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Maya writing

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ABSTRACT

This article makes a brief tour on the writing among the Maya of pre-Columbian, summarizing some of its main features, obtained by great advances in its decipherment and knowledge. So says the basic aspects of their history, antiquity, content, languages reflecting, literary figures, stands, writing resources, types of signs as well as some grammatical rules and composition. Also made references to the value of writing, in that complex pre-Hispanic society and some notes about writing in other Mesoamerican cultures.

Keywords: mayas, writing, glyphs, literature, Mesoamerica.

The Mayan civilization is an ancient culture, with established villages existing since 1200 BC (Healy 2006: 24), Cities From 500 BC (Clark, Hansen and Perez, 2000: 464) and complex urban systems interconnected with roads from 200 BC (Hansen 1998). In the centuries prior to our era, they reached a high level of quality in their monumental buildings, with the Mayan corbelled dome and arch decorating buildings, developed complex sculptural and pictorial art, as evidenced by the City of San Bartolo in Guatemala (Saturno, Taube, and Stuart, 2005 ; Taube et al, 2010) and begun to use a writing system that reflected many of their cultural interactions and great mathematical and calendrical achievements. But above all, their writing incessantly reflects a complex, prosperous society until it reaches its period of splendor during the III to X centuries of our time. That stage, by analogy to the history of the Greco-Roman world, has been called by specialists for decades as the Classic Period.

Only five zones in the world invented writing- in ancient Egypt, Mesopotamia, China, India and Mesoamerica (Woodard 2004). From these locations neighboring and subsequent cultures copied and adapted the languages and diverse systems with typical resources such as inverting the meaning of the sign. In Mesoamerica, all signs indicate that it was the Olmecs who were the inventors of writing. There is scattered evidence, with questionable dates for being written in stone, such as the block from Cascajal from around 800 BC (Skidmore 2006) and Monument 13 from La Venta around 400 BC (Lacadena 2008a). The dating of ceramics is more accurate with scriptural evidence from San Andrés, Tabasco from around 650 BC (Pohl 2005: 10). Around 500 BC the Olmec began to decline and its main capital of La Venta was finally abandoned around 400 BC, but the Epi-Olmec peoples developed a writing system that has been called *istmeña*, of which a few examples have been found, although with long texts. The most famous is stela 1 from La Mojarra (Pérez 2005). With this knowledge the Olmecs influenced the Zapotecs around the middle of the first millennium before our time, in San José Mogote and Monte Alban (Marcus and Flannery 2001), with the people of the Pacific coast, such as Izapa (Lowe, Lee and Martinez 2000) -long considered as *Mixes* and today more thought of as Zoques and Takalik Abaj, cosmopolitan population with clear Epi-Olmec influences at Izapa, with the Maya and in the Guatemalan highlands. The Chalchuapa culture of El Salvador (Ohi 2000); the highlands of Guatemala in Kaminaljuyu, El Baúl and El Porton (Sharer 1998) whose exact cultural affiliation is still discussed; and the Maya as seen in San Bartolo (Saturno, Stuart and Beltran, 2006). All this was during the formative or Preclassic/Late pre classic period, between 400 BC and 250 AD.

Interestingly all of these cultures had a tradition where two fundamental aspects can be seen: the use of writing and the representation of individuals with attributes of power such as ceremonial bars, feline heads, and masks of fantastic beasts or claws, sculpted in relief in stone (Grove and Gillespie 1992). From the Classic period, most of these cultures stopped producing stone monuments and their cities stopped growing, although they weren't abandoned until six or seven centuries later. The Maya were the only ones who continued growing demographically, developing increasingly numerous cities and monuments and almost always accompanied by writing.

Undoubtedly, the most extensive scriptural evidence is from the Maya, with about fifteen thousand texts (Houston 2000: 131) over twenty centuries. It is a considerable figure, in my opinion, if we think of other peoples with evidence of writing in Mesoamerica, with just about 200 texts surviving in various languages -without considering the Nahua texts with glosses in Latin characters that contain mostly lists of villages or people and are more numerous. At the same time it is a low figure if we contrast it against the 2 million Egyptian texts (Woodward 2008a), where dry weather contributed greatly to their perpetuation. We know that the Maya wrote in countless types of material: stone, bone, shell, jade, and obsidian- but also in softer materials such as wood, paper, plaster and a lot of paint that decorated rooms and exteriors (Johnson 2014: 11). Inclement sun, humidity, the jungle and time has taken away the majority. However the Maya culture was characterized as perhaps the only ancient culture to resort to writing on their clothes, as can be seen in the representations in paintings, ceramics and stone (Valencia 2009). Not only that, they also painted images of deities or mythical characters on their clothes, as seen in characters of the Bonampak murals.

The evidence of the oldest Maya writing is from 300 BC, and comes from a painted block on a column with 10 few glyphs found in the fill of a substructure in the pyramid of paintings of San Bartolo. For specialists, it is an indication of a clearly developed writing, suggesting that the Maya wrote long ago. In fact, about a dozen short texts have appeared in the material of the rubble of San Bartolo with similar ages (Stuart 2014). We know that paper was manufactured since at least 500 BC, as the evidence of tools suggests in Motul de San José, in the Peten and in Blackman Eddy in Belize (Castellanos 2007: 30). In addition to San Bartolo, just over thirty examples of Maya writing from the Pre classic or Late Formative (400 BC-250 AD) periods, the majority of unknown origin, denote however their belonging to a system that still escapes decipherment by specialists (Mora-Marín, 2001), except for isolated glyphs. These cases reflect writing with clear links to contemporary systems of neighboring cultures, particularly the isthmus. Some signs are almost identical but reversed in the direction or disposition- a typical resource

as has been mentioned and which is frequently mentioned in the history of the scriptures.

Writing was increasingly taking greater relevance among the Maya. Over time, simple columns with a few complex glyphs hidden within complex moralistic compositions converted into extensive monuments with approximately 2,500 glyphs, such as in the steps of Temple 26 of Copan in Honduras, which is the longest text that has survived to today. Researchers originally thought that probably the Maya had a writing system during the Pre-classic and another during the Classic. Today, everything points to being the same system that evolved and achieved spectacular developments in the second period. There still lacks an understanding and deciphering the more ancient texts, which is now only partially understood, alluding to the general sense that has been mentioned previously.

About 1,100 written signs have been identified throughout its development to the Classic Period, although the Mayans used in a specific time around only 500. Other sign were constantly being developed and others abandoned, while receiving influxes of Mayan languages or those of other cultures (Kettunen and Helmke, 2014).

All writing systems in the world, in any time, have only two types of signs: logograms and phonograms. The first represent a value of the full word, the second represent sounds and can be syllabograms or alphagrams. Writing systems with only one type of signs do not exist, they combine everything. We basically use alphagrams and some logograms- for example '4' is a logogram which is read as "four", the latter written with 6 alphagrams or alphabetic signs. The Maya used a system of logograms, which are more than 850 of their signs, and syllabograms of which there are about 200, although many of these are homophones because in total there are 80 syllables in the Classical Mayan language – there are no syllables for the consonants d, f, g for example, but they have other that we do not use such as the glottalized *ch'*, *k'*, *t'* or *tz'* (see syllabary in Kettunen and Helmke, 2014). The syllabograms of Mayan writing are composed of consonants and vowels, CV as linguists call them. There is nothing to appreciate if a sign is a logogram and when it is a syllabogram. Today, by linguistic convention, our writing system of logograms is fully capitalized and phonograms all in lowercase (figure 1).

As with any system there are allografts- variations of the same sign; homophones- different signs but with the same reading; polyvalences-when the same sign has different values- one as a logogram and another as a syllabogram-and signs that they used at a particular time or in a particular region. Reading was done through paired columns, from top to bottom; although they made texts in a single column, in a circle, inverted L or inverted U, mirrored or in the form of a woven mat, thus altering the order of normal

reading. The signs were grouped in a sort of box or cartridge that usually contained the words, but not always and the hieroglyphic cartridge (Lacadena 2013) were dominant.

It is totally wrong that writings evolve alphabets. This depends only on the development of the people, of the transmission of writing systems and other factors such as the story itself. Proof of this can be found in the Chinese system with more than 5,000 signs, the great majority being logographic and with more than 3000 years of use (Woodward 2008b: 136-162). There also does not exist in writing signs called ideograms or pictograms, pretending that pictorial signs are legible when they can be simply interpreted, starting from the possibility of understanding what they represent, their context or other sources. It is easy to get confused in these aspects since we will see how all scriptures begin with strong iconic loads, and therefore many paintings or drawings mean something but cannot be read, for this there be by convention a value in a specific language, whether by sound- Phonogram- or be a complete word-logogram. It is important to stress that the images of the codices and monuments, particularly in Mesoamerican Studies, are highly relevant and provide valuable information for understanding and interpretation, but they are not a system of actual writing. They support mechanisms of oral tradition.

Not only are the academic constructions elaborate but also improbable-in the literal sense. Like semasiography (Boone 1993), which proposes a writing system without 'words', supposedly readable from pictorial representations for different peoples with different languages, having an almost universal significance- which is something never before seen in human history. Or Galarcist school (Mohar and Fernandez 2006; Galarza and Libura 2002) which advocates for a-plastic-symbolic-phonetic grammarian writing , denoting its attempt to combine every way possible, even the color or position in a pictorial composition, to espouse original writing systems that have not ever been seen in the history of man in another latitude or time. This school arose when trying to combat ideas into vogue in the seventies in Europe (Mohar and Fernández 2006: 10), the latter being absurd because they thought that the Mesoamerican peoples were semi-civilized for not having writing, for never supposedly reaching that accomplishment.

Many of these distortions come from inadequate theoretical framework. In our country until recently, for example, there were no studies on writing systems invented by humans that also considered linguistic issues of language- from there many aspects are clarified. Proof of this are the so-called reconstructions, made by epigraphists-name that has been used to describe students of Maya writing, more by extension that rigor, as epigraphy is specifically the study of writing on hard materials- in the case of Maya writing, completing words where some syllabic parts are not reflected which is

made from mechanisms identified as abbreviation or knowledge of a language and script, which determines how they behave and therefore how to remake a text that presents omissions either by deterioration or by using abbreviations (Lacadena 2013: 12-13). For instance, we wrote “Mr.” but we know that it reads *Mister*, rebuilding between brackets the omitted alphagrams. I have personally been at conferences where some scholars refuse these reconstructions, for lack of familiarity in studies of writing systems.

This does not mean that the codices of the Mexican plateau or Mixteca, for example, were documents that lacked writing, since they usually only contain place names, personal names and dates mostly from logograms. Leaving the pictorial representation in their books, as we have said, was to support an oral narrative, a key part of Mesoamerican cultures generally west of the Isthmus of Tehuantepec. The regular use of writing does not determine the importance nor did neither the quality nor the degree of civilization attained by a culture- it simply shows part of its idiosyncrasy. Do not forget that Homer himself has been considered part of an oral tradition that very belatedly had his stories discharged into text (Bowra 1948: 16). We will discuss other writing systems in Mesoamerica later.

Maya writing stands out for its high graphic content or iconic charge, which has sometimes been confused in its decipherment. But the graphics load is not exclusive of Maya writing. Actually all writing systems began in this way, some despite the centuries continue to use very graphic elements, like the Egyptians. It wasn't until cuneiform or Chinese that had very clear graphics loads at an early stage (Woodard 2004). Those who would say that our own sign for the letter A, for example, was originally the head of a bull in the proto-Semitic form, turned to the left by the Phoenicians and returned by the Greeks, thus passing to the Romans (Moorhouse 1961). Like all systems, graphical content originally determined many of the values of reading and phonics, through mechanisms such as acrophony, signs that taking their sound from the initial part of the word they represent. A case in Maya writing is the syllable *chi*, represented by a hand that unites the thumb and forefinger, perhaps representing *chij* = pinch; or the Maya syllable *yo*, when it represents a leaf and derived from *yop*, *yopol* = leaf.

Focusing too much on what the signs represent is not a good methodology, and has led to some confusion. It is perhaps the last thing to consider in deciphering. The graphical charge of Maya writing is a big part of its appeal. Often they seem to be simple lines or elementary representations, and only when the work of reproducing the signs does one realize how complex they are. This helps a lot to know and distinguish them (Lacadena 2010).

These graphic loads allowed the Maya rulers to constantly return to capture in their headdresses and ornaments the elements of writing by

prominently combining decorative elements with ritual aspects and texts that proclaimed the name of the ruler or his ancestors and dynasties (Figure 2).

The Mayan signs, starting from their representation, are basically divided into two variants: the symbolic and those of the head- the ideas expressed by Dimitri Beliaiev in the workshop advanced than he gave in 2013 are still present. The first are the representation of objects or parts of objects or body parts which are schematizations of natural elements or parts of something. The head variants are signs that are head-anthropomorphic deities or human-beings and animals. In various examples there are variants of the same head but representations of the full body, fascinating in their shape and interaction, in addition to the singular idea of a script that takes bodily form (Figure 3).

A feature of the Maya system, which has greatly helped in a large part to the recent decipherment of writing, is use of the resource called phonetic complementation. This is the use of syllabograms, to indicate the correct direction of reading the signs or words-we are no strangers to these mechanisms when we put 1st or 4th, indicating that reading is not ‘one’ but ‘first’ and is not ‘four’ but ‘fourth’, respectively, in these examples we use logograms with alphagrams in phonetic complementation. The phonetic complementation can be at the beginning of the word or the end. In the example that is shown (Figure 4) the reading is, in the first case, *waj* “tamale” and the second *tuun* “stone”. It is not the only scriptural resource- There is the rebus procedure where the value of reading for a logogram-which in itself is a word-is used to construct a different and longer word, adding logograms or syllabograms. There are also auxiliary signs as a resource, they have no reading value themselves but help it. Those of our current writing systems are the punctuation or diacritical markers. Among the Maya there exists for example the duplicator, which consists of writing two points usually in the upper right of a sign which indicates that the value of reading a syllable or logogram should be read twice (Lacadena 2010: 9-19 6; figure 5).

Like other systems, the Mayan writing tends to simplify and superimpose the signs, sometimes leaving only part of them or hiding a part behind each other (Figure 6), also called overlay. Or they make an infixion, when a sign is inserted fully or partially in another (Figure 7). But they also combine or merge elements, mixing characteristics (Lacadena 2010: 8; Figure 8).

What language reflects Mayan writing? Experts call it *Cholano* (Houston, Robertson, and Stuart 2000), also known as Classic Maya language, which prevailed in the southern lowlands formed by Belize, the Peten region and the Rio Pasion (Passion River) . The Cholano derived during the Classic period, in a western variant in the region west of Lake Peten Itza, the Usumacinta River and the eastern lands of the current Tabasco, with differences in word endings. The original or oriental Cholano resulted during the time Post classic and

Colonial to Cholti and Ch'orti'; while the western resulted in the Chontal and Chol. In the Yucatan Peninsula the Yucatecan-antecedent of spoken Yucatec- soon was reflected in Maya texts, which in fact shows relevant features such as the expression of the positions and titles rather than names, to the contrary of Cholano. Yucatan shows varying degrees of combination between Cholano and Yucatecan as to the languages of their texts. Chichén Itzá is quite Yucatecan and very syllabic, Ek Balam meanwhile is more Cholano but with Yucatecan names. Scholars have come a long way to be able to distinguish some degree of dialectal variants of the same language such as the Yucatecan, which can be distinguished from Lacandon or Itzá (Davletshin 2013: 72) at the time of the Late Classic (600-900 AD) Yucatecan dialects. In the final centuries of the Mayan splendor, during the prescribed Late Classic new linguistic variations arise in the texts. In Tonina, Chiapas, the *tzeltaleano* (Ayala 1997), which is the antecedent of Tzotzil and Tzeltal appears. Meanwhile in Chama and Nebaj, in the beginning of the highlands of Guatemala, further south, there are traces of the Kicheano linguistic group (Beliaiev 2005). But by far the predominant language in writing is the eastern Cholano, all surviving texts are written in this language with variations especially in terminations, motivated by the other mentioned languages. It has been possible to reconstruct the classic Cholano largely thanks to its derivations indicated in Ch'orti 'and Cholti- although these are extinct, known by colonial dictionaries who tried to compile- the eastern branch, Chol and Chontal from Tabasco and Chiapas; but also epigraphers of all Mayan languages, extinct and not, were helped by dictionaries or colonial references.

Pre Classic texts have not been able to be deciphered except for some signs. Those of the Classic period have mostly been deciphered. While much remains to be done, as there are still around a quarter of signs un-deciphered which are known by a few examples, without complementation that clarifies their reading or evidence to assist in their decipherment. Progress on this point has been very significant from the beginning of this century, considerably enriched by linguistic contributions that have allowed the understanding of much of classical Ch'olan language; as its transitive verbs-with their active, passive, and anti-passive – half passive and intransitive voices, depending on whether the action falls on an object or not; on the character aspect of their verbs, which indicate no time, but if the action was performed (completive), if you are doing it (progressive) or has not been done (incomplete); their pronouns absolute or ergative (see Lacadena 2010).

Although one must consider that the decipherment has many chapters since the nineteenth century. Advances and setbacks were giving for decades, from the mid-twentieth century advances by Knorosov and Proskouriakoff-

the first in the Soviet Union and the second in the US-let specialists identify, without reading, the meaning of certain signs. In the seventies the Roundtables of Palenque give new impetus and soon advanced considerably. The story of the decipherment, which began in the late eighteenth century, is an adventure of Western human intellect (Houston, Chinchilla and Stuart 2001; Coe 1995).

Most words in classical Cholano consist of consonant-vowel-consonant CVC, with the CV syllabograms, the construction of words in Maya writing syllables or phonetic complementation using syllables after a logogram necessarily result in the termination in a vowel. That is why elation is done, which is a mechanism that bypasses the vowel pronunciation of written termination except in rare exceptions. This is another argument that suggests that the Maya invented writing, adopting and adapting the system of a language, such as the Mixe-Zoque, which used vowel endings (Wichmann 2006: 2).

The classic Ch'olan language had unique characteristics that were difficult to express in the Mayan spellings, mainly aspects related to vowels: short, long, followed by suction or glottal and called rearticulated. For example for the vowel 'a' would be: a , aa, ah, a ' , A'A, respectively. How do you express this is graphs? A short while ago epigraphers realized that the Maya wrote with vowel harmony or vowel disharmony, depending on whether the vowel was in a syllabogram or was the last member of a logogram-corresponded or not to the vowel of the syllabogram that came next-although the latter vowel is pronounced. If the vowel harmony is given, then the first vowel is a short, simple mechanism. But when the second vowel is disharmonic of the first vowel, then the other 4 examples of vowels can be presented: long, with suction, with glottal and rearticulated (Houston, Robertson and Stuart 1998; 2004; Lacadena and Wichmann 2004). In a variable scheme and whose rules are still discussed among epigrafistas, the most viable scheme in my opinion is the following proposed in 2004 by Lacadena and Wichman:

1. If the first vowel in the logogram, or on the first syllable, is: a, e, o, u and the second vowel is i then the vowel is long; Examples: B'AK-ki, b'aak "bone"; ke-ji, keej "deer" (in Yucatecan); It is the same if the vowel is i and the second vowel is: a; Example: AHIN-na, ahiin "crocodile".
2. If the first vowel in the logogram, or on the first syllable, is: e, o, u and the second vowel is a vowel, it is then followed by a glottal; Example: se-ka, Se'k "name of the month"; it is the same if it happens that the first vowel is a, i and the second vowel is u; Example: CHAN-nu, Cha'n "watch, see."

3. Another scheme is to double the vowel, but not the second part of a CV syllable, only the vowel; for example: te-e, which gives the word te ‘meaning “tree”’.

Although these rules work in most cases, there are some exceptions that are still under study—all examples are taken from Alfonso Lacadena (2010) .

Most of the texts that have reached us are in stone. A smaller portion is found in various objects such as wood, bone, shell and others. But there is another important quantity in ceramics that, unfortunately, come largely from looting. Although its use is debatable, it is precisely the recent decipherment of writing which can qualify, in general, their authenticity. Its text is not easy at all. On ceramics we usually find two texts, one brief secondary one, which refers to the scene and is inserted therein, accompanied by another main text which is a little larger and usually on the edge, which refers to the dedication of the vessel, if it is glass or a dish. Boot identifies 26 vessels of different types (2005) - its content, if it was for atole or cacao- and the name of the owner of the vessel and his titles; we know it as a ‘dedicatory formula’ (Stuart 2005a). For some years it was called the Primary Standard Sequence, unable to be read but appreciated for the reiteration of some signs (Coe 1973). It’s a pity that the texts of the scenes are brief, because many ceramics contain painted scenes of myths in which the Mayan gods are represented, a huge cultural wealth that just lets us see some signs that help their understanding (Robicsek 1981). The texts are also short on the objects, which also indicate the type of object -earring or bone- and the name or title of the owner.

The most common stone monuments, stelae and the altars that sometimes accompany them, deal mostly with their rulers whose main title was k’uhul – sacred lord. The Classic Maya world revolved around these characters. It is peculiar that the deities appear a few times in monuments, in fact the ruling personifies many times to different deities. These texts refer mostly to the lives of these rulers, their birth, enthronement, his ancestors, the commemorations of the end of calendrical periods – which were very relevant to these people-, capture of enemies, political relations, wars and death. While they can be seen as very historical, we should not lose sight that this society is deeply religious and everything has a ritual character (Martin and Grube 2008). Two cities stand out for a style not linked to leaders in their records: Pomoná and Xcalumk’in; the first seems to allude to calendrical rituals and the second refers to scholars and scribes.

Both in ceramic and stone, many Maya artists inscribed their name on the piece of art that they made, leaving their identification and fame for posterity.

Like Western artists since the Renaissance, the classical Maya artists signed their works (Reents-Budet et al., 1994: 48-50).

The writing had a very important function. It was an instrument given by the gods and provided a prominent social prestige, especially for the elites. It is not believed that all social strata had access to this knowledge. The monuments in public squares referred to rulers- talking about their lives and rituals, which were most likely read by the common people. Some basic signs are embodied to ceramic types that reached most social strata, which were easy to understand, allowing the reading of elementary strata of known aspects of the writing system. The writing was such an important status in several sites in Yucatan, where the Maya society was entering deep crisis by the ninth century. Several sites left evidence of pseudo-glyphs; Similar signs that had no reading value (Grube 2000), denoting the loss of that knowledge but prolonging the use of writing, which surely impressed their subjects, but above all their rivals or allies, though not more than as fiction.

Most vestiges of the Mayan writing are linked, as we externalize, to the ruling classes. There is little evidence of expressions linked to the life of other classes or other strata. Some individual objects are highlighted.- above all, the murals of Calakmul in Campeche, which were recently discovered and show scenes of what is probably a market, people performing sales of snuff, bowls, food, beverages, among other things (Martin 2012) . This finally provided a look at another aspect of the life of cities, in this case, trade.

In Teotihuacan, a powerful city that influenced all of Mesoamerica and beyond, has few of its own scriptural records was where Mayan glyphs were found. The style of the graphics date from around 500 A.D. (Helmke and Nielsen s / f), and are impossible to decipher by the incompleteness of their status except in isolated cases. Highlights include colors that are not common among the Maya but very much for the plateau: orange, pink, light blue and dark blue, among others. In Copan, on the other hand, there exists in Temple 26 a seemingly bilingual text (Figure 9). On the one hand the typical Mayan glyphs are shown in their full body versions and parallel characters with Teotihuacan characteristics (Stuart 2005b: 387). It is attractive to think they were from the big city on the plateau, but we have never found any remotely similar sign in Teotihuacan, or anywhere else.

The Ch'olan language has multiple loans from other languages, as usual, but one has special relevance: Nahuatl. What language the teotihuacanos spoke has been discussed in great detail, and there is no consensus- but several signs point to Nahuatl. Some Mayan spellings from the Early Classic point to the probable expression of terms in Nahuatl, known as *kakaw* that is controversial among specialists, as some think that it comes from the Mixe-

Zoque of the Olmecs and another that is Nahuatl (Macri and Loooper 2003). What is unquestionable is the appearance of terms in Nahuatl in the Dresden Codex. On page 49, for example, in the document appears *xi-wi-te-I* intended to express *Xiu (i) tei*, or *Xiutecutli* which is literally a Nahuatl word for “lord of the plants”- a Mexica deity (ibid. : 287).

Maya texts, like all writing, reflect literary forms: personifications, allegories, hyperbole- about eleven were detected. For example, a common metaphor is the expression of death of rulers, even when death is referred to by its rival captors, who often use expressions like *ochha* ‘and *ochbi*’, which literally means “entered the water” and “entered the road” . Special mention goes to the diphasic unique literary figure of Mesoamerica consisting of two different words that appear together that constitute a third unit with metaphorical meaning: *kab* ‘*ch’e’n* literally “hollow earth” and actually used to express the concept ‘city’. For a long time it was thought that this figure was typical of the plateau and the Post classic period, but the Maya texts use evidence from the Classic period, demonstrating a deep-rooting in the minds of Mesoamerican peoples (Lacadena 2009).

In the Classic and Post Classic -250 to 900 then to 1,500 AD- there were other writing traditions in Mesoamerica: Teotihuacan, Zapotec, Mixtec, ñuiñes, to name a few. Unfortunately none have enough examples or bilingual texts, fundamental conditions to try to systematically study it and subsequently decrypt them. Work, for example, on Zapotec writing (Urcid 2001, 2005), despite resorting to various methods, failed to achieve a decipherment but interpreted some signs. Teotihuacan, a city of great importance during the Early Classic (250-600 A.D.), which had powerful rulers, is surprising for the few scriptural records or the lack of monuments or paintings relating to specific individuals. Its writing has been studied, despite not having a clear corpus and slow advancement (Taube 2000; Nielsen and Helmke, 2008 and 2011). Again, oral tradition prevailed over written tradition.

But is not the case of the Mexica and other Nahua, who left numerous texts glossed in Latin characters as we have said, and have recently allowed decipherment via reading of the signs in Nahua. The gloss was a direct translation and was almost always correct since the taking up of old ideas of the French Aubin (1849) in the nineteenth century by Alfonso Lacadena (2008b) and other epigraphists (Zender 2008) who have made considerable progress. They have questioned these developments, because unlike the Maya case, the Mexica texts are formed almost entirely of people’s names, place names and calendar dates, leaving no trace except for two or three examples of prayers. While observing what is achieved in the major examples there are clear rules and conventions of a defined and precise writing system no doubt. Very similar to Maya, using logograms and syllabograms surely not

copied from them but from traditions of the plateau, including some examples of repeated signs of vases from the Teotihuacan period from Las Colinas, in Tlaxcala with the Santa Codex Maria Asuncion 30v or page 86 of the History of the Chichimeca Toltec (Lacadena 2008b). But as we have often stressed, we must also consider that the civilizations of the Mexican plateau responded to a cultural tradition that favored orality before writing-without which they were thereby less relevant or transcendent.

In the Post Classic, the Maya civilization had collapsed. The southern lowlands were virtually depopulated and the population in Yucatan was dramatically reduced. There is no evidence that in those centuries large buildings were erected like in the Classic, or there were monuments carved with texts. The only scriptural evidence of the period are the ones that are in the three surviving Mayan codices: Dresden, Paris and Madrid, appointed and named after the cities where they currently lie. They are not considered authentic by Grolier after the UNAM practiced some physical studies. It is considered that they are copies made of older books of the Classic period, but made with signs from the Post classic and with the same artistic conventions which by then had changed. They are no small thing- these documents begin to reveal their written information as their characters have been deciphered with a little more difficulty, they have been worked over for the overwhelming mathematical and astronomical information, studied since the nineteenth century and continue to shed light on the enormous astral knowledge of the ancient Maya (Bricker and Bricker 2011; see also the special issue of April 2016 of *Archaeology Mexicana* on Dresden Codex).

Upon arrival of the Spaniards, it is reported by the friars of the destruction of numerous Mayan documents by the beliefs of the conquerors. In the late sixteenth and early seventeenth century, in the campaigns of extirpation of the Yucatan, 12 codices were confiscated, 11 were seized with Maya characters and 1 with Latin characters (Chuchiak 2010). This stresses that only one was from the coast of Campeche, where all the others were from the center and east of the Yucatan Peninsula.

For its part, in the highlands of Guatemala, where we know several dynasties migrated as evidenced by the genealogical records, there is virtually zero information on texts in classical Mayan signs, with all texts about history and Mayan genealogy appearing in Latin characters.

Thus, a long and rich Mayan scriptural tradition perished that had flourished for two thousand years.

—FIGURES—

Figure 1. Writing example, in case logograma phonograms lowercase.
Ya-AL-la-K'UH-IXIK, yal k'uh Ixix, “His son of the Holy Lady”.

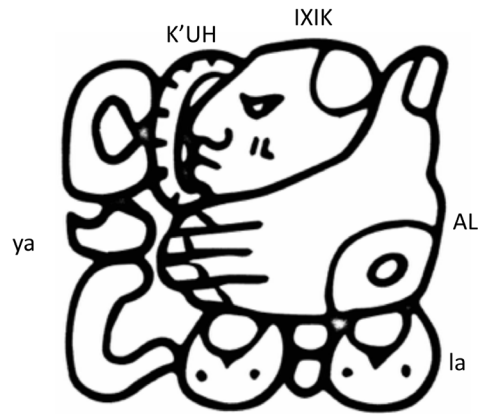
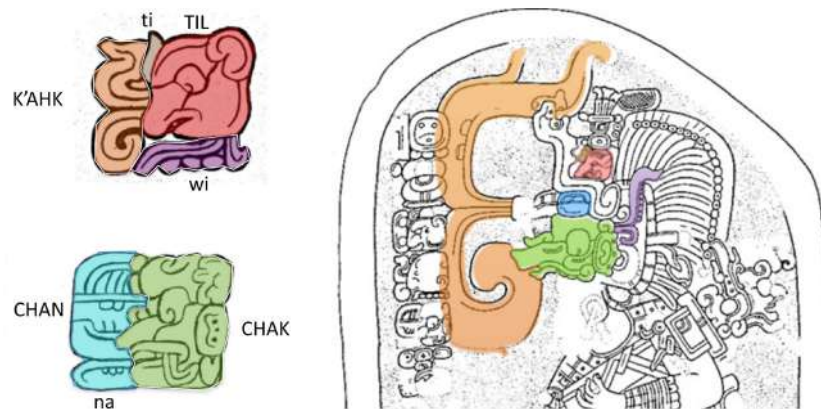


Figure 2. Example name is placed in the headdress Ruler: a) K'AHK-ti-TIL-wi CHAK CHAN-na, K'ahk Tiliw Chan Chahk, “God of Thunder Fire Burning Heaven”; Drawn from side Naranjo Stela 22; b) K'AHK-ti-TIL-wi CHAN CHAK-note the absence of the national *ilaba*, K'ahk Tiliw Chan Chahk, “God of Thunder Fire Burning Heaven”; Stela 22 front. Linda Schele Drawing, FAMSI.



Stela 22 Naranjo. Linda Schele drawing.

The Linda Schele Drawings Collection, 2000 © David Scheme.

Figure 3. Example writing variants as full body. Palenque Palace Tablet.
Redrawn by Jose Francisco Gutierrez, from Linda Schele.



Figure 4. Example phonetic complementation: waaj “Tamal”; tuun
“stone”. Drawn by José Francisco Gutiérrez,
from Alfonso Lacadena (2010).

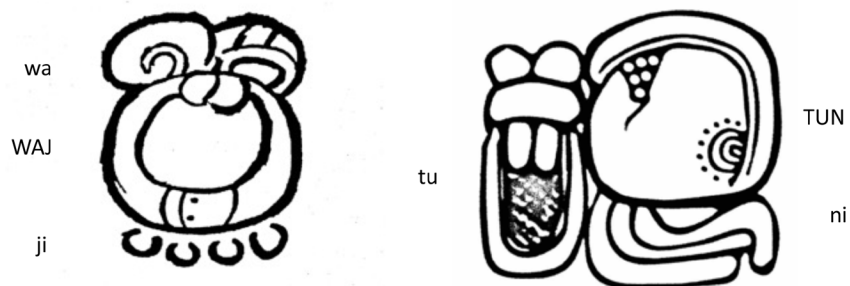


Figure 5. Example of auxiliary signs: ka-kawa, kakaw “cocoa”; tz’u-nu-nu, tz’unu’n “Hummingbird”. Redrawn by Jose Francisco Gutierrez, from Alfonso Lacadena (2010).



Figure 6. Example simplification or overlapping signs, syllables: hi and pi. Redrawn by Jose Francisco Gutierrez, from Alfonso Lacadena (2010).

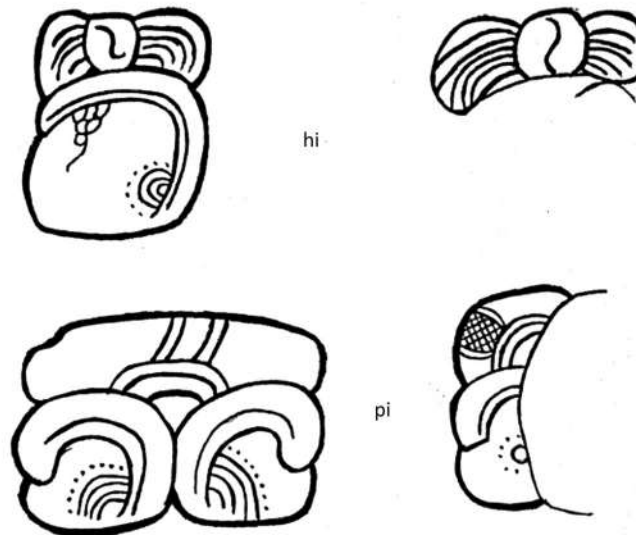


Figure 7. Example of setting signs: winal-la, w al, “month, man.”
Redrawn by Jose Francisco Gutierrez, from Alfonso Lacadena (2010).

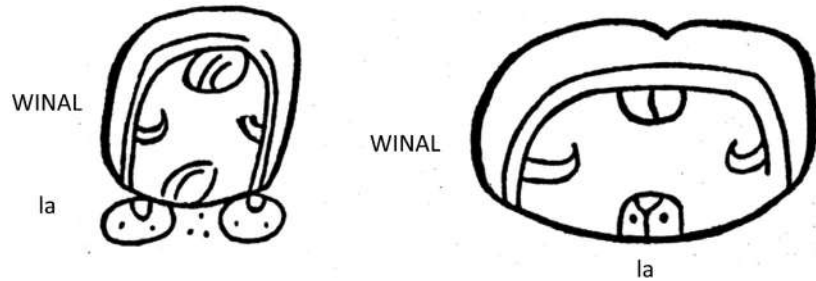


Figure 8. Example combination or merger of signs: KIN-ni-chi, kíh nich,
“bravo” -the title of rulers. Redrawn by Jose Francisco
Gutierrez, from an example of Alfonso Lacadena.

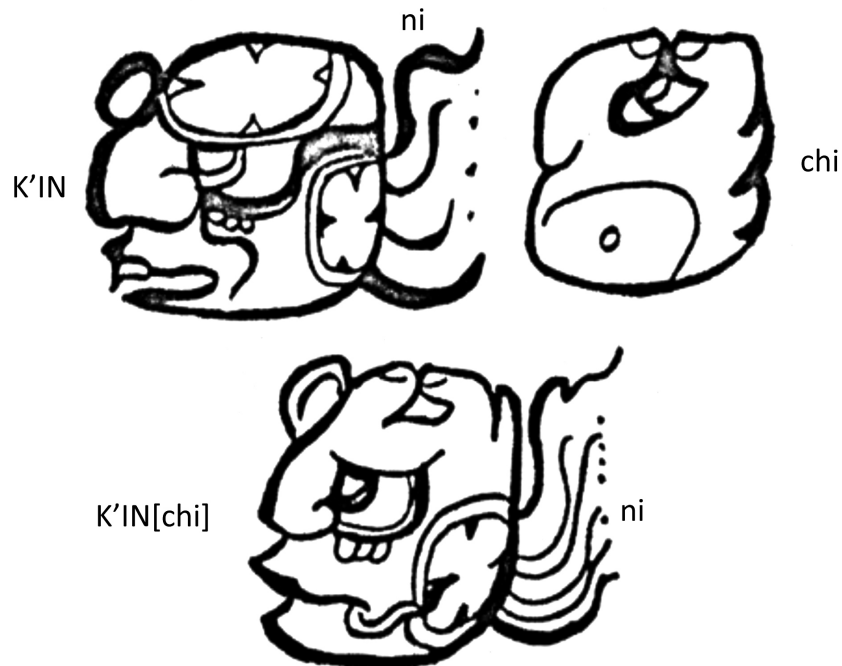
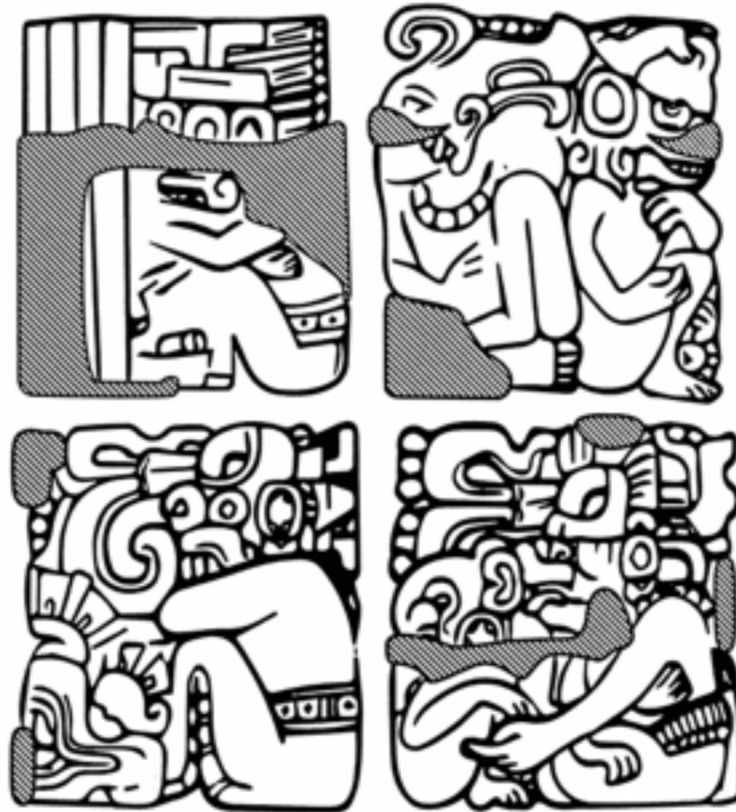


Figure 9. Likely bilingual writing teotihuacanos left and right Maya signs. 26. Temple Copan Redrawn by Mariana Blanco Alcantara from Stuart (2005b).



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