

## CHAPTER IV

# CALENDAR ROUND DATES FROM CHICHEN ITZA

The preceding study has supplied us with quite a number of so-called Calendar Round Dates, that is, dates that are fixed within a period of 52 Maya years, but whose position in the Long Count is unknown. The strange unit of 52 years is a result of the Maya (and Aztec) usage of designating every day with a numeral (one of the series from 1 to 13 inclusive) and a name or sign (one of a series of 20 different symbols). Using years of 365 days, only four of the day names may fall on New-Year days. Thus 13 times 4 equals 52 combinations forming one complete cycle in this system. Besides its numeral and sign the day had a position in an artificial month of 20 days, the count being from 0-19 among the Maya. Only after 18,980 days (that is 52 times 365 days) the same day and month date combination occurred again in the calendar.

To the Calendar Round Dates already represented in figures 631-647 we may add six others in figures 663-668. All will be described briefly and deciphered as far as it is possible with the weather-worn and otherwise damaged hieroglyphs.

Five of the seven lintels of the Casa de las Monjas begin their inscriptions on the underside with what is evidently the same date. The day is surely 8 Manik in figures 631-633, but for the last two examples (figs. 634 and 635) we may only infer this, as the head numerals are too indistinct to be identified. Then follows Kin and an ending sign. This latter refers to the month date and constitutes a peculiarity of the Chichen Itza texts. The numeral before the month can be declared to be Fifteen for figures 631-634, as it represents the head of a certain Maya deity, characterized by an old man's face and the Tun sign.<sup>1</sup> The fleshless lower jaw (which distinguishes Fifteen from Five) is fairly clear in figures 631 and 633 and in the other two cases at least the fleshless teeth are discernible, but in figure 635 quite another head evidently is represented. Above it a bar, the numeral Five, appears. The head, then, might indicate number Ten, although it does not look much like the usual face numeral for Ten. Finally the month glyph is only tolerably clear in its lower half. It can be only Uo or Zip. The remaining vestiges in the upper part speak for Uo. This is the reading J. Eric Thompson suggested to me some time ago. If the lower part of the hieroglyph belonged as ending sign to the following character, then the upper part could only be Mol. But I think Thompson's interpretation is more natural and I adopt it for that reason.

Morley thinks that besides the 8 Manik "there are no other recognizable calendric hieroglyphs" and refers it therefore to the month position 0 Pop,<sup>2</sup> an expedient accepted by R. B. Weitzel.<sup>3</sup> To me there seems to be no reason for such a forced solution. It is true, the month glyph is in a bad state of preservation, but it occurs in its proper place and its numeral is sufficiently distinct to allow a safe identification. Furthermore, the particular ending sign before the numeral is typical for month hieroglyphs.

The head numeral with which figure 636 from the Casa Colorada begins is undoubtedly Six as the characteristic tooth and the cross in the eye are sufficient for its

<sup>1</sup> Goodman (1897, p. 50) had already clearly recognized the value Fifteen for this hieroglyph, and published a drawing of one specimen.

<sup>2</sup> Carnegie Inst. Wash., Year Book No. 26, p. 236.

<sup>3</sup> Weitzel, 1930, pp. 183-184.

determination. Of the day sign only the frame remains, and the month and its numeral are too indistinct to allow identification. This glyph block was so covered with some efflorescence from the limestone that I could not decide whether Maudslay's drawing was correct or not; I kept what seemed fairly acceptable.

On the other hand, figure 637 from the same building clearly reads "9 Akbal, Kin, End of 1 Chen." The dots on the lower part of the first head are characteristic for the deity of number Nine. Akbal is known in similar variants and the month can mean Chen only.

The head numeral in figure 638 is not clear; possibly it is Three. Kan, the day sign, is practically complete. The following glyph, Kin, is known to us. Then comes a prefix which at first glance seems to have a 7 above it. This, however, is only part of the sign itself, which we have met in many other composite hieroglyphs. The real numeral Seven is found above the bird head, which must represent the month Muan. It is distinct from Old Empire forms in not possessing the details in the bill. The two feathers, one before and one behind the head, are visible, although the one in front is very small and very near the prefix. The Sun-Beard below is partly broken away.

Figures 639-641 were deciphered first by Morley as "9 Etznab 11 Yax",<sup>1</sup> which interpretation Gann<sup>2</sup> and Spinden<sup>3</sup> accepted. The latter says that the text "shows quite clearly" that date, and in his drawing the Etznab has undulating crossed lines. In the original, however, I cannot detect this trait. In any case, Morley changed his opinion later, and declared the date to be "9 Lamat 11 Yax."<sup>4</sup> As we have seen previously that Lamat and Etznab, as non-calendrical glyphs, were confounded in the inscriptions of Chichen Itza, it is hard to decide which of the two day signs is represented here. As the form of the questionable glyph is in complete agreement with the Lamat of the Yucatec Codex Tro-Cortesianus, this value is more likely. Probably Etznab as day sign consisted only of the undulated lines without the four dots. The "ears" of the Dog-Heads in figures 132 and 137 prove that the proper Etznab form was not completely unknown.

The heads for Nine in figures 639-641 have dots similar to the head numeral in figure 637, but they differ in minor details. The large ending sign before the month numeral in figure 641 occupies, with the numeral, a whole glyph block. It is omitted in the other two cases. In figure 639 a superfix which looks like a Flame sign appears above the month glyph, although we would rather expect the Skein here.

As the first glyph in figure 642 has a still recognizable Sky sign over the head, it must, by analogy with the southern hieroglyphs, indicate the number Twelve. The day sign to which it belongs is clearly Kan. I do not dare identify the head numeral before the month. All we can say is that it must have been either Two, Seven, Twelve, or Seventeen. The month glyph itself evidently represents Zac. It is somewhat rubbed off but not so as to jeopardize this identification.

The head numeral before the day sign Imix in figure 643 is too indistinct to be identified. The third glyph consists of an ending sign, the numeral Four and two signs, of which only the upper one is recognizable. The two details possibly have only the function of space fillers, as the month sign in the fourth glyph is complete and represents the Uinal Tzec.

<sup>1</sup> Carnegie Inst. Wash., Year Book No. 17, p. 274.

<sup>2</sup> Gann, 1924, p. 227.

<sup>3</sup> Spinden, 1924, p. 280.

<sup>4</sup> Carnegie Inst. Wash., Year Book No. 24, p. 251.

Morley has deciphered the third glyph in figure 643 as 4 Zac.<sup>1</sup> However, the upper element is not the Zac sign but a common composite character consisting of a perforated disc and an elongated Teeth sign. We have just seen the real Zac hieroglyph in the preceding figure 642 and easily notice the great difference. Furthermore, the fourth glyph in figure 643 would have no object.

In figure 644 the first numeral fortunately is sufficiently clear to be declared Three. The day sign also is recognizable on account of its punctuated line as Eb. Quite well preserved are the two glyphs referring to the month position of the day; they read “Ending on 10 Pop”.

The first glyph of figure 645 has an unusual prefix, but the little knobs near the mouth make it clear that the number Nine is represented. The day sign possibly is Ben, but if so it also is unusual. The hieroglyph after the Kin sign should be an ending sign referring to the month numeral. All we can see is a nearly effaced head with a prefix. The following head would stand for the numeral. It is too indistinct to be determined. Of the month glyph, fortunately enough remains to identify it as Zac.

The day sign in figure 646 looks at first glance strikingly like Ben, but the month numeral would not correspond to it. Assuming one or two more teeth in the destroyed part between the two preserved ones of the day-sign, this would convert it into Kan. In fact, the arrangement of the vertical parallel lines in the lower compartment fits better with Kan than with Ben. Even then the month numeral is not correct, since Fourteen goes with the days Imix, Cimi, Chuen, and Cib. The day sign Kan occupies month position Twelve. Thus either the outer or the inner two little ovals for the units should have been distinguished from the other two in some way by the sculptor. This has been done for the two lateral elements of the numeral One before Kan, which are changed into crescents, but it evidently was overlooked for the month numeral; at least the lower three ovals are exactly alike. The upper one is somewhat worn and it is therefore impossible to say how it originally looked. There may, after all, have formerly existed an incised curved line on the fourth oval; faint traces of it seem to appear in the photograph.

The month glyph itself is clearly Cumku. The middle line in the main sign, again a Kan glyph, is curved, not straight as in the day sign proper. The suffix consisted originally of two little Ahaus, which now are effaced.

Figure 646, then, represents the date, 11 Kan, Kin, Ending on 12 Cumku. Morley gives practically the same reading.<sup>2</sup>

In another Calendar Round Date (fig. 647) from the same monument, a lintel formerly used as a water trough in the plantation of Chichen Itza, the numeral of the effaced day sign seems to be either Six or Seven. The month again is Cumku and its numeral Seventeen.

We come now to the new material supplied by figures 663-668.

Figure 663 most probably reads, “1 Kan 2 Pop”. The day sign and the month glyph are very clear. The head variants of the numerals at Chichen Itza lack the precision and neatness to which we are accustomed from the southern monuments, but I think the proposed values are the most acceptable ones.

<sup>1</sup> Morley, 1920, p. 512.

<sup>2</sup> Morley, 1920, p. 512.



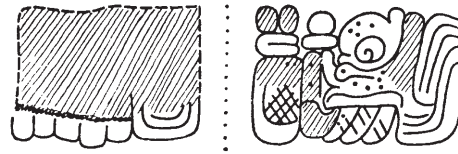
1 KAN 2 POP  
Fig. 663 Yula, I, A1-A2.



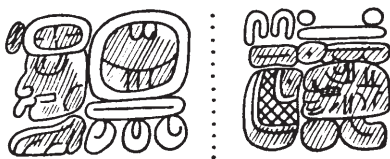
3 IMIX 14 YAX  
Fig. 664 Caracol, Hieroglyphic Band, 18.



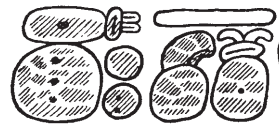
12(?) MULUC (?) 7 —  
Fig. 665 Four Lintels, IVa, A B1.



10 —, END 6 MUAN  
Fig. 666 Halakal, B1 and B2.



4 KAN, END 7 POP  
Fig. 667 Halakal, F1 and G2.



2 AHAU 18 —  
Fig. 668 Column, High Priest's Grave, A B1.

Figure 664 has been published by Morley and deciphered by him as “3 Imix 9 Yax”.<sup>1</sup> As there are, however, clearly two bars, I prefer to transcribe “14 Yax”, although the reading “9” is possible since the bars are somewhat thin. But when Morley connects this date with the following hieroglyph “1 Tun”, I strongly object. In many other cases the Tuns refer unmistakably to an Ahau date, so that we cannot make an exception here, especially since there clearly follows an Ahau date. Therefore the expression “1 Tun, 12 Ahau” as given for figure 693 must be upheld.

Of figure 665 it can safely be said only that it represents a Calendar Round Date with the month position Seven. The head might represent number Twelve, and the vestiges of the day sign could be interpreted as forming part of either Muluc or Manik. Because of the corresponding month position only Muluc is feasible. Finally, the month most probably was either Chen, Yax, Zac, or Ceh, so that 12 Muluc 7 Yax (or Chen, Zac, Ceh) are possible readings.

In figure 666 the day date is practically destroyed. The remains at the bottom speak for Ten as the numeral originally present. The month date, although partly defaced, is evidently “Ending 6 Muan”. The ending sign is the usual one for months. Number Six, on the contrary, is put in a strange position, occupying little space. The head of the Muan bird with feathers under the bill and the Sun-Beard as postfix conforms with other representations in Old Empire sites, but is distinct from a later Chichen Itza example (fig. 638).

The day sign in figure 667 is fairly readable as “4 Kan”, the characteristic features of the Sun-God, the number “4”, being discernible, and Kan still faintly visible. Much

<sup>1</sup> Carnegie Inst. Wash., Year Book No. 24, pp. 249-250.

less safe is the reading “Ending 7 Pop” for the month. Unfortunately, the main part of the month glyph is very indistinct, but the suffix evidently is the sign I have called Owl-Plume.

Although figure 668 is very indistinct, I publish it here because it is of great scientific interest. Morley uses it in connection with figure 694 to refute the Oxkutzcab correlation by *reductio ad absurdum*.<sup>1</sup> However, some observations must be made.

Spinden says of figure 668: “The 2 Ahau and 18 Xul are both very clear.”<sup>2</sup> I judge this a gratuitous assertion, because the whole brief inscription was poor work in its original state and has suffered for centuries from erosion and other destructive agencies. It is thus only with difficulty that one can determine the different hieroglyphs that compose it, some being beyond possible recognition. What the conscientious specialist can make out in figure 668 is “2 Ahau 18 —.” The second main sign must, of course, be a month glyph, but at least ten explanations are possible, none of them convincing. Morley and Spinden read it “Xul”. In his drawing Morley uses part of the following glyph block for the Sun-Beard belonging to Xul, a procedure which seems to me somewhat arbitrary. It is true that the two glyphs seem to touch each other in one point, but this occurs also in other places and obviously is only caused by the crude workmanship of the monument. There is some empty space below the month glyph where a detail might have been lost; but also it can be simply a blemish of the stone that was not used by the sculptor. The outlines as given in figure 668 are perhaps somewhat exaggeratedly rugged, and it is not impossible that originally this main sign was a complete oval. In this case it could have been Mol. However, on the whole I prefer to abstain from any interpretation and leave the month glyph undetermined.

Even accepting Morley’s and Spinden’s reading of 2 Ahau 18 Xul, we are by no means obliged to draw the same conclusions as they. Analogous to all other instances from the Chichen Itza inscriptions figure 668 should be a Calendar Round Date and figure 694 an 11 Tun ending related in some way to it. This Tun 11, 2 Ahau, probably was 11.6.11.0.0 in the Long Count. The next date 2 Ahau 18 — back from the Tun date would, curiously enough, be 2 Ahau 18 Xul.

It is, of course, rare to find an Ahau day in a simple Calendar Round Date, but it is not impossible as such and must, thus, be taken into consideration. We can expect an Ahau on the average once among twenty cases. In the method employed in these studies figure 668 is a member of a class, while in Morley’s and Spinden’s method—or lack of method—it would form a class by itself. In no other case is an Ahau-Tun date in our texts repeated and exemplified with its corresponding month position. Thus, reasonable as Morley’s arguments seem to be, they apply at least to an exceptional case only.

Finally figure 669 represents only the month position of a day. Although much effaced it can safely be restored as “11 Yax”, a date occurring several times in the same text. From it also the missing day date can be supplemented as “9 Lamat”.



11 YAX

Fig. 669 Four Lintels, I, E1.

<sup>1</sup> Morley, 1920, p. 511.

<sup>2</sup> Spinden, 1924, p. 281.