THE MAYA HIEROGLYPH HOAX IN THE USA: PHONETICISM AND LOUNSBURY'S "ON DERIVATION AND READING OF THE 'BEN-ICH' PREFIX"

James B. PORTER
Universidad de California

As the focus of civilization shifts from production to information, issues affecting the dissemination and quality of that information become increasingly important. This is true regardless of the content of that information, be it military, political, religious, economic or —as in the present instance— merely academic. The increasing facility with which the computer generates information is no guarentor of increasing quality or integrity, in fact dishonest or useless information is often generated with greater alacrity than true or usefull information. Such is also the case with an institutionalized hoax, in which a small clique propagates a false or misleading viewpoint and suppresses dissenting views which may (or may not) be more cogent. In the United States such a clique organizes conferences and operates publications, confusing students and censoring dissidents to produce profits for the leaders and perks for the followers of a particular method of interpreting Maya hieroglyphic writing.

The hieroglyphic writing of the Maya Indians of Mexico and Central America challenges scholars today, as it has since the puzzling script was first brought to broad public attention by John Stephens, the U. S. ambassador to the ephemeral Confederation of Central American States (Stephens, 1841, 1843). The subsequent 150 years have witnessed myriad claims to the solution of this fascinating puzzle, with the number and blodness of these claims increasing in recent years (Knorosov, 1953, 1967; Kelley, 1976; Lounsbury, 1973; Schele, 1982; Fox, 1983; Justeson and Campbell, 1984; Schele and Miller, 1986; Bricker, 1986; Houston, 1988, 1989; Stuart and Houston, 1989, et alii).

131

http://www.iifilologicas.unam.mx/estculmaya/

Most of these claims originate within a school of Maya hieroglyphic interpretation which identifies itself as "Phonetic". The ascension of this school hinges upon Lounsbury's (1973) purported validation of, Knorosov's (1953, 1967) restatement of, Phoneticist "method" by employing it to generate a specific reading. Lounsbury's study proposed justifications for more specific readings of "Ben-Ich" than the contextual interpretation (as ca. "lord") which was already widely accepted at the time he wrote (Thompson, 1950, 1972a, 1972b; Berlin, 1958; Proskouriakoff, 1960, 1961, 1963, 1964; Barthel, 1968). However, the most significant application of Lounsbury's paper was to provide the pretext for a revival of the once popular Phonetic method of interpretation (Brasseur de Bourbourg, 1869-1870; Thomas, 1892a, 1892b, 1893a, 1893b; Whorf, 1933, 1935; and Knorosov, 1953. 1958, 1963, 1965, 1967) and for the abandonment of the more rigorous Iconographic method of decipherment (Seler, 1892, 1893a, 1893b; Brinton, 1893; Thompson, 1944, 1950, 1958, 1962, 1965, 1970, 1972b; Berlin, 1959; Proskouriakoff, 1960, 1961).

Sadly, J. E. S. Thompson's death silenced his powerfull critique of Phoneticism before he could pen a reply to Lounsbury's study. Phoneticist opportunists stepped into the resulting methodological void, praising Lounsbury's study as the first practical "proof" of the Phonetic method (Justeson and Fox, 1977; Fox, 1983). These authors also credited Lounsbury with demonstrating that:

1) one element [of "Ben-Ich"] has the phonetic value po in the Yucatec codices; 2) the value of the other elements was almost certainly aj at one time, but no longer had this value by the Classic period; 3) the reading of the collocation was originally ajpo, a title of nobility in the Highlands; 4) an associated phonetic compliment, wa, indicates an alternative title ajaw; and 5) the fossilized collocation could be read differently in different areas (Justeson and Fox, 1977: 164).

The generation which has passed since Thompson's death has seen Phoneticists come to dominate sources of founding, employment, public realtions and professional forums within the United States.² This

¹ Recent reviews of Phoneticism from a Phoneticist perpective appear in Houston (1988, 1989) and Stuart and Houston (1989).

² For example, the *only* publication in the United States exclusively dedicated to the study of Maya hieroglyphic writing is operated by the father of a prominent Phoneticist —David Stuart. The elder Stuart's duties also include grants and editing at the National Geographic Society, hosting the Palenque Round Table forum and other positions affecting Maya hieroglyphic research.

same period has seen the Iconographic method langish while Lounsbury's work has become a standard for Maya epigraphers to follow (Justeson and Campbell, 1984; Schele and Miller, 1986; Bricker, 1986; D. Stuart, 1987; Houston, 1988, 1989; D. Stuart and Houston, 1989, et. alii). Some Phoneticists have become so unfamiliar with the Iconographic method that one attributes to a practitioner the magical abilities of a "seer,' who used his eyes to identify and recognize correlations between iconography and hieroglyphic writing" (Schele, in Schele and Miller, 1983: 1). Others believe that Phoneticism incorporates the Iconographic method (correspondence to author, Stuart, 1990), although Phoneticism actually repudiates the most fundamental principles of the Iconographic method (discussion of Arguments 1 and 4 below).

However, critical thought has not altogether ceased among Mayanists in the United States. Demarest (1976) published a devastating critique of Knorosov's Phonetic "method", while Jeffrey Miller, now deceased (Schele and Miller, 1983), and myself (Porter, 1988) have subsequently attempted the more rigorous and reliable Iconographic method. Regretably, the brevity of my previous criticisms of Lounsbury's study of "Ben-Ich" (Porter, 1988, ms circulated 1985) has left some unaware of the severe problems with his work and the invalidity of Phoneticist method (Schele and Miller, 1986; Bricker, 1986; Houston, 1988, 1989; Stuart and Houston, 1989; Lounsbury, 1989).

The confusion some Phoneticists manifest regarding the Iconographic method may be allieviated by the presentation of a brief, albeit somewhat idealized, outline. Recognizing that "the Maya language with its wealth of monosyllabic words and verbal roots was particularly well supplied with homophones" (Thompson, 1950: 46), the epigrapher begins by identifying in Maya art the object from which a glyph is visually derived (Porter, nd.). Maya lexica for the object or its known qualities are then sought. These Maya terms are examined for homophonus (rebus) or semantic (logographic) relationships to concepts which fit both the image and the context. Finally, Maya terms exhibiting such relationships are proposed as glyph translations.

Although, earlier practitioners were not always successful in employing the Iconographic method to link glyph readings to identifications of objects depicted, their method maintains the integrity of the Maya syllable whitout arbitrarily splitting it or divorcing it from its meaning(s) as Phoneticists do. Without these controls the Phoneticist

epigrapher is truly playing "a game of poker with deuces wild and a dozen jokers in the pack" (Thompson, 1972: 28).

Maya epigraphers of every stripe have historically limited discussion on the nature of Maya script to a moribund debate on its "logographic" or "phonetic" qualities. Since the Maya script clearly represents Maya language, this whole issue is little more than debating club diversion. The real difference between Iconographic and Phoneticist methodologies lies in their treatment of the visual imagery of the hieroglyphic characters themselves. The Iconographic method links the visual referent of a character directly with its pronunciation and meaning, while the Phonetic method commonly uncouples the visual referent of a character from its pronunciation and meaning. Thus, Iconographic method extracts intrinsic meaning through the evocative content of a character's *imagery*, while Phoneticist method (devaluing the profound interplay between Maya art, Maya script and Maya language) injects unrelated linguistic referents into the empty structure of a character's *form*.

The focus on the concrete counterpart of the character sets Maya writing apart from all other scripts by permitting each scribe to invent a new form or modify and old form —so long as the real-world referent remains identifiable to the intended audience— creating a myriad of possible forms for the same meaning. This is in stark contrast to other imagistic scripts such as Egyptian or Chinese, which limit the number of possible characters by rigorous standardization of their forms. These forms are employed to convey sounds and or meanings which are not necessarily related to the evocative content of the original real-world referent.

A great deal of time, energy, public and private funding and (perhaps most importantly) the reputations and careers of its proponents have been committed to the inflated claims of Phoneticism. The need to protect this commitment has reached such a state that scholarly debate is actively dicouraged through a variety of ethically questionable practices. "Readings" are commonly presented (eg. D. Stuart and Houston, 1989: 85 Illustration) whitout the supporting data which are essential to critical review (Proskouriakoff and Marcus in West, 1984). The increasing popularity of this practice can lead to the substitution of assertions of personal authority and of majority rule for arguments openly engaged in the marketplace of ideas (correspondence with Jonathan Piel, 1989). A logical corollary to argument by personal authority is that all dissent constitutes a form of character

assassination (correspondence to author from Richard Diehl, 1989). In conjuction with this attitude, the work of dissenting scholars is either pontedly ignored or actively suppressed (eg. Demarest's, 1976 critique of Knorosov remains unanswered and uncited today). Often Phoneticists assert that it is unnessecery to answer criticisms because their method "works" (correspondence from Stuart). However, this is not true, their method provides an epigraphic age of 80 years for a skeleton which two separate examinations, involving a total of five competent forensic antropologists, assigns an age of approximately 40 years (Ruz Lhuillier, 1977: 292-294). In the rare cases where criticism is acknowledged the response is to dismiss it as a meaningless minority view (Fox, 1983: 529) or to attack the character of the dissenter (Houston, 1988: 128). Further, there is evidence to suggest that the posthomous work of scholarly critics (Proskouriakoff, in preparation) is being censored because it "refutes several current wild ideas about [the] decipherment of Maya glyphs" (Gutierrez, 1989). Finally, the unnamed "handful" of Mesoamericanists which Phoneticist literature commonly cites in opposition to its views are not to be blamed for their apparent silence on the issue; it is emotionally draining and professionally dangerous to publicly debunk the dogmas of an entrenched establishment which controls research funding, professional publications and academic appointments.

Phoneticist epigraphy begins with an inability to recognize a completely new type of writing system, coupled with a certain degree of visual incompetence, followed by an unwillingness to accept scholarly criticism and ending with a small clique whose livelyhood and lifestyle depend upon feeding a public desire for unchallenged Maya Hieroglyphic decipherments.

Lounsbury's (1973) paper typifies Phoneticist scholarship in its repetition of problems which Seler, Brinton and Thompson critiqued in earlier "Phonetic" studies, including issues of method, glyph identification, graphic rules, linguistic rules and logic, as well as an unfocused writing style, false premises, unstated arguments and multiple convoluted arguments. Though these features make Phoneticist work difficult even for the specialist to follow—errors of logic and method are easily identified, once arguments are presented in logical order, proceeding from the known to unknown and including arguments left unrecorded in the publication. It is important to emphasize that Lounsbury's work is examined here because of its pivotal position in the historical acceptance and development of Phoneticist method and in-

terpretation, rather than because it exemplifies particularly bad work—on the contrary, its problems are common to Phoneticist epigraphy as a whole.

Maya terms used in the present study are, unless between quotes, presented in the orthography of Alfredo Barrera Vásquez' Diccionario Maya Cordemex (1980). Hieroglyphs discussed are identified by numbers assigned in Thompson's (1962) catalog; thus "Ben-Ich" becomes T168. Hieroglyphs identified by Thompson's catalog numbers are shown in Table 1 and pages 25-28 of the Maya Codex Dresden are reproduced in Figure 1.

Analysis of Lounsbury's study

Argument 1

- 1. T168 consists of two elements, T584 and T687a.
- 2. Both T584 and T687a must contribute to a reading of T168.
- 3. T584 and T687a combine to form the pronunciation of a third word.
- 4. The textual context shows that third word is a title.
- 5. T584 is the thirteenth day of the twenty day series.
- 6. T584 is read aj [ah] as in the Quiche day list.
- 7. T687a's Iconographic contexts identify it as a ball of incense.
- 8. Incense is commonly called pom in Maya speech.
- 9. [T687a] must be read pom in any Maya language.

Conclusion 1. T168 must be read ah pom.

Lounsbury's work in points 1-9 constructs a logical argument for conclusion 1, T168 must be read *ah pom*. However, conclusion 1 is checked by the following empirical data:

- 1. T168 is a title (point 4).
- 2. Ah pom as a title is not attested by ethnohistorical sources.

³ Identification continues to be a problem, Lounsbury erroneously identifies the nose and eye of an abstracted serpent form as "A minute and poorly etched (sic) early version of [Ben-Ich wich] appears as a superfix to the final glyph of the inscription of the Leyden Plaque" (Lounsbury, 1989: 231). This passage also illustrates the common Phoneticist practice of projecting their own confusion onto the Maya scribes.

At this point Lounsbury abandons logical argument. Although the identification of T687a, as "incense", has been available since Cyrus Thomas (1882) recognized the new years ceremonies in Codex Dresden 25-28, Lounsbury claims to "read" T687a as incense "phonetically". Starting with nine purported variations of T687a, all unaccompanied by provenance or references, Lounsbury (1973: 102, Figure 2, I) erroneously identifies T511 as his model for T687a. Unaware of this error, he builds on it by identifying glyph T582, composed of T511 a circle encircled by dots, as a version of T687b, a rough parallelogram, defined by two opposing arcs and two parallel lines, encircled by dots. Yet, in addition to their distinctive central elements, glyphs T582 and T687b do not appear in the same contexts (Thompson, 1962: 110, 291) and cannot be variations of the same sign!

After erroneously identifying T687b as T582, Lounsbury further errs in assigning the possible reading of T582 (as mo'o "macaw") to T687b, a glyph with no relationship to birds (1962: 102-116). He then arbitrarily assigns the phonetic value po, a meaningless syllable, to the square in the center of glyphs T687a and T687b. By assembling these two egregious "phonetics", he arrives at the astounding conclusion that T687a (shown burning in censers in Maya art) represents the nonsense syllable po, while T687b (never shown burning incensers in Maya art) "spells" pom, "incense"!

Argument 2 and subsequent arguments illustrate how Lounsbury uses jargon, circumlocution and assertion to mask his inability to construct a logical argument for T168 as *Ahaw*. In its simplest form, the five points of argument 2 are added to points 1-9 of argument 1 and may be summarized as follows:

Argument 2

- 10. Landa understood the Maya script, implicit in points 11-12.
- 11. Landa's examples of Maya writing represent Maya usage.
- 12. Landa "spells" the first month name, Pop, by doubling T687a.
- 13. Doubled affixes have the same value as solitary affixes.
- 14. Therefore a solitary T687a could also be read pop.

Conclusion 2. T168 must be read ah pop.

Argument 2, appears to solve the problem of the nonexistent title prodeced by argument 1, since Ah Pop as a title is attested by ethnohistorical sources. However, flaws in points 10-14 of argument 2, follow:

Estudios de Cultura Maya. Vol. XX, 1999 Înstituto de Investigaciones Filológicas/ Centro de Estudios Mayas, UNAM ISSN 0185-2574 http://www.iifilologicas.unam.mx/estculmaya/

- 10. Landa's manuscript (Tozzer, 1941) demonstrates his ignorance of the script with little doubt. The manuscript shows Landa's erroneous belief in a Maya "alphabet" and his examples constitute attempts to elicit such an "alphabet" (Valentini, 1880).
- 11. Landa's manuscript also demonstrates that, once he had elicited an "alphabet," Landa spelled out words for his informant and strung signs together as in European (alphabetic) writing. Therefore the value of Landa's examples cannot be legitimately extended far beyond its hints at phonetic value(s) of individual glyphs illustrated in his manuscript without secure corroborating evidence.
- 12. Landa's "spellings" of the month names appear nowhere in native Maya documentation.
- 13. Landa's use of the doubled T687a to "spell" *Pop* reflects confusion of two possible rules of glyph combination, affix doubling and morpheme truncation. The two rules are as follows:
- A. "Where a single affix might appear distorted in the space assigned it [it was multiplied without affecting the meaning and] an element which is usually in duplicate can also appear only once" (Thompson, 1950: 41, author's emphasis).
- B. Where C1VC1 morphemes are written in syllabic notation they "were written with two signs CV-C(V), with the last vowel phoneme of the second sign being silent" (Knorosov, 1967: 45). Further, since T687a as pom, is a C1VC2 morpheme it cannot be doubled to write pop, nor can a single T687a as pom be used to write pop.
- 14. Given the foregoing problems, Lounsbury's reading of T687a as pop, "mat" becomes highly questionable. Moreover, since glyphs T192, T551 and T614 depict mats, Lounsbury must explain why a ball of incense should be used in place of one of these mat glyphs.

Lounsbury was, apparently, also dissatisfied with argument 2 and he modified point 13 to construct argument 3. In its simplest form, the three points of argument 3 are added to points 1-9 of argument 1 and points 10-12 of argument 2 and may be summarized as follows:

Argument 3

13. Doubled affixes represent C1VC1 morphemes syllabicaly.

- 14. Syllabicaly doubled affixes drop their final consonants.
- 15. Therefore a solitary T687a could also be read po.

Conclusion 3. T168 must be read Ah Po.

Argument 3, circumvents the peculiar use of incense as a mat which argument 2 requires and appears to solve the problem of the nonexistent title produced by argument 1, since Ah Po as a title is attested by ethnohistorical sources. However, argument 3 only disguises the problem (the use of a ball of incense to represent Pop "mat") by changing the rules of decipherment to create the desired result. Granting point 13, for the sake of argument only, flaws in point 15 of argument 3, follow:

15a. According to Knorosov, whose "method" Lounsbury purports to be using, a solitary T687a cannot represent po. To be read without final consonants affixes must be in doubled affix compounds, they must be initial elements in compounds of unlike affixes with identical vowels or they must be second elements in compounds of unlike affixes with identical vowels (Knorosov, 1967: 45). The appearance of T687a in T168 does not conform to either of these two situations.

15b. The distribution of the title Ah Po is too narrow to permit a reading of T168 as Ah Po. The title Ah Po is confined to the contact period Cakchiquel and perhaps Pokom speaking highlands of Guatemala and is not found in the remainder of the wide geographic/temporal range of T168 (Lounsbury, 1973: 132). In addition to the absence of evidence for Highland Maya hieroglyphic literacy, the broad distribution of the T168 title constrasts with the narrow distribution of the title Ah Po to negate any likelihood that T168 corresponds to the Highland title Ah Po.

Lounsbury again appeared to be dissatisfied with his argument and he added four new points to argument 3 to construct argument 4. In its simplest form, the four points of argument 4 are added to points 1-9 of argument 1, point 10-12 of argument 2 and points 13-15 of argument 3 and may be summarized as follows:

Argument 4

16. Points 6 and 15 and conclusion 3 reflect Quichean speech.

⁴ Ah Po is found in Yucatec Maya, but there it means simply, "lucky person" (Barrera Vásquez, 1980: 660).

Estudios de Cultura Maya. Vol. XX, 1999 Instituto de Investigaciones Filológicas/ Centro de Estudios Mayas, UNAM ISSN 0185-2574 http://www.iifilologicas.unam.mx/estculmaya/

- 17. Therefore Quichean speakers initiated Maya writing.
- 18. Hence Lowland Maya learned writing form Quichean speakers.
- 19. Lowland Maya read T168 as a Loeland Maya title.

Conclusion 4. T168 must be read Ahaw.

There is no evidence whatsoever for points 17-19 of argument 4 and conclusion 4 does not logically follow any of the preceding argument. Lounsbury justifies conclusion 4 as follows:

- a. Points 2, 3 only applied during the initiation of Maya writing.
- b. Lowland Maya read T168 as the single morpheme ah.
- c. T130 represents the syllable wah.
- d. Wah becomes haw trough inversion.
- e. T168 and T130 form A(h)haw or,
- f. T168 forms Ahaw and T130 is a phonetic compliment to ensure the reading of aw.

This final portion of argument 4 also suffers fatal flaws.

- a. The negation of points 2, 3 is a "Deus ex Machina" designed to rescue Lounsbury's reading of T168 from the logical flaws of his arguments. Since points 2, 3 constitute the foundation of all four arguments, none of the subsequent points can stand without them.
- b. Points 17 and 18 are a second "Deus ex Machina" designed to rescue Lounsbury's reading of T168 from the logical flaws of his arguments. These points are unique to Lounsbury's argument and are contrary to everything that archaeologists have been able to determine about the origins of Maya writing (Graham and Porter, 1989).
- c. T130 is identified as ak, "una yerba con que se cubren [los techos] de las casas" (Barrera Vásquez, 1980: 4), "a kind of grass with which houses are covered" (Tozzer, 1941: 155, n. 784) by the presence of its characteristic features (1, a scroll and 2, two parallel lines) as defining features identifying the grass roofs of the houses depicted in Dresden 25c-28c. Given the presence of such clear clues to an Iconographic reading of T130, on the very pages which he discussed, only Lounsbury's adherence to the Phoneticist principle of disjunction between image and pronunciation can explain his failure to provide an Iconographic justification for his reading of T130. Further his reading

of T130 as the syllable wah, a syllable which is commonly understood by Maya speakers as "prepared corn" (Barrera Vásquez, 1980: 905) is completely inconsistent with the cribe's use of the elements of T130 in the illuminations of Dresden 25-28. This inconsistency is in sharp contrast to Lounsbury's sound Iconographic justification for the identification of T687a as a ball of incense (Lounsbury, 1973: 107-116).

- d. Knorosov's suggestion that some glyphs were read in inverse order remains unsupported.
- e. The assertion that a suffix such as T130 would have been read directly following a prefix such as T168 by skipping over intervening main signs remains unsupported. Further, since Ahaw is never a divided morpheme, such as would be produced by incorporating intervening main signs in the reading, Ahaw cannot explain the relationship between the T168 superfix and the T130 postfix. Also, since glyphs T41, T179, T533 and T1016 depict Ahaw, Lounsbury must explain why 168: [main sign]. 130 stands in for Ahaw.
- f. There is no evidence that T130 is a phonetic compliment for aw and it appears in many collocations where it cannot be a phonetic compliment for aw, such as the month signs: 551:130, "Pop"; 25:520:130, "Sek"; 559:130, "K'ank'in" and T743:130 "Mak". Fox and Justeson (1980) have attempted to circumvent this problem for 559:130, "K'ank'in" by identifying the collocation as non-Yucatec, but that is not an entirely satisfactory solution because it leaves the remainder of the four month signs unexplained.

Not only has Lounsbury failed to construct a rational argument for reading T168 as Ahaw, but in abandoning his identification of T687a as a ball of incense he recanted his most cogent insight and thwarted his own thesis at every turn (Porter, 1988. 66). His "readings" of T687a as the nonsense syllable Po and T130 as wa place Phoneticists in the indefensible position of insisting that the Maya scribes who wrote the codices burned syllables in their censers rather than incense and thatched their homes with prepared maiz rather than grass! Also, by undermining the foundations of his thesis to procure material for its conclusions, Lounsbury's study discarded the facts to save an indefensible hypothesis. Finally, Lounsbury's phonetic method is further undermined by its failure to generate startling and even unpopular revela-

http://www.iifilologicas.unam.mx/estculmaya/

tions about the ancient Maya, the way that Proskouriakoff's (1960) Iconographic study overturned the cherished beliefs of the prominent authorities of her day.

The widespread acceptance of Lounsbury's work by followers of Maya hieroglyph interpretation represents a serious failure of critical scholarship. The Phoneticist clique has not improved upon the failures of scholarship, glyph identification and method found in the work of Cyrus Thomas (Seler, 1892, 1893a, 1893b; Brinton, 1893), Benjamin Whorf and Yurii Knorosov (Thompson, 1950, 1958, 1965, 1972b; Demarest, 1976). In the present embryonic state of Maya epigraphy, the Iconographic method of Seler, Brinton, Thompson, Berlin, Proskouriakoff and J. Miller remains the only testable generator of readings.

Acknowledgements

I would like to thank Lawrence Benson, Sarah Caldwell Morales, Rebecca González Lauck, John Graham, Merle Green Robertson, Steven Houston, Carol Inglis, Mary Porter, Victoria Riefler Bricker, John Rowe, George Stuart, Suzanne Sundholm, Karl Taube and Harold Young for their help assistance and encouragement in the preparation of this study. I would like to acknowledge the crucial financial assistance of my late grandparents Grace J. Edwards and Earl W. Porter. The UCB Archaeological Research Facility, The UCB Deparment of Anthropology, The UCB Center of Latin American Studies and the Pre Columbian Art Research Institute have also provided some funding and resources.

Bibliography

BARRERA VASQUEZ, A.

1980 Diccionario Maya Cordemex, Ediciones Cordemex.

BARTHEL, T. S.

1968 "El complejo 'emblema'", Estudios de Cultura Maya, 7: 159-193, UNAM.

BERLIN, H.

"El glifo 'emblema' en las inscripciones mayas", Journal de la Societe des Americanistes, 47: 111-119.

1959 "Glifos nominales en el sarcófago de Palenque", *Humanidades*, 2, 10: 1-8.

BRASSEUR DE BOURBOURG, C. E.

1869-1870 Manuscript Troano. Etudes sur le systeme graphique et la langue des Mayas.

BRICKER, V. R.

1986 A Grammar of Mayan Hieroglyphs, MARI-Pub., 56.

BRINTON, D. G.

1893 "The Ikonomatic Method", Science, 22, 556: 180-181.

DEMAREST, A. A.

1976 A Critical Analysis of Yurri Knorosov's Decipherment of the Maya Hieroglyphics, MARI-Pub., 22: 63-73, Tulane University.

Fox, J. A.

1983 "Language and Writing", The Ancient Maya: 497-544. Stanford University Press, Robert J. Sharer, ed.

Fox, J. A., J. S. Justeson

1980 "Mayan Hieroglyphs as Linguistic Evidence", *Third Palenque Roundtable*, 1978, Part 2: 204-216. University of Texas Press, Merle Green Robertson, ed.

GRAHAM, J. A., J. B. PORTER

1989 "A Cycle 6 Initial Series? An Early Maya Boulder Inscription form Abaj Takalik", *Mexicon*, 11, 3: 45-49.

GUTIERREZ, L.

1989 "Letter" to *Institute for Maya Studies Newsletter*, 18, 1. IMS, Museum of Science, Miami.

HOUSTON, S. D.

1988 "The Decipherment of Mayan Glyphs", Antiquity, 234, 62: 126-

1989 Maya Glyphs, University of California Press.

JUSTESON, J. S., L. CAMPBELL

1984 Phoneticism in Mayan Hieroglyphic Writing, Intitute for Mesoamerican Studies, State University of New York at Albany, 9.

JUSTESON, J. S., J. A. FOX

1977 Mesoamerican Writing Systems: A Conference at Dumbarton Oaks, October 30th and 31st, 1971, review in American Anthropologist, 79: 164-167.

KNOROSOV, Y. V.

1953 "Knorosov's Deciphering of Maya Glyphs", The Current Digest of The Soviet Press, 4, 50: 3-9.

1958 "The Problem of the Study of the Maya Hieroglyphic Writing", American Antiquity, 23: 284-291.

Estudios de Cultura Maya. Vol. XX, 1999 Instituto de Investigaciones Filológicas/ Centro de Estudios Mayas, UNAM ISSN 0185-2574

http://www.iifilologicas.unam.mx/estculmava/

- 1963 Pis'mennost'indeitsev maiia, Akademia Nauk SSSR.
- 1965 "Principios para descifrar los escritos mayas", Estudios de Cultura Maya, 5: 153-188.
- 1967 Selected Chapters from The Writing of the Maya Indians, Peabody Museum Russian Translation Series, 4, Sophie Coe, Trans.

LOUNSBURY, F. G.

- 1973 "On The Derivation and Reading of The Ben-Ich' Prefix", Mesoamerican Writing Systems: 99-144. Dumbarton Oaks, Elizabeth Benson, ed.
- 1989 "The Ancient Writing of Middle America", The Origins of Writing: 203-237. Wayne Senner, ed.

PORTER, J. B.

- 1988 "T168 as Itsa': Maya Sorcerers and Their Succession", Estudios de Cultura Maya, 17: 65-86.
- nd. An Early Maya Text form Highland Guatemala: The Hieroglyphic Inscription of Kaminaljuyu Stela 10, manuscript in author's posession.

PROSKOURIAKOFF, T. A.

- 1960 "Historical Implications of a Pattern of Dates at Piedras Negras, Guatemala", *American Antiquity*, 25: 454-475.
- 1961 "The Lords of the Maya Realm", Expedition, Fall: 14-21.
- 1963 "Historical Data in the Inscriptions of Yaxchilan, Part I", Estudios de Cultura Maya, 3: 149-167.
- "Historical Data in the Inscriptions of Yaxchilan, Part II", Estudios de Cultura Maya, 4: 127-201.

RUZ LHUILLIER, A.

1977 "Gerontocracy at Palenque", Social Process in Maya Prehistory: 287-295. Academic Press, Norman Hammond, ed.

SCHELE, L., J. H. Miller

1983 The Mirror, The Rabbit, and The Bundle: "Accession" Expressions from The Classic Maya Inscriptions, Dumbarton Oaks Studies in Pre-Columbian Art and Archaeology, 25.

SELER, E.

- Does Their Really Exist a Phonetic Key to the Maya-Hieroglyphic Writing", Science, 20: 449.
- "Is the Maya Hieroglyphic Writing Phonetic?," Science, 21: 518.
 Some Additional Remarks on Maya Hieroglyphic Writing, Science, 21: 524.

STUART, D.

1987 Ten Phonetic Syllables, Research Reports on Ancient Maya Writing, 14, Center for Maya Research.

http://www.iifilologicas.unam.mx/estculmava/

STUART, D., S. D. HOUSTON

1989 "Cracking Maya Writing: New Window on an Ancient Culture", Scientific American, 261, 2: 82-89.

THOMAS, C.

- 1882 A Study of the Manuscript Troano, Department of the Interior Contributions to North American Ethnology, 4.
- 1892a "Key to the Maya Hieroglyphs", Science, 20, 494: 44-46.
- 1892b "Is the Maya Hieroglyphs Writing Phonetic?", Science, 20, 505: 197-201.
- 1893a "Are the Maya Hieroglyphs Phonetic?", The American Anthropologist, 6: 241-270.
- 1893b "Maya Codices", Science, 21, 520: 39.

THOMPSON, J. E. S.

- "The Fish as a Maya Symbol for Counting and Further Discussion of Directional Glyphs", crw, Theoretical Approaches to Problems, 2.
- 1950 Maya Hieroglyphic Writing: An Introduction, crw-Pub., 589.
- 1958 "Systems of Hieroglyphic Writing in Middle America and Methods of Deciphering Them", American Antiquity, 24: 349-364.
- 1962 A Catalog of Maya Hieroglyphs, University of Oklahoma Press.
- "Maya Hieroglyphic Writing", HMAI, 3: 632-658. University of Texas Press.
- 1970 Maya History and Religion, University of Oklahoma Press.
- 1972a Maya Hieroglyphs Without Tears, Trustees of The British Museum.
- 1972b A Commentary on the Dresden Codex, American Philosophical Society.

TOZZER, A. M.

1941 Landa's Relacion de las cosas de Yucatán, A Translation, Peabody Museum Papers, 18.

VALENTINI, P. J. J.

1880 "The Landa Alphabet: A Spanish Fabrication", Proceedings of The American Antiquarian Society, 75: 59-91.

WEST, Michael

"Another Chat with Tatiana Proskouriakoff", Institute for Maya Studies Newsletter, 13, 3. IMS, Museum of Science, Miami.

WHORF, B. L.

- 1933 The Phonetic Value of Certain Characters in Maya Writing, Peabody Museum Papers, 13, 2.
- 1935 "Maya Writing and its Decipherment", Maya Research, 2: 367-382.

http://www.iifilologicas.unam.mx/estculmava/