

CHAPTER V

HIEROGLYPHIC EXPRESSION “END OF — TUN, ENDING ON — AHAU”

There are a number of glyph pairs and series which represent the statement that a certain Tun ending fell on a certain Ahau day. We might transcribe the concept in mathematical form by “End of m Tuns, ending on n Ahau” where m indicates one of the numbers from 0 to 19 inclusive and n one of the numbers from 1 to 13 inclusive. In the chronologic system of the Maya the same Tun and Ahau combination recurred after 13 Katuns; for instance, 1 Tun ending on a day 1 Ahau fell on 10.1.1.0.0 and again on 10.14.1.0.0 of the Long Count. Thus what we might term a Tun-Cycle has the same length as the so-called Katun-Wheel (13 times 20 times 360 days). The Maya put the numerals before (or above) the Tun sign, but for our understanding it would be clearer to speak of Tun 1 as Morley does in his well-known *Introduction to the Study of the Maya Hieroglyphs*.¹

Although we find various numerals used for the number of Tuns and the Ahau coefficients, the Maya evidently preferred certain combinations. These were “End 1 Tun, End 1 Ahau” and “End 13 Tuns, End 1 Ahau”. Possibly also “End 10 Tuns, End 1 Ahau” had some preponderance, at least it occurs twice in the Chichen Itza texts. However, there is another combination which also appears twice, namely, “End 11 Tuns, End 1 Ahau”. One case occurs in the Akab Tzib and the other in the Monjas, because the four specimens on its lintels all refer to the same date.

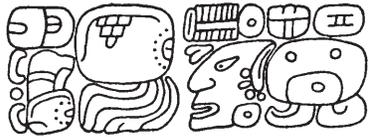
The seven variants of “End 1 Tun, ending on 1 Ahau” come from three different locations, the Akab Tzib (fig. 670), Casa Colorada (figs. 671-673) and Halakal (figs. 674-676).

The oldest specimen (fig. 670) has the Muluc-Variant as first ending sign (left corner, top). Under it appears numeral One with two crescents as space fillers and a little Cauac with a strange superfix. Then follows as main sign Cauac-with-Beard, that is, Tun (360 day period). The second compound has on top the reduced Centipede glyph as ending sign. Numeral One is represented here by the head of a deity, probably a light-goddess. Then comes Ahau with its usual affixes.

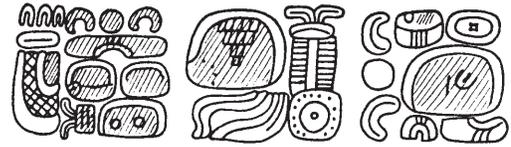
The three variants from the Casa Colorada (figs. 671-673) are arranged in series of three glyph blocks, one more than the preceding example. Thus, probably in order to occupy the available space, there have been added two more details to those we see in the first figure. The numeral One and the little Cauac are plainly visible, while the peculiar superfix has a more regular form in the Casa Colorada variant. A glyph with two teeth is the counterpart of the small Cauac. Finally, below is another new sign. The initial ending glyph is different from that in the example from the Akab Tzib.

To the Tun glyph is joined part of the Ahau prefixes to avoid crowding in the latter. In figure 671 we have the same ending sign as in the corresponding glyph of figure 670, but complete. Then follows “1 Ahau”. The inner lines of the Ahau glyph are effaced, but there can be no doubt about the meaning of this hieroglyph.

¹ Morley, 1915, p. 95 *et seq.*



END OF 1 TUN, ENDING ON 1 AHAU
Fig.670 Akab Tzib, a, A B1.



END OF 1 TUN, ENDING ON 1 AHAU
Fig. 671 Casa Colorada, 33-35.



END OF 1 TUN, ENDING ON 1 AHAU
Fig. 672 Casa Colorada, 10-12.



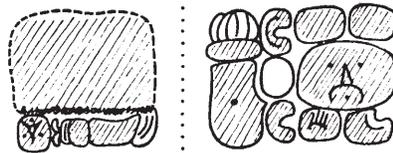
END OF 1 TUN, ENDING ON 1 AHAU
Fig. 673 Casa Colorada, 17-19.



END OF 1 TUN, ENDING ON 1 AHAU
Fig. 674 Halakal, FI-GI and G3.



1 TUN, ENDING ON 1 AHAU
Fig. 675 Halakal, A1-A3.



(END OF 1 TUN), ENDING ON 1 AHAU
Fig. 676 Halakal, a, C1 and C2.

In figure 672 an entirely different ending sign is used in the second glyph block, a segment of the celestial serpent with Crossed-Bands as infix. The head under it is somewhat worn but most probably also means “one”. It evidently has the same hair arrangement as the corresponding head in figure 674. Ahau is represented here by a human head.

Only by analogy can we interpret the second half of figure 673 as “Ending 1 Ahau” since the ending sign is an unfamiliar head. The Ahau, however, is clear.

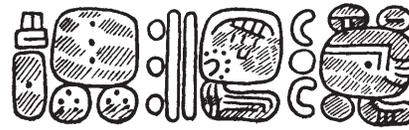
Morley reads “Tun 13 ending on a day 1 Ahau” on the lintel from Halakal.¹ I find (figs. 674-676) the date 1 Ahau three times, but in vain have I looked for 13 Tuns in the inscription. I suppose he reaches his reading by analogy, which, however, in this case is fallacious. The 13 Tuns 1 Ahau appear, indeed, several times in the Chichen Itza texts but in later buildings. Here in the Halakal material 1 Tun clearly is represented twice (figs. 674 and 675) and there is no good reason to restore 13 Tuns in the effaced text (fig. 676). Figures 674 and 676 are interlaced with a Calendar Round Date, which indicates a close relationship between the two. In the first glyph block of figures 674 and 675, although somewhat eroded, we perceive the same details as in the Casa Colorada examples. Figure 675 has no ending sign, while figure 674 has a new design consisting of a series of cir-

¹ Carnegie Inst. Wash., Year Book No. 26, p. 235.

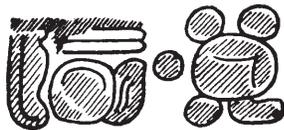
clets with a small Ahau as subfix. Evidently this same ending sign was once sculptured in figure 676, as the little Ahau is still discernible. The Tun glyph is clear in figure 674, still traceable in figure 675, but must be assumed for figure 676. “Ending 1 Ahau” is fairly well preserved in figures 674 and 676, while only the outlines of Ahau can be made out in figure 675, the ending sign and numeral being indistinct details joined to the Tun glyph. Figure 676 has a new ending sign (the Vulture emblem) preceding Ahau.



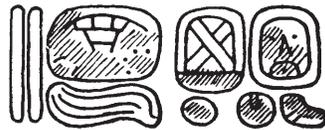
END OF 13 TUNS, 1 AHAU
Fig. 677 Four Lintels, IV, A3-A4.



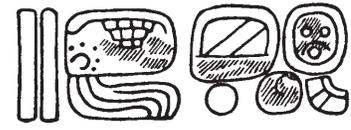
END OF 13 TUNS, 1 AHAU
Fig. 678 Four Lintels, I, B2-B3.



END OF 13 (?) TUNS, 1 AHAU
Fig. 679 Yula, Ila, B1-B2.



10 TUNS, ENDING ON 1 AHAU
Fig. 680 Initial Series, a, A B1.



10 TUNS, ENDING ON 1 AHAU
Fig. 681 Three Lintels, III, BI-A2.

The statement “End of 13 Tuns, ending on 1 Ahau” occurs no less than five times on the four lintels in the Temple of the Four Lintels that were discovered by E H. Thompson and Oliver G. Ricketson, jr. Reference has already been made to three of these (figs. 648-650); the remaining two are shown in figures 677 and 678. In all cases the first ending sign occupies a whole glyph block, but represents only a broadened form of the narrow sign in figure 674, to which the Vulture emblem is added. It is followed in another block by “13 Tuns”. The ending sign relating to Ahau seems to have fallen almost into disuse as the sculptor employed it only in figure 648; it is possible, however, that the completely destroyed Ahau in figure 650 may have once had it, but the three other specimens have only “1 Ahau”.

When Morley interprets figure 679 as meaning a “Tun 13 ending on a day 1 Ahau”¹ I am willing to admit the possibility of such a reading as there once clearly existed a numeral higher than Ten as superfix of the Tun glyph. But when in another place² he puts also the two other Tun-Ahau combinations from Yula in a list of “Tun 13, 1 Ahau” I cannot follow him, because the other two instances refer to 5 Tuns.

The front part of the famous lintel with the Initial Series begins with the hieroglyphs shown in figure 680 which read “10 Tuns ending on 1 Ahau”. This reading is in conformity with figure 681, and an identical hieroglyph for “ending on 1 Ahau” is found in figures 648 and 690. Thus there can be no doubt about the correctness of this deciphering. Morley, however, connects the last glyph of the lintel-front with the first one and interprets “Tun 10, ending on the day 2 Ahau”.³ In treating of group 10, I have given the true explanation of the glyph pair to which it belongs. So I insist on rejecting Morley’s hypothesis notwithstanding its apparent plausibility. As 10.2.10.0.0 2 Ahau 13 Chen is a date very near the Initial Series (10.2.9.1.9), such a reading would indeed fit well, but we

¹ Carnegie Inst. Wash., Year Book No. 26, p. 234.

² Carnegie Inst. Wash., Year Book No. 24, p. 250.

³ Morley, 1920, p. 573.

have to respect the facts and cannot “doctor” them till they suit our needs. The real relation between the Initial Series date and the next 10 Tun 1 Ahau dates is:

9.16.10.0.0 1 Ahau 3 Zip (A. D. 761)
5.19.1.9

10.2.9.1.9 9 Muluc 7 Zac (A. D. 878)
7.0.16.11

10.9.10.0.0 1 Ahau 3 Zac (A. D. 1017)

These conditions are much less satisfactory; in fact, they make interpretation highly hypothetical. We do not know which of these two possibilities is meant in the text, although for general reasons the latter date is preferable. Nor do we know why the 10 Tun date is connected with the irregular date of the Initial Series. That the Maya did see a connection, however, is assured by other occurrences, especially the cases of the Casa de las Monjas and Halakal. So we must leave for future research the elucidation of these problems.

The second variant of “10 Tuns ending on 1 Ahau” (fig. 681) comes from one of the sculptured lintels of a building which originally had three. As the two fairly well-preserved lintels do not contain another date, this (if it existed) must have been on the much-destroyed third lintel. The style of the hieroglyphs indicates a later age, wherefore Morley’s dating 11.2.10.0.0 1 Ahau 3 Uayeb¹ is acceptable.

The chronological statement “End of 11 Tuns, ending on 1 Ahau” is expressed by figures 682-686, figure 682 coming from the Akab Tzib, while the rest appears on the lintels of the Casa de las Monjas.

Figure 682 begins with an ending sign used several times in this inscription. The “11 Tuns” is clear, while the ending sign above the human head is small, although its meaning is guaranteed by its place and the equivalent and better-executed signs in other similar hieroglyphs. The human head for numeral One also is somewhat indistinct because of rubbing. On the other hand, Ahau is quite clear. The two dates in this edifice (figs. 670 and 682) probably are:

End of 1 Tun ending on 1 Ahau corresponding to 10.1.1.0.0 (A. D. 850)

End of 11 Tuns ending on 1 Ahau corresponding to 10.7.11.0.0 (A. D. 978)

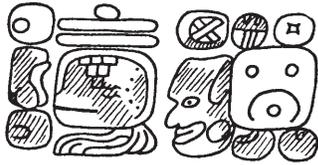
The difference between the two dates is 6.10.0.0; that is, just half a Katun-Wheel (13 Katuns). Morley’s dating 11.7.1.0.0² seems much too late to me, as the Akab Tzib inscription employs old hieroglyphic forms. The three passages shown in figures 683-685 have the same ending sign before 11 Tuns, while figure 686 has an entirely different hieroglyph in its place. However, it is similar to ending signs used elsewhere and therefore here undoubtedly has the same symbolic value. In figure 684 number 11 is represented by a head, of which, unfortunately, only the outlines are left. The Tun sign is clear in figure 686, but weather-worn in the other cases. Figures 683 and 684, and figures 685 and 686 also have the same ending signs before their respective Ahau. The head for number One

¹ Carnegie Inst. Wash., Year Book No. 26, p. 235.

is mostly effaced, but its value is assured by its position. In figure 686 the numeral for the Ahau is omitted, but can be safely supplemented by One in this context. The remaining Ahaus are identifiable by their characteristic outlines, only the One in figure 686 being well preserved.

There remain a few singular dates which will now be briefly mentioned.

Figure 687 is End 3 or 8 Tuns, ending on (1) Ahau. If the curved detail above the Tun glyph means Five, it is unusual. Numeral One before Ahau seems, again, to have been omitted.



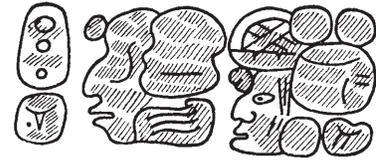
END OF 11 TUNS, ENDING ON
1 AHAU

Fig. 682 Akab Tzib, D1-D2.



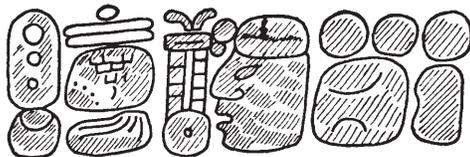
END OF 11 TUNS, ENDING ON
1 AHAU

Fig. 683 Monjas, II, A4-A5



END OF 11 TUNS, ENDING ON
1 AHAU

Fig. 684 Monjas, VI, A4-B5.



END OF 11 TUNS, ENDING ON
1 AHAU

Fig. 685 Monjas, V, A5-C5.



END OF 11 TUNS, ENDING ON
AHAU

Fig. 686 Monjas, IVa, D.

As already mentioned Morley lists the two passages in figures 688 and 689 among his 13 Tuns 1 Ahau cases, indicating the missing 13 Tuns signs by dots. However, there is clearly a bar for Five in figure 688, and the head with Tun symbol on top in figure 689 is well known from Old Empire sites as the sign for Five. As the lower part of the face is destroyed one cannot decide whether it was not originally Fifteen. In any case, Thirteen is an excluded possibility. The other details near the numeral evidently are variants of the similar emblems in figures 670-675. "Ending 1 Ahau" is expressed in the same way in both figures 688 and 689.

Glyphs BI-B2 on the lintel from the Temple of the One Lintel probably read "End of 15 Tuns, ending on — Ahau". The hieroglyphs are so disfigured by mutilation and erosion that I have not attempted to draw them, but the "Ending of 15 Tuns" seems to me fairly legible.¹ The numeral pertaining to Ahau, however, I dare not determine. By general reasons we might suppose it to have been One. How Morley came to determine the date of this lintel as 11.7.1.0.0 1 Ahau 13 Kankin² I do not know.

Figure 690 clearly represents "End of 16 Tuns ending on 1 Ahau". As the individual signs are familiar to us there is no need for further comment.

The much-damaged two hieroglyphs in figure 691 might be transcribed: "(End of) 16 Tuns (ending on) 1 Ahau". If so these would then be a simplified variant of the state-

¹ Since writing the above, I have at my disposal now the new photograph published in plate 4. Consequently, I feel not so sure of my former interpretation. The mutilated glyphs might just as well be read: 16-19 Tuns, 11-13 Ahau.

² Carnegie Inst. Wash., Year Book No. 26, p. 235.

ment expressed in complete form in figure 690. Since one or the other of the two ending signs occasionally was absent in former instances (figs. 680 and 681 in the case of the Tun and figs. 677-679 in the case of the Ahau), this lack of the two ending signs is simply an extreme case.



END OF 8 TUNS, ENDING ON 1 AHAU
Fig. 687 Caracol, Hieroglyphic Band, 9.



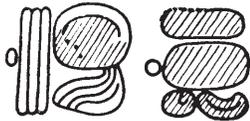
END OF 5 TUNS, ENDING ON 1 AHAU
Fig. 688 Yula, II, G₃-H₄.



END OF 5 TUNS, ENDING ON 1 AHAU
Fig. 689 Yula, I, B2-A4.



END OF 16 TUNS, ENDING ON 1 AHAU
Fig. 690 Caracol, Hieroglyphic Band, 17.



16 TUNS, 1 AHAU
Fig. 691 Caracol, Stela, A B1.



END OF 17 TUNS, ENDING ON 3 AHAU
Fig. 692 Water Trough, Hacienda, C DI.



1 TUNS, 12 AHAU
Fig. 693 Caracol, Hieroglyphic Band, 18.



11 TUNS, 2 AHAU
Fig. 694 Column, High Priest's Grave.

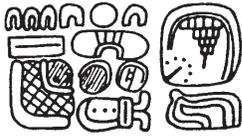
All the instances treated up to the present refer to a date "1 Ahau". In figure 692, however, for the first time we have "Ending on 3 Ahau". The number of Tuns is either Seventeen, Eighteen, or Nineteen. Both ending signs are known to us; the one before the Ahau sign is peculiar in having its upper part so large. Ahau here is clearly a bird head.

As in figure 691, so also in figure 693 the missing ending signs must be supplemented mentally. Figure 693, therefore, means "(End of) 1 Tun (ending on) 12 Ahau". The reading "12" for the human head in figure 693 is warranted by the Palenque example where the head of a deity with the symbol Day-Sky is also used.

Figure 694, coming from the so-called High Priest's Grave has been mentioned already in the preceding study. Although much worn, it preserves sufficient details to be interpreted safely as "11 Tuns 2 Ahau". No ending signs appear, but they can be tacitly assumed. Of the upper unit in the numeral Two no vestige is left today, but the position of the remaining one requires it.

We shall now add a few defective cases. Figures 695-697 clearly represent "End of a certain Tun", but no Ahau follows. In figure 695 the reference is to 1, in figure 696 to 2, and in figure 697 to 3 Tuns. The glyphic details have been described before. A much more reduced form is seen in figure 698, where only the numeral One, the arched detail,

and under it a Cauac element and Teeth fused into one sign can be made out. These details are not so compressed in figure 699, but the numeral is lacking.



END OF 1 TUN
Fig. 695 Casa Colorada,
47-48.



END OF 2 TUNS
Fig. 696 Casa Colorada,
51.



END OF 3 TUNS
Fig. 697 Casa Colorada,
54.



1 TUN
Fig. 698 Casa Colorada,
56.



COMPOUND
Fig. 699 Hieroglyphic Jams, F9.



END OF 13, — ENDING ON 7 AHAU
Fig. 700 Water Trough, Hacienda, A5.



END OF 14 TUNS, ENDING ON
3 AHAU (?)
Fig. 701 Water Trough, Hacienda,
W2-W3.

The very worn lintel which served as a water trough in the plantation of Chichen Itza contains two more chronological glyph pairs (figs. 700 and 701). The first begins with an ending sign, then comes fairly clearly the numeral Thirteen, but the following main sign can hardly be “Tun”. It looks more or less like a Bat-Head and has an indistinct sub-fix. Its second glyph can be identified as “Ending (on) 7 Ahau”, although the Ahau is much effaced. The ending sign is surely » Centipede «.

In still worse condition is figure 701 which might mean “Ending of 19 Tuns on a day 3 Ahau”. In this case the presumable Tun sign, although only left in bare outline, agrees better with the known form; at least, it seems to possess the Sun-Beard. The ending sign belonging to Ahau is identifiable again as » Centipede «. Three circlets are above the main sign, but the hypothetical Ahau in its present form looks more like the hieroglyph for Moon.

We have assumed in this study that the number of Tuns referred to their position in the Long Count. This is Morley’s and Spinden’s view and possibly is true. But it is by no means well proved. There occur in Old Empire inscriptions period glyphs which evidently are not related to the Initial or Secondary Series, but which must have some independent significance. Our 1 Tun (ending on 1 Ahau), 10 Tuns (ending on 1 Ahau), 13 Tuns (ending on 1 Ahau) etc., very well might refer to some kind of computation in which they simply mean “The End of 1 Tun ending on a day 1 Ahau” and not “The End of Tun 1 ending on 1 Ahau”. The Initial Series date is 10.2.9.1.9. From it to the next Tun ending on 1 Ahau are 10 Tuns and 331 days. The relation is:

10.2. 9. 1. 9 9 Muluc 7 Zac
 16.11

10.2.10. 0. 0 2 Ahau 13 Chen
 10.0. 0
10. 3. 0. 0. 0 1 Ahau 3 Yaxkin

This may be mere chance, a coincidence that means nothing, but, who knows?