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The Early Bronze Age

AMNON BEN-TOR

Two difficulties attend the term "Early Bronze Age." The first concerns the early use of bronze, an alloy of copper with 5–10 percent tin. Being much harder than copper, its introduction brought about an improvement in the quality of tools and weapons and was thus a great step forward in the history of civilization. However, it was not used widely in Palestine until the early second millennium B.C.E., or about a thousand years after the beginning of the so-called Early Bronze Age. The term, however, has taken root and become accepted, inaccurate though it may be from the purely technological aspect. The second difficulty concerns the method used in defining periods. Later periods, such as the Persian, Hellenistic, and Roman, may be delimited by fairly accurate dates; the Hellenistic period, for example, may be said to begin in the year 332 B.C.E., with the conquest of Alexander the Great, and end in the year 37 B.C.E. with the accession of Herod. But such a definition, justified though it may be from the political-historical point of view, is not an archaeological one, for archaeology deals with the history of material and spiritual culture, not with that of political change. Archaeologically, each period is firmly bound to its predecessor and overlaps with its successor, so that it is difficult to tell exactly when one period ends and the next begins. Those periods of transition (such as the period from the Chalcolithic to the Early Bronze) are the most problematic and therefore most often studied and debated. In addition, there are many questions concerning the subdivisions within the principal periods. As far as the subject treated in this chapter is concerned, the question may be put thus: when and how did the Early Bronze Age begin and end, and can this period be subdivided?

In 1937, G. E. Wright, in an extensive study of the pottery of the period, laid the foundations for the definition and subdivision of the Early Bronze Age. His division of the period into four phases was widely accepted and remains in force to this day. As may be expected, most of the discussions and suggested revisions of his study, including those by Wright himself, have been devoted to the first and last phases of the period (the transitional phases) while relatively few changes have come about in the understanding of the two middle phases.

In conducting a survey such as this, spanning approximately one

small, poor, and entirely different from settlements of the same sites in the following period. They may be said to be exceptions that prove the rule, for of the three hundred or so known Early Bronze Age sites (and undoubtedly there are more to be discovered), 90 percent are in the new settlement areas—where the average annual rainfall is above 300 millimeters—and the location of the remaining sites may be explained by local factors, such as the proximity of oases (Jericho, Bab edh-Dhra) or other abundant water sources (the settlements of the middle Jordan valley).

The fertile soils in Palestine are the alluvial soils of the valleys and the coastal plain and the *terra rosa* of the hills. However, of the Early Bronze Age settlements, 40 percent are on the alluvium and a further 40 percent on chalky soils, with only 10 percent situated on *terra rosa* soils. This may be explained by the difficulty of clearing the natural cover from the hills, by the necessity of terracing to prevent erosion, and by the scarcity of water sources. Still, important settlements were founded in the hills during the Early Bronze Age, usually confined to hilltops near small interior valleys, for example, Tel Rosh in the Galilee, Shiloh, Bethel, Tell en-Nasbeh, and Ai. As the art of storing water in plaster-lined cisterns was not yet known in the Early Bronze Age, the hill population, and others who were distant from their water sources, were in a difficult position. They overcame it by constructing reservoirs at the lowest point in the towns, which collected enough runoff to enable the existence of some of the most important settlements of the Early Bronze Age, such as Ai, Arad, and, apparently, Yarmuth.

The coastal plain is conspicuously absent from the settlement zones of the Early Bronze Age. The sites of Akhziv, Accho, Dor, Jaffa, Yavne-Yam, and others were first settled only in the early second millennium B.C.E. The absence of ports on the Mediterranean coast of Palestine during the third millennium stands in stark contrast to the situation in Syria (Byblos, Ugarit, etc.) and had a decisive influence on the coastal trade of Palestine during this period.

ECONOMY

Our knowledge of the economy and particularly of animal husbandry and agriculture is meager and random, both because organic remains (with the exception of bones) are poorly preserved in the Palestinian climate and because sufficient attention has not so far been given to the retrieval of the relevant data. Despite these limitations, a number of conclusions may be drawn from the information in hand.

It seems that at the end of the fourth millennium, there was a return to agricultural patterns prevalent before the Ghassulian Chalcolithic, that is, to the economy characteristic of late fifth and early fourth millennium settlements. In this respect, as well as in others, the Ghassulian-Beersheba Chalcolithic may be seen as an intrusive culture in Palestine, whose disappearance is followed by a continuation of interrupted processes. Yet there are important differences: herds, mainly sheep and goat, do not play so central a role as in earlier periods, and the distribution of cattle and pigs is drastically reduced. Of great importance is the appearance of the donkey and the ox in the domestic assemblage; as draft and pack animals they allowed better cultivation of the soil and larger harvests on the one hand and improved communications and transportation on the other. The ox and donkey were central factors in the improvement of the standard of living, in the accumulation of surplus, and in the promotion of trade.

In agriculture, there is a noticeable increase in the importance of previously known crops such as cereals, vegetables and legumes (lentil, chickpea, bean, and pea), and various fruits (walnut, almond, fig, plum, date, pomegranate). These, and especially the fruits, varied and enriched the diet of the people, but they also constituted, with their by-products, an important part of the export trade of Palestine.

Most important are two crop plants that were first widely cultivated in the Early Bronze Age, the olive and the vine. The immense contribution of these plants to the history of Mediterranean civilization has often been remarked: the olive and vine adapt well to poor soil, require relatively little attention (and that mainly in convenient seasons of the year), produce highly nutritious fruit and by-products (mainly oil and wine) that keep well for long periods. It is not surprising that oil and wine soon occupy a prominent position among the exports of Palestine.

The concentration of Early Bronze Age settlement in Mediterranean zones led to the establishment of the so-called Mediterranean economy, which was the basis of economic life in Palestine for thousands of years, from the beginning of the third millennium onward. This economy is based on a combination of goat- and sheep-herding with cultivation, especially of the olive, the vine, and other fruit trees. The product of these labors served to raise the people's standard of living, increase the number of persons who could live off a given plot of land, and bring about an accumulation of surplus, a precondition for trade. These results had a far-reaching influence on every aspect of daily life and on the material and spiritual

culture from the beginning of the Early Bronze Age and on.

POPULATION AND URBANIZATION

The two basic facts concerning the population of Early Bronze Age Palestine—its size and ethnic composition—cannot be satisfactorily ascertained, largely because of the complete absence of written sources. Comparative anthropological study of Chalcolithic and Early Bronze Age burials has been of limited scope, and the once commonly held notion that the bulk of the Chalcolithic population was of the broad-headed Armenoid type and that it was replaced at the beginning of the Early Bronze Age by a dolichocephalic proto-Mediterranean population has been shown to be unfounded. Rather, it appears that the bulk of the Palestinian population, or at least that part represented by the few skeletons studied, belongs, both in the third and in the fourth millennia, to the Mediterranean type, though there are small groups belonging to the Alpine, the Euro-African, and the Armenoid types. If there were migrations of new populations into Palestine in the fourth millennium that could be held responsible for all those changes mentioned above, they were not migrations of a race different from that of the bulk of the indigenous population of Palestine. We must therefore try to trace the source of these populations with the aid of criteria other than those of physical anthropology.

As for population size, various methods of estimating rural and urban populations in a given period have been developed over recent years. These estimates must overcome certain limitations, chiefly two. First, we are not, nor are we ever likely to be, acquainted with all the Early Bronze Age sites that ever existed; many sites, particularly the smaller ones, have disappeared over the years as a result of human or natural activity, and few of the known sites have been fully excavated. Second, in every age, the third millennium included, there was a nomadic and seminomadic population existing alongside the sedentary population. No data allowing an informed estimate of the size of this population, which lived principally in the marginal areas, is currently available. Despite those limitations, the question of population size cannot be ignored, for the number of persons in each site, as well as in the country as a whole, has far-reaching implications concerning, for example, economic and military power, resources for the development of arts and crafts, and so on.

Archaeological research clearly indicates a progressive increase in population at the end of the fourth millennium and the beginning of the third, which peaked in the mid third millennium. The clearest sign of this increase is not a growth in settlement size, for that remained virtually unchanged throughout the Early Bronze Age; rather, there was a marked increase in population density within the settlements. The many open spaces in the sparsely built-up settlements of the earlier part of the period were filled in with time and nearly disappeared. Population increase was also spurred by the improvement in the carrying capacity of the land, that is, by the greater number of persons who could subsist on a given area.

A calculation based on an estimate of the total settled area in the towns and villages of Early Bronze Age Palestine multiplied by 30 persons per dunam (representing the maximal density) indicates a population no greater than 150,000 persons. This, of course, is only a rough estimate, and it is important mainly because it provides a point of departure for comparison with the estimated populations in the periods preceding and succeeding the Early Bronze Age. The figure must be supplemented by the nomadic and seminomadic population, the size of which is even more difficult to estimate, though it may be assumed that it did not exceed some thousands or a few tens of thousands.

At the beginning of the third millennium the population of Palestine was undergoing urbanization. This is not to say that the entire population moved into towns; on the contrary, it may be assumed that the majority continued to live in the tens and hundreds of villages scattered over the countryside, as they did in later periods. However, the crystallization of the city or town as a form of settlement is the single most important social phenomenon during this period in the Near East as a whole and appears to be one of the essential conditions for the development of civilization. The definition of the city or town is a subject often studied and much debated. Its intricacies cannot here be fully treated, but it seems that some conditions—such as size, fortification, population density, public building, social stratification, a part of the population engaged in nonrural pursuits—are essential for the definition of a settlement as urban, though not all of them are required in every case. In regard to size, which is the easiest datum to ascertain, the settlements of Early Bronze Age Palestine may be divided into three categories: 1. Small settlements, or farms, up to 2 dunams (one dunam is one tenth of a hectare). There were probably many such sites, but as they leave no topographical trace, they are difficult to identify. It is also likely that many of them have been destroyed over the years by human and natural agencies. 2. Villages, which range

from 5 to 20 dunams, the majority being about 10 dunams. 3. Towns, which range from 40 to 150 dunams (some towns, such as Beth Yerah and Tel Erani, exceed 150 dunams). Among the towns may be included small towns, less than 70 dunams (Megiddo, Lachish, Jericho), and large towns, more than 70 dunams (Yarmuth, Gezer, Aphek, Arad, and others). Multiplying the area by the coefficient of 30 provides a population estimate for each site.

The urban unit dictated the political organization of Palestine for the following two thousand years. The city-state was a unit in the center of which stood the city or town surrounded by villages and farmsteads, which formed its agricultural hinterland and for which the town provided protection and services. Historical sources of the second millennium show that city-states were often allied or at war with one another, and there is no reason to doubt that this was the case in the third millennium as well. The little that has been revealed on this subject from the archives of Ebla in Syria (dating to the second half of the third millennium) certainly points in this direction.

How did urbanization evolve in Palestine? Was it a result of internal development? Was it imported as a concept or, as is more likely, introduced by immigrants from the North? These are some of the questions that still engage scholars. The best-known model of urbanization is the Mesopotamian one, which apparently began in the south of that land, in Sumer. Here, the phenomenon may be clearly and firmly defined, for art and literature were highly developed, and the cities attained an area of 400 (Khafajeh), 600 (Ur), and even 4000 (Uruk) dunams. Some believe that cities evolved independently in different areas, when conditions ripened. Others suggest that urbanization should be seen as a diffusive process, emanating from a single center. If the latter is the case, then Sumer should be seen as the center, and the process as similar to the effect created by a stone thrown into a pond. In this analogy, Palestine is at the edge of the pond, and only small ripples from the processes occurring in Sumer arrive there, and even those by way of Syria. The high urban culture of Syria may thus be explained by the direct contact between the Mesopotamians and the people of northeastern Syria, especially those of the Middle Euphrates region (for example, the site of Habuba Kabira). From there the phenomenon spread to the Syrian interior and thence to Palestine. This hypothesis cannot yet be proven, though there are various indications that it is highly probable. In any case it is generally agreed that the phenomenon of urbanization in Palestine, with all its importance to the history of that land, is but a faint echo of what was happening in Mesopotamia.

Finally, it should be remarked that urbanization did not occur simultaneously at all sites. One example is provided by the excavations of Arad and Tel Erani. At both sites, the strata of the beginning of the Early Bronze Age were dated by finds to the early First Dynasty period. However, while Tel Erani was at this time a fortified and apparently urban site, Arad was no more than a poor, unwalled village. Only in the following phase (Early Bronze Age II) did Arad become a fortified town. The same is true for most of the towns in Palestine, which achieved urban status only at the beginning of the Early Bronze Age II; some places, however, such as Erani, Ai, and Tell el-Far'ah North, preceded the others and may be called towns already at the end of the Early Bronze Age I.

ARCHITECTURE

DWELLINGS. The private structures of the Early Bronze Age I are rather unimpressive, being built for the most part of bricks on a low foundation of fieldstones, with walls of 0.6–0.7 meter in width (the breadth of two bricks or the length of one). They do not have a fixed plan and generally consist of a few small rooms and a courtyard. The most common domestic installation is a pit dug into the ground, sometimes lined with stone, which served as a silo. The spread-out character of the settlements, the relatively small areas cleared in excavations, and the destruction wrought by the intensive construction activity of the urban settlements built atop the Early Bronze Age I villages have combined to reduce the number of houses known from this period.

An exception is an Early Bronze Age I village of about five dunams currently being excavated at Yiftahel, in the southern part of the Lower Galilee. This village, apparently abandoned toward the end of the Early Bronze Age I, not long after its foundation, was never resettled. Its houses were thus not destroyed by later construction, and a relatively large portion of the village could be exposed. The character of other, more poorly preserved villages can probably be inferred from the site of Yiftahel. The houses, fifteen of which have been excavated, were built of bricks on a low foundation of fieldstones. The structures are relatively large, with an average area of 50 square meters, and single-roomed, a feature characterizing many of the Early Bronze Age houses in Palestine. Some are oval, others are rectangular with rounded corners. Structures of an identical plan have been found at Megiddo and Tell el-Far'ah North in Palestine and at Byblos, on the Syrian coast. In light of the varied con-

nections between the important center at Byblos and sites of northern Palestine revealed in the archaeological finds, it may be suggested that Byblos was the origin of these types of structures.

APSIDAL STRUCTURES. These are rectangular structures with three straight walls and one (short) curved wall. The resulting form resembles the apse of a church, hence the name. They have one or two rooms, with the entrance set either in the short straight wall or in one of the long walls. The position of the doorway is significant, as we shall later see. Apsidal structures have been found at sites in Palestine: Megiddo, Beth Shean, Mezer, Yiftahel, and elsewhere. Such structures have also been found at Byblos (where they first appear earlier than in Palestine) and in Asia Minor and Greece. Regarding their age, origin, and function, only the first can be established with any degree of certainty: they have a relatively short span of existence in Palestine, and all the examples so far uncovered clearly date to the Early Bronze Age I. Their origin is a matter of debate, though it should probably be sought on the Syro-Lebanese coast (Byblos). Every sort of function has been suggested for these structures—regular dwelling houses, patrician houses, temples—but in the present state of research the question had best be left open.

TEMPLES. Remains of cult structures of the Early Bronze Age I have been discovered at Jericho, Ai, and Megiddo. Of these, the most impressive and well preserved is the double temple of Megiddo stratum XIX, which was built before the site was walled and perhaps served as the core around which the town developed.

The temple plan is that of a single-roomed rectangular structure, entered through one of the long walls. A rectangular structure entered through one of the short walls, on its longer axis, is a longroom structure, whereas the opposite is a broadroom structure. Each of the Megiddo temples is thus a single-roomed broadroom structure with a platform (or altar) set against the wall directly opposite the doorway. The temple abuts a wall, which surrounds the sacred area. Such boundary walls are common in ancient Near Eastern temples and are termed temenos walls, the area within the walls being termed a temenos. The temenos wall in fact served as the rear wall of the temple. The temenos itself was paved with flagstones, some of them inscribed with rather crude drawings of humans and animals. Only one of the two broadrooms of the Megiddo double temple is well preserved, and the other almost completely destroyed. Between the two rooms is a small annex, which probably served for storage.

The plan of the Megiddo temples is remarkably similar to that of the Chalcolithic temple at En Gedi. The broadroom concept, which lies at the foundation of the double temple at Megiddo and of later Early Bronze Age temples, is characteristic of houses of the period but also appears in the plan of the En Gedi temple and in houses of the Chalcolithic period (for example, at Ghassul and in the Golan). The continuity in temple design, in which tradition gave less rein to the builder's imagination than in domestic construction, has great significance as far as the transition from Chalcolithic to Early Bronze Age is concerned. It would seem to indicate that at least part of the Chalcolithic population of Palestine remained there during the Early Bronze Age, transmitting building traditions to the newcomers and merging with them to comprise the

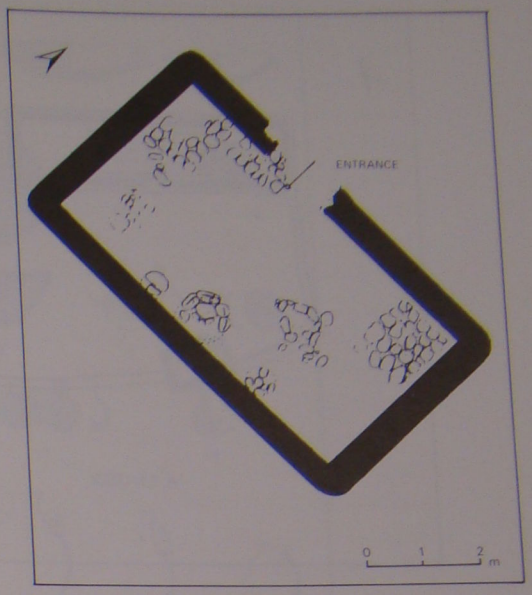


Fig. 4.1. Byblos: structure with rounded corners

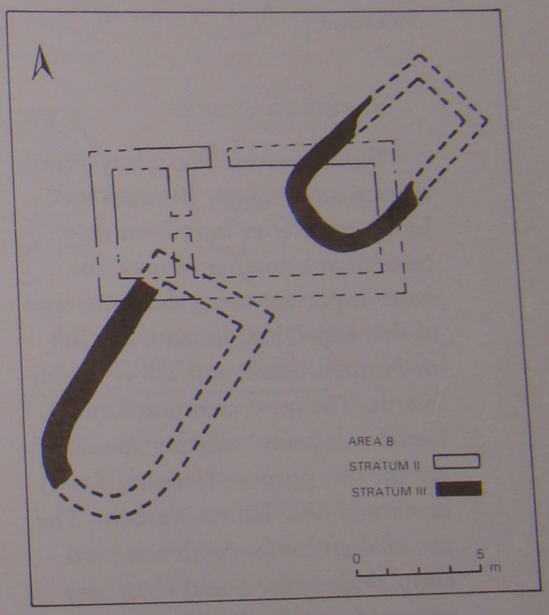


Fig. 4.2. Apsidal structures at Mezer

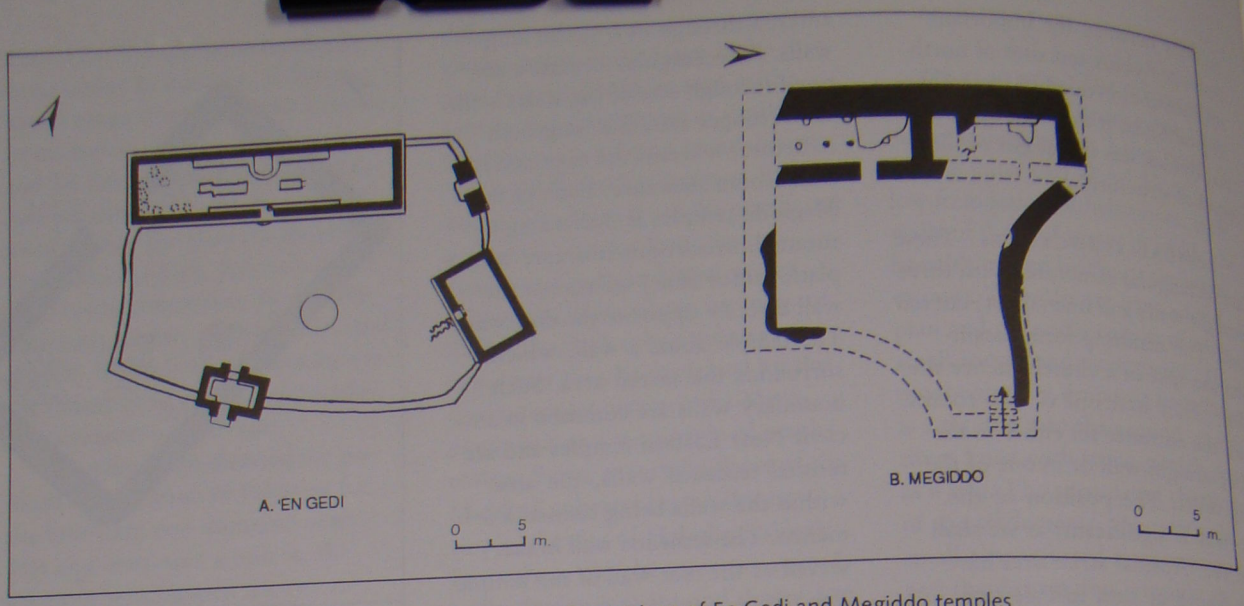


Fig. 4.3. Comparison of En Gedi and Megiddo temples

population of Early Bronze Age Palestine.

BURIAL PRACTICES

Tombs provide important information on the Early Bronze Age I. Large cemeteries have been discovered at a number of sites, the most important being the cemeteries of Bab edh-Dhra, Jericho, Ai, Tell en-Nasbeh, Azor, and Tell el-Far'ah North. The most common form of burial is in caves, whether specially cut for this purpose (Jericho, Azor) or natural (Ai, Tell en-Nasbeh). The use of shaft tombs (with a vertical entry shaft to the burial chamber) observed at Bab edh-Dhra is exceptional; only a thousand years later, in the Middle Bronze I period, do such tombs become common in Palestine.

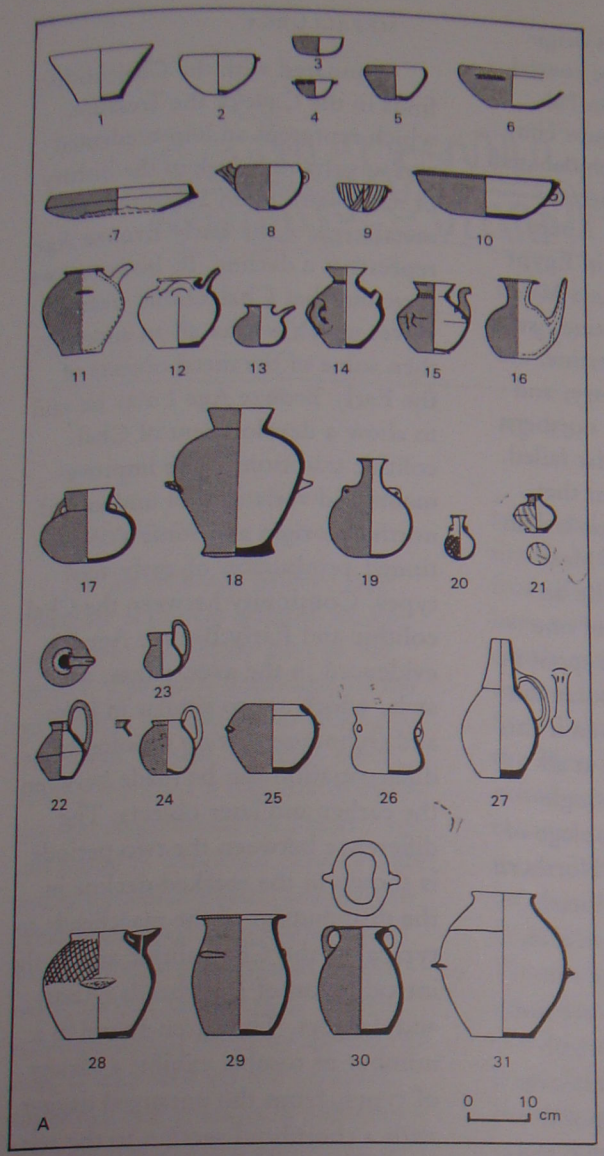
Burial customs, which are—like temples—closely linked to religion and cult, provide important information on the composition of the population. The lack of uniformity in important aspects of burial seems to suggest a heterogeneous population but not the existence of separate groups, that is, a population with some important joint characteristics but with variants representing differences of region, tribe, and the like.

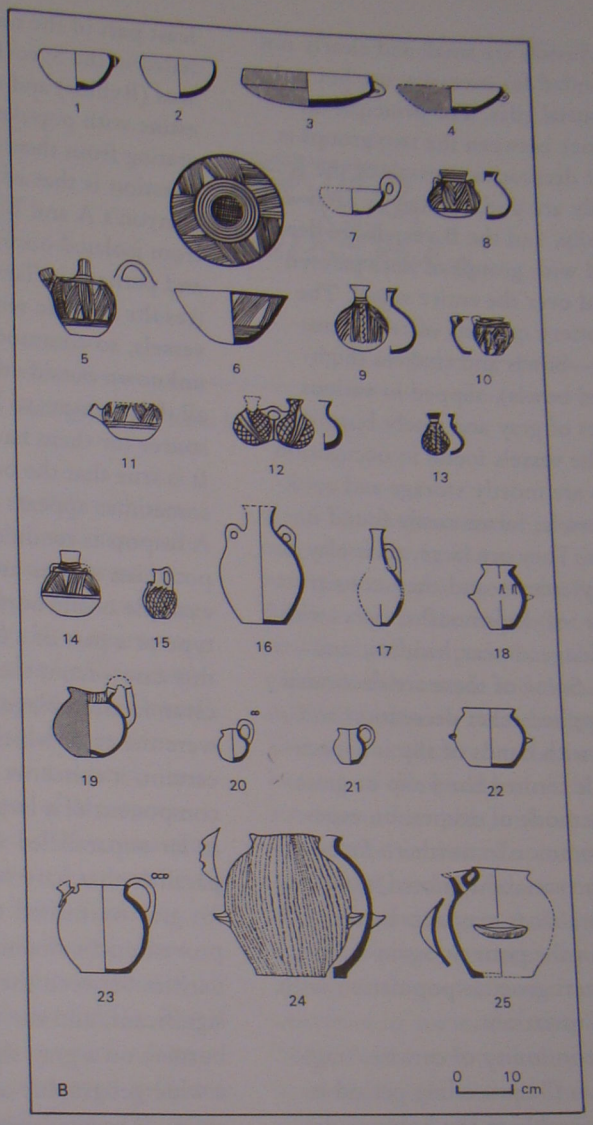
The number of interments in each tomb ranges from a few individuals (five to ten) to nearly two hundred. Usually the remains of a few dozen individuals were placed in one tomb, and it is clear that they do not represent one interment but rather the continuous use of one cave over a long period by one tribal or familial unit. In most cases burial is primary (the body was interred soon after death). The considerable mixing of bones noticeable in the tombs is the result of the repeated pushing aside of the bones to make room for new interments. Nevertheless, some cases of secondary burial have been observed, where the bones were gathered after decarnation. This practice was observed chiefly in the cemetery of Bab edh-Dhra, where not all the bones were interred, skulls and long bones being preferred. In some cases there are clear signs of cremation, for example, at Gezer and Azor. But this practice was not widespread and did not even include all the tombs of any site; in two adjacent tombs at Azor, cremation was observed only in one.

The burial gifts placed alongside the deceased consisted chiefly of pottery and occasionally small amounts of jewelry, weapons, and other personal goods. In view of the poor state of preservation of the settlement sites of the Early Bronze Age I, it is the many tombs, with their wealth of finds, that provide most of the data concerning the material culture of the period.

POTTERY

The pottery of this period may be divided into two principal groups: the tomb pottery—the vast majority of the assemblage—and the pottery from occupation layers. British archaeologist Kathleen Kenyon, who excavated the large Early Bronze Age I cemetery at Jericho, divided the pottery found in the tombs into three families: Proto-Urban A, B, and C ("Proto-Urban" is the term Kenyon used to describe the Early Bronze Age I). The A and B families are composed mainly of saucers, amphoriskoi, and teapots;





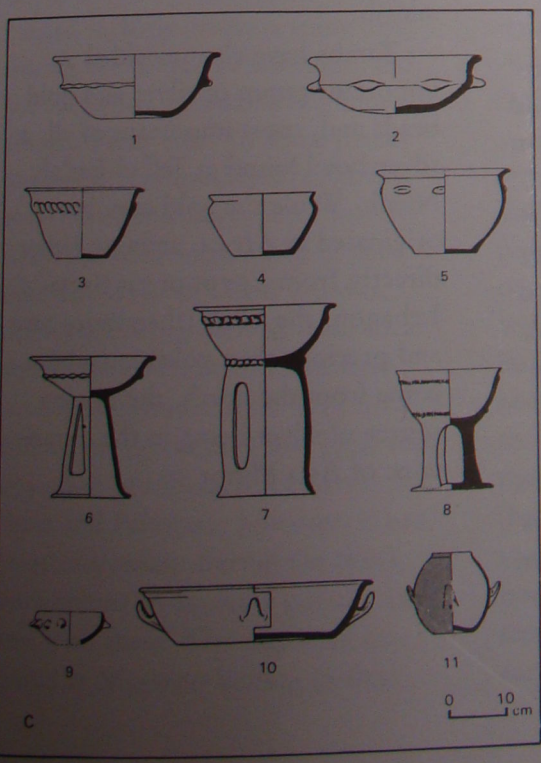


Fig. 4.4. Pottery of the Early Bronze I: Proto-Urban A, B, and C

the vessels are small and clearly not intended for everyday use but rather as burial gifts. The principal difference between the two groups is their decoration: vessels of the A family are undecorated or carry a red slip, and the B vessels are decorated with groups of lines painted in red over the entire vessel. The C pottery consists of two forms only—bowls and chalices (high-footed bowls), slipped in various shades of gray and finely burnished.

The vessels found in occupation layers are mostly storage and cooking vessels, forms rarely found in tombs. They are large, their clay is usually coarse, and they consist mainly of holemouths, jars with large ledge or ear handles, and pithoi. Some of these are decorated with applied relief decoration and others with bands of slip in a peculiar style termed band slip or grain wash, a mode of decoration especially common in northern Palestine. The variability noted in the burial practices may also be discerned in the pottery, again indicating a heterogeneous population with regional variations.

The continuity of ceramic traditions from the preceding period is most noticeable in the holemouths, cooking vessels that clearly continue Chalcolithic prototypes. Continuity is also evident in some bowls, in details of form such as ledge handles, and in the gray burnished ware: the gray color of these bowls and chalices is reminiscent of the Chalcolithic basalt vessels, which also appear only in the form of bowls and chalices. The identical color and typology of the Chalcolithic basalt vessels and the gray burnished vessels of the Early Bronze Age I clearly attest a continuity of tradition, which apparently represents a continuity of population.

The remaining vessel types are new, and it is not impossible that at least part of the new forms originated in the Syro-Lebanese coastal area (Byblos) and arrived in Palestine with population groups emigrating from there. A much debated question is that of the source of Kenyon's A and B groups. Apart from isolated occurrences in Egypt and perhaps in Tarsus in Asia Minor (results of trade with Palestine), such vessels, so common in Palestine, are unknown outside the country, and all the attempts to locate a northern source for them have thus far failed. It is true that the bent spout that sometimes appears on Proto-Urban A teapots is reminiscent of Mesopotamian spouts and may be an example of the borrowing of one type or a part of a form—a spout in this case—from the Mesopotamian ceramic assemblage. But even if this were the case, which is not at all certain, it concerns only a single component of a large assemblage of so far unparalleled vessels. Northern parallels that have been adduced for gray burnished ware have also proved unconvincing, as the similarities between the vessels are not significant, and the technique of burnish on a gray slip appears over a wide geographic and temporal range. It seems, therefore, that the source of these ceramic groups should not be sought outside Palestine. The phenomenon of Proto-Urban A and B ware is specific and defined—small pottery vessels manufactured for use as burial gifts—and should therefore be seen as an original creation. The forms are so unique, with no precursors and no successors (excepting a few types), the technique so uniform, and the geographic distribution so limited that these two pottery types may perhaps be seen as the creation of a limited number of itinerant potters who went from one site to another, producing burial-gift ware for the inhabitants.

METALLURGY

Compared with the Chalcolithic finds in the Cave of the Treasure, which represent an unprecedented and unsustained peak in the history of metalworking in Palestine, the metallurgy of the Early Bronze Age represents a decline. If, however, we leave out that Chalcolithic treasure trove, which is after all an anomaly, then some of the metal objects of the Early Bronze Age I may be said to show a development of Chalcolithic traditions, with improvements and variations of undoubted northern origin and some a continued production of early tool types. Continuity between the Chalcolithic and Early Bronze Age I is evidenced in the axes, adzes, and awls, which are so similar in form and technique that no typological differentiation can be made between the earlier and later objects. The difference between the two periods is shown in the marked decline in the distribution of the maceheads so typical of the Chalcolithic and in the introduction of spearheads (Azor) and daggers. The latter, found in a number of tombs, exhibit a variety of types, from the untanged dagger with a rhomboid section to the relatively developed type, with tang and midrib.

Tombs have also provided an important group of silver and gold beads and, most important of all, a silver bowl found at Tell el-Far'ah North. While the gold may have originated in Africa, arriving either directly from Egypt or via Syria-Lebanon, the silver (then more rare and precious than gold) must have come from the north, the nearest source of silver being in the mountains of Asia Minor.

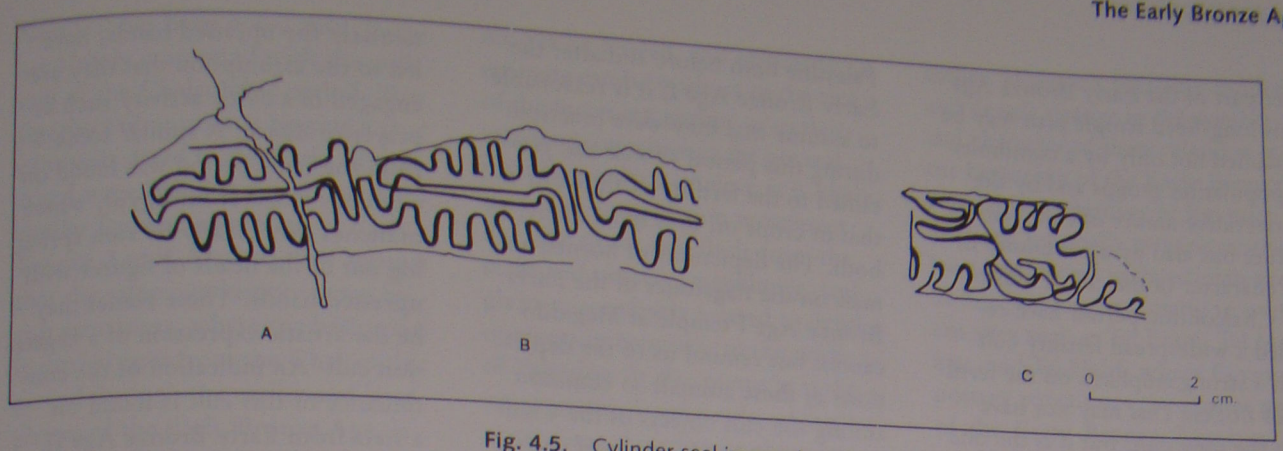


Fig. 4.5. Cylinder seal impressions from Megiddo Stage V

ART AND CULT

The art of Early Bronze Age Palestine is poorly attested to, especially in the earlier part of the period. The most important of the art objects that do occur belong to the realm of seal carving; chief among them are a number of cylinder seal impressions on pottery vessels found at Megiddo. The cylinder seal is a small cylinder, one to four centimeters high, usually made of stone, though examples in wood, ivory, or clay are known. A scene, accompanied at times by an inscription, is engraved on the cylinder, and when the cylinder is rolled over soft clay the scene is impressed on it in relief. The cylinder seal was invented in Mesopotamia some time during the fourth millennium, and the idea soon spread throughout the ancient Near East. In some places imported Mesopotamian cylinder seals have been discovered, but usually the seals were made in the different lands by local artisans, the scenes being derived from local theme assemblages. In their land of origin, cylinder seals were used chiefly for the signing and legal confirmation of official documents. In Syria and Palestine, however, it became customary during the third millennium to decorate pottery vessels with them. The impressions found at Megiddo belong to this type, and they fit in well with similar finds from Syria, and especially from Byblos. The seals themselves have not survived, as they were evidently made of wood, a characteristic feature of third millennium Syro-Palestinian glyptic art. One of the Megiddo impressions is composed entirely of animal heads, in a manner reminiscent of Mesopotamian glyptic. Most of the remaining impressions portray what seem to be lions and various horned animals. Their technique, style, and composition highly resemble those of seal impressions from Byblos. A seal from Tel Qishyon in which a long-horned animal is portrayed indicates contact with North Syria. The material of the seal, its form, and the style in which the animal is depicted all testify to a foreign origin, in the region of Syro-Cilicia.

Seal engraving is the principal expression of the artistic impulse in Early Bronze Age Palestine. It is supplemented by drawings incised on stone or, occasionally, potsherds, which usually portray human or animal figures. Such drawings have been found at Arad and Jericho, and the largest group at Megiddo. There the figures, depicting armed persons (hunters or warriors, perhaps) and various animals, most of them long-horned, were incised on the paving stones of the sacred area (described earlier in the section on architecture). The scenes may be taken as one of the few indications of the nature of cult practice in the Early Bronze Age I. The important cult structures of this period are the Megiddo double temple and the so-called Babylonian shrine at Jericho. These are considered to be temples because of the quality of their construction, their plan, cult installations found in them (for example, platforms), and the temenos wall that surrounds them. At Megiddo the double temple marks the start of a long-lasting cultic tradition; for centuries to come, the temples of Megiddo were erected in one place, termed the sacred area. The most difficult task faced by scholars is to understand the nature of the cult actually practiced both within these structures and by the people of Palestine in general. Not only are there no written documents but there is also a dearth of silent evidence—archaeological artifacts that can be clearly defined as cultic. There is thus no choice but to attempt to reconstruct a partial picture using logical inference and objects whose cultic nature, though highly probable, is uncertain.

A continuity of temple design is evident between the Chalcolithic and the Early Bronze I, particularly in the temple plans of Megiddo and En Gedi, and the same principles of design are followed in temples of the

later part of the Early Bronze Age. This long-lived temple plan may be explained not only by a continuity of population groups and by the conservative nature of cultic architecture but also by a continuity in the character of the cult. Finds of the Chalcolithic period have revealed a widespread fertility cult with a strong emphasis on the fertility of flocks. This may not have been the only cult, but it is the one we know best and was no doubt of central importance. Finds of the later phases of the Early Bronze Age reveal that the fertility of land and vegetation joined that of flocks as central elements in the cult. This is no doubt related to the growing importance of field crops, which began to play a greater role at the beginning of the Early Bronze Age. If fertility cults were practiced in Palestine both before and after the Early Bronze Age I, it is reasonable to assume that they were practiced during this period as well and pertained to the fertility of flocks or to that of crops or, as is most likely, to both. The depictions of horned animals on the flagstones of the Early Bronze Age I temple at Megiddo cannot but remind us of the depictions of these animals so common among the cult objects of the Chalcolithic. Incised drawings of such animals were also found on pottery vessels at Bab edh-Dhra, along with a graffito of a palm tree bearing fruit and a vessel decorated with a unique scene: four figures with hands upraised portrayed on either side of a pattern resembling a palm branch. On the rear of the vessel, more palm branches, perhaps bearing fruit, are depicted. The figures' attitude, particularly the upraised hands, have led to the assumption that they are engaged in a cultic activity such as prayer or dance. A similar scene from the same period was found on a pottery vessel from Egypt, where branches may clearly be seen springing out of the heads of figures with upraised hands. These scenes may be the artistic expression of a vegetation cult. An indication of the continuance of this cult is found on a stela from Early Bronze Age II Arad. A thread of continuity is also evident in the clay figurine assemblage of vessel-bearing animals. This type of figurine first appears in the Chalcolithic period. At Azor an animal described by the excavator as a donkey bearing a pair of vessels was found. In the Chalcolithic shrine at En Gedi a figurine of a horned animal bearing a pair of churns was

Fig. 4.6. Animal bearing vessels, from Azor (height 7 centimeters)

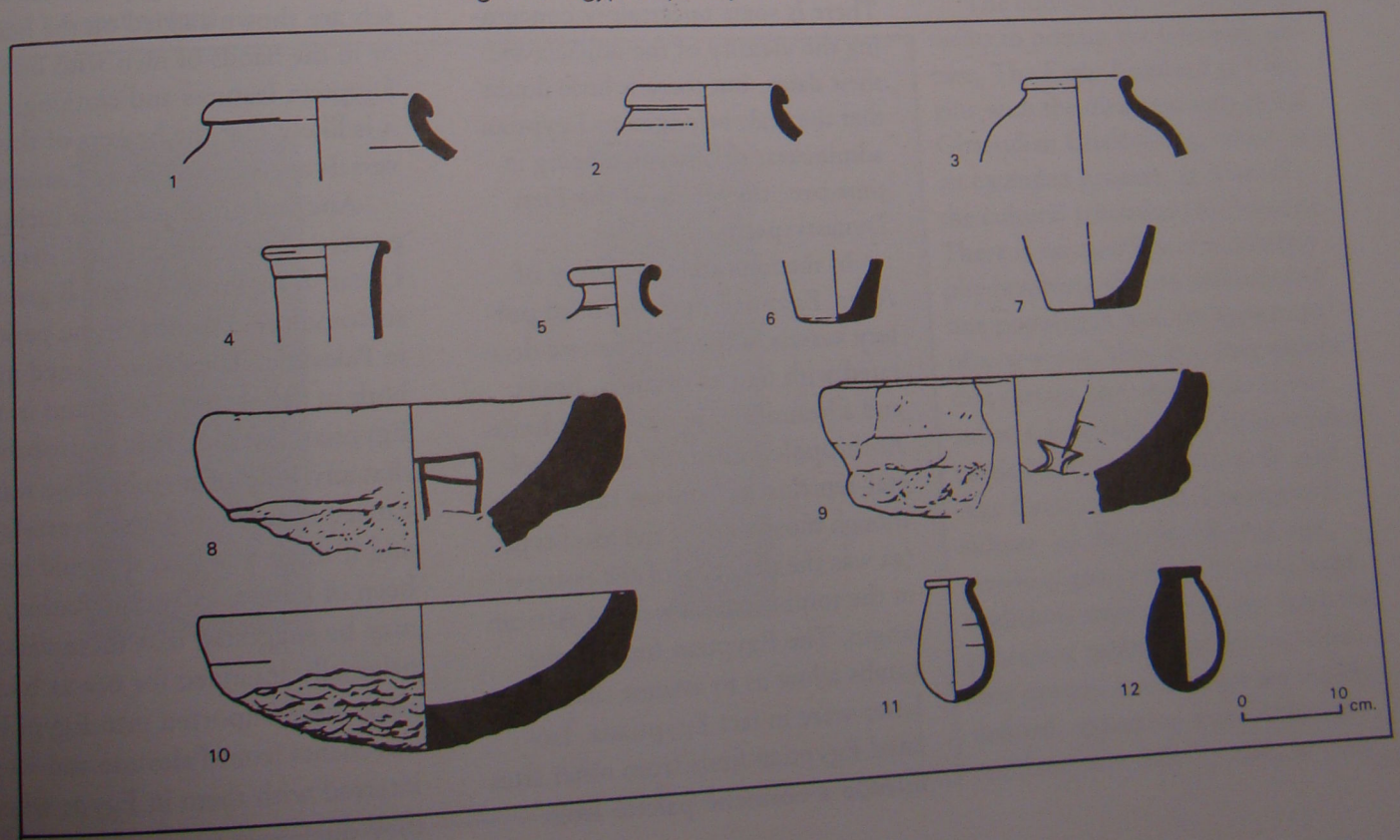
found; it has been noted that churns are closely connected with the milk cult of the Chalcolithic period. Two figurines of an animal bearing a pair of vessels dated to the Early Bronze Age I were found at Aphek, and a similar figurine was found in Early Bronze Age II Arad. It thus appears that the same continuity shown by cult structures, where the basic plan is carried over from the Chalcolithic period through the earlier and later phases of the Early Bronze Age, is demonstrated by cult objects such as vessel-bearing figurines. It is therefore likely that the cult itself, a fertility cult of flocks and vegetation closely linked to the economic life of the people, continued to be practiced.

FOREIGN RELATIONS

The suggestion that some of the people of Palestine in the Early Bronze Age I were immigrants from the north, whose place of origin was somewhere in Syria-Lebanon, cannot yet be proved, and obviously no estimate can be made as to the size of the incoming groups or to their relative proportion in the general population. Nonetheless, it is likely that such a population movement did take place, and finds from the realms of pottery, metallurgy, and glyptics are clearly related to developments in countries to the north of Palestine. It also seems as if the immigrants played a role, perhaps a central one, in bringing about or speeding up processes occurring in the country at this time, processes that herald a new era in the history of Palestine. Yet it should be emphasized that this subject has not yet been thoroughly studied, and suppositions still outweigh certainties.

In contrast, the relations of Palestine with Egypt have aroused great interest, and the subject has been widely discussed. Evidence for relations with Egypt, in the form of Egyptian objects found at Palestinian sites, first appears in the Chalcolithic period and perhaps even earlier. However, there is a sudden and drastic change in the number and character of these relations at the beginning of the Early Bronze Age. A large number of Egyptian artifacts, especially ceramic vessels, have been found in Palestinian sites of this period, particularly in southern sites such as Tel Erani, Tel Maahaz, and Tel Halif, where Egyptian pottery constitutes the greater part of the Early Bronze Age I assemblage. The finds are in part truly Egyptian (imported) and in part locally produced in Egyptian forms. Some of the vessels are medium-sized containers, but the great majority are small vessels. Notable are the simple crude vessels used for baking or cooking and the tableware. Two are of particular interest, one from Tel Erani and the other from Arad. They are fragments of two large closed vessels of Egyptian manufacture; each bears an incised design in the form of a rectangular frame containing the name of Narmer, the founder of the first

Fig. 4.7. Egyptian pottery from En Besor



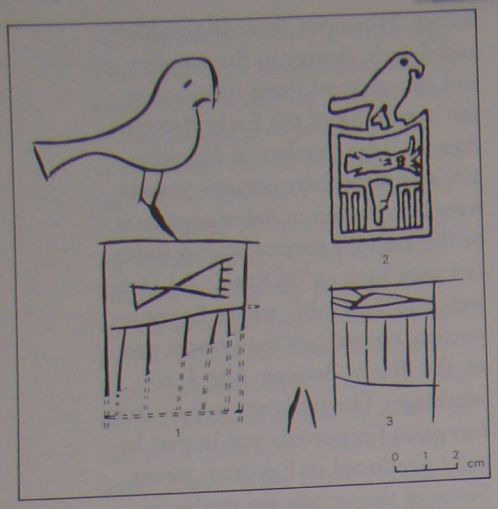


Fig. 4.8. Incised serekh signs of Narmer on pottery vessels: Arad (1), Egypt (2), Tel Erani (3)

Egyptian dynasty. The inscribing of the king's name within a rectangular border—a schematic representation of a temple facade—was a widespread practice in the third millennium B.C.E., and this design is termed a *serekh* in Egyptian. The two inscribed serekhs from Tel Erani and Arad are of great importance in establishing the absolute chronology of the period and contribute much to the discussion of the nature of the ties between Egypt and Palestine. Other serekhs of the Archaic period in Egypt have been found inscribed on Egyptian pottery vessels in Palestine: at En Besor an incised serekh apparently bearing the name of Hor-Aha, Narmer's successor, was discovered, and further serekhs (with the names of unidentifiable kings) have been found in sites of northern Sinai and the Gaza Strip (Rafiah) and at Tel Malhata in the Beersheba valley. At En Besor there were discovered, in addition to the Egyptian vessels and the incised serekh, tens of seal impressions of Egyptian officials, impressed on clay stoppers used to seal various containers, apparently sacks and skins. There is some uncertainty concerning the identity of the officials and their dates, but there is little doubt that the seals belonged to Egyptian administrative officials ranging in time over the whole of the First Dynasty period.

In the important cemetery of Azor, Egyptian finds included pottery vessels, a cosmetic palette decorated with figures of birds, beads, and a beautifully worked flint knife. Anthropological study of the skeletal remains has shown that although most were of the local type (as was the majority of the pottery in the tombs), some were of African origin. The Egyptian finds in the tombs allow us to assume that the latter were in fact Egyptians. Isolated Egyptian finds from other sites include a cosmetic palette from Jericho and a clay cylinder seal from Gezer engraved with scenes derived from the Egyptian glyptic. As one proceeds northward the quantity of Egyptian artifacts diminishes. Among the few items found are a closed vessel and a macehead from Megiddo, a stone vessel from Tel Yoqneam, and beads and a stone amulet from Tell Asawir.

Palestinian imports into Egypt, though fewer in number and less varied than the Egyptian exports to Palestine, must not be overlooked. First and foremost is the not insignificant number of medium-sized vessels of Palestinian origin, which stand out in the Egyptian assemblage with their wide, flat bases and their large ledge and ear handles. Such vessels have been found both in sites of the eastern Delta, such as Minshat Abu-Omar, an area that has always maintained close relations with Palestine, and in sites of the Egyptian interior, such as El-Gerze, Naqada, and Abusir el-Melek. They are also portrayed on small plaques made of wood or ivory discovered in tombs of the early First Dynasty in Egypt. These vessels are shown carried on the heads or in the hands of men with non-Egyptian features and clothing, and it is likely that the bearers of the vessels are inhabitants of Canaan.

Another group of finds includes pottery vessels of Kenyon's Proto-Urban A or Proto-Urban B groups, so common in tombs of the period in Palestine. They have turned up both in the eastern Delta and in the Egyptian interior. It is improbable that any kind of merchandise was carried in these miniature vessels, and if there was any, it would have been of minute quantity. Rather, it may be suggested that these vessels, originally intended for use as burial gifts, were imported into Egypt by merchants from Palestine and were interred with them in Egypt when they died.

Thus it can be proven that ties existed between Egypt and Palestine in the Early Bronze Age I, as attested by the great number of objects from each land found in sites of the other. Scholarly debate has centered not on the question of the existence of ties but on the nature of the ties: did Egypt control Palestine, or at least the southern part of it, during this period, or were the ties between the two lands only commercial? One of the well-known finds from the time of Narmer, the founder of the First Dynasty, is a slate palette discovered some decades ago in Egypt bearing scenes carved in relief describing important events from the reign of this monarch. Nearly thirty years ago Y. Yadin proposed to interpret one of the signs on the palette as referring to Palestine and expressing Egyptian domination of that land. Those who support this interpretation explain the presence of Egyptian artifacts in southern Palestine, such as the vessels bearing the name of Narmer or the Egyptian seal impressions, as evidence of garrisons or of trade colonies protected by Egyptian troops, which exploited the economic resources of the land. Other scholars have not accepted Yadin's interpretation and thus do not accept the idea of Egyptian domination of southern Palestine. They prefer to see the relations between Egypt and Palestine as trade relations. Therefore, they interpret the pottery-bearing figures depicted in the wood and ivory plaques found in Egypt as merchants, while those who support the theory of Egyptian domination see them as tribute bearers. As for the goods themselves—especially those exported from Palestine to Egypt—whether tribute or merchandise, they will be dealt with in the following section, for the relations between the two countries continued in the Early Bronze Age II.

Fig. 4.9. Egyptian ivory plaques depicting Canaanites bearing ceramic jars (height 7.5 centimeters)

CHRONOLOGY

The archaeological finds do not seem to justify dating the beginning of the Early Bronze Age I to more than one hundred years before the reign of Narmer, at about 3100 B.C.E. The end of the Early Bronze Age I is fixed mainly by the appearance of a certain type of pottery vessel imported from Palestine into royal tombs in Egypt, dated to the reign of Djer (the third king of the First Dynasty), around 2950/2900 B.C.E. The multitude of approaches and proposals that archaeologists have applied to those two hundred years demonstrate that the period generates more questions than answers. Most difficult of all is the question of the relation between the Early Bronze Age I and the Ghassulian Chalcolithic. Was there an overlap between the two cultures, when the earlier had not yet disappeared and the later had not yet crystallized? How long did the overlap last? Did it occur throughout the country or only in parts? Or perhaps there was no overlap but rather a gap between the two cultures.

The current state of knowledge seems to present the following picture. The Early Bronze Age I begins with the disappearance of the Ghassulian Chalcolithic, which was an extended process, as were all the cultural transitions in Palestine. There is no question of a catastrophe involving the extermination of one population and the appearance of a new one, thus it is only natural that certain elements of the Ghassulian Chalcolithic should have been carried over into the Early Bronze Age I and even later. The material culture of Palestine during the period is quite varied. On one hand traditions seem to continue from the preceding period, and on the other new pottery assemblages are clearly defined, appearing more or less simultaneously, side by side, or even

mixed. The period may be divided into, at most, two phases, of approximately equal length. In the first, which ends with the unification of Egypt under Narmer, ceramic traditions of the Ghassulian Chalcolithic are still strong and relations with Egypt are still weak. In the second, Chalcolithic traditions decline, and the ties between Egypt and Palestine increase, thanks apparently to the unification of Egypt.

The Early Bronze Age II–III

The important developments incipient in the Early Bronze Age I—the penetration into new regions, the establishment of a Mediterranean economy, the accumulation of surplus, and the increase in population—reached maturity in the Early Bronze Age II–III. The transition between the periods was gradual, without a break. Only a few Early Bronze Age I sites were abandoned or destroyed (for example, Mezer) and no longer settled. Most of them continued into the following phase, among them Hazor, Beth Yerah, Beth Shean, Megiddo, Ai, Jericho, Tel Erani, Lachish, and Arad, and many became urbanized. Characterizing this process is the erection of fortifications and public buildings, the development of urban planning, and the apparent social stratification. The towns of Palestine can be seen as a modest version of the urban society of Mesopotamia. The difference between the societies is most evident in the small size of the Palestinian towns, which is comparable to that of Mesopotamian villages, and in the absence of writing. Nevertheless it seems permissible to speak of the development of an urban society during this period in Palestine, and of towns of considerable size, compared with the nearby villages. Agricultural improvement, the higher standard of living, and the resultant increase in population also led to the foundation of many small settlements—farmsteads or villages. These unwalled settlements were sometimes near the large fortified towns, such as the agricultural villages around Tell el-Far'ah North or those of the Beersheba valley (related no doubt to Arad), and sometimes a great distance away from them, for example the many sites of the Negev Highlands, Uvda valley, and Sinai. Of the latter, some were seasonal settlements of pastoral nomads (mostly goatherds), some were agricultural settlements (part of the Uvda valley sites), and some (the settlements of southern Sinai) were workers' villages whose inhabitants were engaged in the mining of copper and its supply to the urban regions north of the Negev Highlands. The phenomenon of coexisting urban and nonurban populations, the latter residing near the towns and in the marginal areas, is thus well known in the Early Bronze Age II–III. Strong bonds undoubtedly existed between these two components of the population; some may be observed in the archaeological record, and others only inferred from documents of the second millennium B.C.E., when the population of Palestine and indeed of the entire Near East was composed in a similar manner. Towns provided villagers and seminomads with various spiritual and material services, with a market for their produce, protection in times of danger, and perhaps a political framework and a sense of community. The villagers and seminomads, in return, brought their surplus produce into the urban settlements, and played an important part in intersite communication and in the trade network. Sometimes the very existence of the villages depended on the urban markets, as was the case with the miners' settlements of southern Sinai, and in any case they were clearly subservient to the large towns, their culture at best a poorer version of urban culture. Comparison of the ceramic assemblages of villages of the Jezreel valley with that of Megiddo, villages of the Beth Shean valley with that of Beth Shean, or villages in the valley east of Shechem with that of Tell el-Far'ah North reveals in each case that the village assemblage is poorer, the range of forms narrower, and the quality of the vessels often lower than in the adjacent towns. A strong bond was also observed between the miners' settlements of southern Sinai and the town of Arad, 180 miles to the north. This relationship is reflected, for example, in the identity of the house plans and of the flint and copper tools in the miners' settlements and in Arad. Clay analyses have revealed that some of the southern Sinai vessels were made of clay that originated in the Arad valley (or were imported as vessels from that region), while in return, some of the vessels at Arad were made of clay that originated in southern Sinai. There are, however, some differences: though the plans of individual houses in southern Sinai resemble the Arad house, the circular outline of the settlement as a whole contrasts with that of the town of Arad. Also, the ceramic assemblage in the southern Sinai settlements is poorer in variety and in quality than that of Arad.

Not all the settlements appearing at the start of the Early Bronze Age II–III existed until the end of that period. On the contrary, every site excavated has provided evidence that the period was one of great unrest. In all sites a number of phases or strata of the period were observed, often separated by conflagration layers testifying to destruction, probably the result of wars. Also, many additions and repairs were found to have been made in the fortifications erected at the start of

the period, further evidence of unrest and preparation for war. The fortifications of Jericho, for example, underwent no fewer than sixteen phases of repair and alteration from the time of their construction until the destruction of the town in the latter part of the Early Bronze Age.

There is a marked decrease in the number of sites between the Early Bronze Age II and III. The important towns of Arad and Tell el-Far'ah North, and perhaps also Tel Erani and Aphek, were abandoned at the end of the Early Bronze Age II and remained unoccupied in the Early Bronze Age III. Their rural dependents, the miners' settlements of southern Sinai and the villages of the valley east of Shechem, were completely abandoned with the demise of the two towns. The Israel Archaeological Survey has revealed a general decline in the number of Early Bronze Age III sites in comparison with the preceding period. This phenomenon, evident throughout the country, is especially conspicuous in the south. In the Negev Highlands, the Aravah, and Sinai the entire settlement system, composed solely of rural settlements, collapsed, and these regions lay deserted for hundreds of years. The causes of the phenomenon are not altogether clear. We do not know if towns like Arad or Tell el Far'ah North were destroyed in war or merely abandoned following a gradual decline. It has been suggested that the attrition wrought by frequent warfare among the towns of Palestine affected the entire urban system, with the weaker towns expiring first, but Tell el-Far'ah North and Arad were hardly weak. Others have suggested climatic change, pointing to a gradual process of dessication, decreased rainfall, and a lowering of the water table that reached its peak at the end of the third millennium B.C.E. Clearly such a process would affect the settlements in the southern desert fringes first, explaining, if only partially, the abandonment of these regions at the end of Early Bronze Age II. Economic factors may also be considered: the disruption of trade relations with Egypt in the Early Bronze Age II would have had a greater effect on the southern sites, which stood in close contact with Egypt, than on the sites of northern Palestine. It would perhaps be best to see the causes of the change in settlement pattern as a combination of the factors described here, accompanied by others as yet unknown to us. A different factor may have been decisive in each town or region, and one explanation need not be sought for all cases.

Despite what has been said, not all the villages of Palestine were abandoned, and many continued to exist in the Early Bronze Age III, as did most of the towns. In fact, the Early Bronze Age III is considered the high point of urban culture in the Early Bronze Age. All those towns that have been thoroughly studied—notably Beth Yerah, Megiddo, Ai, Yarmuth, and Jericho, as well as sites such as Dan, Beth Shean, Lachish, Tell el-Hesi, and Bab edh-Dhra—now reached the height of their prosperity. This is attested by their size, the public buildings erected in them, and their developed material culture, which has provided evidence for, among other things, relations with centers far distant from the borders of Palestine. It may be assumed that the inhabitants of the towns and villages abandoned at the end of the Early Bronze Age II found their way to sites that were not affected and were assimilated into those towns, stimulating their growth and prosperity.

ARCHITECTURE

FORTIFICATIONS. As we have seen, a few sites such as Ai and Tell el-Far'ah may have been fortified late in the Early Bronze Age I, permitting them to be characterized as towns at a relatively early stage. They may not have been the only sites fortified at the time, but the transition from unwalled to walled settlement in the majority of Palestinian sites occurred in the Early Bronze Age II, the outstanding examples being sites such as Arad, Megiddo, and Ta'anach. These sites had been sparsely inhabited in Early Bronze Age I, and though cult structures had been built in them in that phase (Megiddo, Jericho), they cannot be considered to have been planned, organized settlements. In the Early Bronze Age II a sudden transformation seems to occur; impressive fortifications are constructed and, as far as may be discerned, the foundations of the urban layout that was to characterize these towns are laid. It is difficult to accept the view that an invasion from abroad and a deterioration of security conditions were responsible for this sudden erection of fortifications. The social changes of the Early Bronze Age I, which matured earlier in some places than in others, led as a matter of course to the rise of towns in most of the Palestinian sites, many of which reached this phase more or less simultaneously. The accumulation of means and the development of construction technology, accompanied by the rivalry between the different settlements, were the reasons for the deterioration in security and the erection of fortifications. It was thus an internal development, the causes of which should not be sought elsewhere, especially as there are no signs of change in other components of the material culture that would indicate the arrival of newcomers.

Fig. 4.10. Plan of Arad in Early Bronze II

The heart of the fortifications was the town wall. As the walls have not been preserved to their original height, we have no knowledge of the superstructure (balustrades, battlements, crenellations, and the like). At some sites, such as Megiddo, Tell el-Far'ah North, and Ai, the stone walls were preserved to a considerable height, often exceeding 2 meters, and it is difficult to say whether they were built of stone to their full height or whether, as seems likely, their upper parts were made of mud brick. At sites where stones are not so abundant, such as Jericho, only the foundations were made of stone and the walls themselves of brick. At some sites the walls are 2–3 meters thick (Arad, Aphek), while at others they are more than 8 meters (Beth Yerah, Megiddo). This tremendous width brought about structural problems involving the stability of large masses of masonry, but the ancient builders overcame the problems to construct fortifications that stood for hundreds of years, sometimes for the entire length of the Early Bronze Age. Buttresses and additions to the walls, as well as glacis added to protect their base, were no doubt intended not only to confront the enemy but also to overcome problems of everyday maintenance. Another measure observed at Megiddo, Jericho, and elsewhere was the building of the wall in separate segments, with a clearly visible seam between each segment. This method (which may also reflect a degree of social organization, each segment being built by a different crew) made the wall more flexible and minimized damage that might be caused by human or natural agencies, such as earthquakes. As no means of battering and piercing walls are known to have been used by the armies of this period (the battering ram was not introduced before the second millennium), the main function of the walls was to prevent sapping and scaling. The thicker the walls were, the higher they could be built; thus both breadth and height served to counter the possible means of enemy attack.

The defensive capabilities of the walls were improved by the construction of projecting towers. These were either semicircular, as seems more characteristic of the earlier part of the period (Arad, Jericho, Ai), or rectangular (Tell el-Far'ah North, Megiddo, Ta'anach). The most impressive gate is that discovered at Tell el-Far'ah North, where the entryway is set between two strong towers that protect it. The western gate of Arad, in the Early Bronze Age II, is a gap in the wall defended by two semicircular towers. A fortification system of the Early Bronze Age III, including a gate approached by a ramp of beaten earth and an impressive wall built of huge stones, was excavated at Tel Yarmuth. The principle of narrowing the entrance by the construction of internal piers, typical of gates of the Middle Bronze Age and beyond,

Fig. 4.11. Megiddo city wall in Early Bronze II

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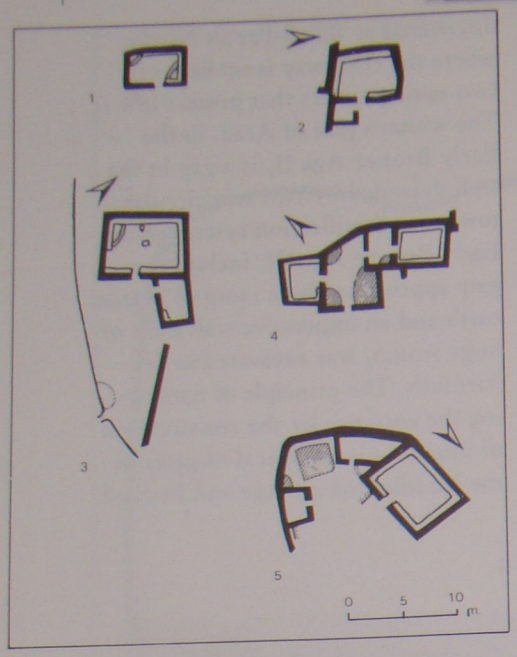

Fig. 4.12. Variants of the Arad house

was not yet known in the Early Bronze Age. At some sites (Arad, Ai, Tell el-Far'ah North, and elsewhere), postern gates—small passages 1–1.5 meters wide—were set in the walls to provide the inhabitants with convenient passage to the nearby fields. In times of danger they could be blocked easily and quickly with stones, and indeed several of those excavated were so blocked.

DWELLINGS. As private structures were conceived, planned, and built by the families that resided in them, it is difficult to define fixed types of dwellings, many of them being devoid of any discernible design. Nevertheless, the apparent existence of building fashions or traditions allows us to single out from among the dwellings of the Early Bronze Age II–III two types of structures with fixed principles of design.

The first group consists of structures often called Arad houses, after the site where they appear in the greatest number and most complete form. Their plan is that of a broadroom structure, or broadhouse, with the doorway set in the middle of one of the long walls. The entry is thus along the short axis of the structure, with the interior space extending along the breadth, to the left and right. The house contains one main dwelling unit, sometimes accompanied by a small, cell-like room, which probably served for storage. The floor is below street level and is therefore approached by several steps. The door, located by the stone socket upon which it turned, opened inward and to the left. Benches are set along part or all of the walls; various installations

Fig. 4.13. Clay model of the Arad house found at Arad (height 21 centimeters)

and platforms furnish the rooms. Stone slabs are set in the floor, some serving as installations for domestic use and others as socles for posts that supported the roof. A clay model of such a house, found at Arad, reveals details of the unpreserved superstructure. The structure had one story and was windowless or had, at most, narrow slits for windows, suited to the harsh climate (sun, dust, sandstorms); the roof was flat with slightly raised edges to collect rainwater.

This plan is repeated many times at Arad, and structures of the same types have been observed in other Palestinian sites and in Sinai, where they characterize miners' settlements such as Nebi Salah and Sheikh Mohssein. The broadroom design is typical of dwellings of the Ghassulian Chalcolithic and is present in the Chalcolithic temple of En Gedi; it is also represented in the temples of Megiddo and Jericho in the Early Bronze Age I and now in the dwellings and temples of the Early Bronze Age II–III. It is, therefore, one of the clear manifestations of the traditionalism and of the continuity of the population in Palestine over more than one thousand years.

The second type of dwelling is less distinctly characterized by fixed design components, though it remains well defined. It may perhaps be termed the front-room house. The house consists of a courtyard and a dwelling unit behind it. The apparently open courtyard (the front room) contains installations such as the hearth and silo; through it the dwelling unit was approached. Typical examples of this type of structure may be seen, for example, at Tell el-Far'ah North, in the Early Bronze Age II, and Tel Qashish, in the Early Bronze Age III.

TEMPLES. The broadroom plan also characterizes the temples of the Early Bronze Age. The design common to the abode of both man and god (cf. "the house of the Lord," I Kings 6:1–2) was apparently used by the king, the most important citizen of the town, who was intermediary between man and god, or perhaps the gods' representative on earth. Palace remains are rarely found in Palestine in general and in the Early Bronze Age in particular. But the relation in plan and concept between palace and temple is readily perceived in Mesopotamia, and it may be assumed that a similar relation existed in Palestine. The king has a house, with male and female servants providing above all for his food and drink; so too has the god a house, with priests and priestesses providing sacrifices and libations. The house of the king is set off from those of his subjects, access to it is limited, and the throne room is the heart of the palace; so too is the house of the god surrounded by a wall that sets off the sacred area from the rest of the town; only a chosen few may enter that area, and fewer still the house itself, at the heart of which lies the cella, the holy of holies. If the complex of buildings south of the double temple at Arad is a palace, as the excavators believe and as indeed seems to be the case, then it is a good example of the surprising resemblance between the layout of private dwellings and the palace, on the one hand, and between that of the palace and the temple (Fig. 4.14) on the other. Adjacent to the palace on the north there appears to be a pair of small temples, which may be interpreted as a royal chapel, in contrast to the large double temple, which served the general population. The palace and its annex are almost identical to the Chalcolithic temple at En Gedi. The broadroom plan also appears in charnel houses (man's abode in

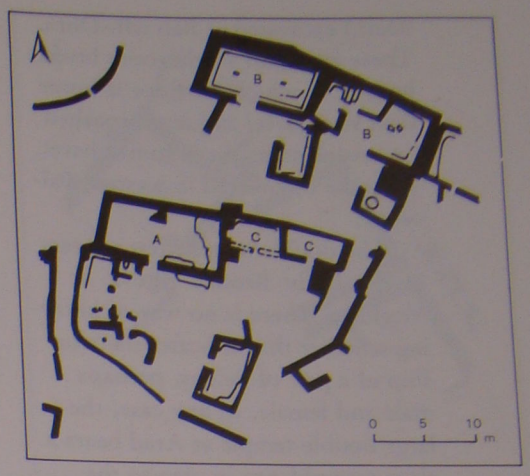

Fig. 4.14. Palace (A) and two pairs of twin temples (B-B, C-C) at Arad