COPAN, AN ANCIENT MAYA METROPOLIS BY J. ERIC THOMPSON Assistant Curator, Field Museum of Natural History

R UINED Maya cities are scattered in the forests and jungles of a wide area of Central America comprised within the States of Chiapas, Tabasco, Yucatan and the Territory of Quintana Roo in Mexico, the whole of British Honduras, the northern half of Guatemala and the western border of Honduras.

Copan, situated in the last named country, is one of the most important of these ruined cities, and must, at one time, have been the religious metropolis of the whole of the eastern part of the Maya area. Unlike most Maya cities, it is not buried deep in the forest, but is situated in a pleasant valley some two thousand feet above sea level, where the exuberant growth of the tropical forest has, to a certain extent, been held in check.

Few people outside the ranks of archaeologists have visited this site owing to its comparative remoteness, for a two days' ride on muleback is necessary to reach it.

Puerto Barrios on the north coast of Guatemala is the jumping-off place. This is a typical O'Henry banana port, for there are to be seen all the characters that pass and repass across the stage of his Central American yarns. One can recognize all the types—tropical tramps, pompous Latin American officials, revolutionary leaders resting between bouts, banana workers of every race and color, and the flotsam and jetsam of a port. The town is hot, dirty and roadless, and one is usually glad enough to get out of it at the earliest opportunity.

A railroad, running between Barrios and Guatemala city, carries us from the humid heat of the *Tierra caliente* or hot lands up into the cool mountainous climate of Guatemala city. For the first three hours the train passes an almost continuous series of banana

plantations owned by the ubiquitous United Fruit Company. One seems to be passing through an endless green-walled tunnel broken only by the occasional clearings, on which are situated the houses of the farm managers or laborers. One perspires, fans oneself with a paper, and wonders how there could possibly be so many banana trees in the world.

Just as one begins to believe that the banana farms will never end, the country suddenly changes, and the train is traversing a semidesert country of grassless fields and stunted trees, liberally strewn with organ-pipe cactus.

About five hours after leaving Barrios we reach Zacapa, base for the mule trip to Copan. Here we spend the rest of the day bargaining for mules and envying our fellow passengers of the train, which is now climbing up into the cool air of the plateau country. Finally everything is arranged for an early start next morning. The muleteer has sworn by all his saints that the mules will be ready at 6:30 am., but, after many such trips in Central America, only a rank optimist would expect to get away at the hour fixed. The Latin American muleteer with his lithe build and flowing moustache seems to have inherited a little of the proud mien of the conquistadores, but the mules with their slow gait and mean stature have little in common with the horses of the conquest, to which "After God," to use his own expression, Cortez so frequently attributed his victories and escapes from defeat.

The trail stretches eastward across the cactus-studded plain for a few miles, and then starts its climb into the hills. It soon narrows to a boulder-strewn footpath which zigzags up the hills, descending frequently into valleys to cross dried watercourses, only to rise more steeply on the far side. Progress is slow; with halts to adjust cargo and other inevitable delays the pace is slowed down to less than three miles an hour. Riding thus in single file conversation is difficult, and the silence of our passage is broken only by the shouted curses of the multeer at the laggard mules and the metallic clang of ironshod hoof against rock. The country is without inhabitants, and life is represented solely by innumerable lizards that resentfully abandon their sun-baths on our approach, and myriads of crickets vibrating a hidden chorus.

As evening is approaching, we file into the little town of Jocotan conveniently situated halfway between Zacapa and Copan, and suf-

ficiently high up to insure a cool night. Jocotan, like every Central American settlement, sprawls around a large plaza, flanked on one side by the low long municipal court-house, on another by an equally squat and lengthy seventeenth century church.

In the days when Jocotan's church was built, the Spaniards were few and the hostile Indians around them many, and so it was built to serve the dual purpose of worship and defence. An outside staircase leads to an embattled roof. Thither, in times of danger, the little settlement could retire—the women and children to safety, the men to man the defences.

To-day there is no danger of Indian raids. The Indians are few in numbers and cowed in spirit. The staircase is slowly crumbling away, adding one more feature to a scene already pregnant with beauty. In the cool of the evening the plaza serves as the foreground for a restful picture with the whitewashed walls of its houses topped by weathered, red tiles, forming a contrast to the mountains behind with their earth colors broken by the dark greens of pine forest on the higher slopes. The rest of the canvas is covered with a cerulean blue that towards the west fades into the pale lemon of a cloudless sunset.

Hammocks are slung on the verandah of the little straw-thatched posada, while close at hand the mules seem contented with their vitaminless diet of dried cornstalks—all that is obtainable in this grassless land. A few people stroll slowly round the plaza, the men promenading in groups of threes and fours in one direction, the girls in the other. One or two guitars are half-heartedly strummed, but the sparse oil lamps in the houses are soon dinumed, and Jocotan relapses into silence. The peace of the sleeping town is broken only by the barking of dogs and the steady munching by our mules of the diminishing pile of cornstalks.

Next morning we are off as soon as coffee has been drunk and the inevitably broken girth or stirrup leather has been mended with string in the best Central American style. A mile or so beyond Jocotan, the trail enters another small town, complete with eighteenth century church decorated in a kind of local plateresque style. This is Camotan, which is to Jocotan as St. Paul is to Minneapolis. Jocotan means the place of the plums, Camotan the place of the sweet potatoes. Both are Aztec names dating from the conquest when Mexican mercenaries were employed by the Spaniards in the sub-

jection of this country. After Camotan the country becomes wilder and more mountainous. In many places the narrow trail clings to the mountainside, while, hundreds of feet below, torrential streams roar their protests at the boulders that impede their hurried rush to the sea. High up on the mountain slopes are little scattered settlements of the Chorti Indians, a branch of the Mayas who built the city of Copan some fifteen to twenty centuries ago. These modern Mayas are a humble people, who show little evidence of their noble descent. All the greatness of their ancestors is lost, even the knowledge of their past, and they are content to live in little communities of four or five huts and tend their maize and sugarcane fields. These are situated high up the mountain sides, and are set at almost incredible steep angles. The Chortis encountered on the trail appear a timorous lot, either passing with downcast faces or, where this is possible, slipping off the trail till we have passed.

Soon we are in the sweet smelling pine forests. At the divide is a small pile of stones, surmounted by a cross and decorated with little bunches of flowers or bundles of pine needles. This is an Indian offering to the old Maya mountain god with a thin veneer of Christianity imparted by the cross. There is a freshness in the air like that of a new England spring morning, which even our weary mules appear to relish. For several hours more we ride round or across mountains until just before sunset we top yet one more small rise, and find ourselves looking down into the Copan Valley.

Three miles away the mass of the main group of ruins can be distinguished beyond the modern village of Copan, while a few feet away from us where we stand looking down into the valley, a solitary stela appears to be giving us a bienvenida.

It was customary at Copan, as in most Maya cities, to erect these stelae at fixed intervals of five, ten or twenty years. They are monolithic stone shafts, averaging about twelve feet in height, and almost invariably carved on the front with an elaborate figure, who probably represents the deity to whom the monument is dedicated. The remaining three sides are usually given up to hieroglyphic inscriptions that record the date of the monument's erection, the age of the moon at this date, information as to the movements of other planets, the names of the patron gods of the night and the month, and other ritualistic information not yet decipherable.

It has been claimed that this solitary stela on the lip of the valley above Copan formed with another monolith of the same type on the opposite, or east side of the valley, a giant line of sight, nearly five miles in length. This, it is claimed, the ancient Mayas used as a check on the length of the tropical year and to fix the date on which their fields were to be burnt off prior to sowing. The sun sets behind the western marker on April 12th during its passage northward, and this is about the date when the modern Mayas start to burn their fields. Nevertheless, definite evidence



Courtesy of Field Museum

A stela at Copan

that these two monuments served this purpose is lacking.

The main group of ruins, situated in the bottom of the valley on the banks of the Copan river, consists of a series of courts flanked by a bewildering array of pyramidal structures once crowned with temples. Both pyramids and temples are faced with beautifully faced stone and adorned with numerous decorative motifs. Copan was at its height in the eighth century of our era, or, according to a different correlation of the Maya and Gregorian calendars, about the middle of the sixth century A. D. At that time with its gaily painted and carved temples perched on the tops of high pyramids with terraced sides and broad stairways, the city must have presented an overwhelmingly impressive spectacle. Copan was primarily a religious center.

The city must have witnessed many ceremonies of barbaric splendor. One pictures processions of priests bedecked with the sweeping emerald plumes of the quetzal bird, wending their way across the courts and up the steep stairways to the temples above. Probably prisoners were led up here to be sacrificed while the court below was crowded with breathless spectators. Direct evidence of this usage at Copan does not exist, but human sacrifice was of frequent occurence in later Maya cities of Yucatan, and there is evidence of the practice in other early cities of Guatemala that were contemporaries of Copan. In the more usual form of sacrifice the priest opened the breast of the victim with a sharp stone knife, and inserting his hand in the cavity, wrenched out the heart. The wretched individual, who was generally a prisoner of war, was held by four assistant priests so that the small of his back rested on a low convex stone. In other forms of human sacrifice the captive was shot with arrows.

Despite this somewhat gruesome custom, the Mayas had attained by the eighth century of our era a very high level of achievement, particularly in art and mathematics. Copan was in the van of this advance. Her artistic achievements are well exemplified by the magnificent carving of the personage on the face of the stela shown in the picture. The Maya artist was largely shackled by convention. His object was not mere portrayal, but rather the conveyance of religious symbolism by well stylized and conventionalized media intelligible to the layman. Portraiture was secondary and dependent on the prior fulfilment to the last detail of every symbolic feature. Once one realizes this subordination and the Maya artist's horror of space unfilled by decoration, one speedily appreciates that the best Maya art was incomparably superior to that of

Egypt at any time and to that of the rest of the contemporaneous world.

Copan, in addition to being a great artistic center, was in its heyday the intellectual leader among Maya cities. One might al-



Courtesy of Field Museum

The head and shoulders of the personage on a Copan stela.

most name it the Athens of the Maya confederation. Perhaps Copan's greatest intellectual achievement was the astronomical conference held here in A. D. 763. At this conference the length of the tropical year was fixed with such accuracy that, in computations over a period of four thousand years, the Mayas had an error of only one day. A truly remarkable performance when one considers that the Julian calendar, which was in use in this country until the seventeenth century, would have had an error of thirty days over the same period.

Copan was justly proud of this achievement, and commemorated it by carving on an altar bearing this date the portraits of a series of individuals who were in all probability the actual members of the astronomical conference. In the photograph four of these persons are seen facing towards two glyphs which record the date 6 Caban 10 Mol. This was the basis for the new computations, and



Courtesy of Field Museum

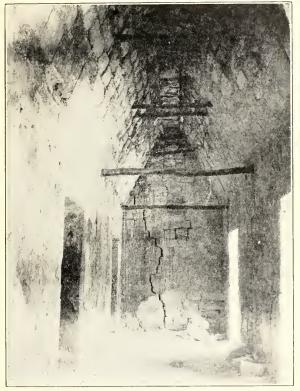
Grotesque head on stone incense burner at Copan.

in the first of the two correlations mentioned, corresponds to July 1st 763 A.D.

One of the wonders of ancient Copan was the great hieroglyphic stairway. This consisted of a flight of some ninety steps leading up the face of a steep pyramid to a temple on the summit. Each step, which was thirty feet wide, was carved with hieroglyphs, and, at intervals, were set stone-sculptured individuals of heroic size. Each individual wears an elaborate head-dress surmounted by a mask representing a deity, and is richly clad in addition to displaying intricately carved jade jewels. Jade was the most treasured

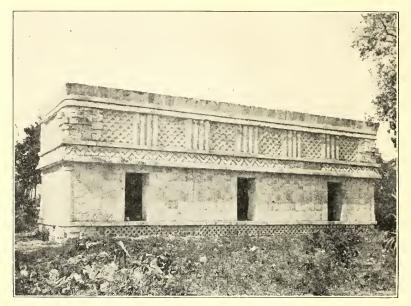
possession of the Mayas. It was worn in a number of different ways, particularly as nose and ear ornaments, as inlays in the teeth, and in the form of elaborate breast ornaments. Indeed, in later times when gold was in use, it was considered less valuable than jade.

The ruins are profusely strewn with carved stelae and altars, no less than eighty of these having been discovered. Their carving must have been a tedious business as the Mayas possessed only



Courtesy of Field Museum Interior of a typical Maya temple showing corbelled roof.

stone tools at this period. The background was laboriously pecked away with crude stone hammers until the design was left blocked out in rough relief. Then the face of the carving was smoothed off by abrasion with celts and sand. The monument was hauled to its position on rollers, and then raised into position, probably with the aid of ropes passed over trunks in the manner of a primitive pulley. The whole community must have been pressed into service



Courtesy of Field Museum

A temple of late date in Yucatan.

when the construction of a pyramid, court or temple was undertaken. Perhaps these forced laborers would have worked with a better will had they realized that their work would still stand after more than a thousand seasons with their attendant floods and rapid changes of temperature.

In the middle of the ninth century this great era of activity came to an abrupt end. Within a period of some fifty years, construction ceased in every important city of the early period. In Copan and all the great centers of the lowlands of Guatemala it was never to be restarted, but in Yucatan a brilliant development was soon in swing, which continued until shortly before the coming of the Spaniards.

Many theories have been advanced to account for this collapse in the south. It has been suggested that the early cities were abandoned because of the impoverishment of the soil owing to the wasteful agricultural system of the Mayas. This was based on clearing and burning off large tracts of forest land, and employing the soil thus cleared for one, or at the most two, seasons before abandoning it, to permit of refertilization through fresh forest growth. Such an explanation is unsatisfactory for it does not account for the continued occupation of Yucatan, where the soil is considerably poorer than that of the southern area.

According to another explanation yellow fever swept off the population, but there is no real evidence that this disease was even known in the new world prior to its discovery by Columbus.

A third and quite plausible theory is that the Maya area was once drier than it is to-day, but a gradual increase of the annual rainfall eventually made agriculture so arduous for a people forced to fight back the onslaught of tropical forests with stone tools that the whole southern area was abandoned. In Yucatan, where the civilization continued, the rainfall was not so heavy and the forest growth consequently more checked. Indeed, at the present time the rainfall in Yucatan is much less than in the southern region.

It is also possible that there was a revolt among the workers against the virtual slavery imposed on them by the priesthood. The continual building and rebuilding of pyramids and temples must have entailed an extremely irksome form of forced labor for every man and woman in the community. This combined with resentment against new religious concepts imposed by the theocracy on the layman may have caused a revolt, which ended in the massacre or expulsion of the priesthood and other members of the aristocracy. With their death or departure building operations ceased, and the common people, uninterested in any branch of science, gradually slipped down the path of cultural degeneration until, kicked farther down by their Spanish conquerors, they have reached their present stage—pathetic inheritors of a civilization they rejected. After this very brief survey of Copan and its culture, it would be interesting to look a little more carefully into the religious concepts of this remarkable people to see if they carried into the realms of religion the same peculiar balance of progress and primitiveness that characterizes their material culture.

For information on the religion of the Mayas we can turn to three sources. First, we have the information handled down to us by the first Spaniards who came in contact with the Maya civilization. Secondly, we have such information as we can deduce from the carved monuments and the three manuscripts of hieroglyphic writings that have survived. Lastly, we can go to the modern Mayas, descendants of the city builders and find how much of their old religion has survived four centuries of European contact.

Actually, the information that can be gleaned from all three sources is not very great. The early Spanish chroniclers with few exceptions were priests, who were so busy extirpating heathenism that they had little time or inclination to enquire closely into what the Mayas believed. The sixteenth and seventeenth centuries were not marked by the spirit of tolerance. Catholics were no worse than Protestants, but when one realizes that the Mayas were subjected to Autos de fe, and suffered death for relapsing into their old religion less than twenty years after the introduction of Christianity, one can not expect a sympathetic study of their religion from their inquisitors. As a matter of fact the best description of Maya religion has come to us through one of the most cruel and bigoted of the early evangelizers. Bishop Landa, the author of this treatise, was recalled to Spain because of his cruelty to the Indians, and furthermore in modern eyes he was guilty of an even more serious offence. He collected all the hieroglyphic writings he could lay his hands on, and burnt them as works of the devil—an irreparable loss to science as only three of these books have survived the holocaust. We regret having to acknowledge our indebtedness to such an individual, but without his writings we should know little indeed about Maya religion and ritual. Actually much that he wrote on this subject was probably supplied to him by a certain Gaspar Xiu, an early convert to Christianity of royal Maya descent and remarkable intelligence.

The information that can be gathered from the monuments and codices is scanty in view of the fact that so many of the hieroglyphs are still a sealed book to us, but it has been possible to correlate some of the information given by the Spanish writers with that yielded by the stelae and other inscriptions.

The ethnological information that can be gleaned from the modern Mayas is our one great hope of reconstructing the ancient religion. The modern Mayas, of whom there are at least a million, are nominally Christians; this is but a thin veneer; underneath they remain essentially pagan. To scrape away this veneer of

Christianity and reveal what it hides is the task that faces the modern ethnologist.

Frequently we find that the present day Mayas have welded Christianity on to their old religion to form a new polytheistic concept with the Christian God at the head of the pantheon. Beneath Him are a number of junior gods, whose numbers are recruited in about equal parts from the ranks of the old Maya gods and the more important saints of the Catholic church.

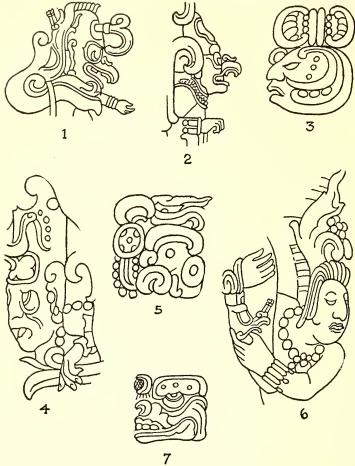
The ancient Maya religion seems to have been very largely based on nature worship. Maya economic life revolved around the success or failure of the crops, consequently we find personifications of the maize crop and those aspects of nature in closest contact with it. The most important deities to the Maya layman were earth gods, who by extension of their functions became also gods of rain, thunder and the winds.

The Mayas seem to have conceived these gods as being innumerable, but four of them were of paramount importance, and one of these four acted as chief god of the whole band. The big four, if one can apply this modern term to a group of Maya gods, were associated with the four world directions and four world colors, fundamental Indian concepts that are met with all over aboriginal America. These earth-rain gods are essentially benevolent, but if their dues of offerings are denied them they can be destructive, either by withholding the rains required by the crops, or causing destruction with storms and thunderbolts. They also ruled over the rivers and lakes.

In Guatemala these gods were known under various names. Among the Kekchi-Mayas they were, and are to this day, known as *Tzultacah*, which means "Mountain-Valley," a poetic way of expressing their ubiquity as earth gods. They were also addressed as "Our Grandfathers, our Grandmothers," the implication being, apparently, that they have existed since the creation of the world. They are of both sexes, and appear to change sex with consummate ease, for one moment a particular *Tzultacah* will be considered a male, another moment he will be spoken of as feminine. In Yucatan, where mountains are non-existent, they were known as *Chacob* or *Yumil Kaxob*—"The Thunders" or "The Lords of the Forest."

These earth-rain-fertility gods were and are, for they are still

worshipped in many parts of the Mayan area, the recipients of prayers and copal incense. They guard the crops from predatory animals and insects, send the rains when required, and, in their



Courtesy of Field Museum

Maya gods as depicted on Copan stelae.

- 1-2 The long-nosed earth and rain god.
 - 3 The Moon deity.
 - 4 The Sun god.
 - 5 God C, the monkey-faced god.
 - 6 The maize spirit.
 - 7. The death god.

guise of earth gods, fatten the crops. According to legend they gave maize to man, smiting asunder with their thunderbolts the rock in which it was hidden. On the monuments they are shown with modified ophidian features, the snake being closely associated with rain and crops among the Mayas as among so many other Indian peoples. In Figure 6 is depicted a typical head of one of these fertility gods. The nose has been prolonged into a kind of proboscis, which is actually derived from the conventionalized upper jaw of a snake. In the drawing the rain god is emerging from the open jaws of a serpent's head. The similarity of the god's nose to the snake's upper jaw, which stretches upward immediately behind the god's head, is very apparent.

Frequently the earth and rain gods are represented as carrying stone axes over their shoulders. These are the thunderbolts they hurl to earth, indeed, the modern Mayas still believe that a house or tree struck by lightning has been hit by a stone axe thrown by one of the rain gods. They are also believed to carry calabashes of water, and drums. They bring the rains upon earth by pouring out a little water from the calabashes, and they make the thunder by beating on their drums.

In ancient times, apparently, they were believed to preside over one of the abodes of the dead, a paradise which, strangely enough, was largely if not entirely peopled by suicides. This was considered a pleasant land where crops were ever abundant, and people rested in the shade of the sacred ceiba tree (Bombax ceiba).

These fertility gods were the most important in the eyes of the Maya layman, whose life was bounded by his crops. Probably few peoples have such a love for the soil as that shown by the Mayas, both ancient and modern. Maya civilization, I repeat, was based on maize, and it was only meet that its most revered gods should be of the soil.

Of secondary importance from the layman's viewpoint were the sky gods. The sun and moon bulk largely in legend, but had little attention paid them by the peasant. The sun was believed to have been a great hunter during his abode on earth, the blowgun being his weapon. He wooed, and after many adventures won the moon, the inventress of weaving. The emblem of the sun is a St. Andrew's cross placed in a cartouche. The sun was seldom invoked in prayer, for it was believed that were he asked to shine down with more

warmth on the earth, he would not know when to stop, and a drought would ensue.

The sky god, par excellence, was known in Yucatan under the name of Itzamna, and was ranked as a creator god. He is invariably pictured on the monuments and manuscripts as an old man with toothless mouth and heavy Roman nose. The Mayas do not appear to have accorded him much worship either, for he was considered too remote to take much interest in the every day life of the common people. For that reason the earth gods were more popular with the rank and file, for although not so powerful as Itzamna, they were close at hand, and able to see with their own eves what the people needed.

A good illustration of this belief, slightly metamorphized by Christianity, came to my notice in a small Mava village in southern British Honduras. This village of San Antonia was founded some forty years ago by immigrants from the village of San Luis in Guatemala. At first the crops were poor and disease rife. It was concluded that the reason of this was that Saint Louis, their patron saint in their old village, was too far away to see their troubles, for his statue had remained in San Luis when they migrated. An armed expedition to seize him was despatched. This burst into the village when everyone was sleeping, and the saint was successfully removed from the church and taken to San Antonio. Since his rape crops have been good, and the better times are attributed to his presence, for now he is on the spot, and well able to see that nature is functioning as it should. The sky gods were associated with astronomy, and were of more importance to the priests. There seems little doubt that there were two very different sets of religious ideas held by the laymen, on the one side, and the priests and nobility, on the other.

One of the most important rites in this esoteric cult of the priests was the worship of the planet Venus. This appears to have been a later concept evolved by the priesthood, and unsuccessfully foisted on the laymen. That the cult was of very great importance is shown by the large number of temples dedicated to its worship, but traces of it are very few among the modern Mayas, and legends clearly reveal that Venus as the morning star has usurped many of the functions of the earth-fertility gods. At the time of the conquest most of the old Maya nobility and priest class was wiped out, and their re-

ligious knowledge and science died with them. The Maya religion that has survived is that of the peasant, and as that body never seems to have taken kindly to the Venus worship, it is not surprising that few traces have survived.

The priest and nobility group were also in all probability responsible for the practice of human sacrifice, as such a concept is at variance with the essential friendliness of the earth gods. As I have already stated, there is a possibility that the fall of the Old Empire was due in part to a revolt of the peasants, and the foisting of these alien cults on the people, combined with the slavery involved in the building of pyramids and temples in large quantities, may have been important factors in the revolt.

Prayers of the ancient Mayas have not survived, but below is given a short prayer collected by me in southern British Honduras, and used by the modern Mayas in addressing the earth-rain gods in connection with the sowing of their crops. The prayer is simple, but probably does not differ greatly from the prayers that have been said every spring throughout the Maya area for the last three thousand years.

"O God, my grandfather, my grandmother, Lord Huitz-Hok, god of the hills and the plains, Lord Kuh, god of the maize lands, with all my heart, with all my soul I make this offering (copal incense) to you. Be patient with me in what I am about to do for the sake of God Almighty and the Blessed Virgin Mary. I pray you give me an abundant return for all the crops I have sown, for all the work I have done in my fields. Guard them for me, let nothing damage them. May I harvest from all that I have sown."

Some fifteen hundred years ago very similar prayers must have mingled with the fumes of the copal incense in the fields around Copan, while in the temples of the city the pomp and splendor of a developed ritualism made a strange contrast, but the sacerdotalism has disappeared, while the simple prayers have survived.