From: The Maya Scribe and His World

The Grolier Codex

Collection: private collection, New York Provenance: unknown Date: thirteenth century Dimensions: greatest height of page 18.0 cm; average width of page 12.5 cm Text: Venus Tables

General remarks

This is the fourth pre-Conquest codex known for the Maya; the others are the Dresden, Madrid, and Paris. Said to have been found together with a mosaic mask in a late Maya-Mexican style now at Dumbarton Oaks (von Winning 1968, pl. 333), it must owe its preservation to the dry conditions of a cave somewhere in the Maya area. Its coming to light is thus an exceptionally rare event.

Like its three fellow codices, the Grolier Codex is a folding-screen book painted on bark paper which has been coated with stucco. Despite the fact that both sides are stuccoed, only the obverse is painted, a situation which has been cited by some correspondents as grounds for doubting its authenticity. However, four pages of the Dresden have been left blank, and the reverse sides of the Cospi and Vindobonensis, both folding-screen pictorials from non-Maya Mexico, must have remained blank for many years before being painted in a totally different style and content from the obverse sides. In fact, only thirteen of thirty-seven pages of the Vindobonensis are painted. In my opinion, the Grolier was buried, ceremonially deposited, or otherwise taken out of circulation before the reverse could have been used by the ancient scribe.

The codex comprises eleven pages or leaves surviving from a book which, as will be shown, must have contained twenty pages. The bottom part of the codex is poorly preserved, having been eroded through moisture which has stained the surfaces near the damaged edges. Only the central portion of page 11 remains, so that it is not possible to identify it with any certainty as part of the codex.

Five additional pieces of bark paper, none of them with any stucco, are associated with the codex. All are single sheets, brown in color, and somewhat water-stained. One of these adheres to the stucco on the reverse of page 8 at a 30° angle; another small piece sticks to the reverse of page 10 at right angles. Three additional pieces, which in general appearance are identical with the foregoing, are now separate from the codex but were surely with it when it was found. Two of these are doubled over, and down the edge of one runs a painted line in exactly the same hematite red that was used in the codex. Adhering to it was a smaller piece of bark paper, also folded over on itself, with crumpled edge. This was submitted to Teledyne Isotopes for radiocarbon dating. The determination (1-6107) is A.D. 1230 ± 130. Assumed that this also dates the work, the codex was probably painted some time in the thirteenth century, a dating in accord with its style and content.

Colors have been used sparingly in the Grolier Codex. They are confined to a rich hematite red, deep black, a brown wash, a thin red wash, and blue-green, all set against the strong white background. Where water-staining has not altered the surface, the colors have a freshness that is truly remarkable.

On each page there is a standing figure facing left, always holding a weapon of some sort and generally restraining a captive by a rope. Along the left-hand edge of the page is a vertical row of day signs (thirteen where the column is complete), and with each day sign a
numerical coefficient in the bar-and-dot system. In a space left above the scene is a bar-and-dot number surrounded by a ring, sometimes accompanied by another numeral given only by dots.

The sequence in which each page was painted is fairly clear. First of all, the lower boundary of the scene was established by a thin horizontal line carried out in brown wash; on page 6 is a second line, running parallel to the first and just below it. Next, the artist roughed out the scene and the glyph column in thin lines of light red wash which still can be seen since the finished product did not always exactly conform to the first sketch. The row of day signs was blocked out by a ladder-like arrangement of two vertical lines connected by horizontal lines. Then, using a somewhat heavier brush pen, the artist drew in black all the day signs and all the figures and other parts of the scene; probably at the same time he wrote in thick black line the number which was to be surrounded by a ring. Subsequently, with a brush pen well loaded with opaque red, he painted the day-sign cartouches, the coefficients that accompany them, the ring around the black numerals, the line of dots, and various details of the scenes. Finally, he filled in the hair of the captive on page 1 with light brown wash, and the water on page 11 with blue-green.

Nature of the Grolier Codex

The ancient peoples of Mesoamerica were deeply interested in Venus, the brightest object in the sky after the Sun and Moon. Their astronomer-priests realized that the Morning Star and Evening Star were the same planet, a fact not appreciated, for instance, by Homer’s Greeks. For the synodic period of Venus, that is from one heliacal rising as Morning Star to the next, they used the figure 584 days, the nearest whole number to the true figure, 583.92. This synodic period was divided into four positions of Venus: (1) Morning Star (236 days); (2) disappearance at Superior Conjunction (90 days); (3) Evening Star (250 days); and (4) disappearance at Inferior Conjunction (8 days). We know from ethnohistoric accounts that the heliacal rising of Venus was an awesome event for the Mesoamericans, who considered the influence of the planet decidedly baleful.

This Venus calendar was coordinated with their sacred Calendar Round of 52 years, the latter based upon the intermeshing of the almanac of 260 days (13 numbers x 20 named days) with the Vague Year of 365 days (18 months of 20 days plus 5 extra days). It so happens that 5 x 584 equals 8 x 365, so that in eight Vague Years there are exactly five synodic periods of Venus. The grand cycle, equivalent to our century, is reached after 65 Venus periods, or 104 Vague Years. At this point, the Aztec priests believed, the world might end, so all fires in the empire were extinguished, to be relighted only when the Pleiades passed through the zenith rather than stopping.

Venus calendars based upon the equation of 65 Venus Periods equaling 104 Vague Years are found in the Cospi, Borgia, and Vaticanus B codices, in which five Venus gods, each associated with five successive heliacal risings of the planet, are shown in the act of spearing victims.

The Venus calendar in the Dresden Codex (pp. 46-50) shows that the Maya had far more complex calendrical and ceremonial ideas associated with it (Thompson 1950:217-29). The Dresden Venus Tables are spread over five pages; on each page are four vertical rows of day signs from the 260 day tzolkin (almanac), each column containing thirteen such day signs. The day sign represents that day in the tzolkin on which began a particular position of one of the five Venus Periods that made up eight 365-day years. The four columns on a particular page thus represent, respectively, Superior Conjunction, Evening Star, Inferior Conjunction, Morning Star. One reads horizontally along all five pages until that line is exhausted, then down to the next line, beginning on the left of the first page. Running through all thirteen lines would take one through sixty-five Venus Periods (five pages or periods, multiplied by thirteen). At the bottom of
the page is the number of days contained in each phase, given by the positional bar-and-dot system.

Far more information than this is given in the Venus Tables of the Dresden. Each page has three pictures of gods. At the top is seated a ruler upon a throne; this deity is either aged or associated with death, and it is clear that this series of five gods belongs to the Underworld. In the middle is a god attired as a warrior hurling darts, just as in the three non-Maya Venus Tables, and in the pictures at the bottom is his victim (God L, for instance, shoots God K on p. 1). Also named by their glyphs are twenty additional gods presiding over the twenty Venus phases contained in the five successive Venus Periods, but their pictures are not given, which is a pity, since some of these divinities are otherwise unknown. Also given in these tables are cardinal directions for each phase, days reached in the Vague Year, and Long Count positions. They have been, and remain, the fullest exposition of Maya concepts concerned with Venus.

Let us now return to the Grolier Codex and examine the day signs on the left side of each page (Table 3). It is quite obvious that these match perfectly with the columns of day signs in the Dresden Venus Tables. Ten of these are exactly the same as columns I through R of the latter, so that it can be concluded that each Grolier page represents not an entire 584-day Venus Period, as in the Dresden, but one synodic position of that period.

Accordingly, the number at the top of a Grolier page should correspond to the numbers at the bottom of the Dresden Venus Tables, which tell the number of days to be added to reach the first day of the next synodic position. This can be shown to be the case, since the Grolier numerals in question are what Maya epigraphers call ring numbers. In the Dresden, the only other place where they have been found, they are present not only in the Venus Tables but also wherever tables of multiples are to be coordinated with the Long Count. They function like a kind of Distance Number, expressing the difference between two Long Count dates, or between two base dates used to calculate Long Count dates. The number involved is expressed positionally by the bar-and-dot system, but in the unit or kin position the black number is surrounded by a red cartouche, usually surmounted by a knot identical with affix 60. The entire numeral, including uinals and tuns, is designated a ring series. Linton Satterthwaite has pointed out to me that on pages 71a-73a of the Dresden, there is a different use of ring numbers; in this case black numbers enclosed in red rings indicate the day coefficients reached in a cycle of 702 (13 x 54) days.

Examining the Grolier Codex for such a system, we find at the top of page 3 the number 8 in black, surrounded by a red cartouche and topped by the affix 60 knot. This is the difference between a day in the column on the left side of that page (column K) and a day in the one following (column L), and represents the number of days of Inferior Conjunction. Four pages later, the same ring number appears again, as it should. Thus, the ring number at the top of page 1 should be ninety days, and the four red dots to the right must be the uinal coefficient, in spite of its being to the right instead of above as in “normal” Distance Numbers, since (4 x 20) + 10 = 90 days, the days for Superior Conjunction. However, the divergence from the Maya way of expressing numbers goes even further than position. Let us look at the ring number, for such it is, on page 8, which should be 236. The kin coefficient in the ring is 16, shown in the Maya system, so that the uinal coefficient to the right must be 11, since (11 x 20) + 16 = 236. Instead of giving two bars with a dot, however, the scribe put down eleven horizontal red dots. This is the system known for Post-Classic times in the Mixtec area and central Mexico, in which numbers 1-13 or even up to 20 were represented by dots alone. The combination of non-Maya with Maya in the Grolier ring numbers is an excellent example of the amalgam of these elements to be found throughout the codex. One could consider this to be decadence, but I would prefer to think of it as acculturation of the Maya to Mexican ways of thought.

I sincerely doubt that any modern faker would have thought of putting hybrid ring numbers into a Venus calendar. Fakers, whose knowledge of Maya calendar and iconography is fairly abysmal, are usually reduced to copying, but no trace of copying from the Dresden can be detected here, as we shall see when we look into the style and content of the codex.
Style of the Grolier Codex

The seven day signs found in the Grolier can be fruitfully compared with those in the other three codices (see illustrations in Thompson 1950, figs. 6-10). Admittedly, assessing degrees of similarity is a somewhat arbitrary task, but in Table 4 I have rated each glyph stylistically by assigning a zero for glyphs that show little or no affinity to each other, 1 for those that are more or less similar, and 2 for those that are identical. It can be seen that in terms of glyphic style the Grolier diverges from the other three codices, but among these it is by far closest to the Dresden. Internal evidence indicates that the Dresden Codex, although containing much material of the Late Classic date, was prepared in the twelfth century of the Christian era, that the Paris is somewhat later, later, and that the Madrid may well date to the period of Maya decline in the mid-fifteenth century (Thompson 1950:24-6). On the evidence of the glyphs as well as the style in which the scenes were executed, it would seem reasonable to suppose that the Grolier would fall somewhere between the Dresden and the Paris; thus, stylistic data tend to reinforce the thirteenth-century radiocarbon determination. Furthermore, the glyph style confirms its authenticity, since copying can be ruled out.

To turn to the scenes and the figures in them, the most convincing points of comparison are not so much with any Maya codices but with Toltec and Toltec-Maya art, and with Mixtec-Mexican codices. I am indebted to Joyce Bailey-Berney for pointing out to me the compelling resemblance of the Grolier style to that of a Toltec incised shell pendant in the American Museum of Natural History (Ekholm 1970-55). It will be seen that five of the Grolier pages have figures of young gods with tear-drop shaped eyes, slightly Roman noses, and scroll-like ears (also present in the Dresden Codex); all of these features, along with a free and very ungeometric line, can be found on the Toltec shell. Moreover, there are costume details in both which point to an identical tradition.

The specifically Toltec or Toltec-Maya traits which can be singled out are the following:

1. Back shields, shown in three-quarters view
2. Knee fringes
3. Toltec, non-Maya atlatls (a simplification of the feather-decorated Toltec atlatl)
4. Triangular dart points
5. Ruffled padding on one or both arms as protection
6. Death Gods with knives protruding from the nasal opening (for examples at Chichen Itza and Tula, see Tozzer 1957, figs. 199, 200, 202)

The lower legs are always shown with sandals only, never with the peculiar “gaiters” that are characteristic of the Dresden and other Maya codices. Other similarities will be pointed out for each Grolier page.

The Grolier shows strong affinities with prehispanic manuscripts from the Mixtec and central Mexican areas, although these are uniformly painted on deerskin. This is testimony to the powerful influence these peoples had upon all parts of the Maya area that were still inhabited after the Classic Maya collapse around A.D. 900. Perhaps the most convincing resemblances are to the Laud and Fejervary-Mayer codices, two manuscripts of great elegance which probably were carried out by the same hand. The heads of the Death Gods in the Grolier are virtually identical with those in these codices, including the painting red of that part of the teeth nearest the gums. Another trait held in common is the tear drop eye with central pupil, a feature also present in the Vindobonensis.
There are five spearing gods in each of the Venus Tables in the Borgia, Cospi (Bologna), and Vaticanus B codices, all with death’s heads. What allies them with the spearing gods of the Grolier and Dresden is the headdress of black and white feathers with squared tips (Grolier p. 7). In Vaticanus B, the god wears knee fringes and sandals indistinguishable from those on Grolier pages 4 and 7.

Certain geographical and human features in the Grolier are those pointed out by Robertson (1959:17-22) as typical of the Mixtec style before the Spanish inundation. For instance, Grolier 11 shows the god hurling a dart at a body of water, which is shown in Mixtec fashion as a U-shaped container, cross sectioned, and filled with blue-green water in which a snail shell can be seen. Another prehispanic feature in the Grolier is the lack of differentiation between right and left feet: all are shown as left, with the toes overlapping the sandals in some cases. The two temples in the Grolier (pp. 5, 8) are shown in side elevation, as in the day sign Calli, but they can be exactly matched with neither Mixtec-Mexican temples nor with those in the Maya codices, which always have a Crossed-bands element at the back wall.

One of the most un-Maya traits of the Grolier is the pair of snakes which appear in the headdress of the figure on page 5. These are not depicted in the realistic Maya fashion, which shows the open mouth with internal fangs, but with upper fangs overlapping the lower jaw and with a scroll-like device over the eye. This kind of snake is the same as the day sign Coatl as it appears in the Laud and Fejervary-Mayer as well as other non-Maya codices from the prehispanic era.

This is not, however, a Mixtec manuscript. Specifically Maya deities appear on pages 1, 4, and 7, and there is, of course, the use of Maya numbers and day signs. As with the day signs, the most detailed resemblances are with the Dresden Codex, although these are far fewer than with non-Maya codices. A good Maya trait is the sparing use of color.

The hybrid style and content of the Grolier Codex pose the question of where it could have been produced in the Maya area. Similarities are low with the late east-coast style of the Tulum and Santa Rita wall paintings, which at any rate are much later than the thirteenth century. We know little of the archaeology of the Yucatan peninsula between the abandonment of Toltec-Maya Chichen Itza, early in the thirteenth century, and the founding of Mayapan toward the end of that century. Presumably, Toltec influence was still strong, and the burgeoning power of the Mixtec kingdoms could have been making itself felt even in the Maya area. My own guess, and it is nothing more than that, is that the Grolier could have been painted by Toltec-Maya artists in some cosmopolitan trading center in the lowlands, most likely the great commercial port of Xicalango in Campeche, a city controlled by the Chontal Maya.
The enigmatic God K, the so-called Long-nosed God, brandishes a spear with a large point, below which are placed smaller transverse points with red bases. The disk from which plumes depend can also be found on spears in the Dresden Codex. Around his neck on this badly destroyed page, the god wears a death collar. The butt of his spear rests upon the brown hair of a young captive. God K, incidentally, appears in the list of twenty regents in the Venus Tables of the Dresden. Whatever his true nature and function, Thompson’s identification of him as an earth and vegetation deity (Thompson 1970:224-7) seems to me to be premature and probably ill-founded.
The Death God stands with a spear similar to that on page 1. On his cranium is bristling hair like that on the Death Gods of Laud and Fejervary-Mayer. As headdress he wears the head of a jawless jaguar, similar to that worn by the planting gods of Madrid 34a and 36a. On one forearm he wears the Toltec arm protection. Hung across his chest is a pendant suspiciously like the stylized butterfly worn as a pectoral by Toltec warriors at Tula and Chichén Itzá; it also looks like the pectorals worn by the warrior-frieze figures at Malinalco (Villagra 1971, fig. 30). Other Toltec traits are the back shield and knee fringes. Instead of the knife at the front of the face of the Death God on page 6, this deity has what seems to be a spotted speech scroll. Unfortunately, the captive whom he holds by a rope in his left hand is missing. The Death God (God A) is also a Venus regent in the Dresden
A young deity, probably male but possibly female, is bedecked with an elaborate reptilian headdress and wears a tubular plug through the ear lobe; at the shoulders are two disks. In his left hand he holds a rope by which a captive’s arms are bound. Around the captive’s tear-drop eye is a black lining, and there are two black-tipped feathers in his headdress. There is more than a passing resemblance between this captive and a black-eyed figure who appears in Dresden 60 as a warrior with darts and atlatl, and in Dresden 60b as a captive; in the latter case, his arms are bound behind his back, he has the butt of a spear over his head, and his captor appears to be the spearing god in Dresden 49b and Grolier 7, both surely Venus gods. However, other than the feathers, the form of the captive’s headdress on this page is specifically Toltec, like those found both at Tula and Chichen Itza (see Tozzer 1957, figs. 534, 535).
This again appears to be God K, attired as a Toltec warrior. However, his headdress is very different from that of page 1, with a stepped-down element in which is fitted a downball from which stream quetzal plumes. Most of the figure of the captive whom he holds has been lost.
I believe this figure to be the old goddess known as Ix Chel among the Maya, the counterpart of Tlazolteoll and Coatlicue in the Mexican pantheon, on the basis of her aged face and the snakes in her hair. Since she is garbed as a warrior, she is probably in the guise of one of the Cihuateteo, the formidable goddesses of the west who had died in childbirth. In her right hand is a Toltec atlatl, in her left a shield and darts. The shield is of interest for it is decorated with a fringe of death eyes and the Maya numeral seven, a symbol of the Jaguar God of the Underworld, also known on shields in Classic Maya reliefs. In front of her is a temple which she has just speared. The curling element by the spear probably represents flames; both are reminiscent of the conquest scenes in the first third of the Codex Mendoza. At the top of the temple, presumably on its ridgepole, is a device which may be a flower placed upon a star.
The Death God (God A), with simple headdress and knife in hand, has just decapitated an old Roman-nosed god, from whose neck blood pours. At the Death God's back is a Toltec shield, and at his knees and ankles are what A. M. Tozzer called tape garters. Specifically Maya are the dot-with-line markings on the legs, although in the Dresden these Death God insignia have dotted lines instead of wavy ones. The belt is also typical of deities in the Dresden, but death collars in that codex are always straight instead of pendulous as here. The figure should be compared to the Death God in one of the Toltec-Maya frescoes of the Temple of the Warriors at Chichén Itzá (Tozzer 1957, fig. 430), which shows a skeleton with a knife in the nasal opening, tape garters at the knees and ankles, and a very similar knife held in one hand.
As mentioned above, the feathered headdress on this figure identifies him with the spearing gods in the central Mexican Venus Tables, with the spearer on page 49 of the Dresden Venus Tables, and with the standing figure on the bottom of Dresden 60. He is attired as a Toltec warrior, with arm protection and knee ruffs. On his chest is a circular pendant with the numeral seven. In his left hand he holds something like a piece of cloth, and in the right a long spear with disk and plumes. Before him stands the bearded head of God C, a Maya deity supposedly connected with the North Star; from it sprouts a plant with disk-like blossoms. This representation seems unknown elsewhere, although similar vegetation is known in the Borgia Codex; on Dresden 41b a head of the old god, Itzamna, forms the base of a tree, but it has a swollen trunk with heart-shaped leaves.
At first glance the deity represented on this page would appear to be unique in Mesoamerican art, but this is not the case. A personage with eagle legs and elaborate avian headdress holds a spear in one hand and Toltec atlatl in the other. His belt with crossed bands is Mayan, but he wears the Toltec back shield; both arms have Toltec protective covering. The headdress—a bird-like mask with fangs, recurved snout, death eyes on stalks over the regular eyes, and attached plumes appears—on the left-hand deity shown in Paris 9; his glyph, VI.168:17. 671, appears in the list of twenty Venus regents in the Dresden Codex, but the god on this Grolier page is young, not old as in the Paris. This same headdress is shown six times on the Death God in the Dresden Codex.

Eagle-legged Toltec warriors appear at Chichén Itzá with some frequency (Tozzer 1957, figs. 434, 436, 584-6). It is known that many of the Toltec men-at-arms depicted at that site wear the accouterments of gods such as Tezcatlipoca and the Death God, and it is not altogether surprising to find an eagle-legged deity at that site.

The object of the deity’s ire is another temple similar to that on page 5; in this instance, the roof ridge has spikes or knives fixed on it. What the curling element in the door of the temple represents I cannot imagine.
A god with tear-drop eye and “Dick Tracy” nose holds a round object (perhaps a stone he is about to hurl) by one hand and a tied captive by the other. His head is cleft, with two stepped scrolls on either side; in the cleft can be seen something like kernels of maize. I presume this is the Maize God, but he bears little resemblance either to Cintéotl, the Mexican Corn God, or to God E, his Maya counterpart. His ear is unusually large and fleshy, and from his neck hangs an ovate pectoral with two dots, an ornament also known for a Toltec-Maya warrior at Chichén Itzá (Tozzer 1957, fig. 690).

The strange captive whom he holds by a double rope has the same prominent upper teeth that he has; on the captive’s head is a bird resembling a cormorant.
This page is so damaged that little can be made of its subject matter. The principal figure was probably standing. In his headdress was a waterbird of some sort, and he wielded a Toltec-style atlatl.
Because the column of day signs is missing, and the page is unattached, it is virtually impossible to place page 11 in the context of the Grolier Codex. Presumably it could be either column H or S. The figure is the Death God, depicted as on page 6. In place of the knife, however, he carries a shield with death’s head and a group of three darts, the bases of which are painted red. A dart is aimed from him toward a body of water, shown as a U-shaped, cross-sectioned container filled with blue-green; in it floats a gastropod. Quite probably this scene would be the equivalent of Borgia 54, in which the Venus god spears the Water Goddess, Chalchiuhtlicue, who is placed in a tank-like body of water in which are found a snail and a turtle, both spewing blood from wounds. It is likely that on the day that was associated with this particular part of the Venus cycle, drought was expected (Thompson 1950:217).