Burial Customs during Chalcolithic Palestine

Burial Customs During Chalcolithic Palestine[1]

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Abstract: This paper examines Chalcolithic burial customs in the four regions of Palestine. Tell 'Adeimeh produced cist tombs in the Jordan Valley. The coastal plain caves contained ossuaries in the form of rectangular boxes, decorated houses, and stone jars. Although the concentration of burials in the coastal plain led some archaeologists believe that Beersheba pastoralists used these caves during seasonal migration, there is no evidence for long-distance seasonal migration during the Chalcolithic. Nawamis in the Sinai were used by Sinai pastoralists as their tombs.

1. Introduction

During the late fifth and fourth millennia B.C., societies in Palestine experienced significant technological and social changes: establishment of formal temples and burial grounds, emergence of craft specialization and copper metallurgy, and a dramatic increase in human population. This period, roughly dated from 4500 to 3400 B.C., is called the Chalcolithic period.[2] In the chronology of ancient Palestine, the Chalcolithic era is placed between the previous Neolithic period characterized by the egalian societies and the Bronze Ages signified by the urban societies. This intermediate position is reflected in its character, and is testified in the very name of the period, "Chalcolithic" consisting of the two Greek words "copper" and "stone." The Chalcolithic was still largely a stone-using age, despite the introduction of copper to widespread use (Gonen 1992:40).

In this paper, after adopting a chiefdom working model, we will examine Chalcolithic burial customs found in the four regions of Palestine. Special attention will be paid to burial caves in the coastal plain to determine whether they were used as a central graveyard for the inhabitants of Palestine.

2. Chiefdom

In dealing with the Chalcolithic period of Palestine, an anthropological model

suggested by Service (1962) serves as a useful concept. Levy (1986:87) indicates that in some regions of the country many of the innovative developments observed in Chalcolithic Palestine can be explained as reflections of the development of social ranking and hierarchies. The beginnings of social ranking, according to Service (1962), are associated with the emergence of a distinctive social system, chiefdoms. In Palestine, as Levy (1995:226) has stated, the egalitarian society did not advance immediately to state level after the Chalcolithic era. Chiefdoms in this region developed much slower than the concept might suggest. It was not until 10^{th} century B.C. and onwards that state-level societies developed.

Chiefdoms are characterized by institutionalized offices of leadership such as priesthood: "chiefdoms are particularly distinguished from tribes by the presence of centers which coordinate economic, social, and religious activities." (Service 1962:143). Peebles and Kus suggested that the gradation of social rank in chiefdoms is not a smooth progression from the lowest to the highest ranking individual (1977:422). In chiefdoms, the chief and his lineage are qualitatively distinguished from the rest of society (Levy 1986:87). According to Peebles and Kus (1977:422), the office and the person of the chief and of his nearest kinsmen are marked by sumptuary rules, distinctive ways of dress, prescribed modes of behavior, and, usually, compulsory ritual behavior.

Renfrew (1973:543) has outlined the material correlates for the presence of chiefdoms in the archaeological record; some of these correlates include: greater population density and total number in the population; increase in the size of individual residence groups; greater productivity; more clearly defined territorial boundaries; centers that coordinate social, religious, as well as economic activity; rise of priesthood; a ranked society; the redistribution of products organized by the chief; an environmental situation favoring specialization in production over some ecological diversity; specialization not only regional but also through the pooling of individual skills in large cooperative endeavors; organization and deployment of public labor for agricultural work or for building temples; potential for territorial expansion; distinctive dress for those of high status; and no true government to back up decisions by legalized force. The strength of this model, as Renfrew (1973:543) noted, is that it implies the co-occurrence of many of these features.[3]

3. Regional Survey

Chalcolithic Palestine marks the establishment of formal burial grounds located apart

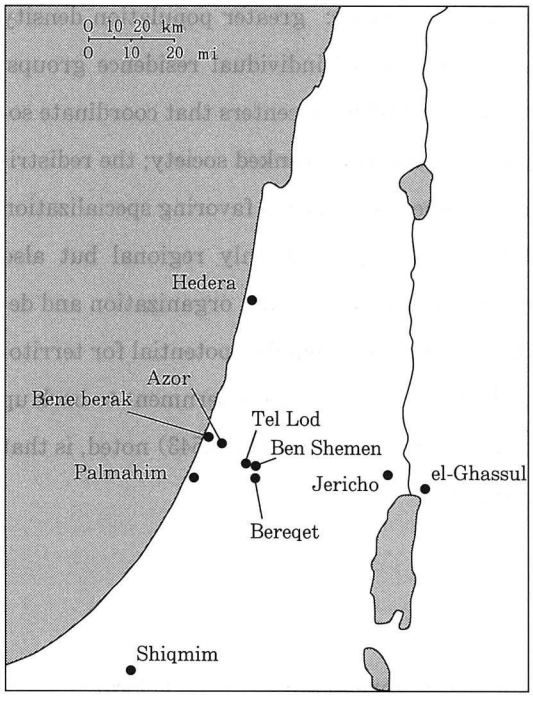
from habitation sites. This phenomenon reflects a number of the archaeological correlates for chiefdoms such as the deployment of public labor to build burial monuments and facilities (Levy 1986:96). Evidence of formal Chalcolithic cemeteries was found in four regions of Palestine: the Jordan Valley, the coastal plain, the northern Negeb, and the Sinai peninsula.

3.1 The Jordan Valley

Teleilat el-Ghassul is located in the southern Jordan Valley about 2 kilometers northeast of the Dead Sea. This large site consists of some dozen low mounds and the remains of some of the oldest known copper artifacts found in Palestine (Lee 1978:1205). The excavators also carried out a survey of the Jordan Valley and discovered an extensive fourth millennium cemetery at Tell 'Adeimeh, situated less than 6 kilometers southeast of Teleilat el-Ghassul (Mallon et al 1934:153).

Because objects unearthed at Teleilat el-Ghassul and 'Adeimeh are similar (e.g., goblets with the same decoration), 'Adeimeh is considered to be the necropolis of Teleilat el-Ghassul (Mallon et al 1934:152-4).[4] In 1933, Stekelis conducted extensive excavations at 'Adeimeh, which revealed 11 circular tumuli varying in diameter from 3.85 to 7.0 meters situated close to the surface (1935:40-45). These were associated with 168 cist tombs measuring less than 1.5 meters in length. Eighty percent of these did not exceed 1 meter in length (Stekelis 1935:66). The method of interment appears to have been secondary burial although the human skeletal remains were poorly preserved.

Map of Chalcolithic Sites



3.2 The Coastal Plain

Along the coastal plain, Sukenik discovered in 1934 a new type of Chalcolithic cemetery previously unknown in Palestine (Sukenik 1937). At Hedera, Sukenik (1937) unearthed an artificial cave, dug from the kurkar sandstone, containing ceramic ossuaries, Chalcolithic pottery, human bones, and other objects. The method of

interment was secondary like cAdeimeh.

In the years since 1934, more Chalcolithic burial caves containing clay and stone ossuaries have been discovered at Bene Berak (Ory 1946), Azor (Perrot 1961), Ben Shemen (Perrot 1967), and Palmahim (Gophna 1968; Gophna & Lifshitz 1980). The caves were carved into the kurkar ridges running parallel to the shore. Most of the caves have collapsed, and the ossuaries have been found in fragments, scattered over the cave.[5]

The ossuaries as objects are fascinating. They are capable of accommodating the bones of an adult, including the skull and long bones. The average dimensions of ossuaries are 70 centimeters in length, 30 centimeters in width, and 60 centimeters in height. The ossuaries, normally consisting of coarse clay fired at low temperatures, are quite fragile. It is possible, therefore, that they were made near the burial sites and not transported from distant locations (Gonen 1992:75).

Most of ossuaries are plain rectangular boxes, but the majority of them take the form of a house with a few additions. The roof, usually a tall gable roof, is the most important addition. Windows sometimes pierce through the walls. Some ossuaries are mounted on what seem to be stilts. One ossuary from Azor has one window in one of the broad walls in addition to three windows in the upper part of the narrow gabled wall (Perrot 1961:46-47). Many plastic and painted decorations add realistic detail to the house form. A red net pattern painted on a slanted roof simulates the beams and rafters. Some ossuaries have a projecting ledge running around the entire house, under the eaves, and others have pierced projections on either side of the door to which a clay or wooden door could be attached (Perrot 1961:39-55).

Because only the foundations and lower wall courses have survived in most of the structures excavated, the house form ossuaries could have been a great clue to the structures of the period. However, they do not resemble excavated structures. The doorway of the ossuaries is on the narrow side, which is always on the broadside in the excavated structures. This is perhaps because long bones had to be inserted in the ossuaries and may not imply the existence of another house type. The tall slanted roofs of ossuaries contradict the flat roof which was the custom in Palestine in all periods (Gonen 1992:76).

The raised panel above the door of the ossuary is usually rectangular or trapezoidal, but sometimes rounded. Further symbols, the most common of which is the prominent nose, are sometimes attached to the panel. Some of the panels have large round eyes, either painted or applied. In order to explain the significance of the schematized human representation on

the ossuary facade, Kaplan (1963:312) indicates the discovery of the tombstones at Bene Beraq; the tombstones must have had some other purpose other than marking the grave since they were inside the cave and invisible from outside. The stones seem to be a schematic human form, conforming to the schematic style in human representation. Therefore, the human figures on the ossuary facade and the tombstones have no difference in kind: Both perhaps served the same purpose to protect the dead from evil spirits and harm (Kaplan 1963:312).

In addition to the house-shaped ossuaries, zoomorphic and store-jar shaped ossuaries have been found (Perrot 1961:67). Since Chalcolithic people must have considered animals and stored foods to be the vital domestic needs, ossuaries imitating their forms may have been intended to insure the abundance of provisions in the afterlife (Gonen 1992:77).

Another form of ossuary is the coverless stone coffer. This type was found at Azor (Perrot 1961:81), Bene Beraq (Ory 1946:57), Ben Shemen (Perrot 1967:47-48), and Palmahim (Gophna 1968:132). In one tomb at Ben Shemen, there were found two rather large stone ossuaries, one 1.1 meters long and the other 0.95 meters long. In the larger ossuary, seven skulls were placed on one side and the long bones on the other. This group burial included adults, adolescents, and children. The number of individuals interred and the presence of children in the ossuary are not common and may indicate unusual circumstances of death (Perrot 1967:47-48).

Objects and vessels were left in association with ossuaries. The V-shaped bowls are the most common vessels accompanied by typical pottery of the period. Virtually no cornets or churns were found with ossuaries (Gonen 1992:77). A cave at Palmahim contained two unusual vessels shaped like birds, perhaps doves (Gophna & Lifshitz 1980:6-7).

3.3 The Northern Negeb

Concentration of burials in the coastal plain, in contrast to the scarcity of burials in other areas of Chalcolithic settlement, has caused some archaeologists to propose that the Chalcolithic pastoralists from the Beersheba region, or northern Negeb may have used these burial caves during their seasonal movements on the coastal plain in search of pasture lands (Perrot 1961:27; Perrot & Ladiary 1980).

During a survey in the vicinity of Shiqmim, Levy and Alon (1982) discovered the first Chalcolithic cemetery site in the northern Negeb. This was made less than 200 meters northwest of the large 9ha village site Shiqmim. The extensive cemetery complex spreads 800m X

100m along a series of chalk hills that parallel the Nahal Beersheba. The excavations of Shiqmim cemetery revealed 40 burial circles that range in size from less than 1 meter to over 3.5 meters in diameter. The grave circles contained long bones and skull fragments of secondary burials with a wide range of burial offerings, which included typical Beersheba pottery vessels, bracelets, pearl pendants, beads, and others. It seems that each individual was accompanied by at least one typical Chalcolithic V-shaped bowl. The surprising discovery of ossuaries in one of the hilltop cemeteries indicates that Perrot's explanation should be re-evaluated (Levy 1986:97).

Perrot and Ladiray (1980:128-130) assume that the numerous disarticulated burials found at Chalcolithic sites are a clear indication of the existence of a primarily nomadic society during this period. Perrot's model interprets the coastal plain of Palestine as the winter grazing zone of Chalcolithic pastoralists from the Negeb during their annual pastoral cycle. This model, thus, assumes that the pastoralists carried the dried bones of corpses to these burial caves from the settled areas during this annual pastoral cycle. In the case of the Negev, a dichotomy is to have existed between the distant burial grounds on the coastal plain and settled village region (Levy & Alon 1987:345).

However, as Levy & Alon (1987:345) rightly indicate, this distinction may be more a function of fieldwork intensity and site visibility rather than a real division between a "settled zone" and a "cemetery zone" in protohistoric Palestine. In a study of settlement pattern in the Lod Valley, Gophna (1989:99) mentions the presence of a Chalcolithic village (Tel Lod) and two burial caves (Ben Shemen and Bareqet) in the coastal plain region; the settlements of the cemeteries were not discovered either because they were previously eroded or because they are still buried beneath the alluvium. The so-called "cemetery zone" on the coastal plain is probably associated with numerous village sites (Levy & Alon 1987:346). The existence of the extensive burial grounds at 'Adeimeh near Teleilat el-Ghassul and the Shiqmim cemetery in the vicinity of the large village site contradicts the notion that the nomadic society of the northern Negeb utilized the coastal plain burial sites for interring their dead.

There is no reasonable evidence to assume that long-distance seasonal migration was carried out during the Chalcolithic. Noy-Meir and Seligman (1979) demonstrated that the annual cycle of movement for Bedouin sheep/goat herds rarely exceeds 60km in total, even under today's climatic conditions which occur along the semi-arid desert interface. Although Perrot's model suggests an annual round trip of more than 200km, the physiological characteristic of the herd animals forces annual distance to be relatively shorter.

Particularly sheep must be watered every day or two in summer (goats up to four days), and if possible in the morning. This limits the maximum range of grazing away from water points to about 5-8km (goats up to 20km) in a day (Noy-Meir & Seligman 1979:130).

In addition, the fact that long distance pastoralism usually occurs in arid zones (Sweet 1969:175-77) and the fact that conditions were more moist in the 5th-4th millennium in Palestine (Goldberg & Rosen 1987:30) would preclude the need for long-distance pastoralism.

Finally, it seems that the occurrence of secondary burial is not necessarily a reliable indicator of the existence of nomadic societies in the archaeological record. We need to question on what basis archaeologists equate secondary burial with nomadic society. In antiquity, it was widely practiced by the Jews of Palestine from Early Bronze ages to the time of Diaspora (Meyers 1971:3-11). Furthermore, ethnographic literatures show that the majority of societies which practice secondary burial are clearly sedentary villages, although their economy has a strong pastoral component (Levy & Alon 1987:347). One needs to be cautious to conjecture that the secondary burials were directly related to a semi-nomadic way of life.

3.4 The Sinai Region

Well-built circular structures, known by the Bedouin as nawamis, were discovered in a large group near ᶜEin Huderah in the Sinai region. This area lies between the mountainous limestone plateau of central Sinai and the crystalline high mountains of southern Sinai. The 42 nawamis of the ᶜEin Huderah group are scattered over an area of about 0.7 sq.km., of which the main concentration comprises 30 structures built on a low, flat hill, generally 10-40 meters away from each other. Twenty-four of the 42 nawamis were excavated (Bar-Yosef et al 1977:67).

Slabs of the local Nubian sandstone were used for the construction of the nawamis. It seems that building the nawamis required only moderate effort; 3-4 days' work for 4-5 men would be sufficient for one of the buildings. Fairly uniform building technique was used and the entrances generally directed towards the south-west despite minor construction differences (Bar-Yosef et al 1977:67-70).

Excavations of the nawamis show that these structures served as tombs, most probably for secondary burials. One of the nawamis had the burial deposit of 30-50 cm. thick. The fact that most of the bones were found along the inner walls might suggest that they were pushed aside to make room for subsequent interments (Bar-Yosef et al 1977:72).

Human skeletal remains, found in 20 of the 24 nawamis, represent both sexes and all ages except for infants under 2 years. The number of individuals found in any one structure varied from one to five. Most of the nawamis showed evidence of prior disturbance, and the bones were widely scattered (Bar-Yosef et al 1977:80-81).

The deceased were buried with at least a portion of their private property such as beads, pearl pendants, shell bracelets, transverse arrowheads, fan-scrapers, and some copper points. Just as the number of interments in the structures varied, so did the type and quantity of ornaments and tools present in each tomb. It appears that the differences in the finds reflect the wealth of each group of burials, although many tombs were robbed or disturbed either in antiquity or recently. The variability may indicate burial in family groups, and the various clusters of nawamis at 'Ein Huderah may hint at social ties between families, such as affiliation on the tribal level (Bar-Yosef et al 1977:87).

It seems reasonable, according to Bar-Yosef et al (1977:87), to assume that this population subsisted on goat-herding, horticulture, some trade and to a lesser extent copper-mining. The society possibly had more ties with the Egyptian world than with Palestine, as suggested by their hunting equipment of bows and arrows with transverse arrow heads; these are common in Egypt both as actual finds and in representations, but are absent from contemporary archaeological horizons in Palestine.

The orientation of the entrances seemed to have played an important role in the minds of their builders; for instance, tombs that were built at the foot of a steep slope have a western opening in spite of the inconvenient access. Bar-Yosef et al (1983) attempted to determine whether the entrances of the nawamis were directed towards a sacred or significant geographic feature such as Mount Sinai; or the entrances face the direction of sunset because of some religious belief.

Bar-Yosef et al (1983:56-57) favor the latter explanation for the following reasons: Most nawamis entrances are directed at the range within which the sun sets throughout the year; The westward orientation of the entrances recalls the Egyptian belief that the deceased were going to the land of the setting sun; The basic beliefs concerning the after-life of the deceased were commonly shared by the builders of the nawamis and the Egyptians during the late 4th millennium B.C.; The westward orientation of the entrance is an expression of a religious belief that related the dead to the setting sun.

The nature of southern Sinai as part of the planetary desert belt suggests that the builders of the nawamis were pastoralists. As far back as there are any historical records,

Sinai was occupied mainly by nomads who lived on herding, some hunting, robbery, and trade. Agricultural products were never an important source of subsistence. It seems that the nawamis builders were local southern Sinai population, economically based on herding goats, hunting and trading with Egypt and the Levantine world (Bar-Yosef et al 1983:57-58).

According to a study of the economic potential of southern Sinai from the viewpoint of a present-day pastoral society, winter and later spring are the best grazing season: Annuals for fodder are available shortly after the first rains; Abundant water sources are present as ephemeral pools and springs; Low altitudes (600-1200m) are favored because temperatures often drop below 0 degrees centigrade in the higher mountains; winter and early spring are also the kidding season, when the herds should be kept close to camp. The shift to higher mobility, expressed in dispersal of families, suits summer conditions when water pools have dried up and annuals are still available at higher altitudes (1600-2200m) (Bar-Yosef et al 1983:58).

Therefore, the nawamis fields do not demarcate the annual movements of pastoral groups which built their graves in the same mode all year around. Considering the correlation between the orientation of the nawamis entrances to the points on the horizon where the sun sets throughout the year, Bar-Yosef (1983:59) concluded that the nawamis fields mark the winter camping and grazing areas of a pastoral groups and that most of the nawamis were constructed during one season of the year, winter.

4. Conclusion

In conclusion, the Chalcolithic period in Palestine witnessed some of the most dramatic social changes, the transition from segmentary tribe to chiefdom. The archaeological correlates for chiefdoms are reflected in the establishments of formal cemeteries, which can be divided into four regions: the Jordan Valley, the coastal plain, the northern Negeb and the Sinai peninsula. Tell 'Adeimeh, considered to be the necropolis of Teleilat el-Ghassul, produced cist tombs in the Jordan Valley. The coastal plain caves contained ossuaries in the form of rectangular boxes, decorated houses, and stone jars. The ossuaries were also made of stone. Although the concentration of burials in the coastal plain led some archaeologists believe that Beersheba pastoralists used these caves during seasonal migration, the discovery of Shiqmim cemetery with ossuaries in the northern Negeb forces reevaluation of this idea;

settlements that used the coastal caves are probably invisible and there is no evidence for long-distance seasonal migration during the Chalcolithic. Nawamis in the Sinai were used by Sinai pastoralists as their tombs. The entrances of the nawamis were directed southwest, implying religious significance, and the construction was in winter indicating the nawamis field as the winter camp.

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notes

1 I would like to express my gratitude to Dr. Steven Olson for reviewing this article and suggesting necessary corrections for improvement.

2 A lack of well-published sites and a distinct stratigraphic boundary between Late Neolithic and early Chalcolithic has caused chronology of this period to be a frustrating subject. According to the available radiocarbon dates, the Chalcolithic period begins in the mid-fifth millennium B.C. and ends approximately in the 3400 B.C. (Weinstein 1984:305-6).

3 In terms of the list of chiefdom characteristics, Tainter (1978:116-7) indicates disturbing aspects of Renfrew's analysis: we may be left with the impression that Renfrew regards a chiefdom not as an adaptive system but as a list of traits; what Renfrew seems to advocate is the "checklist" approach to social change.

4 Lee (1978:1213), on the other hand, thinks that current information does not uphold the identification of the 'Adeimeh as the necropolis of Teleilat el-Ghassul.

5 Secondary burials without ossuaries in burial caves are known in the late Chalcolithic tombs at Jericho; in Tomb A94 approximately 100 disarticulated individuals were discovered; and in Tomb K2, more than 300 disarticulated burials were recorded (Kenyon 1960:4).