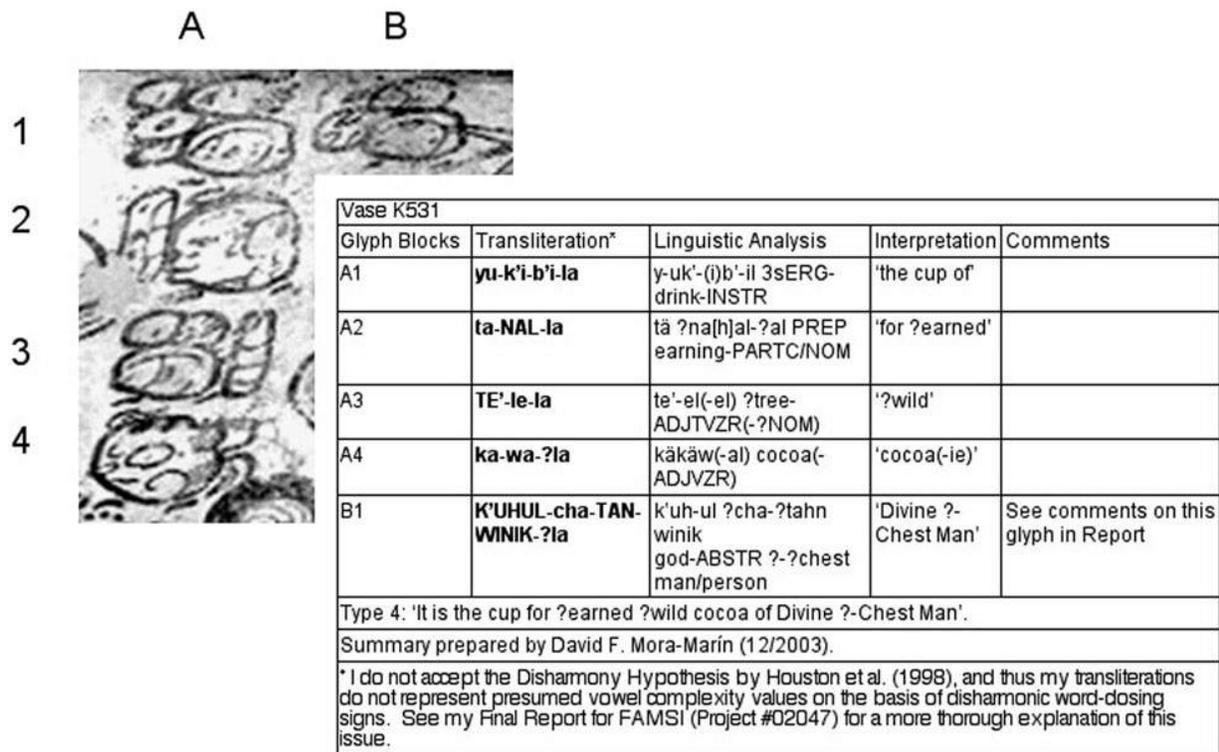


Figure 1. Synopsis of Vase K531.

Stage 5: Primary Documentation of Selected Texts

One of the objectives of this project was the documentation of several texts in unusual types of artifacts to determine whether their texts could contribute to the study of the structure, content, and history of the PSS. I have completed the documentation in the form of line drawings of four texts: (1) an Early Classic greenstone statuette (K3261) located in a private collection; (2) the Mr. and Mrs. Charles Dyker stone bowl (Coe 1973:26-27), a Late Preclassic or Early Classic vessel now on display at the Metropolitan Museum of Art in New York City (1999.484.3); (3) a shell silhouette with a typical, Late Classic PSS text that is part of the Dumbarton Oaks Research Library and Collection (B-556.66.MAL); and (4) a shell silhouette with an idiosyncratic text that is

also part of the Dumbarton Oaks Research Library and Collection (B-191.MAL). Next I provide a brief summary of each of these, though I am preparing a more thorough description of each one in Mora-Marín (2004a, 2004b).

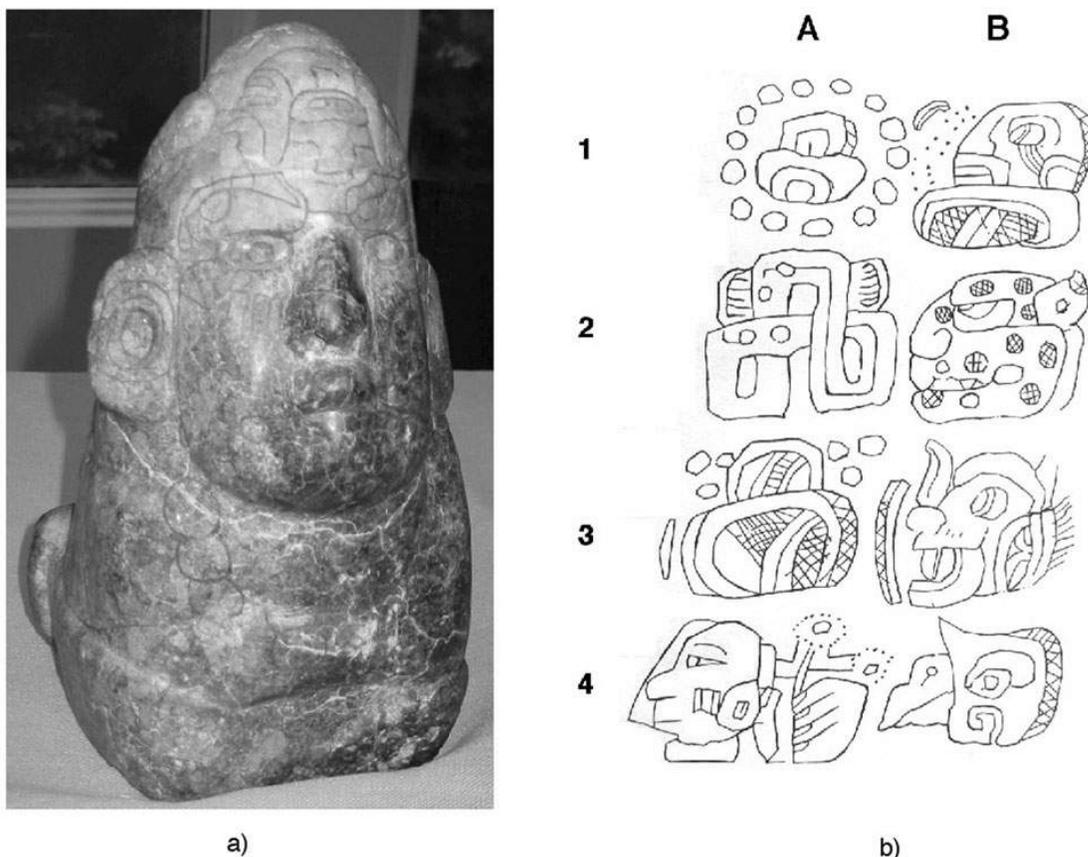


Figure 2. a) Photograph of K3261 taken by this author. b) Text on left side of statuette. Drawing by this author.

The Greenstone Statuette (K3261)

This magnificent greenstone statuette, which measures 35.2 cm tall, is housed in a private collection. It depicts a woman with “II” and “III” markings on her cheeks wearing a shark costume, which is identifiable as such by two shark teeth, a dorsal fin, and a bifurcated tail ([Figure 2a](#)). It bears a text consisting of two columns of four rows each, for a total of eight glyph blocks ([Figure 2b](#)).¹³ The inscription on the statuette lacks chronological data, but it may date to ca. A.D. 200-400, as the calligraphic style of several of its glyphs closely matches that on several texts of very early date, such as Tikal Stela 29, dated to A.D. 292. While I plan to present a more detailed description

¹³ Unfortunately, the red pigment on the text is not always placed to fill in actual incisions; sometimes it was applied on cracks and fissures instead. Moreover, some incisions were left unpigmented, and due to the color and texture of the mineral, they are almost invisible to the unaided eye. Raking light and magnifying lenses are necessary to observe such details.

and analysis of the piece and its text in a catalog of early Mayan texts on portable objects currently under preparation (Mora-Marín 2004b), the following is a preliminary transliteration and interpretation of the text¹⁴:

Glyph Block	Transliteration	Linguistic Analysis	Translation
A1	?mo/BEJEWELED[T533]	?nak-om-Ø rise-FUT/POT-3sABS ----- ?ajaw/äjäw lord/sacred object	'S/he/it rises/will rise' ----- 'lord/sacred object'
B1	u-K'UH(UL)(-IL)	u-k'uh(ul)-il 3sERG-god(/holy) POSS/ABSTR	'his/her/its god/soul'
A2	?WAY(-AB'/AS)	way(-ab'/as) animal co-essence	'Shape-shifter/ Co-essence'
B2	B'ALAM	b'ahläm jaguar	'Jaguar'
A3	u-K'OCH/KUCH-TUN	u-?kuch=tun(-il) 3sERG-carry=stone(-POSS) ----- u-?kuch-Ø-Ø tun(-il) 3sERG-carry-CMP-3sABS stone(-POSS)	'his/her/its carry(ing) stone' ----- 'S/he/it carried the stone'
B3	u-?BAT.HEAD	u-? 3sERG-?	'his/her/its ?'
A4	?IX(IK)-?TREE.IN.HAND	ix(ik)+ ? Mrs./woman ?	'Mrs. ?'
B4	BIRD	?	?
Paraphrase A: 'BEJEWELED.T533 is the god/soul of [<i>Way(as/ab')</i> <i>B'ahläm</i>]. S/he/it carried the [BAT.HEAD] of Mrs. [TREE.IN.HAND-BIRD]'.			
Paraphrase B: 'BEJEWELED.T533 is the god/soul of [<i>Way(as/ab')</i> <i>B'ahläm</i>]. S/he/it is the carrying-stone of the [BAT.HEAD] of Mrs. [TREE.IN.HAND-BIRD]'.			
Paraphrase C: 'The god/soul of [<i>Way(as/ab')</i> <i>B'ahläm</i>] will rise. S/he/it is the carrying-stone of the [BAT.HEAD] of Mrs. [TREE.IN.HAND-BIRD]'.			

¹⁴ I have Barbara MacLeod to thank for the suggestion that the BEJEWELED[T533] glyph might actually be **mo**[T533], and that T533 might read **NAK** 'crown; to rise'. I find both suggestions to be quite plausible based on additional evidence she and I have reviewed. Also, Barbara suggested that the TREE.IN.HAND glyph, which may be unique in the corpus, and the following BIRD.HEAD glyph might actually be a glyphic version of the bird staffs used in ritual dances by different personages at Yaxchilan (e.g. Lintel 5). I agree with her identification of this, given that the iconographic evidence suggests that the BIRD.HEAD glyph corresponds precisely to the same type of bird as on those staffs.

The Dyker Vase at the Metropolitan Museum of Art

Coe (1973:26-27) has suggested that the pictorial imagery carved around the bowl ([Figure 3a](#)), which measures 12.5 cm in height, was done in the style of Late Preclassic Kaminaljuyu or other sites in highland Guatemala, and that it is very similar to the Chiapa de Corzo bones. He also hinted at the likelihood that the text on this bowl is a PSS text. Indeed, the text ([Figure 3b](#)) has several familiar glyphs, though some of these familiar glyphs are used in unfamiliar ways. The first glyph is either a possessed noun, perhaps referring to the bowl itself, or a transitive verb, for it begins with *u-*. I had suspected that this first glyph, if indeed a possessed noun, could very well represent the earliest example of an ownership statement on a portable object. However, the four signs after the T1 **u** sign standing for *u-* 'third person ergative and possessive prefix' are rather opaque; for instance, superficially, the sign at A1c resembles a bowl, but this could be simply a coincidence.¹⁵ Below is my preliminary transliteration:

Glyph Block	Transliteration	Linguistic Analysis	Translation
A1	u-?-?-?-?	u-?	'his/her/its ?'
A2	cha-?-?ju/hu/FOOTPRINT-STEP/EB'[ye]	? ? ?y-eb' ? ?3sERG-step/ladder	'? ?his/her step/ladder'
A3	?-HAND -?la-?-?u-?	?	
A4	u-ya-?K'AL-TUN	uy-?k'al-Ø-Ø tun 3sERG-?wrap-CMP-3sABS stone ----- uy-a[jj]+k'al=tun(-il) 3sERG-PROCL+carry=stone	S/he/it carried the stone' ----- 'His/her/its Stone Carrier'
A5	tu-?WINIK-?li/IV	t-u-?winik/winak-?il PREP-3sERG- man/person(/owner/su pernatural protector)	'to/for(/by) his person/man/owner/supernatural protector'

¹⁵ Even if it were an actual depiction of a bowl, the fact is that it may not necessarily refer to a bowl. For example, in Classic Mayan texts a sign depicting a bowl is used phonetically as a syllabogram **u**.

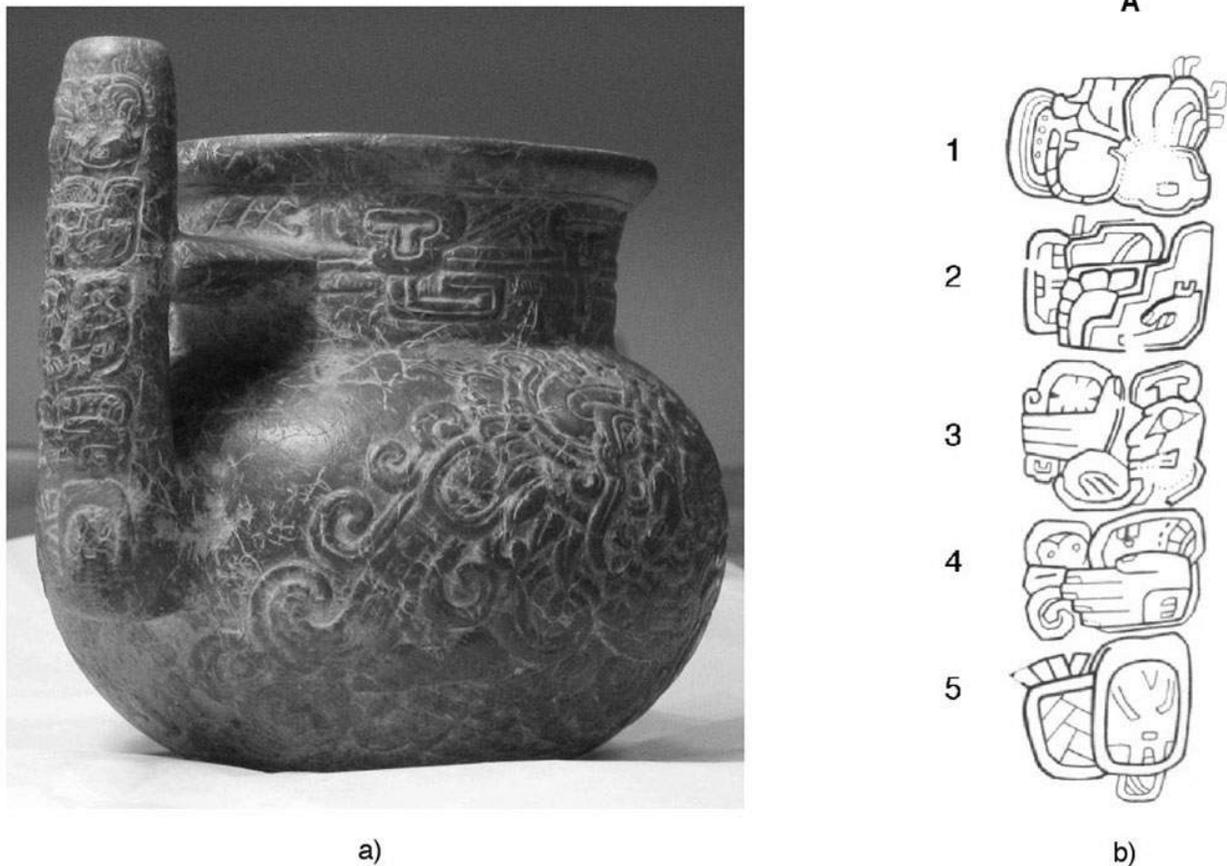


Figure 3. a) Photograph of Dyker Vase at the Metropolitan Museum of Art taken by this author. Notice text inscribed on handle. b) Drawing of text on Dyker Vase by this author.

At this time I cannot offer a paraphrase of the whole text. Even the familiar signs are difficult to contextualize. It is not clear whether the STEP sign at A2d is functioning as a verb or as a noun (i.e. **EB'**). It more closely resembles the form used to refer to staircases, **EB'**. This is supported by the infixed ye at A2e, possibly for **y(e)-EB'(UL)** 'his/her/its step/ladder', given that in Classic texts there are a few occurrences of similar spelling patterns. Interestingly, the text does bear a narrow linguistic marker at A4a: *uy-* 'prevovalic third person ergative and possessive marker', attested only in Ch'olan and Yukatekan (Lowland Mayan); otherwise, one also finds *u-* and perhaps *t-u-*, which are not as narrow (i.e. they are attested in Greater Q'anjob'alan, Ch'olan-Tzeltalan, and Yukatekan). Given that at least in Classic Lowland Mayan texts the FLAT.HAND sign at A4c was read **K'AL** 'to wrap', it is peculiar to see **u-ya-** spelling its person agreement marker. If **K'AL** were its reading in this text then it would almost be necessary to read the **u-ya-** sequence as spelling *uy-ajj*+ (3sERG-PROCL) 'his/her Mr. [...]'.¹⁶

¹⁶ However, it is possible that this text dates to a time when there may have been various, competing readings for the same sign; if so maybe the FLAT.HAND sign here has a different, though probably roughly equivalent reading. Such a reading would almost certainly be of the shape **AC**, representing a root of the shape [7aC] (i.e. /aC/), where C is an undetermined consonant (e.g. *ak'* 'to give').

Lastly, Coe (1973:26) suggests that A3 may begin with T544:670, which corresponds to the so-called “K’in-in-hand” glyph. Though this glyph’s reading is not yet clear, it sometimes appears in proper name phrases. Coe suggests, in fact, that it may correspond to the name of one of the personages depicted on the accompanying imagery; indeed, one of the two depicted personages bears a T544:670 sign on his head. While this makes sense, the fact is that upon examination of the bowl with a magnifying lens and raking lights I determined that the sign in the actual text is not T544, at least not a canonical form of it, instead of showing four striations in a quadrupartite pattern, like the T544 sign sometimes does, it shows a total of seven striations. I believe, nevertheless, that this may yet prove to be a case of T544:670. Usually, whenever a pictorial image bears embedded labels for the names of depicted individuals, such labels are present on the accompanying text.

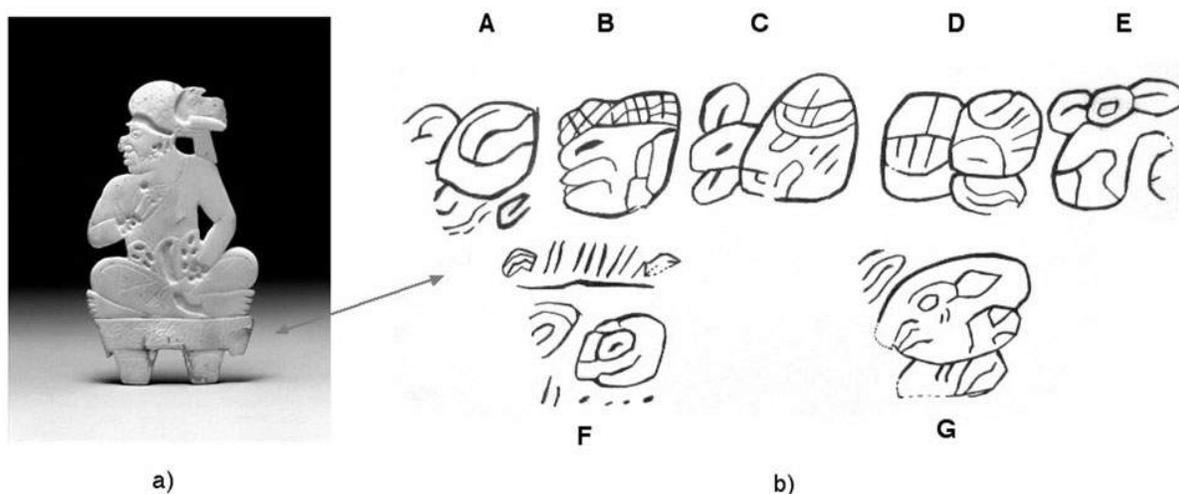


Figure 4. a) Shell silhouette pendant in the Dumbarton Oaks Collection (B556.66.MAL). Photo provided by Loa Traxler and Jennifer Younger at Dumbarton Oaks. b) Drawing of text by this author.

Shell Silhouettes at Dumbarton Oaks

The text on the first silhouette (B-556.66.MAL), which measures 10.0 x 5.7 x 0.7 cm and portrays a likely lord seated cross-legged on a throne or bench ([Figure 4a](#)), is fairly straightforward ([Figure 4b](#)):

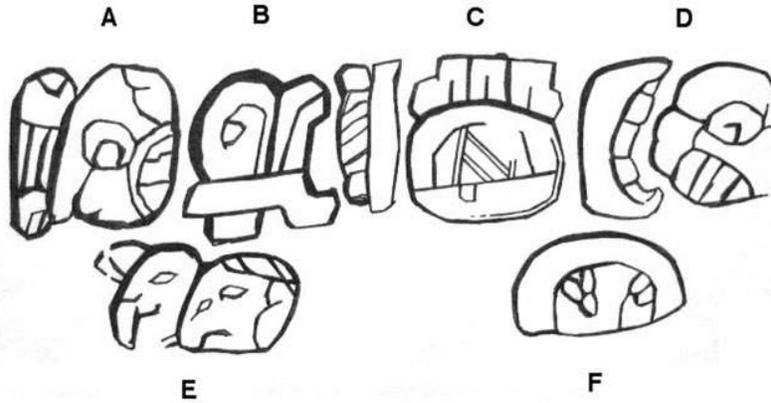
Glyph Block	Transliteration	Linguistic Analysis	Translation
A	a-IS-ya	a[y]-[i]layEXIST-here	'Here is'
B	GOD.N	?[VERB]	'was/got GOD.Ned'
C	yu-UH(IL/AL)	y-uh(-il/al)	'his/her pendant'
D	i-?chi-ni	?Ichin	'Ichin' [Proper name]
E	yu-?ne	y-unen3sERG-son.of.man	'his son'
F	AJ-nu-?-?la	aj+?PROCL+?	'He of/who ?'
G	?-?TIL(AL)-?HUN	?-?tapir-?	'? ?Tapir ?'
Paraphrase: 'The pendant of [?Ichin], the son of Mr. [? ?-Tapir-?], was <i>GOD.Ned</i> here'.			

The text on the second silhouette (B-191.MAL), which measures 10.1 x 5.0 x 0.75 cm and also depicts a possible lord seated cross-legged on a throne or bench ([Figure 5a](#)), is not as straightforward ([Figure 5b](#)):

Glyph Block	Transliteration	Linguistic Analysis	Translation
A	ko-ji	?intransitive verb	
B	?-?THRONE	?u-?throne	
C	AJ-tzi-'i/ta	aj+?tzi'(-i(C))/tzit(-a(C))PROCL+?	
D	u-?MUWAN	u-?	
E	?-?HUN	?-?	
F	ku/TUN/CHAK	?	
Paraphrase: 'The throne of Aj-Tzit(-a(C))/Tzi'(-i(C)) [...] is <i>KOJed</i> '.			



a)



b)

Figure 5. a) Shell silhouette pendant in the Dumbarton Oaks Collection (B191.MAL). Photo provided by Loa Traxler and Jennifer Younger at Dumbarton Oaks. b) Drawing of text by this author.

This text is a bit problematic. It is possible that Glyph A, which reads ko-ji, might be an intransitive verb, given that it is clause-initial and that it is not inflected like a transitive verb would be (e.g. with T1 u spelling *u-* ‘third person ergative agreement marker’); instead, it is inflected like root intransitive verbs spelled phonetically **CV-Ci**. Unfortunately, I have yet to find an appropriate lexical entry that might explain its use on this text.¹⁷ Part of the problem is that Glyph B, which would constitute the subject of the preceding intransitive verb (i.e. Glyph A), is rather unusual. It looks like an AXE glyph (**CH’AK**) resting on its back, but the first element also resembles the EARFLARE sign that sometimes substitutes for T617 in the Initial Sign compound. My gut feeling, and that is the best I can do for the moment, is that it depicts a throne or bench, and refers to the throne on the silhouette; a throne depicted on vase K1524 has in fact a similar shape in profile as the glyph in question ([Figure 6](#)). Glyph C is **AJ-tzi-’i** or **AJ-tzi-ta**, and seems to be part of a person’s name, *aj tzi’(-i(C))* or *aj tzit(-a(C))*. If Glyph C does in fact represent the first part of a person’s name, and if Glyph B is in fact referring to a throne, then, syntactically, I would have expected there to be a possessive prefix u-in

¹⁷ There are several entries in Ch’olan and Yucatekan languages for words beginning with /koj.../. However, without knowing for sure what the glyph that follows is, it is hard to make any sound judgments on what the first glyph might be. For example, in Yucatekan languages *koj* is ‘tooth/beak’ as well as ‘puma’. In Itzaj in particular it also appears as *koj* ‘pisonear (tamp)’, an affective and transitive root (Hofling and Tesucún 1997:356). In colonial Yucatek one finds <coh> ‘cosa preciosa y de estima y rica (precious thing and of high esteem and valuable)’, <cohil> ‘la preciosidad (the preciousness)’, <cooh> ‘cosa cara, o lo que es caro (expensive thing, or that which is expensive)’, as well as a likely cognate with the Itzaj verb above, <coh> meaning ‘pisar (to tamp)’ and ‘batir (to stir)’ (Acuña 1984:77-78). In Mopan the term *coj* is attested as a verb too, apparently as a transitive root roughly meaning ‘to poison the water for fishing’ (Ulrich and Ulrich 1976:43-44): *coja’an a ja’a* ‘The water is poisoned’, *cojbi a ja’a* ‘The water was poisoned’, among others. In Chontal the transitive stem *coje’* means ‘to charge (money)’ (Keller and Luciano G. 1997:59). In Ch’ol it is apparently some type of adverbial particle base, judging from the following entries (Aulie and Aulie 1978:37): *cojach* ‘sólo (only)’, *cojax* ‘sólo esa vez (only that time)’, *cojco* ‘menos (much less), qué tal (what if)’, *cojon* ‘único (only one)’, *cojix* ‘el último (the last one)’.

Glyph B (i.e. 'his throne' or 'the throne of'), so that the whole sentence might be saying 'The throne of So-and-So was/got KOJed'. However, there is no obvious T1 *u* sign in Glyph B to represent *u*-.

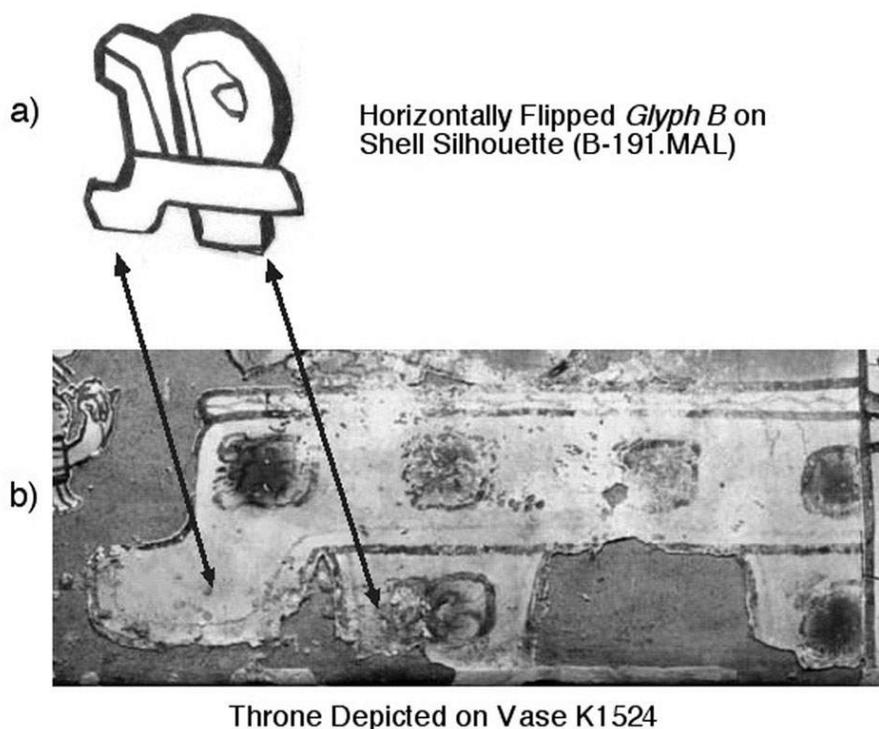


Figure 6. a) Glyph B on B-191.MAL. b) Throne depicted on Vase K1524.

Glyph D is *u*?, where the second sign resembles the **MUWAN** sign; the T1 *u* sign may be used here as a third person ergative/possessive prefix *u*-. If so, then the sign that follows it, **?MUWAN**, could refer to an object or a relationship, for example, among other possibilities. Glyph E --on the first leg of the throne -- is not clear either. It may be **?-HUN**, where the **?HUN** sign may be an AVIAN.JESTER.GOD sign. The preceding sign might be **IX(IK)** but it is not clear. The last sign, Glyph F, is clearly T528 **ku/CHAK/TUN**. I am not certain what the best solution for this text might be, and I am open to suggestions.¹⁸

History of the PSS

MacLeod and Reents-Budet (Reents-Budet 1994:144) have argued that "The PSS does not become a standard component of the polychrome pottery until well into the Early

¹⁸ Could the whole text be a single name/title phrase? This is possible: some texts on portable objects are simple labels describing the object itself, without any expression of ownership or any expression of whatever dedicatory ritual the object experienced (i.e. Type I structure). And clearly on monumental texts glyphic captions naming individuals are common too, and some of them do not use introducing possessed nouns like **u-B'AH** 'It is the image of'.

Classic Period (ca. A.D. 450). By this time, however, the text appears in its full form.” As MacLeod and Reents-Budet made clear, most of the components of the PSS can be traced back to the Early Classic period. In fact, as I show below, some of these components are found already in Late Preclassic texts, albeit with higher frequency in texts on jade pendants and stone figurines. It is the preferred structure of the PSS that was not standardized until late in the Early Classic period.

For instance, in what may be the earliest known Mayan inscription, the text incised on the back of the Dumbarton Oaks quartzite pectoral (Figure 7), one finds a dedicatory text that contains some of the standard (e.g. Initial Sign, GOD.N verb, STEP) and non-standard (e.g. T124 **TZIK** verb) glyphs of the PSS (Coe 1966, 1976; Schele and Miller 1986; Mora-Marín 2001). The Initial Sign (A1), GOD.N verb (B2, C1), and the STEP verb (B1) are of course some of the components that define the PSS. The T124 **TZIK** verb (C4) is not common in PSS texts on pottery, though at least one Early Classic example (K6547, the Berlin tripod vase). However, T124 **TZIK** is very frequently found in a clear dedicatory context as part of the Initial Series Introductory Glyph (i.e. T124:25.548), which served as a dedicatory verb for the Initial Series itself; in this context we can say that it is found as early as 236-18 B.C. on Abaj Takalik Stela 2.¹⁹

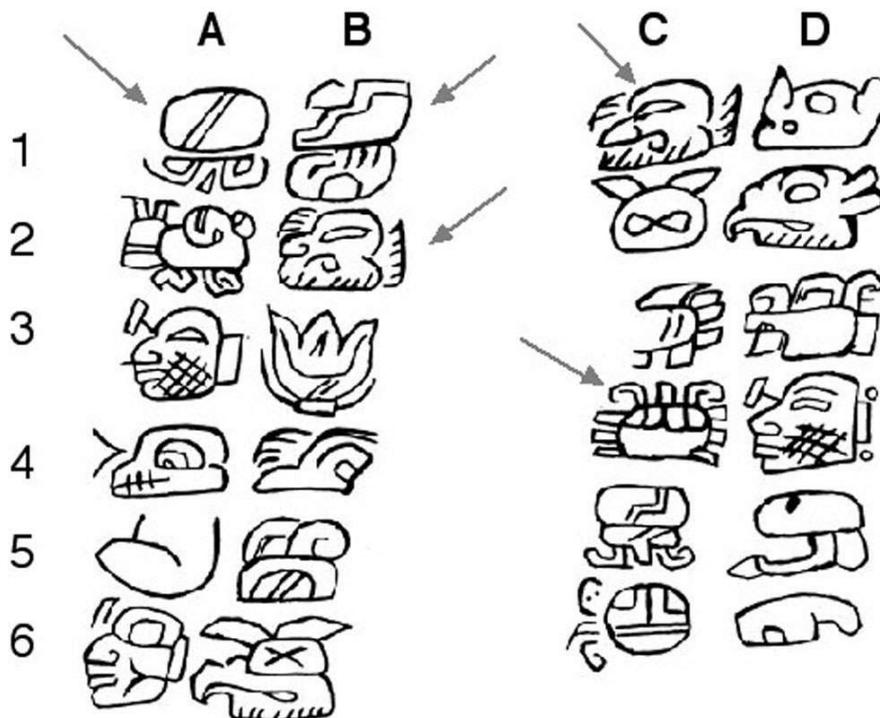


Figure 7. Drawing of text on Dumbarton Oaks pectoral by this author.

¹⁹ I analyze the Initial Series Introductory Glyph as follows: **TZIK-ka-HAB'/TUN** for *tzik-ajj-Ø-Ø ha'b'/tun* (recount-PASS-CMP-3sABS year/anniversary) or *tzi(h)k-ajj ha'b'/tun* (recount(MPASS)-PRF-3sABS year/anniversary) 'the year/anniversary has been recounted'.

The T671 **chi** sign that is present as a graphic suffix to the STEP sign on the pectoral at B1 may be the earliest form of the **ji-chi** ~ **yi-chi** glyph. The sign appears after the STEP verb: STEP-**chi**. This could be compared to spellings like STEP-**yi yi-chi** on K4375, and **?ju-STEP yi-chi** on K1261 and K4958. In fact, in the text found on the Blom Plate the glyph appears as STEP-**chi** (Figure 8a). In examples like these, **yi-chi** could represent the enclitic marker *+ich*, as suggested by Terrence Kaufman (John Justeson, personal communication 2004).²⁰ This marker is attested today in Ch'ol, but is reconstructed to Proto-Mayan as **+ik* 'already' by Kaufman (1989).²¹ A similar use of T671 may be attested on Tikal Stela 7:A7 (Figure 8b), only here one finds **TZUTZ-?yi-chi**. The Blom Plate has what may be an identical verb to that on the Dumbarton Oaks pectoral, spelled STEP-**chi** (Figure 8c), and perhaps as an alternative spelling of the more commonly attested STEP(-**yi**) **yi-chi** mentioned above. If this is correct, then the Dumbarton Oaks pectoral may already attest to the major components of the PSS (Initial Sign, STEP verb, **ji/yi-chi**, GOD.N verb), although not necessarily in the same sequence.

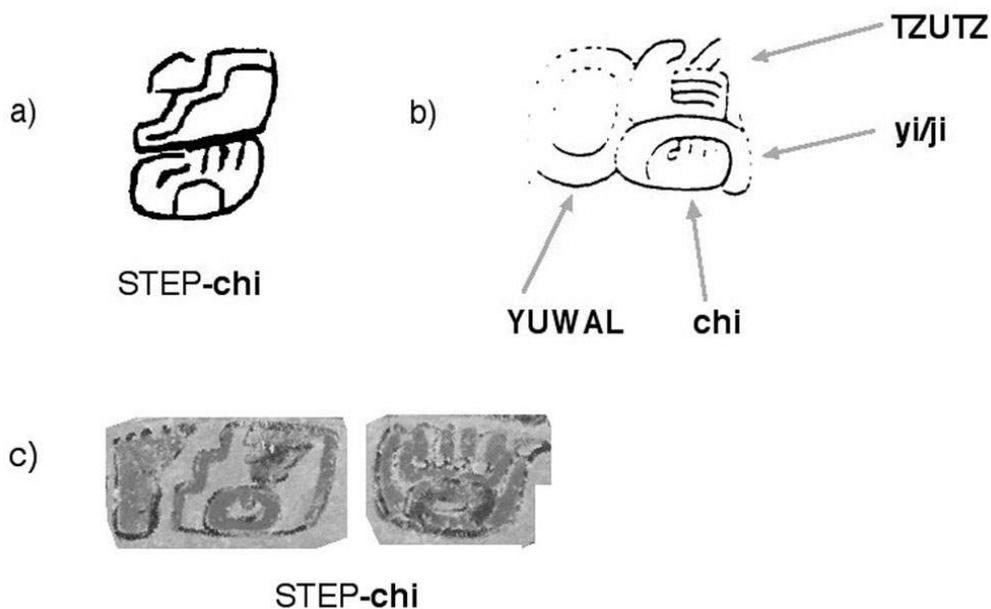


Figure 8. a) Glyph B1 on Dumbarton Oaks quartzite pectoral. Drawing by this author. b) Tikal Stela 7:A7. Drawing from Jones and Satterthwaite (1982). c) Glyphs B and C on Blom Plate. Photograph in Reents-Budet (1998:278).

²⁰ According to Kaufman, if we assume **yi-chi** ~ **ji-chi** normally represented the enclitic *+ich*, such assumption could explain why the glyph was often written in a glyph block by itself, as if it were a separate word, which some enclitics essentially are.

²¹ Schumann (1973:27) illustrates this enclitic, which he regards as a suffix, as follows: *utz'at* 'bueno (good)' vs. *utz'at-ich* 'está o es bueno (it is good)'. Schumann simply states that the suffix 'establishes the fact of possessing or having a state or reaffirms it' ('marca el hecho de poseer o tener una condición o bien asegura la misma').

The use of T1000a **NAL/na** in the PSS is also early. Its first clear use may be found in the Uaxactun tripod vase with a text painted on stucco, a vase that may date to between ca. A.D. 100-300. In that text T1000a **NAL/na** appears as a modifier to **ja-yi** ([Figure 9a](#)), and as **NAL-?TE'** as a modifier to **ka-wa** ([Figure 9b](#)). This dual function of the same sign is attested in later PSS texts ([Figure 9c](#)). However, in later texts the two functions were generally distinguished orthographically: (1) as a modifier to **TE'(-'e-le) ka-wa**, for example, it usually appears as **NAL** ([Figure 9d](#)), with a few examples showing it as **NAL-la** or **NAL-ja** or **NAL-ja-la** ([Figure 9e](#)); and (2) as a predicate or modifier it appears as **na-ja(-la)** ([Figures 9f-h](#)).²² As I propose in Mora-Marín (1999a, 1999b, 2001, 2004a), this glyph may represent the term *nah* 'obligation' and *nahal* 'to win, earn; profit', and it may have referred to the gift-exchange system whereby preciosities such as jade pendants and fine ceramics were probably given out as rewards for services. Thus, a vessel described as *nahal* (cf. **NAL ja-yi** in the Uaxactun Tripod Vase, Structure Type VI above) was perhaps given to someone as his or her 'earned' reward. This interpretation stands in place of the recently favored interpretation of the **na-ja** sequence as representing a passive marker *-n-aj*. My analysis of the glyph's distribution and spellings suggests it is not used as a passivizing suffix in the PSS.

²² As a predicate, the **NAL** or **NAL/na-ja(-la)** verb appears in quite a few PSS texts (e.g. K1379, K2669, K3459, K5350, K4357, K4551, K7147, K7220, K7227, K8252, MScribe 38).

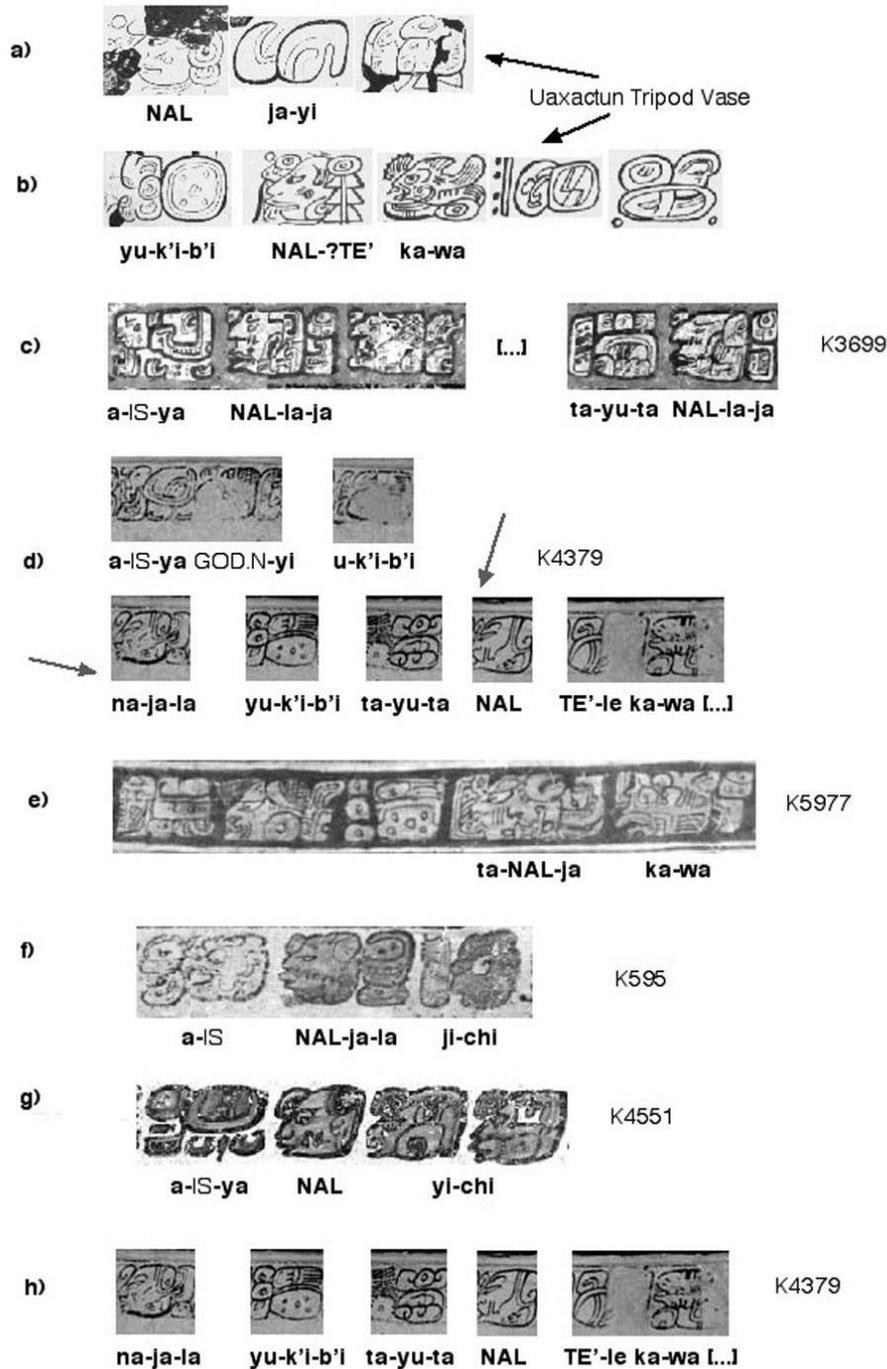


Figure 9. Examples of T1000a/1002a NAL/na used as predicate and modifier. a) Uaxactun tripod vase: NAL ja-yi. b) Uaxactun tripod vase: NAL-?TE' ka-wa. Drawing in Keleman (1956). c) K3699: Use of NAL-la-ja as predicate (before GOD.N verb) and as modifier after ta-yu-ta. d) K4379: Use of NAL/na-ja-la as predicate (yu-k'i-b'i [...] functions as its subject) and of NAL as modifier before TE'-le ka-wa. e) K5977: Use of NAL-ja as modifier to ka-wa. f) K595: Use of NAL/na-ja-la as a predicate after a-IS and before ji-chi. g) K4551: Use of NAL as a predicate after a-IS-ya and before yi-chi. h) K4379: Use of NAL/na-ja-la as predicate; it is found between u-k'i-b'i and yu-k'i-b'i, suggesting it serves as interclausal boundary, and most likely as a predicate to the clause ending with u-k'i-b'i. Photographs from Justin Kerr Archive.

Another point of interest is the subject matter of PSS texts. Late Classic PSS texts usually pertain to the dedication or ownership of the inscribed object itself. Thus one expects to find *y-uk'-ib* 'his cup' on a vase, or *u-lak* 'his dish' on a dish, whether as the subject of the dedicatory verb, or as the thing that someone owns, or both. However, starting in the Late Preclassic and still in rather frequent use through the Late Classic, the images or scenes present on objects such as pots were often the ones that were 'dedicated' or 'belonged' by someone. This is the case of the texts on the Brooklyn Museum of Art pectoral jade mask ([Figure 10a](#)), and a stone cylinder illustrated in Houston and Stuart (1998:83, Figure 9) ([Figure 10b](#)):

1. **u-B'AH ?-?CHAPAT ?CHAK-?STEP-?K'UH ?u-?le/PENIS-?WINIK**
2. **?ju-STEP yu-B'AH ?-ch'a-?**

In the first one **u-B'AH** '(It is) the image of' probably refers to the person portrayed on the front side of the mask, whose name probably started with **?-?CHAPAT** '?-*Chahpat*'.²³ In the second one the glyph **yu-B'AH**, with T62 **yu** probably used here for **u**, a rare usage attested elsewhere, is the subject of the text, the thing that is dedicated. More specifically, the text says that 'the image of [**?-ch'a**] was STEPped'. This type of theme was carried into the Late Classic period. A similar example on a jade mosaic mask from Calakmul (Martin and Grube 2000:109): **u-B'AH CHAK-?lo-?-?mo[?WINIK]?che yu[ku]-?CH'EN-na** 'It is the image of *Chahk* [...] *Yuk[nom]* *Ch'en*'. And in fact, numerous monuments bear examples of this ancient PSS sentence.

²³ The face carved on the front side of the pectoral is a rather generic Olmec-style face, rather than a portrait of a specific individual. Nonetheless, it is possible that the Mayan lord who owned the piece commissioned a more specific labeling because of the likeliness that it was not desirable to modify the front side of the mask in any way to individualize the face more.

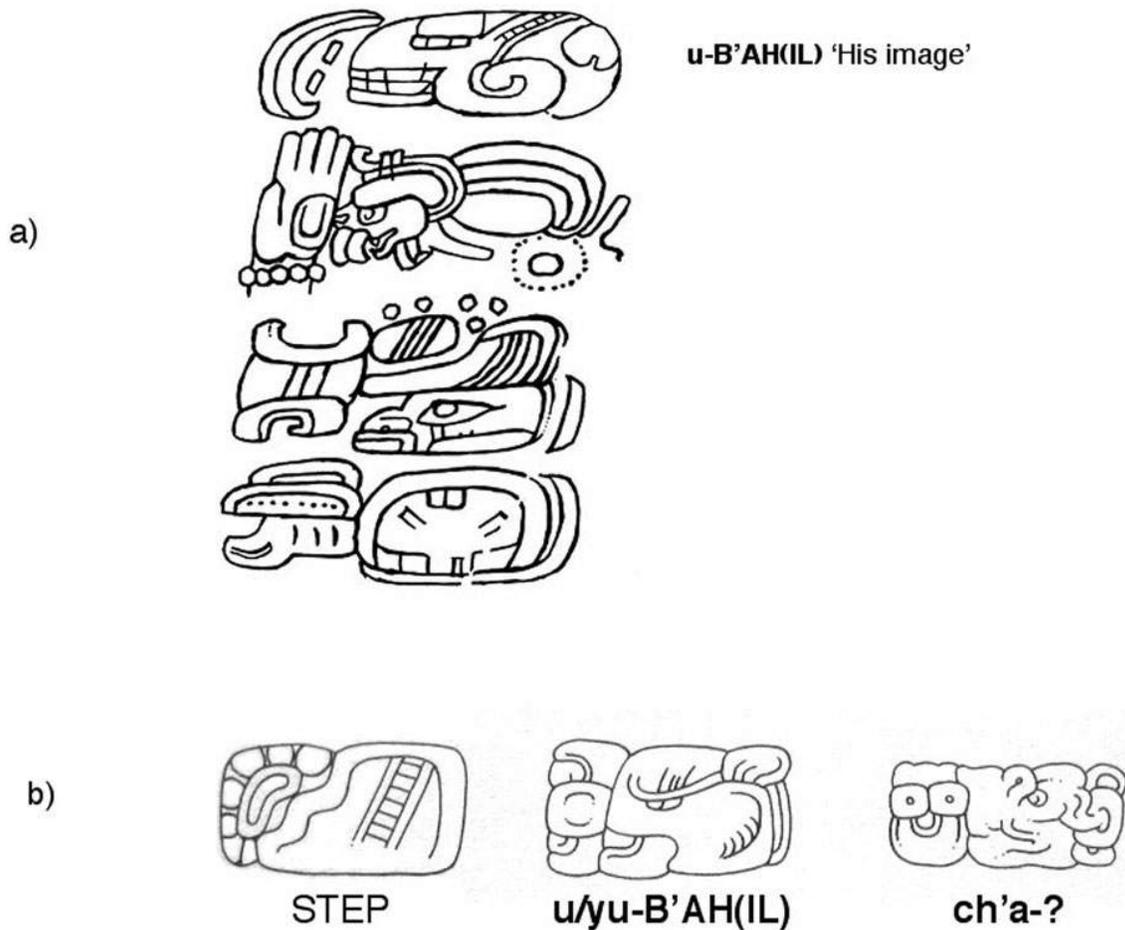


Figure 10. a) Text on the back of the Brooklyn Museum of Art jadeite mask. Drawing by this author. b) Stone cylinder illustrated in Houston and Stuart (1998:83, Figure 9). Drawing by Stephen Houston.

The use of **u-B'AH** in the PSS context resembles the use of other, more standard possessed nouns, such as **yo-k'i-b'i**, in the presence of what appear to be complement phrases headed by the preposition *ti/tä*. Indeed, as seen on vase K2803, a clause beginning with **u-B'AH-hi** includes the prepositional complement phrase **ta-tzi-hi**, interpreted by MacLeod (1990) as *tä tzih* 'for fresh', as follows ([Figure 11a](#)):

- 3 **u-B'AH-hi ta-tzi-hi CHAK-ch'o-ko ke-KELEM SAK-MUWAN-ni K'UHUL-
IK'(NAL)-AJAW-wa** 'It is the image of Great Sprout Youth White Hawk, Divine Lord of *Ik'(nal)*, as *TZIH(IL)*'.

This can be compared directly with examples like that on vase K679, where a clause beginning with **yu-k'i-b'i** also bears the phrase **ta-tzi-hi** ([Figure 11b](#)):

- 4 **yu-k'i-b'i ta-tzi ka-wa ?ja-? [CHAK]ka-B'ALAM a-ku ya-la K'UHUL-IX(IK) NA' CHAN-na** 'It is the cup for *TZIH(IL)* cocoa of ? Puma Turtle, the son of Divine Lady of Uaxactun'.

u-B'AH-hi ta-tzi-hi CHAK-ch'o-ko ke-KELEM SAK-MUWAN-ni K'UHUL-IX'(NAL)-AJAW



yu-k'i-b'i ta-tzi ka-wa ?ja-? [CHAK]ka-B'ALAM a-ku ya-la K'UHUL-IX(IK) NA' CHAN-na

Figure 11. a) K2803. b) K679. Photographs from Justin Kerr Archive.

Thus, the **u-B'AH** clause on vase K2803 bears a parallel structure, and probably a parallel function, to a Type V clause in which the contents of a drinking cup are described as **ta-tzi(-hi) ka-ka-wa** 'for [*TZIH(IL)*] cocoa', for example, as on vase K679. The only difference may be that in the case of vase K2803 the best interpretation may be one where the **ta-tzi-hi** glyph is read as a status, i.e. 'as [*TZIH(IL)*]'.

There is additional supporting evidence for the similar treatment of dedicated objects and people. On vase K4550 one finds **K'AL-ja tzi-hi-li ch'o-ko [...]** '*TZIHIL* Sprout [...] was wrapped', where an heir (*ch'ok* 'sprout') is qualified by the modifier **tzi-hi-li**. Furthermore, on vase K5857 one finds [...] **ch'o-ko K'AL-ja ti-AJAW-wa** 'Sprout (who was) Wrapped as Lord' as the name phrase for the vase's owner. This suggests that the dedication of a vase went hand-in-hand with the dedication of an heir to a high office; in fact, it suggests that both were sometimes thought of as similar types of events. The wrapping of a headband around the head of a young lord was probably equivalent to the wrapping of an object in cloth. And both objects and people to be dedicated could be referred to by the term **tzi-hi-li**.

This practice of referring not to the inscribed object itself but instead to the scenes or portraits carved or painted on the object is clearly present in later Early Classic and Late Classic PSS texts. In some vases the thing dedicated is not the vase itself, but the writing on it. For example, on K578 one finds the following clause ([Figure 12a](#)):

5. **a-IS-ya** GOD.N-**yi** **u-tz'i-b'a-li**

'Here the written.thing/writing was/got GOD.Ned'. Here, **u-tz'i-b'a-li** (*u-tz'ihb'-al-i(l)*) 'his written thing' or 'his writing' is the subject of the GOD.N-**yi** verb. Another example is K6814 ([Figure 12b](#)):

6. **a-IS** **K'AL-la-ja** GOD.N-**yi** **tz'i-b'i**

'Here the writing was wrapped and GOD.Ned'.

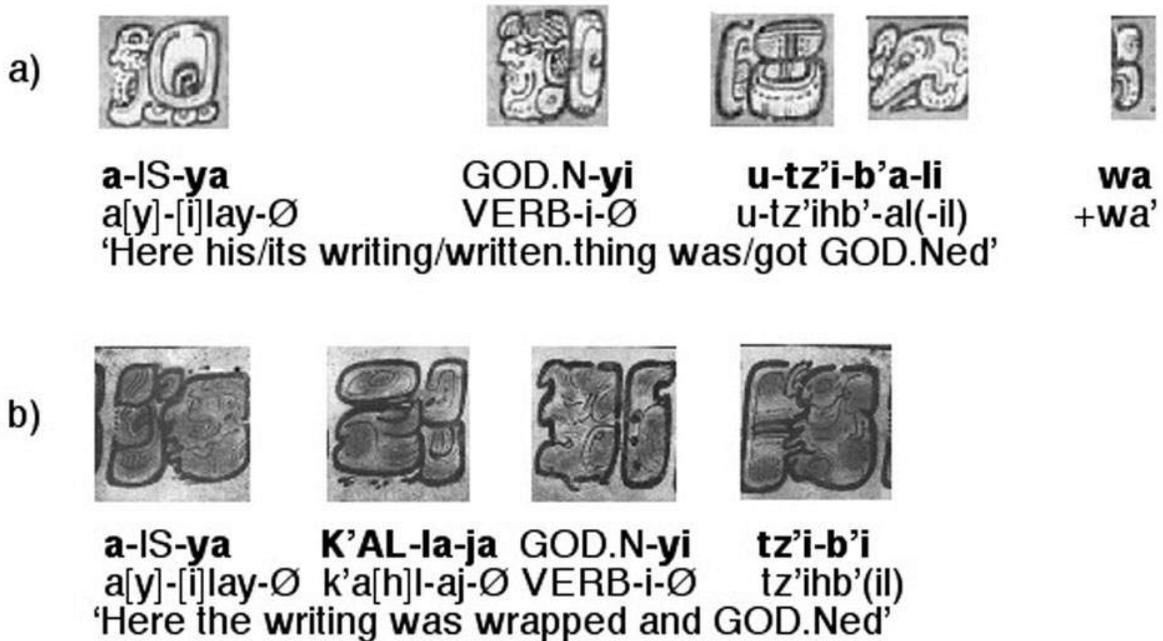


Figure 12. a) K578. b) K6814. Photographs from Justin Kerr Archive.

In Mora-Marín (2004a) I provide further details on the history of the PSS, especially how its structure, as attested in Late Classic examples, came to be. I also discuss possible changes in media and topics suggested by the evidence.

Conclusions

This report summarizes some of the major findings in Mora-Marín (2004a), which is still under preparation, and has been funded exclusively by FAMSI grant #02047. The study analyzes the grammar of PSS texts using a database of 550+ text transliterations, and improving on my previous efforts (Mora-Marín 1999a, 1999b), which used a database that consisted of only 240 text transliterations. This database will be available as an Excel file included with the monograph once it is completed.²⁴ The more important findings pertain to the readings of specific signs, some of which have important implications for the grammatical analysis of many PSS texts, as well as to the analysis of the grammar of the PSS itself, which consists of at least twelve basic sentence structure types, classified from simple to complex. This typology is in agreement with the typologies presented by previous researchers (Stuart 1989; Grube 1990; MacLeod 1990): in some respects it provides more details, while in others it adds types of structures not considered by those authors. In addition, I trace the history of the PSS, taking into account changes in media and topics through time, as well as the gradual development by accretion, from the Late Preclassic period to the late Early Classic period, of the structures attested in the Late Classic period.

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[Figure 5](#). a) Shell silhouette pendant in the Dumbarton Oaks Collection (B191.MAL). Photo provided by Loa Traxler and Jennifer Younger at Dumbarton Oaks. b) Drawing of text by this author.

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[Figure 7](#). Drawing of text on Dumbarton Oaks pectoral by this author.

²⁴ However, I will soon make the database available through email to interested parties, at which point they may edit the database and add entries as they may see fit.

[Figure 8](#). a) Glyph B1 on Dumbarton Oaks quartzite pectoral. Drawing by this author. b) Tikal Stela 7:A7. Drawing from Jones and Satterthwaite (1982). c) Glyphs B and C on Blom Plate. Photograph in Reents-Budet (1998:278).

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Addendum: Brief Background to the Study of the PSS and the Present Report

Progress in the decipherment of dedicatory texts, one of the three main textual genres in Classic Mayan inscriptions (historical, cosmological, dedicatory), took place relatively quickly once the major stumbling block was removed. Indeed, epigraphers and archaeologists initially followed Thompson (1950, 1962) in assuming that inscriptions in some portable objects, such as pots, were nonsensical and purely decorative. Coe (1973, 1978, 1982) single handedly changed that view. In two structural studies of a set of pottery vases Coe showed that the texts constituted a rigid formula whose component glyphs exhibit highly predictable positions and substitution patterns. He termed it the Primary Standard Sequence (PSS), as is generally known today, and defined its presence in pottery vases primarily. Though he suggested it probably referred to “codified chants or recitations” related to the soul’s journey into the Underworld (1973:18), it was not until a few years later when the nature of its content would become evident.

That is when Mathews (1979) pointed out the presence of the label *utuup* ‘his/her earring’ on a pair of obsidian earrings from Altun Ha. His finding was soon confirmed by Justeson (1983), who identified the same label on a set of jade earrings from Xcalumkin, and Stuart (1984, 1987), who identified a different label, *u-b’aak* ‘his/her bone’, on a set of inscribed bones from Tikal. These findings showed that ownership statements were an intrinsic part of inscriptions on portable objects. Schele and Stuart (1985) and Stuart (1986a) soon presented additional evidence for similar labels on monumental media (e.g. *te’-tuun* for ‘tree stone (stela)’), broadening the contextual scope of ownership statements once again. Soon, researchers discovered that ownership statements are part of the more inclusive genre of dedicatory texts (PSS texts) present in portable and monumental media alike; e.g. Krochock (1989, 1991) has carefully studied a set of PSS texts at Chichen Itza. Houston and Taube (1987) presented a structural analysis of texts on pottery vases suggesting different terms for different types of vases, and also the use of proprietary statements as the subjects of dedicatory verbs. Houston et al. (1989) further expanded on their identification of functionally different terms for different types of pots. At the same time, Stuart (1986b, 1988, 1989), Grube (1990, 1991), MacLeod (1989, 1990), and MacLeod and Grube (1989) discussed several of the dedicatory verbs of the PSS in detail, as well as the evidence for the descriptions of the contents of pottery vessels (e.g. *käkaw* ‘chocolate’, *ul* ‘corn gruel’) and the typical epithets and titles of the owners of the pots (e.g. *chak ch’ok* ‘red/great sprout/youth’, *ajaw* ‘lord, ruler’). Stuart (1989), Grube (1990), and MacLeod (1990) presented arguments for the general structure of the PSS that advanced well beyond Coe’s (1973) original definition and were more consonant with the grammar of Mayan languages. Stuart (1989) suggested the most basic PSS is made up of a possessed noun (the object’s name) followed by a possessor (the object’s owner), and optionally a verb which may precede the possessed noun. MacLeod (1990) agreed with this basic structure and proposed an additional sentence type not considered by Stuart (1989), consisting of a glyph called the Initial Sign followed by the

sequence glyphs **na-ja tz'i-b'i ji-chi**. And Grube (1990), finally, showed that sometimes the subject of a dedicatory verb can be made up of two possessed nouns, each one referring to the same object (e.g. *ujaay y-uk'-ib'* for 'the thin(-walled) one, his/her drinking cup').

These advancements constitute the basic structural decipherment of the PSS. However, many details of the structure of PSS texts and of the structure of the words and phrases that make up PSS texts remain unanswered (e.g. How many sentences per PSS text? How many different types of phrases are there? Are all the verbs intransitive and in the completive aspect? Are the nouns derived nouns or root nouns? Are nonverbal words used as predicates?). From 1991 through 2002 there have been no published comprehensive epigraphic studies of PSS texts except for MacLeod's contribution in Reents-Budet (1994), which was based for the most part on her previous comprehensive analysis of PSS texts (MacLeod 1990). Only scattered studies of verbal morphology, noun morphology, or phonetic sign decipherments which include examples from scattered PSS texts have addressed PSS texts during this time (e.g. Houston et al. 2001; Lacadena 1996; Mora-Marín 2000), in spite of the fact that the last decade was witness to a great number of advancements in the understanding of the orthography and grammar of Mayan texts (e.g. Lacadena 1998; Stuart et al. 1999; Wald 1994; Wald and MacLeod 1999; Zender 1999) which would have allowed for more focused studies of PSS texts as independent tests of those advancements.

The main objective of my research project, consequently, is to contribute with a detailed and comprehensive grammatical analysis that will benefit from the advancements made in other areas of Mayan epigraphy during the last decade, from numerous additions to the corpus of dedicatory texts in various types of media (e.g. Kerr 1997, 2000; Mora-Marín 2001), from a better understanding and documentation of the grammar and historical reconstruction of the Greater Lowland Mayan languages (e.g. Bricker et al. 1998; Hofling 2000; Hofling and Tesucún 1997; Keller and Luciano 1997; Robertson 1999), and from recent discussions of the linguistic variation present in Classic Mayan texts across time and space (e.g. Houston et al. 2000; Justeson and Campbell 1997; Lacadena and Wichmann 1999, 2000).