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*A STRATIFICATION OF REMAINS AT AN EARLY MAYA SITE*

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The chronology of the Maya civilization of Middle America has been recovered in bare outline by the decipherment of hieroglyphic inscriptions recording a series of dates in the native calendar extending from 98 B.C. (according to the Morley-Spinden correlation) to shortly before the Spanish conquest. Knowledge of the events of Maya history is however extremely scanty, because the textual portions of the inscriptions have so far resisted decipherment, and such native histories as were written after the conquest concern themselves only with the later events of prehistoric times. Solution, therefore, of highly important problems relating to the origin, the growth, and the spread of Maya culture; and its relationship with other advanced cultures of Middle America, must be arrived at largely by archaeological methods.

The study of Maya archaeology has been greatly hampered by the inaccessibility of the early cities, and by the fact that most of them lie buried in tropical jungles so dense that excavation is both difficult and extremely costly. Hence very little digging has been done, and almost no deposits have been found so stratified as to permit the identification of sequences in Maya material culture, particularly in the all-important matter of the development of Maya ceramic types. As potsherds are to the archaeologist what fossils are to the paleontologist, this lack of stratigraphic information as to pottery has for years been an almost insuperable obstacle to progress.

The third season's excavations by the Carnegie Institution at Uaxactun in the department of Peten, Guatemala, have resulted in the finding of very interesting and important stratigraphic conditions. Uaxactun was discovered by Dr. S. G. Morley during the course of the Institution's expedition of 1916. On the basis of the hieroglyphic dates, it appears to have been the oldest and the longest inhabited of the ancient Maya cities. It consists of a series of courtyards or plazas, each one surrounded by great artificial mounds most of them topped by the ruins of temples. One of

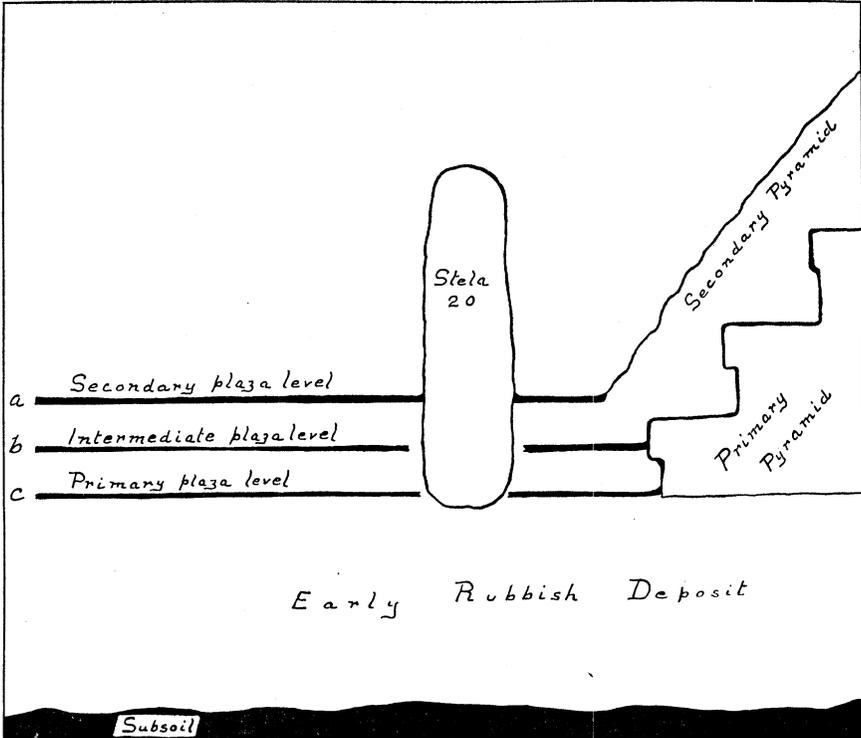
these plazas (Group E) was selected for investigation by the expedition of 1927, because several of the structures enclosing it gave evidence of having been so placed as to serve as markers of certain recurring astronomical phenomena. During 1927 there was cleared a long mound on the east side of the group upon which stood three small temples; toward the end of the season excavation was started upon a high pyramidal mound (E VII) closing in the west side of the plaza. In and in front of this mound were discovered late in 1927 and during the season of 1928 the stratified remains above-mentioned.

The pyramid E VII was built of rough rubble masonry and had presumably been faced with lime stucco. Time and the growth of forest trees had almost completely destroyed its exterior finish, but enough persisted to show that it had been a very steep structure some 50 feet high, with an eastern stairway and a small terminal platform. Close against the east side, at the foot of the stairway, stood a monolithic limestone monument (Stela 20) bearing the Maya date 9.3.0.0.0 (235 A.D. Morley-Spinden correlation). Examination of the plaza showed that a hard-packed lime floor ("a," Fig. 1) impinged upon the stela and upon the base of the pyramid. It was obvious therefore that the pyramid had been constructed, the stela erected, and the floor laid during the course of a single building operation, which took place (unless the stela had previously been erected elsewhere) in 9.3.0.0.0. Irrespective of date, however, the floor-stela-pyramid complex surely represents the latest construction at that spot.

In 1927 the work on the pyramid had exposed parts of another smaller pyramid buried beneath it. In 1928 the outer pyramid was removed and the earlier building was exposed. It proved to be a stepped pyramid of stone, 25 feet high, with stairways facing the four cardinal directions. A small platform formed the summit. The entire structure was coated with fine lime stucco, and was ornamented with grotesque stucco masks of colossal proportions. Having been in good repair when it was entombed by the erection of the secondary pyramid, and having been perfectly protected by it through the centuries, the primary pyramid stands today in almost its original condition. It is entirely unlike any known Maya building, but it is, of course, much older than any other Maya building hitherto observed.

After the clearing of the primary pyramid, a pit was dug just east of it in the plaza a few feet north of Stela 20. This part of the work was carried out by Dr. G. C. Vaillant of the American Museum of Natural History, who, at the invitation of the Institution, was visiting Uaxactun as ceramic consultant. The pit was first sunk to undisturbed subsoil and was then enlarged by wing-trenches, one running south to the north side of the stela, the other west to the east face of the primary pyramid. Conditions dis-

closed were extremely interesting. Below the late plaza level ("a," Fig. 1) was a second fine, hard floor ("b," Fig. 1) which impinged upon the primary pyramid a little above its base; below this was a third similar floor ("c," Fig. 1) which joined the base of the pyramid and was evidently constructed at the same time as the pyramid. Both these lower floors had been broken during ancient times in process of digging a large rough hole for the recep-



Conditions at east side of structure E VII (diagrammatic).

tion of the butt of the stela. The stela was therefore erected subsequent to the building of the primary pyramid and floors "c" and "b."

Between the lowest floor "c" and virgin subsoil and extending westward underneath the primary pyramid lay about 4 feet of refuse, rich dark earth containing a few building stones and large numbers of potsherds, whole and broken effigies, and a few animal bones. A much decayed human skeleton was found about 2 feet from bottom. The refuse appears to be typical midden material, lying as originally deposited. The pottery and effigies are of types not hitherto known from the Maya area and are radically different from those taken from the eastern temples (E I, E II, E III) and from the fill of the secondary pyramids.

A second pit was sunk on the east side of the plaza in front of the space between Temples E I and E II and north of Stela 18 (8.16.0.0.0., 97 A.D.). Almost identical conditions were encountered, and floor levels pierced by the stela butt and presumably corresponding to "b" and "c" of the E VII pit, were observed to run beneath the substructure of the temples, indicating the presence below it of an early buried building.

The following sequence of events may be postulated: (1) A prolonged period of occupancy during which the 4 foot refuse bed was laid down. This took place prior to the development of the classic Maya culture. The buildings of this period have not yet been located. (2) The construction of the primary pyramid and of floor "c." (3) The laying of floor "b." (4) The apparently simultaneous construction of the secondary pyramid and floor "a," and the erection of Stela 20. Stela 20, the latest object in this entire complex, records the very early date of 9.3.0.0.0 (235 A.D.), and Stela 18 the even earlier date 8.16.0.0.0 (97 A.D.). One can only guess at the age of the primary pyramid and of the still older refuse deposits which underlie it, but as all these materials lie in stratigraphic order, their relative ages are certainly established; they furnish the first sound data for studies on the morphology of early Maya culture.

Plans for the 1929 season contemplate following the floors across the plaza to the east, and to the as yet unexplored mounds to the north and south; together with extensive excavations in the sub-plaza rubbish.