

APPENDIX III

Whorf's Attempts to Decipher the Maya Hieroglyphs

It is an old trait of human nature when in the mist to be very sure about its road.

—JOHN BUCHAN

IT HAD BEEN my intention to ignore Whorf's (1933, 1942) attempts to read the Maya hieroglyphic writing, supposing that all students of the subject would by now have consigned them to that limbo which already holds the discredited interpretations of Brasseur de Bourbourg (1869-70), de Rosny (1876), Charency (1876), Le Plongeon, Cresson (1894), and Cyrus Thomas (1886). Nevertheless, it seems advisable to examine his writings because of his position in the linguistic field and because of the air of certitude with which his interpretations are offered.

My objections to Whorf's writings are not against his conclusions as to the nature of Maya hieroglyphic writing, but against his lines of reasoning. I feel that he has built his structure on the shifting sands of false premises with the aid of a scaffolding of misidentifications. That the structure contains some good stone is not improbable. Whorf maintained that the glyphs are purely phonetic, and that each element represents a syllable or the single consonant with which that syllable commences. Glottal stops may be ignored. Obviously, with such a method, one can get almost any interpretation one likes out of the writing.

I propose to analyze very briefly the steps by which Whorf reaches two or three of his fundamental interpretations in order to show how shaky are the whole foundations.

Cumhu. Whorf's interpretation of the month sign Cumhu serves him both as proof of his arguments and as a base on which to build a whole series of interpretations. First, it should be noted that the month was almost certainly called Cumku in Yucatec, not Cumhu, for it is thus spelled in all the books of Chilam Balam and in the month list of Sanchez de Aguilar. The only source for Cumhu is our edition of Landa, which is notoriously weak in the transcriptions of Maya words; the *k* of Cumku might easily have been copied as *h* by the scribe who extracted the surviving version of Landa's writings. Secondly, it should be noted that in no other Maya language does the eighteenth month have a name resembling in any way Cumku.

Whorf (1933, p. 19) takes the superfix of Landa's drawing of Cumku as "a form of the day sign Ahau,"

which, he says, "was pronounced with the *a* scarcely sounded, and which would seem to represent the syllable *hu*. An examination of a series of Cumku glyphs would have shown Whorf that the superfix of Landa's glyph is not a sort of Ahau, but a poorly drawn example of the regular superfix which, whatever else it may be, is not a form of that day sign (fig. 19, 1-16). Whorf next argues that the original name of the glyph may have been Cumhau. As he takes certain extraneous elements to the left as standing for *cum*, he reads the whole as Cumhau, completely ignoring the Kan sign which is the main element of the month glyph.

However, in 1942 a quite different derivation of Cumku appears: Whorf decides that the Kan sign does not stand for maize or ripeness, the fact that everywhere in the codices and on sculptures one finds the Kan sign associated with maize or the maize god being dismissed as secondary symbolism. Instead the Kan sign means *hu*, "iguana," apparently because the Aztec equivalent is Cuetzpalin, "lizard." The original meaning of the Kan sign, Whorf tells us, is *huun*, "a letter or book," and the sign shows us this book or letter folded up like a modern letter in its envelope! A glyph of an iguana above a Kan sign from Dresden is explained as "an example of the method of repeated affirmation, using the ordinary sign for *hu* [the Kan sign], topped by an iguana figure Here the formula which we use in transliterating is *hu-hu*, to be read or pronounced, of course, as *hu*." On the same pages (29-31) as the iguana over the Kan sign, and occupying precisely the same positions, are pictorial glyphs showing respectively a turkey head and a haunch of venison, both above a Kan sign, and two fish, but these Whorf ignores. Obviously, they represent offerings, either turkey and maize, venison and maize, and iguana and maize, or, more probably, turkey tamales, venison tamales, and iguana tamales. The Kan sign cannot stand for *hu*, "iguana," in one place and not in the other; the pictures are so obviously related.

Whorf now returns to Cumhu (Cumku). Whereas before the *hu* had been represented by Ahau (elided to *hau*) as the superfix, now the *hu* is shown by the main element. A variant form of the superfix is identified as a feather (fig. 19, 15), "*kuḱum*," from which one drops the

ku and obtains *kumhu*. The mere fact that *kumhu* (glottalized) and *Cumhu* are totally different sounds is not accepted by Whorf as a valid argument against his theory. Whorf does not mention that the superfix in question is extremely rare with *Cumku*, occurring only twice in Dresden and never in the inscriptions, and he gives nothing beyond his bare statement for accepting this highly conventionalized symbol as representing a feather.

Thus, two entirely different phonetic translations are offered for what is almost certainly a misspelled version of a Yucatecan month name. They are self-contradictory and based on a complete ignorance of Maya hieroglyphs.

One of the most important of Whorf's "proofs" derives from an identification of the hand as the symbol for the sound *ma* or *m*. First, Whorf, in a very roundabout and unconvincing way, shows how the sound *ma* might have been represented in Maya writing by a hand. Next, he calls attention to his drawing of Landa's sign for *m*, of which he says, "I regard it as a corrupted reproduction of a cursive Manik." I do not know whether he means that Landa's drawing or his own is the corrupted reproduction, for besides turning Landa's sign upside down, he has redrawn it in such a way that it appears about halfway between a Manik sign and Landa's *m*. Because the hand is the sign for the day called Manik only in Yucatec (other names in other dialects are ignored by Whorf), and because his drawing of Landa's *m* is identified by him as a hand (and of course *m* also covers *ma*), Whorf uses the definite identification of the hand as the symbol for *ma*. The hand completion sign is then given the sound *ma*, and we learn that in an IS this hand before a period glyph should be translated as *ma*, e.g. 9 baktuns, 15 katuns, *ma tun*, *ma uinal*, *ma kin*. Although this interpretation is not implausible, it has, so far as I know, no parallel in the books of Chilam Balam. When used to translate the similar hand before a PE date, it makes nonsense: "9 Ahau 18 Mol, no 19 Katuns." If the sign means *ma* "no" or "not," it cannot precede a numeral.

Next, Whorf, rightly or wrongly, identifies the well-known prefix of Mac (Beyer's "down-balls" prefix) as two hands (fig. 18, 1-15, 20). He should at least have noted that in the scores of examples of this element in this and other glyphs not once do hands drawn in a naturalistic manner replace the elements he identifies as such; there is no mention of that fact. Instead, Whorf boldly states as a fact that the sign represents two hands wrist to wrist, and previous identifications of the element which are totally different are passed over in silence. The two hands are again given the sound *ma*. The fish head of Mac is identified as Cimi, "death," and given Landa's sound *k*, no attention being paid to the fact that the sound is *ka* with a glottal, not *c*. Thus two doubtful

hands (*ma?*) plus a wrongly identified Cimi (*ka*) equal Mac.

The hand in Whorf's thesis can stand not only for *ma* but also for *m*. Thus in discussing Glyph C of the lunar series, Whorf assigns to the head of the death god, not the sound *ka* as given by Landa, nor that of *c* which he used in the derivation of Mac, but that of *la*. To a kin sign which is not in the original, is ascribed the value *le*, although Landa assigns it the sound *te*. The hand below is given the sound *m* or *ma*, and the whole, together with the coefficients and the moon signs, reads "3 *Lama* lunations," "3 *lelemma* lunations," "5 *lemma* lunations." Next we are referred to Tozzer's grammar where, we are told, "a classifier used for periods of time is *lem*." Accordingly, if the Maya wrote these moon inscriptions *in the way they talked* they must have written not "six lunations," but "six *lem* lunations." It sounds very convincing, but if the reader will turn obligingly to Tozzer's grammar (1921, p. 291), he will find the entry "Lem. For times; hun lem, once." In other words, *lem* refers not to *time*, but to *times*. References to lunations in the books of Chilam Balam show the use of the numerical classifier *p'el* with moons. The least that can be said of such arguments is that they are unbelievably sloppy.

Rather than prolong this examination unwarrantedly, let us briefly discuss one of the two passages Whorf has translated from the codices. It is that on Madrid 113d [read 102d], I give below Whorf's interpretation and my comment.

The action in the pictures is that of weaving. . . . The verbs for both pictures are alike and their second components are *ma*. The first component is a sign for which I have a body of evidence to show a phonetic value *ya*. Maya students will recall that it is the superfix of the glyphs of the months *Yax* (*Yac*) and *Yaxkin* (*Yack'in*) in the codices. The verb then reads *ya-ma*. *Yama* or *Yamah* would be a perfective or possibly an aorist of the transitive conjugation of a verb with stem *yam*. A common stem *yam* in the Perez dictionary means between, interstice, and as verb, interpose, insert, force between, get caught between. This is the action shown; the subject is *inserting* the shuttle and its thread into the warp, or *putting it between* the warp threads.

Comment: The first component, as every Maya student will recall, is definitely not the *yax* superfix. If, as I suppose, the body of evidence largely rests on this identification, it is of a wraithlike nature. Whorf completely ignores the postfix. The *ma* is our old friend the grasping hand.

I cannot understand the many meanings for verbs with the root *yam* which Whorf derives from Pio Perez. I find: *yambezah*, *mudar*, *diferenciar*; *dejar espacio entre dos cosas*; *interponer*. *Yamnaat*, *entrever*, *presuponer*,

calcular, prever. Yampahal, mudarse, diferenciarse, vomitar. Yampal, trocar suertes. Yamtah, poner intermedios. Of these only the last could possibly correspond to the meanings assigned the stem by Whorf, although actually it means to set intervals. The word *yamtah* is not given in the Motul dictionary, but we find there a more precise definition of *yam*: "*la concavidad o espacio que hay entre dos cosas, e intervalo, o distancia de tiempo y lugar.*" No word with the root *yam* in the Motul dictionary carries any meaning approaching that which Whorf implies. In fact, the action of inserting the shuttle seems to be the opposite of one main concept which is that of creating, not filling, a space in time or place which separates two objects. Whorf's translations from the Perez dictionary are grossly exaggerated and misleading. Taken in conjunction with the *lem* incident and Landa's *m*, they imply that Whorf considered that he could strain the evidence as much as he liked to gain his point.

Granting, even, that *yam* could be the root of a word meaning "to insert," I see no reason why that word should have been used to describe the act of weaving.

Whorf continues:

The first part of the object glyph is a sign that has phonetic values *sa* and *sak*. It appears here in the form it has as sign of the month *Zac* (*Sak*) and of the color white (*sak*), and so might have here the value *sak*. The second upper part of the glyph is the *a* of Landa. . . . The second lower part of the glyph is a form of the day-sign *Ahau*. My evidence is that *Ahau* is a polyphonic character and that one of its values besides *hau*, *hu* is *li*, *l*. Maya students will recall its use as superfix of the sign for east, *lik'in*. It is thus possible to read this object glyph as *sak-a-l*. But *sakal* [*sacal*] is the Maya word for woven cloth. . . . The two glyph blocks in the lower line are name-glyphs answering to the unknown name of the deity shown in the picture. We may denote them and this deity's name as $X_1 X_2$. We may now transliterate the

"verse" and translate it . . . *Yama sakal* $X_1 X_2$. Translation: $X_1 X_2$ inserts (it) into the cloth.

Comment: Unfortunately, Whorf is again in error. The element he reads as *zac* "white" is not that at all; the *zac* sign has two nubbins, and varies quite a lot from the element depicted on this page. One wants a lively imagination to recognize the superfix [my *te* (τ) affix] as Landa's *a*. The main element is not an *Ahau*. Whorf elsewhere (1942, p. 487) identifies this same glyph as *e*, deriving it from Landa's sign for *e*. Thus, one must conclude that all three components of the glyph are wrongly identified.

Even had the elements been correctly translated, and even did the glyph compound actually represent the sounds *sakal* (admitting the dubious argument that the appearance of *Ahau* in the glyph for east permits its identification with *li* and thence *l*), it is very much to be doubted that such first-class weavers as the Maya would have used a word for woven cloth to represent the warp threads. I am neither a weaver nor a linguist, but such imprecision in nomenclature does not strike me as Maya.

Of the five elements which Whorf uses, four are wrongly identified; of the two words he obtains, one does not have the meaning he ascribes to it, whereas the other probably would not be used in the sense he attributes to it. Whorf's writings are a direful warning to those with a similarly uncritical approach to the hieroglyphic problems. For imprecision of a somewhat similar nature in Whorf's special field of linguistics, the reader is referred to a paper (Thompson, 1943g), in which I demonstrate that two words, *mis* and *tumin*, for which Whorf created an imposing Uto-Aztecan ancestry, are common Spanish words, introduced to the New World in post-Columbian times.