THE COSMIC TEETH
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IV. The Teeth of Vakub-Cakix

The most elaborate and altogether the most obscure mythic concepts relating to the teeth are found in the story of Vakub-Cakix in the Popol Vuh of the Quiches of Guatemala in Central America. As extant, the Popol Vuh dates only from the seventeenth century A.D., but it purports to be a memory reproduction of an ancient lost book. The extant text was written in Quiche by a native of Guatemala and shortly translated into Spanish by Francisco Ximenez; but both the Quiche text and the Spanish translation remained concealed in Guatemala until the middle of the nineteenth century, when they were found by C. Sherzer, who published the translation of Ximenez in 1856. Brasseur de Bourbourg published the Quiche text with a French translation in 1861, and several other translations or versions have appeared since then, the best of which is that of J. A. Villacorta and F. Rodas, in Spanish, published together with the Quiche text under title of Manuscript de Chicicastenango (Popol Buj), Guatemala, 1927.

We shall find reasons for concluding that in the original myth of Vakub-Cakix he was a personification of the imaginary fire of the underworld, and that as such he was recognized as a dawn figure:

17 An English version of Book I (otherwise Traditions I and II), including the Vakub-Cakix myth, was published by J. Price in Lucifer, a Theosophical magazine, 1894-1895. K. S. L. Guthrie followed with an English version of the whole Popol Vuh in another Theosophical magazine, The Word, 1905-1906. A German version by N. E. Pohoriller appeared in 1913; a Spanish version by S. I. Barberena, 1923, and a French version by G. Raynaud, 1925. We also have English epitomes of the work by H. H. Bancroft (in his Native Races) and by L. Spence (in his Popol Vuh, a booklet, 1908; in his myths of Mexico and Peru, 1913, and in the Open Court, Vol. XI. II. Nov., 1928). All these versions and epitomes follow Brasseur or Ximenez, or represent a composite of both; but Brasseur is not very exact and Ximenez even less so.
for it was supposed that the underworld fire is seen in our world when the gates of the east are opened for the rising of the sun (and again at sunset when the western gates are opened). And we shall also find reasons for concluding that the personified Vakub-Cakix was conceived with a materialized body, and that as a dawn figure he was fabled to have lived in the mythical dawn period that followed the night of a universal deluge; his fabled dwelling place being the dawn land in the far east where the Quiches and other ancient Americans supposed they had originated.

Therefore in all probability the original dental organs of Vakub Cakix were flame-teeth which were conceived as materialized like the rest of his body. And there are reasons for concluding that his materialized teeth were fabled to have been the primordial precious stones, while his eyes were the primordial precious metals; the existing precious stones and metals of the earth being recognized as fragments of his teeth and eyes.

In the Popol Vuh we have the only extant account of the personified Vakub-Cakix. His name is translated “Seven-Fire-Plumes” by Villacorta and Rodas, while others make it “Seven-Fire” and interpret it as “Seven-times-the-color-of-fire”—which may safely be rejected. The same name is applied by the Quiches to the ara-macao, guacamaya, guaca or great macaw, a gorgeous parrot whose predominant colors are red, blue, yellow and green; and as the personified Vakub-Cakix was decorated with plumes according to the Popol Vuh, there can be no doubt that they were conceived like those of the great macaw, and that the “Seven” in “Seven-Fire-Plumes” referred alike to all the colors of the bird and all the colors of the dawn—the gorgeous clouds of the dawn being the plumes or feathers of the personified Vakub-Cakix. Here we seem to have the European concept of the seven primary colors, which could hardly have been known to the Quiches except through the Spaniards; and therefore it is possible that the name as extant is of comparatively late origin. But in all probability the myth of Vakub-Cakix as we have it represents an ancient original in a more or less corrupt form.

Tradition I of the Popol Vuh closes with an account of a universal deluge and the destruction of a race of man-like beings who preceded the human race on earth. In Tradition II we have the
story of Vakub-Cakix, which opens as follows (according to a close rendering of the Spanish version of Villacorta and Rodas):

"As yet there was not on the surface of the land more than very little light, for the sun did not exist. But there dwelt thereon a being filled with pride; Vakub-Cakix was his name."

"The sky and the land already existed, but hidden still were the faces of the sun and moon.

"Then said Vakub-Cakix: 'Only in this manner shall it be possible to bring hither the pure teaching after the inundation of the people. . . . I will be their sun. I will be their light. I will likewise be the moon that illumines them.' So he spoke then.

"'Great is my wisdom and intelligence. I will be he who looms among the people.

"'For my eyes are as of metal, like emeralds set in their sockets where they gleam; and similarly my teeth shine as precious stones, like the clarity of heaven. [Further on he is made to say 'I hold my riches in my teeth and eyes,' and it is stated that "his teeth of emerald. . . . made his mouth gleam," while his eyes had a "metallic glitter"].

"'In this same manner my nostrils gleam afar, like the moon; the place where I shelter myself is also of metal; the surface of the ground also shines when I go forth in front of my place of shelter.

"'In this same manner then I am the sun and the moon, and I will be the cause that the sons and daughters of the land civilize themselves and become intelligent; and so will it be because my sight reaches afar.'

"Thus spoke Vakub-Cakix; but in truth he was not the sun that gives light, and it was only pride of his plumes and metallic glitter that made him speak thus."

That Vakub-Cakix was conceived as a gigantic figure is evident from the character of his two sons, whose adventures after the death of their father are described in Tradition III of the Popol V'uh. In Tradition II we have only their names and occupations. Cabrakan ("Earth-shaker") shakes the mountains and upsets the earth, while Zipacna ("Earth-heaper") is said to have heaped up certain large mountains which existed at the time of the dawn, and

18 Villacorta and Rodas have "Gakup-Cakix." While their translation will be followed throughout the present consideration of the myth, the older and generally received transliterations of the proper nouns will be employed as being more readily recognizable than those of V. and R.
were in a night created by Zipacna. These sons appear to be no more than mythic variants of Vakub-Cakix himself as a figure of the underworld fire, which was supposed to burst through the earth in volcanoes, heap up mountains and cause earthquakes.

According to the Popol Vuh, the wife of Vakub-Cakix and the mother of his gigantic sons, was Chimalma ("Shield-bearer"), whose death occurred at about the same time as that of her husband. She is well-known as an Aztec goddess (with her name variously transliterated), and is probably a personification of the night, with the starry sky or perhaps the moon as her shield. The mother and father of the great Mexican man-god Quetzalcoatl were Chimalma and Camaxtli, according to Mendieta; but according to Motolinia, they were Chimamatl and Iztacmixcoatl (See H. H. Bancroft, Native Races, Vol. III, pp. 249, 250). Quetzalcoatl ("Bird-serpent") is often figured with a conventionalized bird-face, the bird being the beautiful green and red trogan known as the quetzal (pharomacrus mocinno), the feathers of which are sometimes placed on a serpent in Maya art (Tozzer and Allen, "Animal Figures in the Maya Codices," in Papers of the Peabody Museum, Vol. IV, no. 3, p. 340).

Like Vakub-Cakix, Quetzalcoatl was an introducer of civilization and is said to have been very wealthy in precious stones and metals—and also in maize and other food supplies (see Bancroft, Vol. III, pp. 241, 256, 261). Though generally recognized as a god of the air or wind, Quetzalcoatl is sometimes the celestial deity of the east, the region of wealth and fertility (Seler, Codex Vaticanus B, p. 88), and according to the Anales de Quauhtitlan he wore the decorations of the fire-god and finally burnt himself to death, whereupon his heart became the Morning Star (Ib., p. 138). Acosta describes an image of Quetzalcoatl with the face of a bird having a red bill with ranks of teeth (probably those of a serpent, for birds have no teeth), and he says this image was surrounded by a wealth of gold, silver and jewels (see Bancroft, Vol. III, p. 249). In some respects, therefore, Quetzalcoatl has much the same character as Vakub-Cakix; but the serpent is in no way associated with the latter.

The story in the Popol Vuh continues to the effect that two youths (twin brothers), named Hunahpu and Xbalanque, decided to kill Vakub-Cakix because of his pride and arrogance. They
concealed themselves with their blowguns under a great tapal or nance tree which the giant was wont to climb (every morning) for the purpose of eating its fruits (which are small, round and yellow). When he had climbed into the tree, a pellet shot from the blowgun of Hunahpu wounded him in the mouth, dislocating his jaw and breaking his teeth. He fell from the tree; but was victorious in the ensuing struggle, during which he tore off one of the arms of Hunaphu. The suffering giant carried the severed arm to his shelter or house and hung it over the fire in vengeful rage, at the same time bemoaning his injuries to his wife.

Hunahpu and Xbalanque doubtless represented the sun and moon originally, their blowguns indicating that they were recognized as producers of the winds, which break the teeth of Vakub-Cakix (and scatter his cloud-plumes). These great heroes of the mythical portion of the Popol Vuh were conceived miraculously by a virgin mother (the earth); many of their exploits belong to a journey through the underworld, and they seem to be viewed as human figures who were finally transformed into the sun and moon. The name Hunaphu is generally rendered Master-magician, but Villa-
corta and Rodas have Junajup Blowgunman. Most authorities, including V. and R., agree that Xbalanque signifies Little-tiger (so V. and R. for their Ixbalanque); the animal indicated being the ocelot or American leopard-cat, perhaps suggested as a lunar symbol because of its spotted or blotched appearance. Seler says that "Hunaphu" is the Quiche translation of the Mexican Ce Xochitl ("One Flower") and a variant of the Yucatec Hunhau, Lord of the Realm of the Dead; and this authority recognizes the Quiche hero as a solar figure and notes that "at the end of his exploits he mounts to the sky as the sun" (I'aticanus B, p. 11).

Therefore it appears that the rising sun is represented by Hunaphu when he causes the downfall of Vakub-Cakix as the dawn, while the handlike solar flabellum is represented by the young hero's severed arm suspended over the fire of the underworld (see the present writer's "Cosmic Hands," in the Open Court, Vol. XXIII, p. 8). In accordance with these interpretations, the great tapal or nance tree climbed by Vakub-Cakix may be recognized as belonging to the eastern quarter of the heaven at dawn, when its small, round and yellow fruits (for stars) are devoured by the giant. This tree is probably the Quiche variant of the Mexican Tree of the East, one of the four trees of the quarters of the heaven pictured in the codices. Each of these trees is formed somewhat like a Latin cross, with three main branches. The Tree of the East is painted blue, or blue and green; and always on the top of its upright branch is a green-plumed bird (a quetzal), while the other branches have flowers or jeweled disks at their tips. According to Seler: "The flower, the jewel, the quetzal bird, are all symbols of costliness, of the precious fecundating moisture. By them the East is characterized as a region of prosperity, of fertility, of abundant food supplies" (I'aticanus B, p. 78). In the Codex Fejérváry Mayer (sheet 2) we find an eight-rayed star at the base of the Tree of the East, and a human figure standing on either side of its trunk; the one on the right being recognized by Seler as the sun-god, while the one on the left probably represents the moon; and it is quite likely that these two figures reappear as Hunaphu and Xbalanque beneath the tapal or nance tree. Furthermore, in the same codex, all four trees have seven terminal branches, each with a flower at its tip; while in the Codex Borgia three of the trees, including the Tree of the East, have seven such branches tipped with jewels.
Originally there may have been only two of these cosmic trees, representing the solar flabelli of the east and the west; and their flowers (or jewels) may have represented the variously colored clouds of sunrise and sunset. Therefore the seven branches, like the "Seven" in the name Vakub-Cakix, may have referred originally to the seven primary colors, of which the Mexicans and Central Americans probably learned from the Spaniards.

According to the story in the *Popol Vuh*, the heroic brothers resolve to recover the arm of Hunaphu, and proceed to the house of Vakub-Cakix accompanied by an aged man and woman (unnamed) whose assistance had been obtained. The old couple make Vakub-Cakix believe that they are the grandparents of the youths, whom the suffering giant does not recognize (probably because his eyes as well as his teeth had been injured, according to the original myth—see below). All authorities are agreed that the old couple are the divine father and mother of the human race who appear in Tradition I of the *Popol Vuh*. Their names are generally transliterated Xpiycoc and Xmucane and translated Great White Boar and Great White Tapir; but it is quite probable that they were originally the Great White Boar and the Great White Sow (i.e., male and female peccaries), for swine have always been recognized as prolific animals. Xpiycoc and Xmucane as the divine father and mother appear in the Maya Codex Cortesianus seated under the Tree of Life, which was possibly introduced by the Spaniards as a variant of the Mexican Tree of the East and the tapal or nance tree of the *Popol Vuh*. It is not impossible that Xpiycoc and Xmucane represented the sky-father and earth-mother in the original Vakub-Cakix myth; but in the extant version they appear in human form (probably gigantic), and tell Vakub-Cakix that they belong to a class of physicians who extract worms from aching teeth and cure diseased eyes as well as injured jaws. Sahagun preserves a native

The erroneous belief in worms as the cause of decay of the teeth and toothache was probably suggested by the worm-like form of the tooth-nerve. This belief existed from a very ancient time among Oriental peoples, including the Chinese, Hindus, Babylonians and Egyptians. It was held by the Arabian medical writers of the first Christian millenium and was generally accepted in Europe during the Middle Ages, and even till the eighteenth century. But it does not appear to have been known to the ancient Greeks and Romans; the earliest extant reference to it by a classical writer being in the *De Compositione Medicamentorum* of Scribonius Lagus, cap. X, first century A. D. (See especially K. Sudhoff, *Geschichte der Zahnheilkunde*, pp. 21, 28, 36, 49, etc.).
account of the Mexican earth-mother Tlacoltcotl or Toci as the patroness of those who let blood, those who take worms from teeth, and those who take worms from eyes—literally "tooth-wormers" and "eye-wormers," in Aztec tetlanocuilanque teyxcuilanque (see Seler, Vaticanus B, p. 173, and Bancroft, Native Races, Vol. III, p. 353). There can be little doubt that Xpiycoc and Xmuchane were originally represented in the Popol Vuh story as pretending to be both "eye-wormers" and "tooth-wormers"; but in the extant text nothing is said of eye-worms and there is only a passing allusion to the eyes of Vakub-Cakix as injured or diseased, or both (see below).

In the Popol Vuh, Vakub-Cakix is unable to speak because of the pain from his broken teeth and injured jaw; but he makes signs to Xpiycoc and Xmuchane, imploring them to cure him. And then we have the following dialogue, in which the speechless giant is curiously enough represented as expressing himself by signs:

"'Two boys, mischievous and malevolent, struck me in the mouth and produced this pain which prevents me from speaking, and I maintain myself only by keeping my jaws and teeth in restraint.'

"'Very well, lord. Worms are what molest you. We will take out these teeth, and we will make replacements for you.' 'But this not well,' said he, 'because, being a lord, I hold my riches in my teeth and eyes.'

"'We will put others [i. e., 'other teeth'] in place of these. We will put in some that have the appearance of bone.' Then they thought of putting in for him grains of white maize, because they are like bone [and like teeth].

"'It is well,' he said to them, 'proceed to extract them then.' So they took out the teeth of Vakub-Cakix, and in their place they put grains of white maize which gleamed in his mouth.

"Soon his ostentation of a great personage fell away because already he was no longer such, since this state ended with his having his teeth of emerald extracted, which before had made his mouth gleam. Also they [the aged couple] acted as if to cure the eyes of Vakub-Cakix, and on uprooting them, they put an end to the metallic glitter which formerly they had."

The death of Vakub-Cakix shortly followed, as did that of his wife; and Hunaphu recovered his arm, which was replaced by the
aged couple (in other words, the dawn and the night disappeared, and the sun-god rose with his flabellum hand or arm in place).

The eyes of Vakub-Cakix as a dawn figure are probably stars; and that his nose was identified by some with the crescent moon (as well as with the beak of the great macaw) is indicated by the statement according to which he said: "My nostrils gleam afar, like the moon" (see above). But it is not impossible that he originally had only one eye, for the Morning Star. There can be little doubt that the uprooting or gouging out of his eyes (or single eye) was conceived to have occurred during a pretended operation for the removal of worms; and it is possible that this treacherous act was suggested by the well-known Mexican pictures of a sacrificed human being or god (in profile) with an eye gouged out. According to Seler, this gouging out of an eye symbolizes sacrifice (Vaticanustus B, pp. 184, 192), and Quetzalcoatl as celestial God of the East is sometimes figured in profile with one eye hanging from its socket, as in the Codex Borgia (sheet 51).

In the breaking and extraction of the first or natural teeth of Vakub-Cakix—probably materialized flame-teeth—we have some remarkable resemblances to the breaking and knocking out of the teeth of the Hindu Pushan, which represent the fiery rays of the sun (see above); but here we doubtless have one among many instances of similar mythic concepts originating independently.

The grains of maize (/seeds of Indian corn) that became the second or substitute teeth of Vakub-Cakix were probably conceived as the product of the original maize of the dawn period and the dawn land; all things including maize being fabled to have been of gigantic size in that time and that place.

The ancient Mexicans and Central Americans had several maize deities and various myths relating to the origin of maize. In the latter part of the Popol V'uh, the first maize is said to have been found in a land to the east (the mythic dawn land), while the first human beings were created by the gods from the yellow and white maize of that land (see Bancroft, Native Races, Vol. II, pp. 716-718 and V, pp. 193, 194). Mythically this is the same maize that was originally found by Quetzalcoatl: the account representing him as the wealthy ruler of the Toltec city of Tula in the ancient time when an ear of maize was an ordinary man's load, being so large that it required both his arms to clasp it (Bancroft, Vol. III, pp. 261, 241).
According to the Navajos, the original seeds of maize and other plants were brought by a turkey-hen which came from the region of the Morning Star (ibid, p. 83): and this bird is evidently identical with the sacred turkey of Mexico, called the emerald fowl, to which offerings of maize paste were made (See Spence, Myths of Mexico and Peru, p. 186. Seler says it was called the jeweled fowl, Vaticanus B, p. 75).

Nothing is said in the Popol V’uh as to what became of the body of Vakub-Cakix; but in the original myth it probably mingled with the earth everywhere (not only in the dawn land), while the giant’s substitute teeth were broken into fragments to become the seeds of the first maize plants of ordinary size. And it is also probable that the broken and extracted natural teeth of Vakub-Cakix were fabled to have become the precious stones of the earth, which are various colors and are often said to have a fire of their own; while his gouged out eyes were changed into the precious metals of the earth. In the Popol Vuh, where the giant evidently has a materialized body, his teeth “shine as precious stones,” and his eyes “are as of metal,” etc.

Therefore it seems that the fire-giant as a dawn figure was conceived somewhat like the macrocosmic man of other myths, whose living body formed the material universe, or whose dead body became that universe. In the Egyptian Hymn to Ptah-Tenen, that god has a hidden body, with his eyes as the sun and moon, etc., and it is said to him that “the staff of life (grain) proceeds from thy back (the earth); thou makest the earth to bring forth fruit” (Budge, Gods of the Egyptians, Vol. I, pp. 509, 511). One of the forms of the macrocosmic Ra is that of Tenen, and he is “armed with teeth” (Litany of Ra, I, 3, 66, 71). It is said of the Persian Kuni that the sky came from his skin; the earth from his flesh; the

20 The suggestion for these teeth is of course found in the resemblance between grains of maize and human teeth; and it is quite probable that some of the crude idols of Mexico and Central America were fitted with maize grains for teeth. No evidence of this appears to be extant; but the Hallow-e’en pumpkin heads of modern North America are sometimes given teeth of maize grains, and Sahagun tells us that some of the small images of Tlaloc were moulded of dough, with calabash pits for teeth and haricot beans for eyes. (Historia General de las Cosas de Nueva Espana, I, XXI; Spence, Gods of Mexico, p. 235).

21 Anatole France makes one of his characters say that the pearls which serve for the teeth of salamanders are composed of “materialized light” (Rotisserie de la Reine Pédaulque, IX). A fragment of a rainbow is called “a tooth” and “an angry tooth” in some parts of England (J. Wright, Dialect Dictionary, s. v. Tooth).
mountains from his bones and the trees from his hair (Sikand-gumanick Vigar, XVI, 8-20). According to the Elder Edda, the Scandinavian Ymir's skull became the heaven; his bones, the hills; his hair, trees and plants, etc. (Grimnismal, 40); and the Younger Edda adds that stones and pebbles were made from his teeth, together with some bits of broken bones (I, 8). The teeth of men and animals are the hardest parts of their bodies, and in the Mexican calendar man the sign of the flint-stone is allotted to his teeth (Kingsborough, Mexican Antiquities, Vol. II, plate 75, and Bancroft, Native Races, Vol. III, p. 129). In the case of the macrocosmic man P'an Ku of the Chinese Taoists, his eyes became the sun and moon; the hair of his head and his beard became constellations; his skin and the hair thereon became plants and trees, while his teeth and bones were changed into the metals, and his marrow into the precious stones of the earth (Mayers, Chinese Reader's Manual, No. 558, edition 1924, p. 186). The Mangaians of Polynesia give a similar account of their Ru, as do the Iroquois Indians of their Chokanipak (See A. Lang, Myth, Religion and Ritual, Vol. I, p. 246).22

"The sky and the land already existed" before Vakub-Cakix died, according to the Popol Vuh (see above); but it is probable that the land was conceived as a barren waste immediately after the deluge, and that the subsequent vegetation was fabled to have come from the dead giant's skin, while his flesh became the fertile soil, etc. It is probable that his skin was originally conceived to have been of a green hue; for the dawn and sunset skies of the tropics are often remarkably green, ranging from a deep olive above to the lighter shades below, where they merge into the yellows and reds. And it is also probable that the green hue of the giant's skin was erroneously transferred by some to his teeth and also to his eyes (whence the allusions in the Popol Vuh to "his teeth of emerald" and his "eyes like emeralds").23

22 See also the present writer's "Cosmic Man and Homo Signorum," in the Open Court, Vol. XXXV, p. 10.
23 It is thought by some that "green jadeite" should be substituted for "emeralds" and "emerald" in these allusions, as words for the latter were also quite generally employed for the former by the Mexicans and Central Americans; and as many upper anterior teeth inlaid with little disks of jadeite and haematite have been found in Central American tombs, several of the leading authorities on American antiquities have suggested to the present writer that teeth inlaid with jadeite are to be understood in the Vakub-Cakix myth. But no such explanation can be accepted in view of what is said of the giant's eyes, etc.
Moreover, it is possible that the Vakub-Cakix macaw of the Quiches, as a symbol of the dawn sky, is a mere variant of the Aztec quetzal; for the wing coverts and tail feathers of the latter are green while the breast is scarlet (fiery). And it is also possible that the tooth extraction concept in the myth of the personified Vakub-Cakix was suggested by some ancient story according to which the great macaw or the quetzal originally had teeth but lost them in some such way as those of the dawn giant are said to have been lost.

According to the very unsatisfactory suggestion of Spence, Vakub-Cakix is an earth-god; the extraction of his emerald teeth and the implantation of the maize-seed substitutes being an allegory of the agricultural removal of the green turf of the earth and the planting of maize seed (Popol V'uh, p. 42; Myths of Mexico and Peru, p. 237). Others take the mythical giant for a sun-god, while Bancroft supposes that he was originally a human monarch (Native Races, Vol. V, pp. 184, 187).