

MAYA CIVILIZATION, — 100% AMERICAN

SYLVANUS GRISWOLD MORLEY

EUROPEANS are fond of telling us that America has no distinctive art. In this paper Mr. Morley demonstrates that the ancient Mayas of Central America developed a complex art and civilization which has every claim to the epithet, "100 per cent American."

THE FORUM takes this occasion to reprint together with this article an explanation of its cover design. From what source could the modern American FORUM draw more fitting symbols than from the art of those first civilized Americans?

the Maya race and culture. Truth is, however, as this presentation will endeavor to show, that Maya culture owes nothing to Old World inspiration, that its splendid achievements in art, architecture, sculpture, astronomy, and chronology were essentially and exclusively the product of its own ingenuity; in fine, that its origin was in the strictest sense of the word, autochthonous. By their own sandal-straps, so to speak, the ancient Maya lifted themselves from a state of savagery to the highest plane of intellectual development found upon this continent before the coming of the white man.

Before presenting the evidence upon which this assertion is based, however, it will be necessary to trace briefly the rise of the Maya civilization and the course of its development.

It is generally held by American anthropologists that civilization in the New World is indissolubly linked with the origin of corn or maize. Corn was the great American food-staple, and where corn was first developed and cultivated there began our first American civilization. But as to just where and when this took place, there is some doubt.

Two principal lines of investigation have been followed by botanists in their attempts to solve this all-important question, — important alike to the archeologist, the botanist, and the biologist, — each unfortunately leading in a different direction to

EVER since the Discovery of the New World, persistent and ingenious attempts have been made to derive our greatest native American civilization, the Maya, from some Old World origin. The Ten Lost Tribes of Israel, the ancient Egyptians, the Phoenicians, the Javanese, the Cambodians, the visionary folk of fabled Atlantis, even our own Latter Day Saints, have been variously hailed as the progenitors of

a different continent for the origin of corn. The two questions which botanists have sought to answer in this connection are: "Where do the nearest relatives of corn occur?" and, "Where is the greatest specialization of types?"

As to the first question, the answer is perfectly simple. The *only* relative of corn close enough to cross with it at all and produce hybrids, is a wild grass found in the highlands of central Mexico, which was called significantly enough by the ancient Aztecs "teocentli", "the grass of the Gods." "Teosinte," as it is called to-day, is the only known plant that will hybridize with corn, the pollen of either fertilizing the other, so that it appears unescapable, whatever origin we conceive corn may have had, that teosinte must have had a place, somewhere, somehow in its ancestral tree. And once this has been admitted, the place of origin of corn and our first American civilization would appear to have been localized as somewhere in the highlands of central Mexico, i.e., the range of teosinte.

As to the second of our two questions, the answer the botanists give us is no less positive and contradictory. The greatest specialization of corn, the greatest number and diversity of types, is found in Peru, the homeland of so many domesticated plants, even a fossilized ear of corn having been found there. Indeed, were it not for the entire absence of any close relatives of corn in South America, the botanist would unhesitatingly give the credit for its domestication to some forgotten pre-Inca people of Peru. But this lack of a genealogy is a serious obstacle to accepting a Peruvian origin for corn, since some sort of ancestor, no matter how remote and humble, is really necessary to start any family.

And here, so far as the botanists are concerned, the matter may be said to rest. The more formal and conservative school, perhaps we may call them the fundamentalists of botany, hold that corn was developed gradually through a very long period of time, — incidentally far more time than the anthropologists are willing to allow, — by minute changes in the characteristics of the progenitive types, human cooperation figuring in the later stages of this evolution.

The modernists, on the other hand, require no such length of time, being satisfied with ten thousand years or so, and are correspondingly more beloved of the anthropologists, who generally

agree that the American continent was peopled not more than 15,000 years ago from northeastern Asia. These botanical modernists suggest that corn came into being as a hybrid between teosinte, or one of its recognized relatives, and some other grass at present unknown, or at least unidentified, as a corn forebear. Such an origin could have taken place in a relatively short period of time, infinitely less than the time element demanded in the theory of origin by gradual evolution. Remember in this connection what has been done with the potato in less than four centuries, or what a Luther Burbank was able to accomplish in a single lifetime.

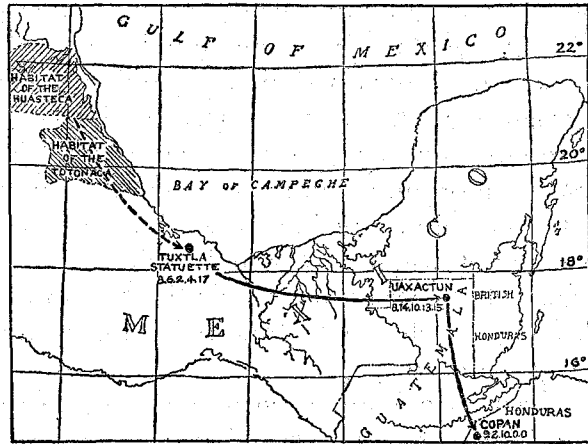
Casting our lot in with the modernists then, let us try to reconstruct the picture of civilization in the New World on the basis that it arose with, and because of, the cultivation of corn somewhere in the highlands of Mexico, the natural habitat of teosinte.

Spinden and others have shown that coincident with the invention and primary dissemination of agriculture as applied to corn, somewhere in this general region, there seems to have spread with it over the greater part of Central America and the adjoining parts of South America, — holding closely to the arid, tropical regions and avoiding the low Atlantic coast-plain with its heavy rainfall and rich alluvial soil, — an early homogeneous civilization, called the Archaic, characterized by a simple and undeveloped religion, an unsymbolic art, pottery-making, and loom weaving.

It is further believed that this culture, or type of civilization, was the common inheritance of peoples then living in the highlands of Mexico, and that the Nahua tribes, if indeed they were not directly responsible for the development of corn, at least led in its dissemination, carrying it southward down the Pacific coast-plain of Central America to Guatemala, Salvador, Nicaragua, and the Isthmus of Panama. It appears likely that before this period of dissemination, which can not be placed later than 1000 B.C. and probably is much earlier, the Maya were to be found on the Gulf coast-plain of Mexico, possibly in the region now occupied by the Huasteca and the Totonaca. (See accompanying map.)

At this remote time, the Maya, far from being the leaders of civilization on the American continent which they later were to

become, were perhaps among its most backward peoples. It is to be assumed that they lived by hunting and fishing, moving to and fro in their quest for food and not held to fixed abodes by the exigencies of an agricultural life, all their time and energies being wholly absorbed by the struggle for bare existence.



Probable place of origin of the Maya Civilization

Sometime, let us say in round numbers about 1000 B.C., to the Maya then living as nomads in this region so richly endowed by nature with all the factors most essential for the growth of crops, — a fertile soil, heavy rainfall, and a continuously warm climate, only wanting cultivation to yield a maximum return for a minimum effort, — there may have come from their, at this time, more highly civilized neighbors on the central plateau of Mexico, knowledge of agriculture, probably first applied to the cultivation of corn.

Soon because of the several favorable factors mentioned, the returns in proportion to the effort expended became very much greater than on the adjacent highlands. Nature was more helpful. The harvests became more and more abundant, until, from scarcely sufficing for the general needs from one harvest to the next, food reserves began to be accumulated, thus relieving individuals more and more from purely economic production and permitting them to devote their energies to other ends, religious and esthetic.

Agriculture brings about tremendous changes in the lives of groups which it touches for the first time. It is literally the foundation-stone, the *sine qua non* upon which civilization rests. Instead of moving hither and thither, driven by the necessities of a hunting life and a wild plant dietary, living in temporary shelters, under very loose social and governmental organization, man finds

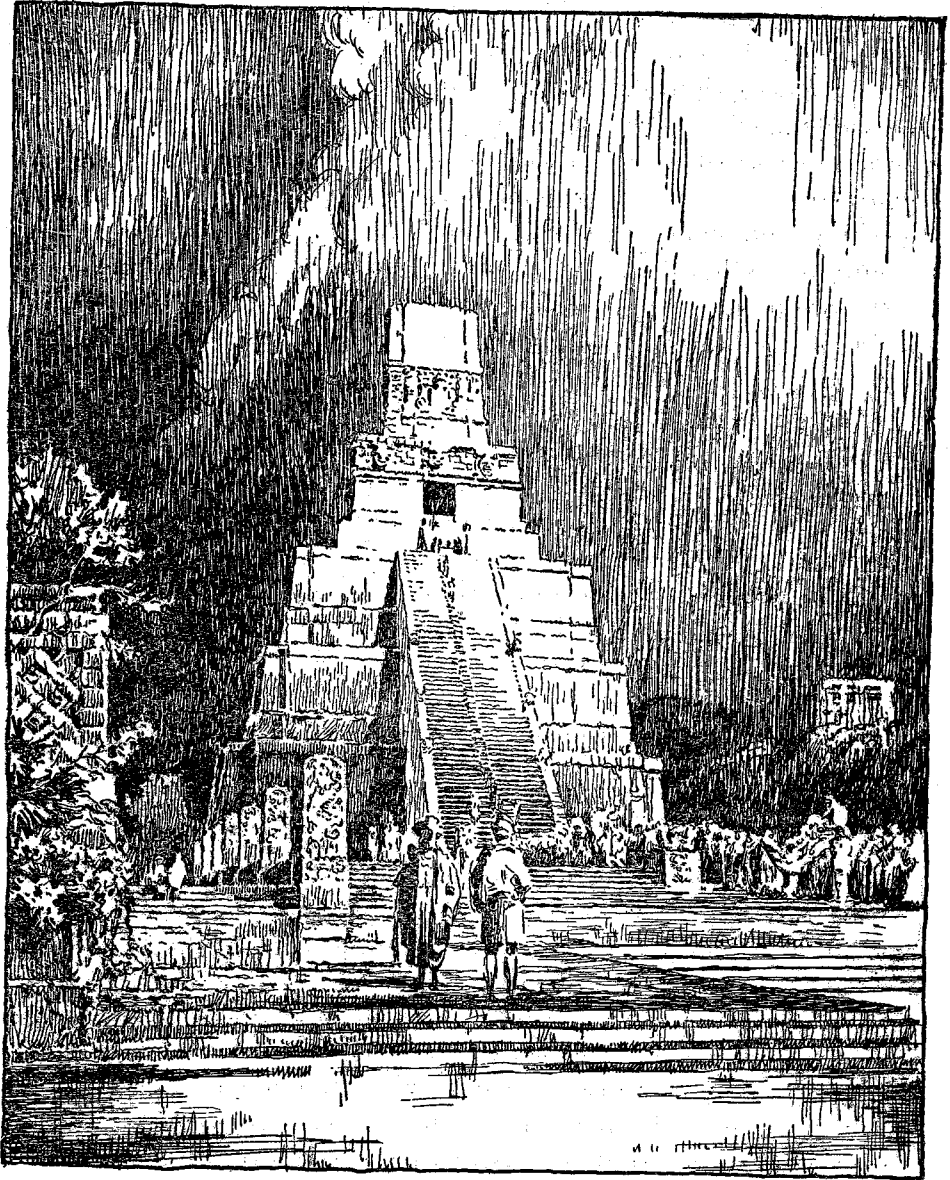
agriculture for the first time making possible, indeed compelling, the establishment of permanent homes, and developing the need for property rights. Larger social units than the family become possible, such as the clan, tribe, and finally the nation, and with less and less time absorbed in the production of food, more and more time is devoted to the general social development, pottery-making and loom-weaving are invented, religion becomes more complex, esthetic instincts wider and more elaborate in their expression.

Some such condition probably befell the Maya after the introduction of the cultivation of corn from the highlands of Mexico not later than the first millennium before Christ; and because their habitat, the Gulf coast-plain was so richly endowed by nature to begin with, and because it was so much more fertile than that of their neighbors on the arid central plateau, the civilization which they were able to develop gradually surpassed all surrounding cultures and eventually under the Old Empire became the finest flower of the aboriginal American mind.

In some such way as this, then, the Maya civilization probably had its origin, presumably somewhere on the Gulf coast-plains of Mexico between the Grijalva and Pánuco Rivers eighteen degrees to twenty-two degrees north latitude, and the writer believes, although the point is as yet incapable of direct proof, sometime toward the end of the second millennium or the beginning of the first millennium before Christ.

Subsequent Maya history is more a matter of record and less of speculation. In the general southward migration of the Maya race, the Huasteca seem to have been thrust off or left behind before the distinctive Maya civilization had been developed. This people, speaking an indubitable Maya dialect, nevertheless present no single element of Maya culture. No archeological remains of Maya type have been found in the Huastec region, and we are forced to conclude that this tribe became separated from the main body of the Maya before their highly distinctive civilization was developed.

The earliest dated object in the Maya hieroglyphic writing is a small jadeite figurine found near San Andres Tuxtla in the southern part of the State of Vera Cruz (see map on page 229). This bears the date 8.6.2.4.17 in Maya Chronology, or 97 B.C. in



THE GREAT PYRAMID AT TIKAL

Prototype of the Modern Terraced Skyscraper

According to the restoration of Alfred C. Bosson

From a drawing by Johan Bull

the correlation of Maya and Christian chronology proposed by the writer.

San Andres Tuxtla, it will be noted, lies midway between the Huastec region and northern Guatemala, the earliest historic habitat of the Maya, i.e., where the earliest large dated monuments are found; and in the general southerly movement of the Maya race, it would seem to have been reached after the invention of their hieroglyphic writing, judging from the presence of this jadeite figurine there.

The earliest large dated monument, — indeed a group of monuments which may be termed the earliest Maya city, — is at Uaxactun, in northeastern Guatemala, discovered in 1916 by the Second Carnegie Institution Central American Expedition. The earliest monument here, Stela 9, bears the Maya date 8.14.10.13.15, approximately 69 A.D. (see map on page 229) and from this time forward for the next six centuries the whole Peten region of northern Guatemala and adjacent parts of the States of Tabasco and Chiapas in Mexico and western Honduras continued to be the centre of the most brilliant native civilization of ancient America.

It is not within the province of the present article to dwell upon the glories of the Old Maya Empire, its many wondrous cities of stone, its massive pyramids, temples, and palaces, its elaborately sculptured monuments and exquisite wood carvings and stucco work, — in short, its barbaric splendor. Suffice it to say that during the first five centuries of the Christian Era the Maya stood at the zenith of civilization in the New World, at an apogee of culture never equaled by any other native American people.

We have now followed the Maya from a state of savagery in the forests of the Gulf coast-plain of Mexico sometime prior to the first millennium before Christ to the highest pinnacle of civilization reached on the American continent in pre-Columbian times, fifteen centuries later. We have seen that this amazing development took place solely through the opportunities for self-improvement made possible by the introduction of agriculture, particularly with reference to corn. We have seen no vestige, no infinitesimal trace of Old World influence in this picture as yet, nothing to detract from the genius of our native American mind. It remains now to adduce proofs showing that this civilization



KEY TO THE FORUM COVER

Designed by Alfred C. Bossom

Interpretation by Herbert Joseph Spinden

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TOP CENTRE — Hieroglyphic of the “four winds” or the date “4 Shecatl”. A picture of the wind god with 4 represented by a dot at each corner. This date refers to one of the previous destructions of the world in Mexican cosmology.

TOP BAR AND SUPPORTS — A planetary band from the Mayan City of Palenque with the celestial cross of the galaxy repeated three times. Across from left to right: Planet Venus, Milky Way, Constellation of the Shield, Venus No. 2, Venus No. 3, the Moon. Left support reading down: Jupiter, Milky Way. Right support reading down: Milky Way, Saturn.

MIDDLE CROSS BAR — Centre: the Sun Shield from the tablet of the Sun at Palenque. Either side: Deer from the Dresden Codex (Maya).

SMALL BLOCKS — Shells, symbols of water.

SIDE FIGURES — From one of the early reproductions of Palenque figures. Palenque was a Mayan city of magnificent temples and palaces flourishing in 430 A.D.

BOTTOM — Mayan water monster.

was in very truth *sui generis*, the product of its own natural development and capacity, as free from Old World influences as the Old World was in turn free from the New.

These proofs confront us in every expression of the Maya culture, in Maya art, sculpture, architecture, ceramics, jade-carving, hieroglyphic writing, astronomy, mathematics, and chronology. Again space is wanting in which to pile up this mountain of evidence, but we may select an example here and there in different fields of attainment to prove our point.

Two decades ago Spinden demonstrated conclusively the absolute chronologic sequence of Maya art. When monuments were arranged according to their chronological sequence, it was found that they stood in their proper positions in the stylistic sequence as well, the earlier and cruder forms first, the later and more developed forms last, an orderly series showing clearly progressive technical improvement from earlier to later forms. The five Maya stelae, or monuments, in the Illustrated Section demonstrate this stylistic development. No. 1, Stela 9 at Uaxactun, is the oldest Maya monument known (69 A.D.). Its crude early character is obvious at a glance. The shaft upon which the design is carved is not even symmetrically shaped. The relief is low, and the principal figure is very awkward, wooden, and anatomically incorrect.

No. 2, Stela 7 at Tikal, was made one hundred and sixty-six years later, (235 A.D.). Already, however, considerable improvement had been achieved, although the shaft of stone is still somewhat irregular in shape. The principal figure, while far from anatomically correct, being still stiff and awkward though less so, is handled with greater attention to detail, and the whole design is more elaborate.

No. 3, Stela 25 at Naranjo, one hundred and nineteen years later than No. 2 (354 A.D.) shows a great advance in realistic treatment. The figure approaches natural proportions, the pose is easy, the ceremonial bar is clasped lightly against the body, the shaft of stone being neatly rounded and symmetrically shaped.

With No. 4, Stela 40 at Piedras Negras, one hundred and thirty-three years later (487 A.D.), the very zenith of Maya art may be said to have been reached. All technical difficulties have been overcome, and within the limits of the conventions imposed by

his religion, the Maya sculptor was free to develop his inspirations as best he might. Anatomical perfection, naturalistic pose, delicacy of treatment, elimination of unessential details, all combine in this figure of the Corn God sowing grains of the precious seed, to show Maya plastic art at its highest moment.

Once the esthetic apogee had been reached, however, deterioration and decline followed swiftly. No. 5, Stela 10 at Xultun, one hundred and forty-three years later (630 A.D.), clearly shows this decadence. The whole design has become much more complicated, not to say flamboyant. While the details are much more elaborate, delineation, character of line, has suffered correspondingly. The Maya sculptor had gone over the crest of achievement and was starting down the other side.

In these five monuments, chosen from a great mass of sculptured material scattered all over the Old Empire region and all illustrating this same stylistic development, we may trace the whole history of Old Empire sculpture from its first transference to stone, about the beginning of the Christian Era, down to the close of the Old Empire toward the middle of the seventh century. Here is no evidence of foreign origin, each decorative motive, each element, may be traced from an autochthonous beginning through the varying phases of an orderly stylistic evolution to its final form, a native American product from start to finish.

When the writer first studied Maya archeology, twenty-odd years ago, it was still the fashion to believe in the oriental origin of American jade. The convenient Chinese junk, or junks, obligingly filled with unworked jade from eastern Asia, were thought to have been even more conveniently wrecked somewhere along the Pacific littoral of Mexico and Central America, and thus a goodly supply of the raw material put into the hands of the American aborigine for working into beads, pendants, earrings, etc., as his fancy dictated.

Aside from the extreme improbability of such a chain of circumstances' ever having brought to this country sufficient quantities of unworked jade to account for all the worked jade objects found here, a recent petrographic study of American jades has happily forever laid this Banquo's ghost of American archeology.

Dr. H. S. Washington, of the Geophysical Laboratory of the Carnegie Institution of Washington, has recently examined a

considerable number of jade objects both from Mexico and Central America and has analyzed them qualitatively and quantitatively. He finds that, although they are composed of the same constituents as Chinese jade, that is to say they are a true jadeite and not nephrite, they nevertheless differ so greatly from Chinese jadeite in the relative proportions of these constituents, that the American jadeite could never have come from any known Asiatic source of supply.

This, coupled with the fact that Maya jadeite objects almost invariably betray their calculiform origin, that is to say that they were originally river-worn pebbles, before being worked down into final shape, such water-worn pebbles of jadeite having actually been found in graves at the Old Empire city of Copan in western Honduras, pretty effectually disposes of the theory of Asiatic origin for American jadeite. The highly intricate Maya calendar and chronology was like no other system on earth.

Again the famous "elephant trunks", — thought to have been found on some of the Copan monuments by a whole school of earnest writers from Waldeck and Stephens of the early nineteenth century down to Elliott Smith and Perry of our own day and interpreted by them as conclusive proof of the Old World origin of the Maya civilization, — have been identified under closer study and the more critical comparative methods of modern research as the bills of parrots or macaws!

It will be seen from these examples, chosen at random, that there is no room for foreign origins here. In the Maya civilization we are dealing with a strictly American phenomenon.

Why, then, go so far afield for the origin of a civilization so patently all-American, alike to the casual observer as to the careful student, to the lover of logical cultural evolutionary processes, as to the champion of inherent probability? Why not accept the natural, easiest, and most reasonable explanation? The day of fabled Atlantis has gone forever. Let Egypt and Chaldea, Assyria, Phoenicia, Cambodia, and the Ten Lost Tribes hold their glorious sway, but always on the other side of oceans, across which they surely never strayed. By all the shades of our ancient and honorable past, let aboriginal America stay American, and let the Maya civilization remain, what it so surely always was, one hundred per cent a native product.



Corrida de Toros

SCISSOR-CUTS

BY

HVNT DIEDERICH