

THE GROLIER CODEX

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The Grolier codex came to public notice in April, 1971, when displayed as part of the exhibition "Ancient Maya Calligraphy" at the Grolier club, New York. Its survival was hailed by Michael D. Coe as "nothing less than a miracle" (New York Times, April 21, 1971). Where, when, and under what circumstances this supernatural event took place has never been revealed, but it is said to have been found with a jade, turquoise, shell and tortoise shell mosaic mask, now in Dumbarton Oaks Collection and previously published by von Winning (1968, Plate 333) who assigns it to Yucatan. He writes me that was the provenance given the piece by the seller. In that case the asserted find-spot of Codex Grolier would also be in Yucatan.

Now, with its publication (at very slightly over half size) in the Grolier Club's sumptuous and most beautiful book by Michael Coe, The Maya scribe and his world, 1973, Grolier codex can be studied. I have not seen the original.

The codex is a fragment comprising eleven incomplete and damaged pages of bark paper with stucco surface painted only on one side. Pages average 12.5 cm. wide, and the length of the longest incomplete page is 18 cm. One gets a strong impression that the missing lowest parts carried no design or glyphic text. Colors are red, black and blue green (very little) together with red to brown washes.

As Coe notes, the fragment illustrates part of a Venus table with a general resemblance to pages 46-50 of the Maya Dresden codex, which treat of the same subject, but there are several important differences. One is that whereas in Dresden codex pictures accompany only dates marking appearance of the planet as morning star after inferior conjunction, Grolier codex has illustrations for all four stations of Venus, the above heliacal rising after inferior conjunction, disappearance (approximate), 236 days later, before superior conjunction; reappearance (approximate), 90 days later as evening star, in the west (day 326); and disappearance, 250 days later, before inferior conjunction (day 576). This is followed 8 days later by another heliacal rising as morning star, thus completing the synodical revolution which averages 584 (actually 583.92) days. Far and away the most spectacular of these stations is that of Venus' appearance as morning star; disappearance and reappearance before and after superior conjunction are tame in comparison. For that reason the scribes of Dresden codex and of three codices from the Mexican "mainland" rated only appearance of morning star as worthy of an accompanying illustration.

Because after 5 revolutions Venus will rise on the same day name, but with a different number, Dresden codex devotes 5 pages to the planet's revolutions, with helical rising as morning star, accompanied by pictures and augural glyphs, occupying

nearly 2/3 of each page on the right. The other three stations without pictures occupying slightly over 1/3 of each page on the left side, a clear indication of their far lesser importance.

In Grolier codex each station has a page to itself with no indication at all that morning star station is so much more important. Clearly, the complete Venus cycle would have occupied 40 pages of Grolier, each with its own illustration. The columns of days are the same as those in Dresden codex.

Grolier codex gives the same intervals between stations as in Dresden, these being, as noted, 90, 236, 150 and 8 respectively. Numbers above 20 are expressed in the vigesimal system, but the twenties are not written as bars (each representing 5) and dots (for 1), but only as dots. That is 236 is shown as 11 dots for 220 (11 x 20) plus 16 expressed as 1 dot over 3 bars. Such a system is neither Maya fish, Nahuatl fowl nor Mixtec red herring.

Twenties in proto-historic and early colonial Mexico outside the Maya area were represented by the international symbol, a flag, examples may be seen in Codex Mendoza (Aztec), Codex Sierra (attributed to the Chocho of Oaxaca), the town book of Santiago Guevea (Zapotec), and codice de tributos de Mizquiahuala (Otomi?). The flag symbol was even used in southern Guatemala as Fuentes y Guzmán reported. Accordingly, were Grolier codex a product of cultural hybridization, as Coe supposes, one would expect 11 banners, not 11 dots, to record 220.

More disturbing are the first digits expressed as bars and dots within rings tied at the top. That peculiar arrangement is frequent in Dresden codex but found nowhere else. Except in one almanac (pp. 71 a -73 a), where its function is not understood, it encircles the lowest digit, that of the days, of a count ranging from merely a few days and 20-day "months" up to 140 years which invariably leads forward from a date, here called X which lies that same distance before the Maya era, here designated Y. The Maya era is the position 13.0.0.0.0 4 Ahau 8 Cumku which lay some 4,000 years in the past when Dresden codex was painted.

The tied ring around the number of days serves as a warning that Date X lies the distance of the total count before the era (Y). In fact, the position of 4 Ahau 8 Cumku is invariably recorded as such or in the abbreviated form 4 Ahau immediately below the ringed number. That is the tied ring functions practically as the B. C. in our English calendar.

The ringed number count always appears in conjunction with a second and much longer count (of 3,000 to 4,000 years), the starting point of which is again Date X. The terminal of this second count (Z) is followed by the day name and number and sometimes the accompanying month position reached. Such an equation would be the equivalent of, for example one in our calendar reading "From a date X, 12 years, 3

months and 8 days before January 1, A.D. 0 (Y), count forward 1986 years 11 months and 9 days to reach August 2, A.D. 1974 (Z). Without the ringed number warning, the reader might take the terminal date to be in 1986. I suspect the tied ring stands for the root tab carrying the idea of a tie, link or companionship (cf. tabal, expressed as tie sign and the glyph (23) al, which designates the Lords of the Nights; tabal signifies companion, a term used in Mexican sources for those same deities because they are the acompañados of the days).

Significantly, in one place (Dresden p. 51a) the starting point of such a count lies not before 4 Ahau 8 Cumku, but 8 days later. The tied loop is not present.

The appearance of the tied loop in records of the distance from one station of Venus to another is nonsensical. It is as though we wrote "From appearance of Venus as morning star to its disappearance is 236 days B. C.; from disappearance to reappearance is 90 days B. C." etc.

Early sources inform us of the important role Venus played as morning star.

When it the morning star newly emerged, much fear came over them; all were frightened. Everywhere the outlets and openings of houses were closed up. It was said that perchance the light might bring a cause of sickness, something evil, when it came to emerge. But sometimes it was regarded as benevolent (Sahagún, 1950-70, bk. 7, ch. 3).

The Memoriales con escolios of Sahagún, in repeating the above, adds that when the planet began to be visible in the east, they slew captive men in reverence, and offered it their blood, spattering it toward the star with their fingers. The Anales de Cuauhtitlan (Codex Chimalpopoca, 1945, para. 51) also from Central Mexico, details the planet's evil effects:

They the old men knew when Quetzalcoatl as morning star appears, on what particular numbers and what particular signs he shines. He casts his rays at them and shows his anger toward them. If it appearance as morning star falls on 1 Cipactli, he spears the old, men and women equally. If on 1 Ocelotl, if on 1 Mazatl, if on 1 Tochtli he spears the children. If on 1 Actl he spears the great lords, and just the same on 1 Miquiztli. If on 1 Quiauitl, he spears the rain and it will not rain. If on 1 Ollin he spears the youths and maidens; if on 1 Atl everything dries up. For that cause old men and old women venerated each of those signs.

Flechar here translated to spear, in fact means to kill with arrow or dart, that is by a hurled weapon. As will be seen, the weapon was a dart propelled by an atlatl. From the above it is clear that the rays of the planet were regarded as the darts or arrows with which he slew categories. Indeed, in Nahuatl the sun's rays are called tonamitl: tona, contraction of term for sun; mitl, arrow or dart.

Mendieta (1879, bk. 2, ch. 5), perhaps drawing on Andrés de Olmos, writes that Quetzalcoatl's soul became a star, "and it was that one that at times casts a ray like a lance or spear [*lanza*], and sometimes in this land that star or comet has been seen, and after it pestilences among the Indians and other calamities have been observed to follow." As is well known, Quetzalcoatl became the morning star and as such he was called Tlauizcalpantecutli, Lord of the dawn.

Association of the morning star with sickness was apparently accepted by the Indians of San Miguel Sola, Oaxaca, as late as the middle of the 17th century. To prevent a recurrence of sickness members of a household, after preliminary fasting, bathed in a river for nine mornings when the morning star rose (Berlin, 1957: 27).

Dresden codex shows Venus as morning star hurling his darts with an atlatl, and as noted, does not consider other stations of the planet worthy of either augural glyphs or pictures. Venus as morning star, complete with darts, atlatl and his slain victims, is depicted in Codex Borgia (pp. 53-54), Codex Vatican B (pp. 80-84) and Bologna (pp. 9-11), in each case five times to form the period of 2920 days, as in Dresden codex. In Codex Bologna Venus is shown with a skull, undoubtedly a reference to his having just emerged from the underworld, land of the dead, in his transit from west to east in changing from evening to morning star (cf. Tlalchitonatiuh, the sun at rising, similarly depicted with death symbols).

All sources, then, are in accord in recognizing Venus as of paramount importance only at heliacal rising as morning star, and in emphasizing that it was then the planet inflicted death and pestilence with his rays. No source mentions Venus at any other station; that is understandable for at the remaining three positions Venus is not a star -- she is in the back row of the chorus.

In Grolier the situation is very different. There is no pattern. Instead, the arrangement is one to make any Maya priest tear his long hair.

Venus gods pierce a temple with a dart hurled at heliacal rising as morning star (p. 8) and at disappearance before superior conjunction (p. 5), at a now lost target at reappearance as evening star (p. 10), and at water or some creature in the water at disappearance before inferior conjunction (p. 11). He holds a roped prisoner at heliacal rising as morning star (p. 4), at reappearance after superior conjunction (pp. 6 and probably 2), at disappearance before superior conjunction (pp. 1 and 9) and at disappearance before inferior conjunction (p. 3). Once he stands, spear in hand, facing a tree at disappearance before inferior conjunction (p. 3).

Only once of the four times in which the Venus impersonator hurls darts at victims is the act correctly assigned to appearance as morning star. One occasion is appearance as evening star; the other two are disappearance of the planet before inferior and superior conjunction. How, one wonders, can the planet hurl his death rays when he disappears from sight. Such representations make nonsense of the whole

body of evidence concerning Middle American beliefs about the planet.

In five scenes, possibly six, Venus is shown holding a bound captive. There is no basis for this in surviving tradition. Indeed, as a resident of the skies such action would be extremely difficult, if not impossible. One such scene (p. 4) represents Venus' appearance as morning star, when he should be hurling his rays at victims. On page 8 the Venus god carries both a spear and an atlatl, having discharged his one dart left-handedly, a decidedly anomalous arming with long spear and atlatl.

The speared temple as victim (pp. 5 and 8) is not found on the Venus pages of Mexican codices or Dresden codex. Indeed, as a common Mexican symbol of conquest it would seem out of place here. Venus' victims fall into categories; the slaughter of the whole community does not fit the pattern, although, admittedly Seler thought he recognized the symbol for atepetl, town, combining that with the warriors as victims, but his argument is unconvincing (Seler, 1904-1906, 2: 151-157).

As to the Venus gods in Grolier, none resembles any of those in Dresden codex. God K appears twice, but on both occasions with human incisors which is incorrect; they should be ophidian fangs. There are three death figures and five human faces without marked characteristics (two have Roman noses and one of these seems to be wearing a woman's quechquemitl and has a cleft in his head between two frets -- enough to frighten any good Maya or Mixtec out of his wits).

The three recognized Maya codices are books of divination or prophecy. Except for a few almanacs treating of offerings and apparent orations, every page gives the good and bad luck of certain days in connection with mundane activities such as farming, hunting, bee-keeping, idol making, disease and so on. Glyphic texts are supplemented with pictures. Sometimes a text lacks pictures; there are no pictures without texts, demonstrating the over-riding importance of the divinatory glyphs. Years and katuns (20-year periods) are similarly listed with their glyphs of good and bad luck as well as tabulations of dates on which eclipses might be expected each with glyphs recording what was then in store for mankind, for eclipses were much apprehended as during them the world might end. The same is true of the Venus pages in Dresden codex. Hieroglyphs name the Venus god, the supervisory deity, and the victim at each first appearance of the morning star, and the catastrophes to be expected according to the day of appearance. "Woe to the corn fields, misery, death, affliction of war, disease" is the glyphic refrain with variations on the sad theme (Thompson, 1972: 70).

The Maya excelled in astronomy, but that was the means; the ends were astrological. The astronomical material was set down in order that the priests might know from the accompanying glyphic passages what fate awaited mankind at that most dreaded moment of Venus's first appearance as morning star. Day of appearance was important because of the fate -- almost invariably evil -- associated with that particular day. The tables are the equivalent of a modern farmer's almanac. The interest is primarily in what is foretold for specific occasions or dates.

In the Grolier codex there are no accompanying glyphs to warn man of his fate. It is the Farmer's Almanac with September blank -- no prophecy of hurricanes that month or of political upheavals in Washington. It is true that Mexican codices have no divinatory glyphs on their Venus pages. That is so because the more backward peoples -- so far as writing is concerned -- of Central Mexico had not learned to employ divinatory glyphs. But Grolier codex purports to be basically a Maya codex, as the lay-out of the Venus tables, the Maya day signs and the appearance of the Maya God K, although incorrectly portrayed, clearly demonstrate. Thus Grolier codex fails to conform to Maya standard practice in hieroglyphic ritual codices, that is to supply the divinatory data in writing, employing pictures merely to supplement the text. That failure lays the codex open to grave suspicion as to its authenticity.

A fragment of paper attached to Grolier codex has produced a Carbon 14 date of A.D. 1230 \pm 130 years. This however, does not authenticate the codex. In recent years large quantities of plain sheets of pre-Columbian bark paper have been found by looters operating in caves in the dry region stretching south and east of Tehuacan.

My friend and colleague José L. Franco, whose knowledge of Mexican pre-Columbian artifacts is perhaps unequalled, writes me that some years ago he examined in Mexico City loot in the hands of a dealer from caves in the dry region at the bottom of the Tehuacan Valley. Found with authentic pre-Columbian pieces was a very large number of bundles of amate (bark) paper, very well made and smooth surfaced or polished (terso). The bundles were all of about the same size, about 20 cm. x 10 cm., but varying in thickness from less than 1 cm. to 2 cm., and all carefully tied with bow or knot. Each leaf was folded in four. Most of the thicker bundles were of undecorated paper; the thinner ones were splattered with rubber, and thus of the type used in offerings, particularly to the rain gods, according to 16th-century ethnological descriptions. The paper was found with crude pottery figures of such deities as Tlaloc, Xochipilli, etc., and damaged textiles.

Late in 1966 Señor Franco examined two bundles of rather crude amate paper about 25 x 30 cm. and some 18 cm. thick. The owner, an antique dealer, said they had been brought to him by looters as samples of several hundred such bundles found in a cave in the Sierra Madre of Guerrero, together with bundles of herbs and many pottery vessels. Señor Franco was absolutely certain that the paper was pre-Columbian. He adds that he has heard of several other finds of amate paper in areas more or less under Mixtec influence.

I have been told that some who have seen the Grolier codex have been struck by the contrast between the apparent freshness of the paint and the aged appearance of the paper. Clearly a forger would have no trouble in obtaining pre-Columbian amate paper. Indeed, it is said to be a drag on the market; buyers of looted material are not interested in it.

Señor Franco informs me that in the last 8 to 10 years he has seen at least six fake codices of the same type as the Grolier codex.

Faking is big business; a falsified hieroglyphic book, or even a fragment of one, can fetch a very high price if the buyer be persuaded the piece is genuine. A faker, playing for high stakes, would have no trouble in getting information on Maya handling of the Venus cycle. The Venus pages of Dresden codex have been illustrated and described in detail in various available publications. In this case he did not heed Alexander Pope's warning "A little learning is a dangerous thing; Drink deep or taste not the Pierian spring." Shallow draughts, whether from the springs of Urania and her fellow Muses or from the cenotes of Maya astrologers, intoxicate the brain, and the ignoramus falls headlong to disaster.

The little learning of the composer of Codex Grolier was insufficient to save him from the pitfalls noted above and summarized below:

- 1) As 20's are not written Maya fashion, they should conform completely to Mexican style which calls for banners, not dots, to represent vigesimes.
- 2) The practice of ringing numbers which serves to indicate distances before the Maya era, are completely out of place and stultify counts of days between stations of the synodical revolution of Venus.
- 3) Early sources are unanimous that Venus hurled darts, that is its rays of light, only at first appearance as morning star. In Grolier codex darts are hurled once correctly at appearance as morning star; once at appearance as evening star; and twice at disappearance before conjunction when its rays would be extinguished!
- 4) Venus holds bound captives in 5, possibly 6, pictures. Sources tell us nothing of Venus capturing prisoners. Indeed, being confined to celestial journeys, such a task presumably would be impossible. One such scene marks the planet's appearance as morning star, when, all sources are agreed, he should be hurling his darts.
- 5) Once Venus has a long spear in one hand, an atlatl in the other, a combination never found, to the best of my knowledge in Middle American art.
- 6) The speared temple, twice depicted, is a Mexican symbol of conquest; it is out of place in these pages which do not deal with conquest.
- 7) The only recognizable deity, other than a death god, is the Maya God K who appears twice. In both places he has a row of human incisors instead of the ophidian fangs he should display. Neither he nor a death god is among Venus deities portrayed in Dresden codex.

8) Codex Grolier lacks divinatory glyphs, but the recording of those was the main purpose of Maya ritualistic codices. Yet this book is primarily Maya in contents and presentation. The Venus table is expanded from the five pages of Dresden codex to 20 pages, nevertheless, the main purpose of the table, the astrology is omitted.

9) Easy access to pre-Columbian bark paper vitiates the Carbon-14 date as an argument for the genuineness of the codex.

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