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GUS W. VAN BELK

## JERICHO

### IDENTIFICATION

The town of Jericho is situated on the wide plain of the Jordan Valley, about 10 km (6 mi.) north of the Dead Sea and close to the steep cliffs that fringe the valley to the west (map reference 193.142). At a depth of 250 m below sea level, it is the lowest town on the surface of the earth. This location, shut in by mountain walls to the east and west, has a climate that is tropical in summer and usually mild in winter. The amount of rainfall is small, about 140 mm a year, most of which falls in a few violent downpours—in some years there is virtually none. The flourishing agriculture of which the area is capable is dependent on the spring known as Elisha's Well, or 'Ein es-Sultān. With irrigation based on the spring, the valley's alluvial soil can produce crops of

almost every kind, tropical and temperate in habitat—dates, green vegetables, or wheat. In times of expansion, the waters of 'Ein es-Sultān can be supplemented by those of 'Ein ed-Duk (Na'atān), some 3 km (2 mi.) to the northwest, which, as in the Early Arab period and today, can be brought to Jericho by aqueduct. With irrigation, an extensive oasis can be created; but when it is neglected, the area reverts to the parched scrub of the adjacent valley, as is seen in nineteenth-century photographs taken in the immediate neighborhood of 'Ein es-Sultān. Destruction of the irrigation system by enemies, or the interruption of the water supply as a result of the earth movements to which the Jordan Valley is liable, may account for the periodic abandonments of the ancient site that excavation has revealed.

## TELL ES-SULTAN

### HISTORY

Jericho enters written history as the first town west of the Jordan River to be captured by the Israelites approaching from the east. Joshua's instruction to his spies to "Go, view the land, especially Jericho" (Jos. 2:1) is an illustration of the position of Jericho in the age-long process of penetration by nomads and seminomads from the desert area in the east into the fertile coastal lands. It stood near the Jordan fords between a good valley route down the eastern side of the Jordan Valley and another going up the western mountains. As it dominated one of the few routes leading directly from east to west, it was liable to attack by successive invaders.

The identification of the main mound of the oasis, Tell es-Sultān (map reference 192.142), with the oldest city is generally accepted. The mound rises to a height of 21.5 m and covers an area of about one acre. It stands quite near 'Ein es-Sultān (Elisha's Well). As regards the Jericho of the Book of Joshua, there are some chronological difficulties, as will be seen below. Following its destruction by Joshua, the Bible states, Jericho was abandoned for centuries until a new settlement was established by Hiel the Bethelite (1 Kg. 16:34), in the time of Ahab, in the ninth century B.C.E. Other biblical references do not suggest that Jericho ever recovered its importance. The archaeological evidence shows that occupation on the ancient site came to an end at the time of the Babylonian Exile. The centers of the later Jerichos were elsewhere in the oasis.

### EXPLORATION

Soundings at Tell es-Sultān were first made by C. Warren in 1868 as part of the early campaigns of the British Palestine Exploration Fund. Warren sank a

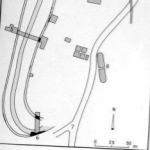
number of shafts into the mound and concluded that there was nothing to be found. Two of his shafts were identified in the 1957-1958 excavations, one of them penetrating the Early Bronze Age town wall and the other missing the great Pre-Pottery Neolithic stone tower by only one meter.

The first large-scale excavations were those of an Austro-German expedition, from 1907 to 1909, under the direction of E. Sellin and C. Watzinger. The expedition cleared the face of a considerable part of the Early Bronze Age town wall and traced the line of about half of the revetment at the base of the Middle Bronze Age defenses. Within the town, a large area of houses was cleared at the north end and a great trench was cut across the center. Re-examination in 1953 showed that it had penetrated well into the Pre-Pottery Neolithic levels. The excavations were conducted and published by the best standards of the time. Unfortunately, at that time, there was no accepted chronology, so that the usefulness of this early work is limited.

By the time new excavations were undertaken by the Neilson expedition, directed by J. Garstang, from 1930 to 1936, the knowledge of pottery chronology had greatly increased. Excavation technique lagged, however, and the absence of detailed stratigraphy still often made the dating of the structures mere guesswork. The dating of the successive Bronze Age defensive systems by Garstang has, in fact, proved to be wrong. No Late Bronze Age wall survives. Also, as knowledge of pottery chronology increased, the dating given to the scanty Late Bronze Age levels from the mound and the tombs was shown to be incorrect. Garstang's most important discovery was that beneath the Bronze Age levels there was a deep Neolithic accumulation, usually of the Pre-Pottery stage. He believed that there was a transition to the use of pottery at the site, but this was a mistake. A third major series of excavations was



Tell es-Sultān: general view after the Sellin and Watzinger excavations, looking east.



1. City wall from Early Bronze Age; in west it is built directly above Neolithic wall; 2. Retaining wall of terraces from Middle Bronze Age II; 3. Glacis; Kenyon's trench I; 5. Trench II; 6. Trench III; Road; 8. Pools near spring

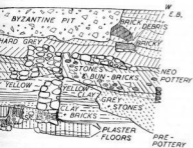
excavations between 1952 and 1958, directed by K. M. Kenyon on behalf of the British School of Archaeology in Jerusalem. The results are described below.

### EXCAVATION RESULTS

Extensive excavations have been carried out by Kenyon at Tell Jericho. The great depth of deposit in the lowest levels has allowed their study only in limited areas. The mound rises to a maximum height of 21.5 m above the surrounding plain, and to an average height of 17 m. Bedrock has been found in a sufficient number of places to show clearly that all of this is built up by human occupation. The original settlement was on a slope gently to the east. Its position was doubtless dictated by the presence of a spring, the actual source of which is now buried beneath the mound.

**NEOLITHIC PERIOD.** The earliest remains, found in an area at the end of the mound, belong to the Natufian culture. Carbon-14 dates give a deposit range from 9687 BCE  $\pm$  107 to 7770 BCE  $\pm$  210. The nature of the remains is not clear, but an oblong structure enclosing a clay floor, a group of sockets for uprights set in a wall, too close together to be a wall, may represent a sanctuary. The associated flint and bone tools, including a harpoon head and a lunate, found in layer K, are characteristic of the Lower Natufian of Mount Carmel. It is possible that this structure was a sanctuary set up by hunters near the spring of Jericho.

**EPICHALCOLITHIC AND CHALCOLITHIC PERIODS.** Definite Epipaleolithic remains were found only at one spot in the limited area excavated to date. In a number of other places, levels were found that link the Epipaleolithic of Jericho with the subsequent Neolithic stage. The most important of these areas was square M. At this spot, the very lowest deposit is a layer 4 m thick, composed of a close succession of surfaces and humps. The humps clearly represent the bases of flimsy



Sample section from Kenyon's excavations.



*Tell es-Sultan: the round tower, PPN.*

walls, perhaps little more than the weighting down of tents of skins, although rudimentary mud bricks were present in the form of balls of clay. The area excavated was so limited and the traces so slight that no plan could be established.

The surfaces that made up this 4 m of deposit represent the remains of a succession of slight structures, huts, or tents seemingly suitable to the needs of a nomadic or seminomadic group. But the creation of this great depth of deposit indicates that these people were no longer nomadic, or at least that they returned to Jericho at regular and frequent intervals, perhaps practicing some form of transhumance. It is a truly transitional stage of culture, and the flint and bone industries are clearly derived from the Epipaleolithic Natufian. Although in square MI there is no preceding Epipaleolithic stage, it is reasonable to presume that the stage represented is that of Neolithic hunters, of whom evidence was found in area E, settling down to a sedentary way of life.

From such slight shelters, the first solid structures are clearly derived. The actual transitional stages were not found. In square MI they may even have been destroyed, for a thickish deposit containing fragments of clay-ball bricks intervened between the earlier succession of surfaces and the first solid structures, probably representing the leveling over of a nucleus mound that had become too small and steep. Above this deposit, the solid structures appear already fully developed, but their circular plan, usually single roomed, is clearly derived from that of a primitive hut. These circular structures are built with solid walls of plano-convex mud bricks, often with a hog-backed outline. The walls are inclined somewhat inward and the amount of brick in the debris of collapse suggests that the roofs were domed. The interiors of the houses were sunk below the level of the courtyard outside, and there were porches with a downward slope, or steps of stone or wood, projecting into the room. Rich industries of flint and bone were found in the houses: many axes and adzes, with polished or partially polished cutting edges, pestles, mortars, hammerstones, and other stone implements, which are clearly derived from the Lower Natufian. Limestone dishes and cups represented the only surviving utensils. The construction of these solid houses marked the establishment of a fully sedentary occupation, and the expansion of the community was rapid. Over all the area occupied by the subsequent Bronze Age town, and projecting appreciably beyond it to the north and south, houses of this type have been identified. The total area covered was almost 10 a.

The expansion of the settlement was soon followed by a step of major importance, the construction of a town wall. This is best preserved in trench I on the western side, where the first of a succession of defensive walls still stands to a height of 5.75 m. At the south end, a structure that was probably the same wall survived to a height of 2.1 m; at the north end, however, although the line could be identified, only one course survived. In each case, the foundations of the wall cut through the remains of preexisting houses, but not of a long succession, so the enclosing of the site by a defensive wall followed soon after the growth of the settlement.

On the west side, the first town wall was associated with a great stone tower (8.5 m in diameter and preserved to a height of 7.75 m) built against the inner side of the wall. The tower was constructed solidly of stone, except in the center, where a staircase provided access to the top of it from the interior of the town. The tower is not only a monument to remarkable architectural and constructional achievement, but tower and wall together furnish evidence of a



degree of communal organization and a flourishing town life wholly unexpected at a date that, as will be seen, must be in the ninth millennium BC.

In all the areas excavated to this level, there was a long succession of structures belonging to this first Neolithic stage. In the house areas, the ruins of successive houses were built up on a deposit of up to 6.5 m. In trench I at the western side of the mound, there was a sequence of four stages of the town wall, each incorporating the tower. The second stage was associated with a rock-cut ditch (9.5 m wide and 2.25 m deep). At the north and south ends of the town (trenches II and III), these later walls lie farther out, obscured by the Middle Bronze Age revetment. The carbon-14 datings obtained for different stages in the deposits of this period range from 8340 BCE  $\pm$  200 to 6935 BCE  $\pm$  155. However, the majority suggest a date for the beginning of the period in the late ninth millennium.

In all the areas excavated, the town of the period seems to have been fairly closely built up. In its area of about 10 a, there may have been two thousand or so occupants. A sedentary population of this size must have been largely dependent on agriculture. The favorable conditions provided by the perennial stream, the warm climate, and fertile land must have led to a very early development in food production. Organized agricultural activity already began in the Proto-Neolithic stage and increased with the growth of the town. It is also possible to assume that the developing agriculture was accompanied by developing irrigation, for the spring in its natural state could not have watered an area large enough for the fully grown town. The urban society, which succeeded in solving its defensive problems, was able to provide the manpower and the organization needed to create an irrigation system.

This Pre-Pottery Neolithic A culture of Jericho came to an abrupt end, the exact time of which could not be determined, and was succeeded by a second,



Left: plastered human skull, PPNA; (below) clay human head, PPN; (right) plastered human skull, PPNB.



Pre-Pottery Neolithic B. Between the two there was a period of erosion, although it is uncertain whether it was caused by destruction wrought by the newcomers, or whether natural causes such as disease or an interference in the water supply caused its inhabitants to abandon the site. The Pre-Pottery Neolithic B culture arrived at Jericho almost fully developed and differed from its predecessor in almost every respect. The most immediately obvious contrast was the architecture. The houses were far more elaborate and sophisticated. The rooms were comparatively large, rectangular in plan, and grouped around courtyards. The plan seems to have been stereotyped, with central suites divided by cross walls in which there were entrances at either end and in the center, with smaller rooms adjoining. No complete house plan was recovered, as the size of the houses was such that in no case was an entire building within an excavated area. The walls were of elongated handmade mud bricks with a herringbone pattern of thumb impressions on the top. Floors and walls were covered with a continuous coat of highly burnished, hard lime mortar. It is presumed from the rectangular plan that the roofs were flat. There was no evidence of upper stories. There were fireplaces in the courtyards, whose floors were usually of mud mortar, and there was often an innumerable succession of charcoal spreads.

The material equipment was also almost completely different from that of Pre-Pottery Neolithic A. The flint industry was distinct and is not derived from the Natufian. The bone industry was very poor, being confined to simple implements such as pins and borers. Polished axes and adzes were rare, and in fact there were very few heavy stone implements. A very characteristic object was a trough-shaped quern with the grinding hollow running out to one edge and a flat border around the other three sides. This type was never found in Pre-Pottery Neolithic A. The types of grinding stone were also distinct. Bowls and dishes of white limestone, some of them very well made, became very common.

Two structures were found that probably served religious purposes. In one, a room had been cut off from part of the usual suite of rooms. In its end wall was a small niche with a rough stone pedestal at its base. In the debris nearby was a carefully trimmed stone pillar, which must be interpreted as a representation of a deity. The plan of the other structure was unique—a large central room with a burnished plaster floor, at each end of which were annexes with curvilinear walls. At the center of the large room was a rectangular plastered basin. It is likely that this structure had a ceremonial use.

The most remarkable evidence bearing on religious practices was the discovery of ten human skulls with features restored in plaster, sometimes with a high degree of skill and artistic power. Flesh-colored tinting, eyes inlaid with shells, and delicately modeled ears, nose, and eyebrows combined to make the heads extraordinarily lifelike. These plastered skulls were most likely associated with a cult of ancestor worship. The normal practice was to bury the dead beneath the floors of the houses, and many of the bodies had the cranium removed, presumably to ensure that the wisdom of the individual was preserved for the benefit of the descendants. The skulls were found in three groups, two close together, but the tenth skull came from a house some distance away, so the practice must have been followed by a number of separate families.

The Pre-Pottery Neolithic B settlement seems originally to have been undefended, for the earliest town wall found was later than a long series of house levels. Like the Pre-Pottery Neolithic A wall, it was built of rough stones, some of them very large. It was traced only on the west side of the site (trench I), where it overlaid the earlier wall, although it was separated from it by a considerable depth of fill. Its probable continuation was found in area M. At

the north and south ends (trenches II and III), the houses of the period were truncated by the Middle Bronze Age revetment, and the contemporary town wall must have been farther out.

The town of this period had a long existence, for the houses were rebuilt many times. Usually, the houses were rebuilt in approximately the same position and on the same plan, but there was nearly always evidence that the preceding destruction had been very severe, and the walls had to be rebuilt almost from floor level. The carbon-14 datings range from 7379 BCE  $\pm$  102 to 5845 BCE  $\pm$  160. Whereas Pre-Pottery Neolithic A had every appearance of being an indigenous development, this was not the case with Pre-Pottery Neolithic B. The latter arrived at Jericho with a fully developed architectural tradition and an industry that owed nothing to its predecessor on the site. Other related sites have since been found in the country (for example, Wadi Beidha). In 1961, at Çatal Hüyük, in Anatolia, J. Mellaart excavated a site that must also be related to this culture. The plans of the houses have the same rectangular layout, the same abundant use is made of burnished plaster, the dead are buried beneath the floors of the houses, and there are other similarities. The relationship, however, is probably indirect. The material culture of the Anatolian site, with molded plaster decoration and elaborate wall paintings, is much more sophisticated than that at Jericho, and pottery is found, although in the lower levels it is not common. The earliest period is dated by carbon-14 to about 6700 BCE. It is very probable that the cultures of the Anatolian and local sites are derived from a common ancestor.

Thus, there were two successive and quite separate Pre-Pottery Neolithic cultures at Jericho, and in each case the settlement assumed the character of a walled town. Of the first indigenous culture, all the stages of development can be traced on the spot. The second had evolved elsewhere.

Like Pre-Pottery Neolithic A, its successor, Pre-Pottery Neolithic B, came to an abrupt end. In all the areas excavated, the buildings and surfaces of the period are eroded on an angle sloping down to the exterior of the town, often very steeply. The terrace walls, which were an essential part of the layout on the slopes of the mound, had collapsed in whole or in part, and the fill and floors behind them had been washed out, often to a depth of several layers. It is impossible to estimate the length of the period of abandonment that produced this erosion. Once an earthquake or violent rains had made breaches in the terrace walls, the washout process could have proceeded rapidly if there was a series of heavy rains, but less violent conditions might have slowed down the erosion over a long period.

The evidence for the next period of occupation appears in the form of pits cut into this eroded surface. These pits, which often were as deep as 2 m and about 3 m across, and in one instance as deep as 4 m, were at first interpreted as quarry pits sunk to obtain material for brickmaking. It was suggested that the characteristic fill of angular stones represented material sieved out in the brickmaking process. Subsequently, however, it became clear that the pits contained a series of floors and occupation levels, including, in one case, a well-constructed oven; it was also observed that the stones originated from walls revetting the edges of the pits. It is therefore clear that these were occupation pits, or the emplacements of semisubterranean huts. Closely similar phenomena, including the angular stones, were observed at Tell el-Far'ah (North) in the levels that preceded the Early Bronze Age structures. The use of subterranean dwellings may also be compared with those of the Chalcolithic period, with a culture allied to the Ghassulian, at Tel Be'er Matar and Tel Be'er Safad near Beersheba (q.v.).

The first pottery appears in these pits at Jericho. Analysis of it suggests that two different and successive groups are represented, called Pottery Neolithic



A and Pottery Neolithic B. The A pottery, consisting of vessels decorated with burnished chevron patterns in red, and also of extremely coarse, straw-tempered vessels, corresponds with that ascribed to stratum IX by Garstang. The B pottery, consisting of jars with bow rims, jars and bowls with herringbone decoration, and vessels with a mat red slip, corresponds with that ascribed to stratum VIII. The former was believed to appear as an indigenous development out of the Pre-Pottery Neolithic. A reexamination of Garstang's trench and fresh evidence from other parts of the mound, however, make it quite clear that this is not so. It was a conclusion arrived at only because the pits containing the pottery were not observed, and it was believed that the pottery belonged to the latest plastered-floor houses instead of being intrusive. With the appearance of pottery there was a change in the flint industry, most noticeably the use of coarse, instead of fine, denticulation for the sickle blades. By far, the greatest amount of finds from the period came from the pits. Above the pits, however, there were some scanty remains of buildings. Too little was found to establish any house plans, but their characteristic feature was the round and the plano-convex bricks, not found at any other period. The relation of the two types of pottery to the successive stages is not yet clear.

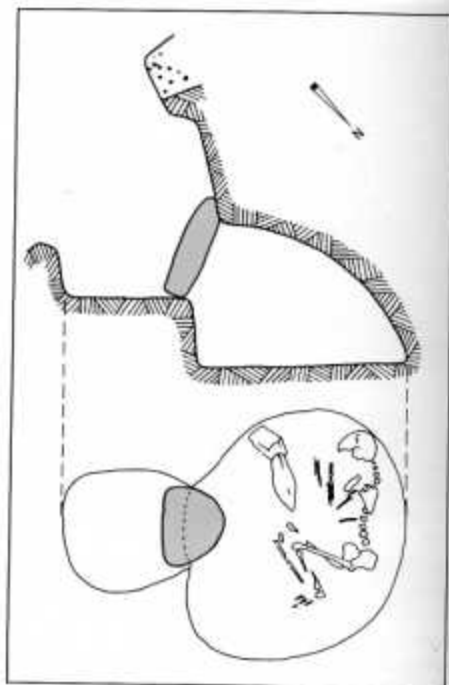
Scattered examples of the characteristic Neolithic A pottery have been found at a number of local sites—Lachish, Megiddo, and Teluliyot Batah—but usually only in mixed groups found at the lowest levels, with a range from the Neolithic to the Early Bronze Age. Such finds indicate that the people who used this pottery were fairly widespread in the country at this time, but tell little about them.

Objects comparable with the finds of Pottery Neolithic B are found over a wide area. Pottery and flints, particularly the former, can be closely paralleled at Sha'ar ha-Golan on the Yarmuk River. Similar pottery is also found in the Enéolithique A at Byblos, with the additional link of incised pebbles, so common at Sha'ar ha-Golan. It would appear, therefore, that this element in the Pottery Neolithic of Jericho had Syrian or at least northeastern connections. However, this period in the life of the site is at present rather obscure.

Between the Pottery Neolithic and the next stage at Jericho there is another gap, perhaps covering the period of the Ghassulian culture. The gap is indicated by the usual erosion stage and by a complete break in the artifacts, particularly the pottery.

**THE EARLY BRONZE AGE.** Toward the end of the fourth millennium, a completely new people arrived in the country. It is probable that some of the earliest evidence of their arrival is to be found at Jericho. Both groups of Pre-Pottery Neolithic people buried their dead beneath the floors of the houses. There is no evidence for how the Pottery Neolithic people buried theirs. The newcomers, for the first time, buried in rock-cut tombs, a practice that was to become standard at least until the Roman period. They brought with them pottery in simple forms—bag-shaped juglets and round-based bowls. These vessels had been found in earlier excavations—at Ai, Tell el-Far'ah (North), and Megiddo—together with vessels more elaborate in form or decoration. The Jericho tombs showed that such combinations represented a later stage because at Jericho the components could be shown as separate entities. The Jericho evidence suggested that the newcomers could be divided into A, B, and C groups. The A group, with the bag-shaped juglets and the round-based bowls, was the first to arrive at Jericho. Upon this group the B group superseded, which decorated vessels in elaborate patterns of grouped lines. Elsewhere, at Tell el-Far'ah (North) and Megiddo, for instance, the A group

Tell es-Sultan: plan and section of MB I tomb.



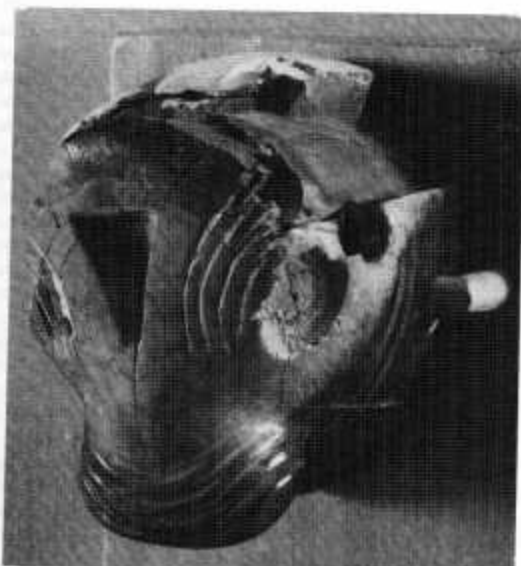
was mingled with a C group not found at Jericho, with vessels characteristically gray burnished and known as Esdraelon ware.

These combinations and permutations suggest immigrant groups arriving successively and mixing differently in the various areas. Nowhere is there evidence that they were responsible for true urban development, for almost all the evidence concerning them comes from tombs. However, at sites where there is evidence of them, urban development subsequently took place (unlike the sites at which the people of the Ghassulian culture are found). It is for this reason that the classification Proto-Urban is suggested.

The Proto-Urban phase at Jericho, with the combination of the A and B elements, developed into the urban civilization of the Early Bronze Age. The process was clearly a gradual one, and other immigrant groups may have provided the impetus toward urbanization. From the amalgamation of influences emerged a culture responsible for the walled towns that at Jericho, as elsewhere, are the country's characteristic feature for the greater part of the third millennium BCE. Jericho at this stage had grown into a steep-sided mound beside the spring responsible for its continued existence. Around its summit can be traced the line of mud-brick walls by which the Early Bronze Age town was defended. The line is uncertain only on the east side, due to the intrusion of the modern road. This line was traced in the earlier excavations. Sections cut across and into it during the 1952-1958 excavations showed that the history of the walls was complex. The section that was cut completely through the walls on the west provided evidence of seventeen stages. The walls were completely destroyed, by earthquakes, by enemies, or merely through neglect. It is impossible to estimate a time scale for the successive events, and it is impossible to correlate the succession observed in one area with that in another, for one length of wall might have collapsed or have been destroyed while other sections remained intact. It was also impossible to relate the detailed history of the defenses with the successive building stages within the town. In the areas in which the interior of the town has been investigated, there was a sequence of building periods, although not the same number of destructions found in the defenses. The remains, however, showed a succession of solidly built and spacious structures that confirms the impression that this was a period of full urban development.

A number of tombs was found covering the same period. All were large and rock cut and contained numerous burials. The interpretation of the evidence was complicated by the fact that in almost every case erosion had removed the roof of the chamber and the greater part of the shaft by which the chamber presumably was approached. It is clear, however, that in each tomb there were multiple successive burials (about a hundred skulls were found in one of the tombs). At intervals the tombs were cleared, and in many cases most of the bones were discarded, leaving mainly the skulls and the pottery vessels and other objects that had accompanied them. Many successive burials were therefore made in the tombs, but it is not known whether they represent family vaults covering a long period, or simply the current burial site for all the members of the community.

The end of Early Bronze Age Jericho was sudden. A final stage of the town



Ivory head of bull, EB.

well, which in at least one place shows signs of having been hurriedly rebuilt, was destroyed by fire.

**THE MIDDLE BRONZE AGE.** The next building stage consisted of houses quite different from those of the Early Bronze Age—more slightly built, of irregular plan and distinctive greenish bricks. These houses, however, did not immediately succeed those of the Early Bronze Age. Between the layers associated with the two types of houses was an accumulation of a new type of pottery associated with newcomers who apparently were not yet building houses but must still have been living in tents. The stage (elsewhere called Middle Bronze Age I) is best called the Intermediate Early Bronze Age I) for it represents an intrusion between the Early Bronze and Middle Bronze Ages, differing from both in every important respect. The newcomers were nomads and pastoralists. Even when they started to build houses, they did not develop a true urban center. The houses straggled down the slopes of the mound and over the surrounding country, and there is no evidence of a town wall. The tribal and nomadic character of the population is shown by its burial customs. The dead were buried individually in separate tombs, a feature that sharply distinguishes this period from the preceding and succeeding ones. But within this general practice there are distinctive variations, grouping the tombs into seven categories. The variations cover disposition and state of the body, form and size of the tomb and shaft, and type of offerings. These differences may represent the practices of separate tribal groups. One feature occurring in several of the groups is the very careful burial—in large, deep tombs—of skeletons that are largely disintegrated and often incomplete. This must be taken as evidence of a nomadic way of life, in which those who died during seasonal migrations were brought back for burial when the tribe returned to some focal spot.

The appearance of the Intermediate Early Bronze-Middle Bronze period people is part of the great expansion of the Amorites, to which reference is made in Sumerian records as early as the time of Sargon of Akkad (2371-2316 BCE) and the Third Dynasty of Ur (2113-2004 BCE), and who were responsible for the destruction of Byblos at about the end of the Sixth Egyptian Dynasty. It thus seems clear that it was at this stage that the Amorites, who formed an important element of the population both in this country and in Transjordan at the time of the entry of the Israelites, arrived on the scene.

A abrupt cultural break marks the beginning of the Middle Bronze Age (according to Kenyon's terminology, it is more often called the Middle Bronze Age II). The evidence at Jericho is very clear. The break is again in type of settlement, burial customs, tools and weapons, and pottery. Unfortunately, very little survives of the town from that period. The greater part of the summit of the mound suffered very severe erosion during periods in which the site was unoccupied. As a result, with one exception, the latest houses to survive in all the areas excavated within the line of the Bronze Age defenses belong to the Early Bronze Age. Those of the Intermediate Early Bronze-Middle Bronze period that survived did so because they were protected by the Middle Bronze Age rampart. The exception to this considerable erosion was in the center of the east side of the town, immediately adjacent to the spring. Here, there was a crescent-shaped hollow, presumably because access to the spring prevented the accumulation of the earlier levels. The Middle Bronze Age levels have survived in the hollow. Only a limited area in the lower levels has been excavated, but the evidence is sufficient to show that from the earliest stages the buildings were substantial. In this respect and in the regularity of their plans, they resemble those of the Early Bronze Age and not those of the Intermediate Early Bronze-Middle Bronze period. Like the Early Bronze Age houses beneath them, they were built in terraces on the side of the mound. A brick-built tomb found in one of the earliest stages contains multiple burials. Other burials were found in graves nearby. These burials appear to be earlier than any found in the cemetery. It may be that the position of the new inhabitants was not yet very strong, and fear of desecration by enemies kept them from burying outside the walls.

Associated with these earliest Middle Bronze Age levels was a succession of town walls of the same brick-built type as those from the Early Bronze Age. Very little of them was exposed, as to the north they were cut by the modern road and to the south they were buried by a modern water point. It seems that immediately adjacent to the south there had been a gate, with the rear of a

gatehouse just on the edge of the excavated area, but it was impossible to explore this further. It is probable that elsewhere the line of these early Middle Bronze Age walls followed approximately that of the Early Bronze Age walls that had created a crest around the edge of the mound. However, for the greater part of the circuit, the earlier walls alone survived. The destruction of the summit of the later Middle Bronze Age rampart (see below) showed that there had been much erosion on the line of the walls.

It appears that the first Middle Bronze Age occupation at Jericho does not belong to the beginning of the period. No evidence was found of anything comparable with the Middle Bronze Age I remains at Aphik, in the Tell el-Ajjul courtyard cemetery, or at Megiddo. Only one tomb in the cemetery area in Jericho is likely to belong to the Middle Bronze Age I. It is probable, therefore, that the site was first occupied at the end of the Middle Bronze Age I (more commonly referred to as Middle Bronze Age II), perhaps toward the end of the nineteenth century BCE.

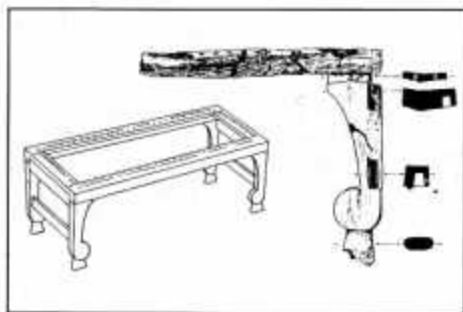
For the final stage of the Middle Bronze Age, something more of the town plan can be established. The houses excavated in the 1930-1936 and 1952-1958 expeditions were small dwellings, with small and rather irregular rooms, being two roads that in parts had shallow cobbled steps going up the slopes. These houses were called the palace storerooms by the earlier expedition, for at the time of their final destruction many of them contained a large number of jars filled with grain. However, this interpretation is improbable, both because the roads show that it was an ordinary quarter of the town, and because the building called the palace is quite obviously later in date. The living rooms were on the first floor and storerooms and shops were on the ground floor. There were clear examples of the little one-room shops found in modern *mazgs* that have a doorway to the street and no connection with the rest of the house. This quarter of the town may have been one in which corn millers lived, for in one house that had grain stored on the ground floor, no fewer than twenty-three grinding querns were found in the debris that had fallen from the upper story.



Tomb from MB IIB: (right) skeleton lying on burial bed; (left) offering table with a wooden bowl, basket, and pottery.



Remains of a chair and its reconstruction, from an MB IIB tomb.



This final Middle Bronze Age building phase, and several of the preceding ones, is later than the town wall described above, and extends over its top to the east, where it is truncated by the modern road and the water installations beyond. It is reasonably certain, however, that these building phases belonged to the new type of defenses that appear at Jericho, as at many other sites in the country—the type in which the wall stands on top of a high glacis. The surviving portion at Jericho consists of a revetment wall at the base (without the external ditch found at some sites), an artificial glacis overlying the original slope of the mound and steepening the slope to an angle of 35 degrees, and the face of the glacis surfaced with hard lime plaster. On the summit of this glacis was the curtain wall, at a height of 17 m above the exterior ground level and set back 26 m from it. Inside the wall was a lesser slope down to the interior of the town. Only in one place, at the northwest corner of the town, did the glacis survive to its full height, with the foundations of the wall above it. Elsewhere, erosion had removed some 6 m of it and, with them, all traces of the previous Middle Bronze Age walls. Those walls are presumed to have existed beneath the glacis and can probably be identified beneath its surviving high point.

Three stages of this glacis can be traced. The final one had a very massive revetment wall placed in front of earlier and less massive walls. This wall can be traced around nearly two-thirds of the circuit of the mound, swinging out at the north end well to the east of the present road. Here, the glacis had left the crest of the sloping edge of the mound and must have formed a freestanding rampart on level ground, as it does at some other sites with such defenses—at Qatna and Tell el-Yahudiyeh, for example.

Evidence of the Middle Bronze Age at Jericho was considerably supplemented by that from the tombs. Once more there was the practice of multiple burials, additional evidence of a break with the preceding period. From the evidence of a succession of forms of pottery and other objects, it is possible to establish a series covering the whole period of the Middle Bronze Age II. The normal practice was to provide each burial with food, furniture, and personal toilet articles. As new burials were made, the skeletal remains and associated offerings of previous ones were pushed to one side, thus creating a heap of bones and objects in the rear of the chamber. Some property in the Jericho tombs arrested the total decay of the organic material, and objects of wood and basketry often survived in recognizable form. In the pushing-aside process, many of the larger objects were broken. However, a number of tombs were found in which groups of simultaneous final burials remained undisturbed. Most of these belonged to the latest stage of Middle Bronze Age Jericho. They are probably evidence of a period of high mortality so soon before the final destruction of the town that the tombs were never reused.

From these tombs, therefore, it was possible to obtain evidence of the full normal equipment in tombs of the period. Almost without exception there was a long narrow table, usually found laden with food. The structure of the table, with two legs at one end and one at the other, presumably was designed to enable it to stand on an uneven floor. Stools and beds were also found, but these were rare and only occurred in tombs of apparently important persons. In other tombs, the dead person lay on rush mats, leading to the conclusion that beds and stools were luxury articles. Most adults were provided with baskets containing toilet articles, alabaster vessels, wooden combs, and boxes with applied bone decoration. Wooden vessels—from huge platters to small bowls, cups, and bottles—clearly supplemented the pottery vessels. In most cases, the dead were buried clothed. The garments were not well preserved, but textile fragments, usually of a rather coarse texture, were found extending at least to the knees and held in place by toggle pins on the shoulder, chest, or at the waist. Personal ornaments were not numerous. From the position of a number of wooden combs, it appears that they were worn in the hair. There were a few beads that in some cases may have belonged to necklaces. A considerable number of scarabs were found, sometimes worn on finger rings but more often apparently as pendants. It is reasonable to assume that the equipment provided for a dead person in a tomb was the same

Anthropomorphic vessel, from Garstang's excavations, MB II.



equipment to which he or she was accustomed in life.

The final Middle Bronze Age buildings at Jericho were violently destroyed by fire. Thereafter, the site was abandoned, and the ruins of two buildings of the lower part of the slope gradually became covered with rain-washed debris. The date of the burned buildings would seem to be the very end of the Middle Bronze Age, and the destruction may be ascribable to the disturbances that followed the expansion of the Hyksos from Egypt in about 1560 BCE.

**THE LATE BRONZE AGE.** The site was abandoned during most of the second half of the sixteenth century and probably most of the fifteenth. The conclusion formed during the 1930–1936 excavations—that there was continuous occupation in this period—was due to a lack of knowledge of the pottery from the beginning of the Late Bronze Age. The significance of its complete absence was not appreciated.

Only very scanty remains survive of the town that overlies the layers of rain-washed debris. These include the building described by Garstang as the middle building, the building he called the palace (although there is no published dating evidence and it could be Iron Age), and fragments of floor and wall in the area excavated from 1952 to 1958. Everything else disappeared in subsequent denudation. The small amount of pottery recovered suggests a fourteenth-century BCE date. This date is supported by the evidence from five tombs excavated by Garstang that were reused in this period. It is probable that the site was reoccupied soon after 1400 BCE and abandoned in the second half of the fourteenth century. The pottery on the mound and in the tombs is certainly later than 1400 to 1380 BCE. A calculation based on biblical evidence led Garstang to suggest this date for the destruction of the site. It is probably not as late as the thirteenth century, which is the date supported by other scholars for the entry of the Israelites into the country after the Exodus.

Of the defenses of the period, nothing at all survives. The double wall ascribed to the Late Bronze Age in the 1930–1936 excavations is composed in part of two successive walls from the Early Bronze Age. For most of the circuit, only stumps survive. Even of these walls and of the Middle Bronze Age glacis that buried them, only the part on the slopes of the mound was intact. At the highest preserved point of the mound, the northwest corner, the glacis was intact, but of the wall that crowned it, only the bare foundations were still in position. There is not the slightest trace of any later wall.

Jericho, therefore, was destroyed in the Late Bronze Age II. It is very possible that this destruction is truly remembered in the Book of Joshua although archaeology cannot provide the proof. The subsequent break in occupation that is proved by archaeology is, however, in accord with the biblical story. There was a period of abandonment, during which erosion removed most of the remains of the Late Bronze Age town and much of the earlier ones. Rainwater gulleys that cut deeply into the underlying levels have been found.

**THE IRON AGE AND PERSIAN PERIOD.** According to the biblical account, Hiel the Bethelite was responsible for the first reoccupation of Jericho in the time of Ahab (early ninth century BCE). No trace of an Iron Age occupation as early as this has so far been observed, but it may have been a small-scale affair. In the seventh century BCE, however, there was an extensive occupation of the ancient site. Evidence of this does not survive on the summit of the mound but is found as a thick deposit, with several successive building levels, on its flanks. On the eastern slope, a massive building from this period was found, with a tripartite plan common in the Iron Age II. The pottery suggests that this stage in the history of the site lasted until the period