

Introduction

THE MATERIAL presented in this report was collected over many years. During 1925, the first season the writer was at Chichen Itza, and subsequent years, some exploratory work was undertaken on Saturday afternoons and Sundays when time could be spared from the major work under way. In 1928 two months were given over to exploring outlying sections of Chichen Itza and in 1946 all numbered structures (fig. 151) were visited and data recorded. No excavations were undertaken; at most, an occasional corner was uncovered.

The structures excavated and stabilized by the Instituto Nacional de Antropología e Historia of the Mexican Government—the Great Ball Court, the Platform of the Skulls, the Platform of the Eagles, the Platform of the Cones, the Castillo—are merely listed. Appendix III gives structure names and their corresponding grid numbers. Structures previously reported on by Carnegie Institution likewise receive only brief mention. It is the structures that have not hitherto been discussed that form the subject of this paper. The Monjas, studied and stabilized under the direction of John S. Bolles, is covered in a manuscript on file in the office of the Department of Archaeology.

An examination of the map (fig. 151) shows that some sections of the city may well have been laid out with a provisional plan in mind. These are groups of buildings, each group on an extensive terrace, which developed into large separate units that at most were connected only by paved roads (*sacbeob*). Besides these there are small clusters of structures. Isolated pyramids, and temples on platforms are scattered throughout the area. Some unrelated platforms may or may not support mounds. Morris (1931, 1:173) has called attention to the "demolition, change and replacement which were common practices" and which may account in no small measure for the apparently unorganized arrangements.

Many students have pointed out different styles of architecture at Chichen Itza. Buildings such as the Akabdzib, the Red House, and the Temple of the Three Lintels have been placed in an early period. On the other hand, structures such as the Warriors, the Castillo, and the Court of the Thousand Columns were placed in a late period. There seems no reason to change this classification.

The earliest identifiable period, that of Maya-Chichen, is represented by close to a dozen buildings. J. E. S. Thompson (1945) places this period prior to A.D. 900. Buildings included in this group, as identified on stylistic grounds or from dates on lintels, are surely the Monjas

proper, the Akabdzib, the Red House, the House of the Deer, the Three Lintels, and the Four Lintels (all hieroglyphic material from Chichen Itza is listed by J. E. S. Thompson, 1950, p. iv).

In the late period, that of Toltec-Chichen, closing around A.D. 1200, we have the countless temples, the ball courts, quadrangles, colonnades, patios, platforms, and terraces. It might be explained that the term Toltec is used to cover what has frequently been referred to as the "Mexican period" at Chichen Itza, a period characterized by architecture and sculpture that show striking similarities to that at Tula, Hidalgo.

From the close of the Toltec-Chichen period to the time of the final abandonment of the site it is less easy to assign buildings. There is no definable style, but this period is thought to include some of the simple, crude, jerry-built structures, which have often many plain and sculptured re-used stones in their construction. Belonging to this group may be the small structures scattered throughout the Court of the Thousand Columns, some of the buildings in the Northwest Group, and certainly some of the many small isolated constructions located away from the main points of concentration.

Little is known of the technology of building or of the craftsmanship of stone cutting. Of the Toltec-Chichen buildings which were found standing to any considerable extent, we have only portions of the north and south temples of the Great Ball Court, the upper and lower temples of the Jaguar and the Castillo.

A noticeable difference in masonry is seen in the facing of substructures. In Maya-Chichen times the stones are large, heavy, not too well faced, and the tenons are long, in contrast to square, well faced, veneer-like stones of the Toltec period. The facing stones of superstructures are less easily distinguished, although, in general, early wall stones are heavier, better faced, and less veneer-like. Vault stones of the Toltec period developed to the extent that the tail became increasingly thinner, the upper surface concave, so that the stone somewhat resembled the shape of a boot. The result was that the vaulting became more and more veneer-like, a development, as suggested to the writer by Pollock, paralleling that of the wall masonry. While such veneer-type vault stones may consistently be assigned to the Toltec period, vault stones from Maya-Chichen (Temple of the Three Lintels) may upon occasion show a similar treatment (fig. 148, *b*).

The mortar of the early period is probably of better

quality. In some instances, when structures of the Maya-Chichen period collapsed, sections of the masonry have fallen en bloc (Temple of the Three Lintels). This has not been noted with the collapse of Toltec period structures. Another feature of the early period is the plaster finish on the top of a wall before the vault was raised. This may occur in late times but so far it has not been reported.

The building plans of the two periods have little in common. Maya-Chichen does not have temples on lofty pyramids. Some features of the inner temple of the Castillo, such as the difference in the floor levels of its two chambers, the vertical lower zone of the exterior, and the decoration, are Maya-Chichen. This structure, a temple on a towering pyramid, may well represent a transition from Maya-Chichen to Toltec-Chichen.

The Monjas, the Red House, and the House of the Deer rise from steep platforms rather than pyramids and the Temple of the Three Lintels rises from a low basal substructure or podium. The plans of Maya-Chichen temples show a single range of two or more longitudinal rooms; two parallel ranges of rooms, the outer being a single chamber into which open the inner rooms; or there may be parallel longitudinal rooms flanked at either end by a transverse chamber sometimes projecting to form lateral wings (Str. 5D2). The palace-type structure appears only in Maya-Chichen and is represented by the Akabdzib and the Monjas.

The temple of the Toltec period may have a single chamber as in the North Temple of the Great Ball Court; two parallel chambers as does the Temple of the Warriors; or a single room, a form of shrine, surrounded by a vaulted corridor as in the Castillo and the High Priest's Grave.

Structures which seem confined to Toltec-Chichen include temples on terraced pyramids, and temples on pyramids with colonnades at the base forming an integral part of the complex, the simple one- or two-chambered structure on a low platform, the gallery-type structure and the great colonnade, the gallery-patio complex, as well as the sweat house, the dance platform and the Tzompantli. Of the nine ball courts in and around the city, five are definitely assignable to Toltec-Chichen and excavation would probably show the remaining four to belong in this period.

Maya-Chichen buildings never rise from terraced pyramids. Their supporting platforms present a nearly vertical unbroken face to the cornice. Quoins are rounded, although they are also rounded in a number of platforms of Toltec-Chichen time (Strs. 3D11 and 2C5). A podium may (Red House, Three Lintels) or may not (House of the Deer) be present, but a plinth always seems to occur. The floor

of inner rooms is on a higher level than the outer. The lower zone of building exteriors always rises vertically and is generally undecorated. Corners of the lower zone may be rounded, as in Str. 7B2 (Str. 5C5 has rounded corners but it is unexcavated and its classification remains undetermined). Maya-Chichen buildings have stone lintels which may bear hieroglyphic inscriptions. When decoration is present in the upper zone it is all-over and consists of masks and geometric designs.

Toltec-Chichen architecture is readily recognized. The salient features include: the terraced pyramid, serpent columns, feathered-serpent balustrade, Atlantean figures (either as altar supports, or full size in the entrance of a building, or as interior vault supports), square and round columns, colonnades. In addition, a basal batter on the exterior of buildings is a common but not a fixed practice (Str. 3E3); the use of wooden lintels is almost invariable although there is an occasional one of stone, which may be sculptured but never with hieroglyphs; the floor of the top of the substructure and that of the chambers of the building are on the same level; and finally, a podium or plinth is never present.

Other features are chac mool figures, standard bearers, jaguar stone seats, truncated sacrificial stones, stone incensarios, and roof ornaments. Naturalistic bas-relief stone sculpture on buildings is confined to panels (Str. 3C16). Decoration may take the form of masks, lines of warriors, prowling jaguars, and jaguars and eagles. Altars are either Atlantean-supported or of solid construction. When solid, the face rises vertically or with a batter, and most often carries a cornice. Decoration, when present, is in the form either of warriors carved in low relief or of a painted floral design, as at the Caracol West Annex.

No study has been made of the great terraces. The one in the northern part of the city, which supports the Great Ball Court, the Castillo, and the Court of the Thousand Columns, is built of large unworked stones laid in dry fill. Mortar is encountered only near the top where it serves as a base for the hard-packed lime plaster floor. Trenches and test pits made by Morris (1931, 1:168) between the West Colonnade and the Castillo exposed three floor levels. A portion of terrace facing, exposed south of Sacbe No. 6, shows large, roughly faced stones. Surrounding the edge of the terrace is a parapet. It is in a poor state of repair but seems to average 70 cm. in width and now rises not more than 65 cm. to its fallen upper margin. Ruz has recently secured evidence of a covered portal at the western edge of the terrace just south of the Great Ball Court. Other entrances were by way of the various sacbeob.

A number of sacbeob have been identified and are

shown on the map. The best preserved is probably the one leading north to the Sacred Cenote. It has a width of approximately 10 m. No surfacing is exposed and it seems doubtful if any remains. Besides the sacbeob shown on the map there are two short stretches of flagstone pavements: one extends northwest from the Caracol to Str. 3C11, the second extends north from Str. 3C8.

Mr. J. C. Kilmartin of the United States Geological Survey began the survey of Chichen Itza in 1924; the resulting map was published by Morris, Charlot, and Morris in 1931. In 1929 he added an equal area to the south. To complete the unit Mr. John P. O'Neill, in 1932, surveyed a strip to the west. The thus enlarged map was published in 1935 by Ruppert. With some revisions based on the study of numbered structures, it reappears here as figure 151.

Besides the structures shown on the map of Chichen Itza, exploration has led to several outlying groups. The East Group, of which only one structure is considered in the present report, is reached by Sacbe No. 6. Beyond it lies the Far East Group, and still farther east the Chultun Group. The last two groups have ball courts; the latter also has a gallery-patio-type structure. The Chultun Group is so named because of a well-defined chultun with a masonry drain extending from its orifice to a cluster of buildings on a terrace to the southwest. The Casa Redonda, included in a group east of the hacienda, has been reported on by H. E. D. Pollock.

Halakal lies about 4 km. northeast of Chichen Itza. A hieroglyphic stone lintel built into the watering trough at the plantation of Halakal may have come from one of the mounds in the small group. The lintel was removed in 1927 and placed in the Museum of Archaeology and History in Merida. The plan, section, and elevation of what appeared to be the principal structure (from standpoint of size of mound) were made by John S. Bolles following a morning's exploration and examination by several members of the Chichen Itza staff.

Holtun, represented by a small group of mounds, lies approximately 1 km. south of Piste. The ball court in this group is the only one of the nine in the Chichen Itza area whose long axis extends east and west. Colonial fences in the vicinity contain worked and sculptured stones; one appears to be a portion of a chac mool.

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CHICHEN ITZA

ARCHITECTURAL NOTES AND PLANS

Karl Ruppert



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