The *Initial Sign* Glyph of the Primary Standard Sequence

Part I: Spelling Patterns

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The so-called Initial Sign, most commonly based on T617 MIRROR as a main sign, is very common in the PSS. In the database used in this study it is found in 355 out of 566 texts (62.8%). The database, however, does not yet include examples of the Initial Sign on monumental texts; I do cite such examples below. **Table 1** provides the frequency of spelling patterns for this glyph, not yet taking into account the distinctions among variant main signs.

Table 1. Spelling Patterns of the Initial Sign.

Spelling Pattern	Frequency	Examples
(a) **'a-IS**	61/355 (17.2%)	K623, K758, et cetera; also on several monuments not included in database (e.g. Rio Amarillo Altar)
(a') **'a-?IS**	5/355	K796, K3033, K4336, K5847, Mscribe 38
(b) **'a-IS-ya**	243/355 (68.5%)	K532, K578, et cetera; also on several monuments not included in database (e.g.

		Tortuguero Monument 6:A6, A13, B16, D2, E11; Tortuguero Wooden Box:N1; Quirigua Stela J:G1; Xcalumkin Column 2:A1)
(b') **'a-IS-?ya**	8/355	K719, K2780, K4407, K4605, K7694, K8741, K8764, K8815
(c) **'a-**IS-**ya-la**	1/355	Ceramic plate (Berjonneau et al. 1985: 230-231, No. 354); also on several monuments not included in database (e.g. Tikal Stela 31:A12, Calakmul Stela 43:pA8; as **III-'a-**IS-**ya-la** on Piedras Negras Lintel 12:F1)
(d) **'a-ya-**IS	2/355	K3844, K5009; also on several monuments not included in database (e.g. Tikal Stela 26:zB1)
(e) IS-**ya**	1/355	Dumbarton Oaks quartzite pectoral; also on monuments not included in database (e.g. Balakbal Stela 5:D11; Tikal Stela 40:B8; Oxkintok Lintel 2:A1, Lintel 13:A1; all of these are Early Classic)
(f) IS-**ya-la**		On some monuments not included in database (e.g. Tikal Stela 31:C19, Bejucal Stela 2:D5)

(g) **la**-IS	1/355	K5197
(h) **'a[la]**-IS	1/355	K2695
(i) **'a-la**-IS-**ya**	2/355	K5458, K8157
(j) **'a-?la-la**-IS-**ya**	1/355	Early Classic vase (Coe and Van Stone 2001:104-105)
(k) **la**-IS-**ya**	2/355	K8009, Bakin Pot Vase (Awe 1993:cover)
(k') **?la**-?IS-**ya**	1/355	K7514
(l) IS-**la**	1/355	Cenote tubular jade beat (CNT 22001; Proskouriakoff 1974:206)
(m) **'a**-IS-**la**	1/355	Early Classic plate (Berjonneau et al. 1985:230-231, No. 352); also on several monuments not included in database (e.g. Palenque Tablet of the Sun:B16; Tortuguero Monument 1:A4c)
(m') **'a**-IS-**?la**	3/355	K1836, K3324, K8339
(n) **'a**-IS-**la-ya**	1/355	Blom Plate

In addition, the following spellings in **Table 2**, which do not involve T617 or any of its recognized variants, are also attested:

Table 2. Spelling Patterns not involving the Initial Sign or otherwise atypical.

Spelling Pattern	Frequency	Examples
(o) **'a-la-ya**	1/566	K8123

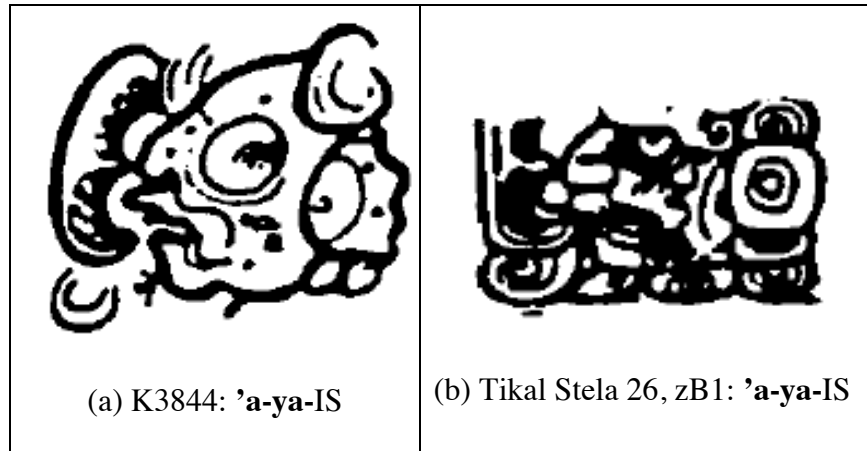|		
(p) **'a-ja-ya**	3/566	2X on K558, K703
(q) **'u**-IS-**ya**	1/355	K7602
(r) **?na**-IS-**ya**	Not in database	K5940
(s) **'a-T501-ya**	1/566	K4652
(t) **'a-T168:IS**	1/355	K791

It is time to examine the spelling patterns in **Tables 1-2** in some detail. First, I use the mnemonic "IS" for the Intial Sign regardless of the main sign variant used, except I exclude T683 which is probably used as the syllabogram **ja** in this context (cf. pattern (p) in **Table 2**). MacLeod (1990a:36) described several main sign variants, but here I will focus instead on the spelling patterns related to the syllabograms that may appear with the IS – whatever variant of the IS is used. MacLeod (1990a:34) proposed, based on the most common spelling pattern (b) **'a-IS-ya**, that the IS is a logogram **'AY** representing a form related to Proto-Ch'olan *ay-an* 'there is' as reconstructed by Kaufman and Norman (1984:116), who also point out that *–an* is a Ch'olan innovation, as suggested by evidence external and ancestral to Ch'olan (cf. Proto-Tzeltalan *ay*, Proto-Mayan *ar*), which suggests that Proto-Ch'olan-Tzeltalan had *ay*, and that Pre-Ch'olan may have had *ay* as well. MacLeod's (1990a) reading, therefore, is in agreement with the expected Proto-Ch'olan-Tzeltalan (or Pre-Ch'olan) *ay*. She further suggested that the Ch'orti' forms *ay* 'be, have, own', *ayan* 'there is/are', and *ay-ix* 'there was (already)' point to a likely Ch'orti' paradigm *ay* 'there was' vs. *ayan* 'there is'. In addition, she noted, on Tikal Stela 31:C19 one finds IS-**ya-?na**, which she tentatively read as *ay-an*, which would correspond to the reconstructed Proto-Ch'olan form. However, to me it is

not clear whether the sign on Tikal Stela 31:C19 is **na** or **la**; the latter is clearly consistent with other variant spellings of this collocation, while the former is not (except for the case of the unusual and possibly unique spelling **?na-IS-ya**, pattern (r) in **Table 2**).[1]

In Mora-Marín (2001) I support MacLeod's (1990a) proposal with spelling patterns and morphosyntactic patterns not considered by her, which I discuss below after presenting the morphosyntactic distribution patterns for the Initial Sign glyph. The spelling patterns (a)-(f) and (m) presented here in **Table 1** all support a root *ay* as the referent of T617 or its logographic variants. Patterns (c), (f), and (m), more specifically, suggest a stem *ay-al* EX-ST (where –*al* could be a stative suffix, possibly semantically related to the –*an* suffix of *ay-an*, which might be a descendant of Proto-Mayan *-a'n/-a:n* 'stative' reconstructed by Kaufman 1989) in spellings such as IS-**la**, **'a-IS-la**, and **'a-IS-ya-la.** Patterns (a), (l), and (m) support a possible logographic reading **'AYAL** for *ay-al* 'there is' given the variation in spellings like **'a-IS**, **'a-IS-la**, and IS-**la**. And finally, the spelling pattern (d), rendering **'a-ya-IS**, is particularly suggestive of either **'AY** or **'AYAL**, as seen in **Figure 1**:

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[1] T840/667, a sign that resembles T617, has been shown to exhibit certain characteristics that suggest it represents the existential particle Ch'olan-Tzeltalan *ay* or Yukatekan *yaan* (Justeson et al. 1988). Interestingly, on Dresden 31c on finds T840/667-**ya-na**, and on Dresden 65b one finds **'a-**T667-**na**, the former consistent with either Proto-Ch'olan *ay-an* or Yukatekan *yaan*, while the latter with Proto-Ch'olan *ay-an*. However, T840/667 exhibits spelling patterns not associated with T617 (e.g. **'u-**T667-**wa** on Dresden 30c, **'u-**T667-**?mu** on Madrid 39a), and for that reason I will exclude it for now from present discussion.

Figure 1. Spelling ’a-ya-IS.

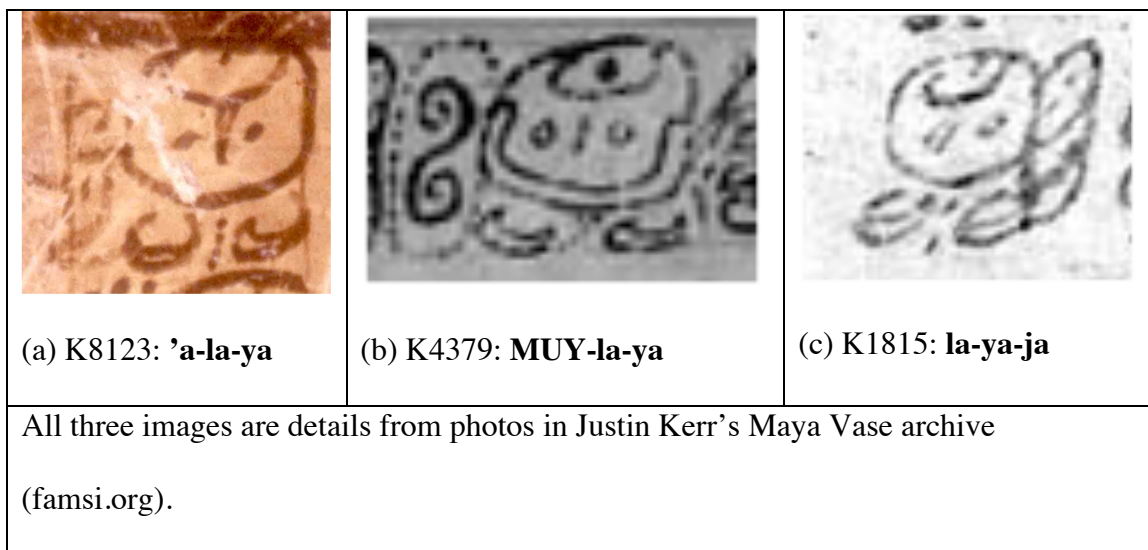| (a) K3844: **’a-ya-IS** | (b) Tikal Stela 26, zB1: **’a-ya-IS** |

More recently, based on spelling patterns involving the Initial Sign main sign (whatever its variant), Barbara MacLeod and Yuriy Polyukovych (2000) proposed a new reading **’ALAY** for the main sign (e.g. T617). This logogram would represent the term *a[y]=[i]lay* attested in Acalan Chontal, which would be an amalgamation of *ay* ‘existential particle’ and Proto-Ch’olan *ila(-i)* ‘this’ (Kaufman and Norman 1984:139). Patterns (g)-(l) and (n) in **Table 1** support this reading. In addition, as pointed out by Boot (2003), Pattern (o) in **Table 2**, a fully phonetic spelling **’a-la-ya**, strongly supports a logographic reading **’ALAY** for T617 (and the other Initial Sign main signs). If correct, this value has to contain *ay* ‘there is’, the existential particle. In Ch’olan and Tzeltalan languages it is clear that *ay* is often contracted. In Chontal and Ch’ol the form *an* is attested, and likely originated in Proto-Ch’olan *ay-an* (i.e. *ay-an > aØ-an > an*). In Tzotzil the form is *’ay* (or *’oy*) but contracts to *’a* (or *’o*).

However, the spelling in pattern (o) can be explained as a grapheme reversal strategy required by the fact that T126 **ya** is a graphic affix (elongated sign) while T534 **la** is a graphic main sign (squarish sign): since main signs occupy the core of a glyph

block, it is often the case that signs in a collocation are placed in a reversed reading order in order to preserve the graphic requirement calling for a main sign as the core of a glyph block (Justeson 1989). Indeed, as I have pointed out in Mora-Marín (2003:footnote 7), the scribe who spelled **'a-la-ya** on K8123 (**Figure 2a**) may have placed the graphic main sign T534 **la** as the second sign in the collocation because that is the position that T617, which is absent in this spelling and is also a graphic main sign, would normally take. A similar process is evident on K4379, where the spelling **MUY-la-ya** (**Figure 2b**), instead of the much more common **MUY-ya-la**, for *muyal* 'cloud', is found, and on K1815, where the spelling **la-ya-ja** (**Figure 2c**), instead of the much more common **ya-la-ja**, for *y-al-aj-Ø* 3sERG-say-PERF-3sABS 's/he/it has said it', is found:
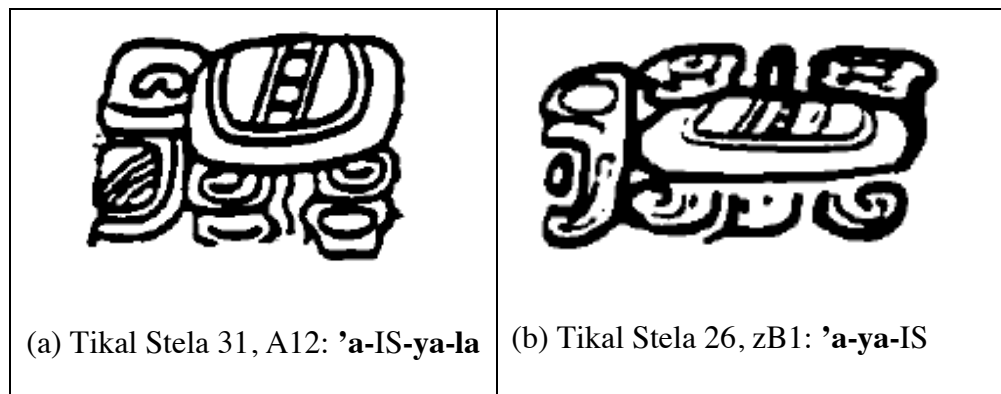
Figure 2. Use of T534 *la* as graphic main sign.

(a) K8123: **'a-la-ya**	(b) K4379: **MUY-la-ya**	(c) K1815: **la-ya-ja**
All three images are details from photos in Justin Kerr's Maya Vase archive (famsi.org).		

What these example suggest is that T534 is especially given to be placed in a main sign position when another main sign is absent or not used as a main sign. Thus, the absence of T617, and the presence of T534 **la** in its place is no guarantee of correct

reading order. And given that there are just as many patterns supporting a reading **'AY**

or **'AYAL** (i.e. (a)-(f), (m)), as there are patterns supporting a reading **'ALAY** (i.e. (g)-

(l), (n)), I propose that the weight of the evidence not be placed on the **'a-la-ya** spelling

on K8123 (i.e. pattern (o)), which could very well be unreliable as a guide to correct

reading order. Instead, we can be confident that one of the two readings, **'ALAY** or

'AYAL is correct. The most common spelling, pattern (b), is potentially ambiguous: **'a-

IS-ya** could represent *ay* or *a[y]=[i]lay*. In fact, the evidence is often completely

contradictory, as seen in **Figure 3**, where **'a-IS-ya-la** in **Figure 3a** strongly supports

'AYAL and **'a-la-IS-ya** in **Figure 3b** strongly supports **'ALAY**:

Figure 1. Contradictory spellings 'a-IS-ya-la and 'a-la-IS-ya.

(a) Tikal Stela 31, A12: **'a-IS-ya-la**	(b) Tikal Stela 26, zB1: **'a-ya-IS**

Consequently, it is still somewhat premature to discriminate between the two likely

possibilities: **'AY(AL)** and **'ALAY**. In either case, MacLeod's (1990a) original proposal

of the presence of *ay* 'there is' (existential particle) in the Initial Sign glyphic collocation

can be presumed.

It is now time to examine the morphosyntactic constructions characteristic of the Initial Sign glyphic collocation, though I will discuss them in more detail in **5**. These are shown in **Table 3**:

Table 3. Distribution Patterns involving the Initial Sign.

Syntactic Pattern	Frame	Frequency	Examples
(a)	IS + GOD.N(**-yi)** + Unpossessed Nominal		
(b)	IS + GOD.N/STEP/FLAT.HAND(**-ji/yi-chi**) + [Possessed Nominal + Nominal Possessor]		Baking Pot Vase, Topoxte Mirror, Early Classic Plate (Berjonneau et al. 1985:No. 354)
(c)	IS + GOD.N/STEP/T1000ab/FLAT.HAND(**-ji/yi-chi**) + [Possessed Nominals + Nominal Possessor]		Early Classic vase (Coe and Van Stone 2001:104-105), Mscribe

			38
(d)	IS + GOD.N **'u-k'i-yi …**		Early Classic Plates (Berjonneau et al. 1985:No. 352, 355)
(e)			
(f)	[IS + **tz'i-b'i-na-ja-ji-chi**]		
(g)	IS + **tz'i-b'i-na-ja-ji-chi** + [Possessed Nominal + Nominal Possessor]		BOD 67, BOD 175
(h)	IS + **tz'i-b'i-na-ja(-ji-chi)** + [Possessed Nominal + Nominal Possessor]		Dos Pilas Plate
(i)	IS + [Possessed Nominal + (**ti** +) Nominal Possessor]		
(j)	IS + [Possessed Nominal …]		
(k)	IS + **'u**-TV …		CNT 22001
(l)	IS + **SIJ-ya-ja** + Nominal Subject		Palenque Tablet of the Sun
(m)	D.N. + **SIJ-ya-ja** + IS + C.R. + **CHUM-wa-ni**		Tortuguero Monument 6
(n)	D.N. + IS + C.R. + STAR.OVER.EARTH-		Tortuguero

	yi-ya + [Possessed Nominal + Nominal Possessor]		Monument 6
(o)	IS + D.N. + 'u-ti-ya + C.R.		Quirigua Stela J
(p)	IS + 'u-ti-ya + D.N. + C.R. + Verb		Tortuguero Monument 1
(q)	'u-ti-ya + IS + FLAT.HAND		Chichen Itza Monjas Lintel 4
(r)	IS + 'u-ti-ya + VERB + Subject		Tikal Stela 31
(s)	D.N. + FLAT.HAND + Subject + IS + Tzolkin		Tikal Stela 31

The morphosyntactic characteristics of the Initial Sign glyph have been discussed in detail in MacLeod (1990a) and Mora-Marín (1999a, 1999b, 2001). MacLeod (1990a:32) pointed out that Schele (1982:Chart 130) first described the frequent occurrence of the Initial Sign with dates and verbs and proposed that it served to highlight information. This is as specific as most epigraphers still get to analyzing the function of the Initial Sign to this day; MacLeod observed that such "view is certainly compatible with [the position of the Initial Sign glyph] in the Primary Standard Sequence" (1990a:32). Though this seems rather general, in Mayan languages the reflexes of Proto-Mayan *ar 'existential particle' often serve rather general discourse marking functions. Larsen (1981), for example, has shown that in Awakatek (Greater
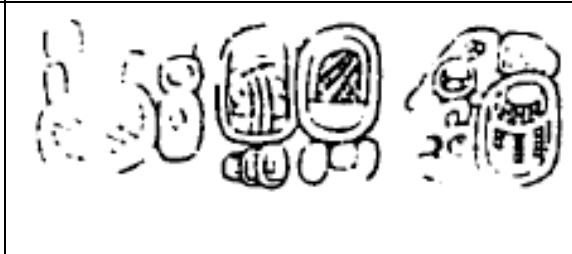
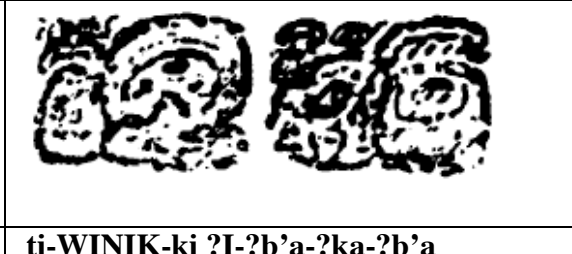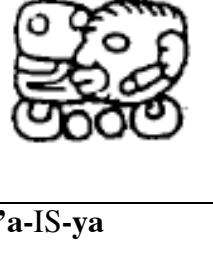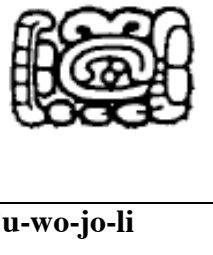Mamean) the existential predicator ’at introduces new information, specifically new S

and O arguments which it coreferences by means of absolutive agreement markers. The

clause- and text-initial contexts that characterize the distribution of the Initial Sign are

clearly consistent with a discourse function of introducing new information.

More specifically in the case of the Initial Sign, MacLeod described how in

monumental texts it often co-occurs with the verbs **’u-ti-ya** for *u[-h-]t-i-Ø(-ya)*

finish[MPASS]-CMP-3sABS(-?) ‘since it happened’ and **SIJ-ya-ja** for *sihj-yaj-Ø-Ø*

be.born-SUFF-CMP-3sABS ‘s/he/it was born’, as well as with distance numbers and

calendar rounds, while in the PSS texts on portable objects the Initial Sign glyph seems to

co-occur with the GOD.N, FLAT.HAND, and **tz’i-b’i-na-ja-ji-chi** verbs (1990a:46-49).

Based on this she suggested that in both monumental texts and portable texts the function

of the Initial Sign glyph was “more that of an independent verb rather than an auxiliary,”

adding that “it prefers couplets and tripets to isolation” (1990a:47). She proposed that in

PSS texts the Initial Sign glyph may form couplets with the FLAT.HAND, GOD.N, and

tz’i-b’i-na-ja-ji-chi verbs, and she argued for an interpretation as ‘it happened’ in such

contexts. And last, for our purposes, she also stated that the Initial Sign glyph does not

open PSS texts of the type Possessed Nominal + Nominal Possessor, and concluded that

“It is apparent that Initial Sign, in its overall distribution throughout the corpus, precedes

verbs, dates, and Distance Numbers,” but not by possessed nouns (1990a:31-32).

I largely agree with MacLeod (1990a). However, there are a few observations

that need to be made and which demand revisions of some of MacLeod’s proposals.

First, as can be seen in the distribution patterns (i)-(j), the Initial Sign glyph does in fact

occur with possessed noun phrases (Mora-Marín 2001). Three examples are shown

below in **Figure 4**:

Figure 4

Pattern		Structure		
		Initial Sign	Possessed Nominal	Nominal Possessor
(i)	(1)			
		?'a-IS-ya	**'u-wo-jo-li**	
	(2)			
		'a(j)-IS-ya	**yu-'UH-li**	**ti-WINIK-ki ?I-?b'a-?ka-?b'a**
(j)				
		'a-IS-ya	**'u-wo-jo-li**	

These examples show the Initial Sign glyph followed by a possessed noun and a

nominal possessor (examples (i1) and (i2)), or simply by a possessed noun (cf. example

(j), though this is a case of an incomplete text, so it is possible that the nominal possessor

did in fact follow the possessed nominal originally). This finding should not be

surprising, given MacLeod's proposal that the Initial Sign is based on the existential

particle *ay(-an*; in fact, this finding adds support to MacLeod's proposal, by providing the

basis for the recognition and description of predicative possession in Classic Mayan texts,

a hitherto unattested construction. Indeed, whenever the existential particle is followed

by a possessed noun and a possessor in any of the Greater Lowland Mayan languages, the

result is a predicative construction used to express ownership or belonging, cf. Ch'orti'

ay 'be, have, own'. Cross-linguistically, there are two types of predicative possession, a

genitive construction and a goal construction (Heine 1997:Table 2.1, 47):

(4.1) GENITIVE: X's Y exists ʻX has Yʼ

(4.2) GOAL: Y exists for/to X ʻX has Y; Y belongs to Xʼ

As discussed in Mora-Marín (2001:111-112), Mayan languages exhibit both types,

though the second type may be attested only Yukatekan (Itzaj) and Ch'olan (Chontal).

Type (4.2) is illustrated by example (4.3) from Itzaj (Hofling 1990:558), while type (4.1)

is illustrated with (4.4) from Itzaj, with *ten* in (4.3) analyzable diachronically as *t-en* or

PREP-1sABS (Hofling 1990:558)[2]:

(4.3) Yan ten ka'=tuul paal

　　　　EXIST 1sIO two=ANIM child

　　　　'I have two children'.

(4.4) Yan ka'=tuul im-paal

　　　　EXIST two=ANIM 1sPOSS-child

　　　　'I have two children'.

While in modern Yukatekan these constructions may no longer be analyzable as type

(4.2) constructions, they probably were originally, but became reanalyzed as type (4.1)

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[2] Hofling (2000:286-287) provides further examples and discussion of these existential
constructions.

constructions when *t-ABS* became amalgamated and reanalyzed as morphologically simple. Chontal may have a construction similar to that of Itzaj. Knowles (1984:202) provides the following suggestive, the second one using an indirect object pronoun similar in form to those in Itzaj[3]:

(4.5)   chitam-lop'   **ta**   7ah+yan

        pig-3PL   PREP PRO+John

        'The pigs which belong to John'.

(4.6)   7um=p'e   7asunto   ya7an-Ø   **t**-a7a

        one=CL   business   EXT-3sABS   PREP(-)2s?

        'You have one business'.

Mayan texts seem to attest to both types, then. Pattern (i1) in **Figure 4** illustrates the genitive predicate possession construction, while pattern (i2) in **Figure 4** illustrates the goal predicate possession construction:

(4.7)   GENITIVE PREDICATIVE POSSESSION

        ' **a-IS-ya** ' **u-wo-jo-li** [Personal Name]

        ay-Ø   **u**-woj-ol(-il)   [Personal Name]

        EX-3sABS   3sERG-glyph-POSS(-POSS) [Personal Name]

         '[Personal Name] has glyphs' . (Lit. '[Personal Name]' s glyphs exist' .)

(4.8)   GOAL PREDICATIVE POSSESSION

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[3] The goal predicate possession construction attested in Chontal and Mayan texts could potentially be a useful linguistic marker, since it is, to my knowledge, absent from Ch'ol, Ch'orti', and Ch'olti'. Further research is necessary to determine whether this is correct. But for now, the example on vase K seems to be unique.

ʾ a(j)-IS-ya yu-ʾ UH-li ti[Personal Name]

ay-Ø   **y**-uh(al)-il   **ti**   [Personal Name]

EX=3sABS   3sERG-bead-POSS   PREP [Personal Name]

ʿ[Personal Name] has a bead/necklaceʾ (Lit. ʿA bead/necklace exists for/to [Personal

Name]ʾ or ʿA bead/necklace belongs to [Personal Name]ʾ.)

And last, as already discussed, MacLeod (1990a) has pointed out that the Initial Sign glyph occurs with verbs, generally intransitive or intransitivized verbs. However, as pattern (k) suggests, it can also occur with transitive verbs, though this is clearly infrequent. Either way, the Initial Sign glyph can occur with verbs. When it does so, the question that one must address is whether it functioned as an independent verb or as a type of auxiliary. MacLeod (1990a:35), citing Laughlin (1975:49), explains that in Tzotzil, *ʾay* (contracted form *ʾa*) can be used as an independent verb or as an auxiliary verb:

(4.9)   **ʾa**   s-tam   tal

       EX   3sERG-pick.up   come

       'He went and brought it'.

(4.10) **ʾoy**   x-Ø-bat   ta   ʾolon

       EX   INC-3sABS-go   PREP lowlands

       'Sometimes (lit. it happens that) he goes to the lowlands'.

It is not uncommon for the existential particle to acquire aspectual functions in pre-verbal contexts; this has happened in fact in Yukatek, for example (MacLeod 1990a:35), where *yaan* has a acquired a 'compulsive' meaning in this type of construction:

(4.11) yaan   im-bin

EX   3sERG-go

'I must go'.

It is possible that the Initial Sign in Mayan texts served a similar function in addition to a discourse marking function. Thus, whether we read the Initial Sign as *ayal* or *alay*, the glyph is based on *ay* 'existential particle'. Also, the most recent proposals suggest that the term "Initial Sign" is somewhat of a misnomer, since the glyph can occur in positions other than text-initially, and in fact since there are several PSS texts on pottery where the Initial Sign is absent before a verbal expression; indeed, Boot (2003:2) counts three PSS texts with no Initial Signs: K6436, K8007, and a vase in Robicsek (1970:Figure 170). To these I would add two more: K5976 and K8220. Interestingly, this absence is the rule for PSS texts on Late Preclassic and Early Classic jade objects, as I discuss in more detail in **7.**

In any case, the important pattern is that the Initial Sign glyph almost always occurs *clause-initially*, and quite often *text-initially*. In fact, it is the comparison between the two types of contexts that can elucidate its function. Its text-initial functions correlate with small, portable texts, where often the clause begun by the Initial Sign is the only clause in the entire text. Its non-text-initial, but clause-initial contexts are examples where the text contains multiple clauses and new information is introduced.

Consequently, we may describe this glyph as a marker of new information in discourse more generally. Of course, such is the function of the reflexes of Proto-Mayan *ar 'existential particle' among the Ch'olan languages. For this reason, I argue here that the Initial Sign's distribution and function are due primarily to its association with *ar, and hence, that MacLeod (1990) was essentially correct.