

The origins of the Early Bronze Age walled town culture of Jordan

An assessment of current theories in the light of recent evidence

Introduction

It has long been recognized that the development of urban centres in the Ancient Near East was one of the great revolutions of man's early history. In Jordan the phenomenon of urbanization takes place at the beginning of the Early Bronze Age which makes this period one of the most intriguing and attractive for the archaeologist.

The most intensive research on urbanization has taken place in Mesopotamia where this cultural process appears to originate¹. Recent work has focused on the changing settlement patterns leading up to urbanization which is now seen by some to have been more of a gradual process than was previously recognized². When one compares the density of settlement and the size of the urban centres in Mesopotamia with the evidence of Palestine, it is obvious that 'urbanization' occurs on a different scale of magnitude in Mesopotamia than that taking place in Jordan. A city in Mesopotamia is described as an area over 50 ha. (Adams, 1972; 742). Some were enormous, such as Uruk whose walls include an area over 400 ha. at the beginning of the third millennium. In Palestine the average 'city' is in the range of 10 to 15 ha., a size which is described as a small town or village in Mesopotamia. For this reason we have chosen the term walled town to keep a proper sense of scale and also will refrain from the theoretical problem of whether or not the Jordanian walled towns are true 'cities'.

Despite the much smaller scale of the town centres it is obvious that important changes were taking place in Palestine at the beginning of the Early Bronze Age. In a recent compilation of sites, Thompson (1979) lists some 888 sites on the East and West Bank of the Jordan during the Early Bronze Age. Since his work was completed in 1974 hundreds of new sites have been identified in the extensive survey work that has taken place on both sides of the Jordan (cf. *infra*). Among Thompsons' 888 sites 436 are described as settlements or tells and 256 as large or very large. (Large equals 10–20 dunams

or 1–2 ha.; very large over 20 dunams or 2 ha.) Only 99 of these sites have been excavated or sounded (twenty-one on the East Bank) and only three (Arad, 'Ai, Tell el-Far'ah(N)) have exposed large horizontal areas in the first period of the Early Bronze Age.

The large quantity of sites underlines the importance of this period. The limited number of excavated sites reveals the difficulties of attempting to construct a coherent theory on the town culture. Yet information has been sufficient to evoke a series of theories which have proposed a wide range of explanations for the origin of the town culture in Palestine. The purpose of this paper will be to compare these theories and their arguments, searching for the critical areas of difference and then to examine the latter in light of the most recent archaeological work³.

Current theories

Theories attempting to explain the origins of the walled town culture in the ancient region of modern Jordan at the beginning of the Early Bronze Age have emphasized either a foreign origin, the imposition by newcomers of an urban life on the local population, or an indigenous solution, the gradual evolution by the same basic population from village to urban life.

Hypotheses proposing a foreign origin have been more dominant. Kathleen Kenyon, Roland de Vaux and Paul Lapp are in basic agreement concerning the ultimate foreign origin of the town culture, although each of their interpretations have their own individual nuances and different terminologies. Their theories have been frequently analyzed and discussed by one another as well as by others. (Kenyon, 1979; Lapp, 1970; Miroshedji, 1971; de Vaux, 1970, 1971; Wright, 1971). It is not our intention here to repeat that analysis but rather to focus on their assessment and arguments for the arrival of one particular group, the painted pottery group of the central region, or the Proto Urban B people of Kenyon. We shall refer to this group as the B tradition or culture.

¹ For bibliography, see R. McC. Adams (1960, 1972) and P. Amiet (1979).

² R. McC. Adams placed considerable stress on the gradual development of urbanization in Mesopotamia in a formal keynote address at a symposium on the rise of Early Civilizations at the Carnegie Museum of Natural History, Pittsburgh, March, 1980.

³ I am indebted to my colleague, Walter E. Rast, with whom many of the interpretations of the Bab edh-Dhra evidence have been reached.

Père de Vaux recognized the B tradition as being responsible for the introduction of town life. Among the various groups arriving in Palestine during the Late Chalcolithic period the B culture is perceived as the latest to appear and provides 'the only valid link with the Early Bronze Age' (R. de Vaux, 1970; 536). These newcomers are seen as arriving from the north, perhaps by way of the Jordan valley, and then penetrating the central region bringing with them new crafts, especially an established tradition of architecture and urban life. 'The sudden efflorescence of fortified cities in phase Ib cannot be explained in any other way' (R. de Vaux, 1971; 234).

Kenyon agrees that the B group was the latest to arrive and that its appearance 'does not long precede the beginning of the Early Bronze Age' (Kenyon, 1979; 70). At Jericho it was set apart not only by its distinctive painted pottery but by a new burial tradition in the upper levels of T. A 13. But she also prefers to see all three of her Proto Urban groups, A and C as well as B, involved in the development of the following urban culture. 'It is from the component groups of this stage that emerges the population which developed the urban civilization of the Early Bronze Age' (Kenyon, 1979; 82).

Lapp also recognizes a series of newcomers arriving in Palestine preceding the formation of the urban culture. His assessment of the various groups is different (the red and grey burnished are two aspects of the same culture) and their arrival is seen as sequential, described as the 'rapid absorption of successive and closely related population increments' (Lapp, 1970; 109). The B tradition was the third increment to arrive and is assigned by Lapp to his EB IB period. But the role of this group in the formation of the urban culture was apparently subordinate. It shared a number of cultural traits with the urban culture that followed revealing 'kinship' but town life was directly imposed by the arrival of a fourth group in EB IC who absorbed the EB IB element. 'The association of the EB IC-III defences, architecture and ceramic with a distinct population group seems inescapable' (Lapp, 1970; 111).

In summary Lapp, Kenyon and de Vaux all agree that the painted pottery or B tradition arrived from outside Palestine and immediately before the development of the urban culture. De Vaux assesses this tradition as introducing and establishing the following town culture. Kenyon assigns the B tradition a less prominent role as one of the components in bringing about the urban culture. Lapp recognizes the B tradition as possibly related but absorbed by a distinct group which arrived later and imposed town life. Their varying assessments of the role of the B tradition are critical in the formation of their theories on the origin of the town culture.

One of the major difficulties, recognized by all three authors, with the foreign origin of the B tradition is the absence of ceramic parallels outside of Palestine⁴. Concern

with this factor has given rise to more recent theories which place more stress on an indigenous development.

Joseph Callaway notes 'strong Chalcolithic influence in the artifacts of the first settlers at Ai' and comments that 'this influence would be inexplicable apart from people who descended from the Chalcolithic population and retained fundamental elements of their culture' (Callaway, 1972; 70). Yet these indigenous 'elements' were submerged under the new influences of the B tradition which arrived from outside Palestine. An explanation for the interaction of the two groups is found in the suggestion that the B tradition absorbed 'scattered indigenous remnants into their group' (Callaway 1972: p. 70) on their way from Jericho to Ai. Callaway argues that the B tradition people settled in an open village at Ai in Phases I and II and eventually dominated the new settlement. Yet he also agrees with Lapp that the urban culture itself was later imposed by a new group in EB IC. In phase III at Ai,

At every site the components of this city show no indebtedness to those of the previous unwallled settlement. Only the population continues to some extent, as the pottery indicates. The conclusion seems warranted that leadership for construction of the first urban phase at Ai was not indigenous but was imposed from the outside. (Callaway, 1972: 117)

Basil Hennessy agrees with Kenyon in distinguishing three contemporary cultures, A, B and C immediately preceding the establishment of the town centres. All three groups are perceived as also contemporary with the later phases of the Beersheba settlements and Ghassul IV⁵. The A and C cultures arrived from outside Palestine but the B tradition may have been indigenous (Hennessy, 1967; 46). Support for this view is found in the absence of foreign parallels for the B tradition and a series of features that this tradition had in common with Late Ghassulian culture. The foreign, A and C cultures, intermingled with the possible indigenous B tradition and from this point the development into an urban culture 'appears to have been an internal one and merely marks the final establishment of the groups who arrived during the Proto-Ubran period' (Hennessy, 1967; 49).

Ruth Amiran has focused more directly on the process of urbanization which is seen as emerging from a type of population explosion in the preceding periods. She emphasizes population continuity throughout the early phases of the Early Bronze Age (adopting Wright and Lapps' terminology) and concludes to an unbroken development from village community to urban society (Amiran, 1979; 85). At Arad the village culture reflects the B tradition. Yet Amiran also is not willing to see urbanism in Canaan developing out of purely and exclusively local conditions. She stresses a series of

⁴ P. Lapp mentions the Çiradere tradition as a possible foreign parallel (Lapp 1970: 119; 1968: 29-31). Other scattered parallels have been cited by Hennessy and by Schaub (1973: 285). The meagre evidence seems hardly sufficient to support the foreign origin of the B tradition.

⁵ This view needs to be revised on the basis of Hennessy's paper delivered at the Oxford conference (see below) in which he argues for a possible earlier absolute date for the Ghassulian cultures and especially the need to avoid the term Ghassulian as specifying a distinct culture and time period for all of Palestine.

foreign elements from both Mesopotamia and Egypt brought in by 'migratory-infiltrating movements' or features that 'reflect a vital cultural and material intercourse that encourages population growth and culminates in the emergence and progressive definition of cities and urban life' (Amiran, 1970; 86–89).

The strongest case for an indigenous development is presented by Pierre Miroschedji in his study *L'Epoque Pré-Urbaine en Palestine*. Miroschedji posits a phased local development over a period of three to four hundred years leading to the establishment of the town culture. His emphases on the ecology and environment of the region and total assemblages of cultural artifacts represent an important contribution to the research of this period⁶. Although Miroschedji does not focus on the walled town culture itself his hypothesis poses an indigenous development of the town culture dating back to the Wadi Raba culture of Middle Chalcolithic. The Ghassulian culture is seen as a foreign interlude which gradually dies out while the local culture re-asserts itself. His Pre-Urban period is divided into three phases, the last of which evolves into the urban phase of EB I without migration or invasion from outside. His third phase basically corresponds to that represented by the painted pottery or B tradition.

Among this latter group of theories the B tradition again emerges as the critical factor in the origin of the walled town cultures. Callaway describes the B tradition as arriving from outside Palestine and establishing the village at Ai while absorbing local elements. It is in turn absorbed and becomes subject to a new leadership element—again introduced from outside. Hennessy allows a possible local development of the B tradition which may be influenced by Ghassulian elements. Amiran sees the B tradition as eventually responsible for the development of the urban culture but does not directly address the question of its local or foreign origin. Miroschedji describes the B tradition as definitely indigenous. It developed from earlier local traditions and in time brought about the urban culture. As in the first set of theories there is general agreement concerning the chronological position of the B tradition as immediately preceding the origin of the walled towns.

It seems quite clear that the role of the B tradition is critical in the varying hypotheses for the origin of the town culture. Yet, surprisingly, this tradition is rarely fully described. For de Vaux, Kenyon and Lapp with the information available to them it is basically associated with the painted pottery tradition found in tombs. Yet at Jericho there was an insufficient number of examples of the B tradition for Kenyon to construct a typology. Hennessy notes that the B tradition never occurs alone. It is always found with the A and C groups in tombs. One reason for this limited assessment may be found in the extremely large tomb groups of Jericho, Ai

and Tell el-Far'ah(N) which were obviously used over a long period of time. A second reason emerges from the tendency to limit the B tradition to the painted pottery. A much fuller description of this tradition now appears possible with the publication of the excavations of Ai and Arad and the ongoing excavations at Bab edh-Dhra.

The B tradition

The B tradition in tomb groups at Bab edh-Dhra

Paul Lapp distinguishes a four stage pottery sequence in the EB I period at Bab edh-Dhra from the evidence of the 1965–67 excavations (Lapp, 1970; 107). The first stage is represented by the typical shaft tomb pottery exemplified by tomb A 76 (Lapp, 1968; 18–41). A second stage is associated with a rough painted tradition introduced in late EB IA, similar to that found in some examples of tomb A 94 Jericho. The line group painted tradition distinguishes the EB IB phase which is also set apart by a change in burial patterns. The fourth stage (EB IC) is characterized by the introduction of the dominant pottery tradition for the remainder of the EB period which is linked with the establishment of the town site. As the cranial evidence is similar in all four phases and because of the different burial practices in the latter phases, Lapp argues for the rapid absorption of successive and closely related population increments.

The evidence of the more recent excavations at Bab edh-Dhra from 1975–1979 continues to support a sequential development but also narrows the differences between the stages, lending itself to the hypothesis of a more gradual introduction of new types as well as a different interpretation of the changes in burial practices (Schaub, 1980b). Two major phases in EB I, A and B, are well represented. The separation of a third phase (EB IC) seems unwarranted. This material has been assigned to early EB II.

Six tombs containing pottery associated with the B tradition have been excavated at Bab edh-Dhra during the recent excavation series. A seventh tomb had pottery belonging to early EB II. Including the 1965–67 evidence there are now nine B tradition tombs and two associated with early EB II⁷.

The relative chronology of these tombs is firmly established as falling between the dominant shaft tomb tradition of the EB IA period and the rectangular charnal houses dominant throughout EB II–III. Three of the B tradition tombs are located directly over the shafts of EB IA tombs. Two others are in a clearly earlier stratigraphic relationship to rectangular charnal houses of EB II–III.

In contrast to the uniformity of the EB IA and EB II–III traditions, the B tradition shows considerable variety in tomb types (Schaub, 1980a). Five of these tombs are chamber tombs related to shafts. Four of these five are single chamber tombs. The fifth example is associated with three EB IA chambers connected to the same shaft but one of these chambers is unique in that it contains two burial groups. The

⁶ Kathleen Kenyon recognizes this contribution in her review of Miroschedji's volume although she is harshly critical of the work in general, especially his use of the ceramic typology of Jericho (Kenyon, 1974: 88–90).

⁷ The B tradition tombs excavated by Lapp have been analyzed in Schaub's doctoral dissertation (1973: 234–287).

latter circumstance suggests it was moved out of the neighbouring chamber to make room for the B tradition burial⁸. Two of the tombs with B pottery are round mud brick houses with formal stone-lined entryways. The stone-lined entryway is also found in late EB IA chambers and in one of the B tradition shaft tombs excavated by Lapp. The two tombs with early EB II pottery also have formal stone-lined entryways. One is a round mud brick house. The second is an unusually large round chamber interpreted as a shaft tomb but for which the shaft was never found. The remaining examples of B tradition tombs are shallow surface chambers directly over EB IA shafts.

The tombs with B tradition pottery thus continue the shaft tomb tradition but with a preference for single chamber tombs. The round mud brick burial house is introduced in EB IB and is continued in early EB II. The stone-lined entryways used in late EB IA tombs, B tradition tombs and throughout EB II–III link all three phases in one cultural trait. The two shallow surface chambers have been associated only with the B tradition.

The burial practices associated with the B tradition display the same variety of old and new with the latter continued in the EB II phase. Three shaft tomb chambers have secondary burials with disarticulated central bone piles. This feature continues earlier practices but the skulls in two of the B tombs are scattered around the chamber breaking the uniform pattern of the EB IA tombs which always have the skulls to the left of the bone pile as seen from the doorway. A fourth B tradition chamber has an articulated adult burial inside the doorway laid on a stone platform similar to the Tomb A 13 upper group of Jericho. A few articulated burials have been associated with the rough painted tradition in late EB IA tombs. Primary articulation appears to have been the common practice in the EB II–III tombs. The two round charnel houses containing B tradition pottery have multiple successive burials with the earliest apparently moved aside to make room for the later. The same practice is found in the tombs with early EB II pottery and was the standard practice throughout EB II–III.

A sequential typological series of the pottery of the shaft tombs of EB IA, the B tradition pottery and that of the EB II–III charnel houses manifests remarkable continuity from stage to stage along with the introduction of new types (Schaub, 1980b). The small tomb groups in the early phases of this sequence along with stratigraphical evidence of tombs cutting into one another are factors which lend more credence to this typology than those established in larger groups which were obviously used over a longer period of time.

The painted pottery of the B tradition is distinctive but it also includes the same forms unpainted and many types continue from EB IA with slight modifications in form. In the round mud brick burial houses the B tradition is more fully developed without the more typical EB IA types but it is

found together with the types which emerge in early EB II and predominate throughout the EB II–III periods.

All aspects of the EB IB period in the cemetery (the B tradition phase)—the tomb types, burial practices and the ceramic evidence—support the description of this period as a gradual transitional stage between the shaft tomb burials of the EB IA period and the charnel house burials of the EB II–III period.

A number of explanations can be offered for the cultural processes involved in these changes. Lapp chose the hypothesis of increments of related groups from outside Jordan. The recent evidence for a more gradual transition as well as the lack of foreign parallels for the B tradition are definite arguments against this hypothesis. A second possibility is the interaction of distinct groups within Palestine. Here the obvious similarity and continuity in traditions is not easily explained. A third possibility is a change in settlement pattern from seasonal migration of peoples who came to the site periodically to bury their dead to the gradual establishment of a more permanent settlement at the site. The latter situation would explain the appearance of articulated burials. It is also supported by the evidence for the B tradition at the town site.

The B tradition at the town site of Bab edh-Dhra

The excavations at the town site of Bab edh-Dhra have not yet cleared sufficiently broad areas in the earliest phases to provide a full description of this period. Yet enough has been cleared to establish a sequential pattern of occupation (Rast, 1980). The earliest occupational phases are associated with the B tradition. Mud brick structures with B occupation layers have been uncovered underneath the EB II–III sanctuary area within the town, and below and outside of the massive EB III stone trace at the west end. B tradition pottery was also found by Lapp in 1965 in layers beneath the mud brick trace at the east end (Schaub, 1975; 272–274). There does not appear to have been a wall around the site in EB I. The first settlers may have relied on the natural ridges of Lisan marl lining the site on the north and south sides and partly on the east for some protection. It is possible that mud brick structures associated with both the east and west ends of the site were associated with gates and were the first stage in closing off the settlement area while still relying on the ridges surrounding the site⁹.

An area west of the town area provides the best complete sequence of occupation encountered so far. The Lisan marl of the north ridge had been originally used for EB IA shaft tombs. A settlement area, associated with the B tradition, had cut into these tombs, bricked them up and built a number of domestic mud brick structures. The same area later had EB II–III occupation (Rast, 1980).

Much more needs to be done at the town site but the basic sequence is clear. The first settlement, unwallled, was established by the B tradition. Settlement at the site by the B tradition also offers a reasonable explanation for the change

⁸ The evidence for this hypothesis is discussed in detail in the 1977 preliminary report of the Bab edh-Dhra excavations (Schaub, 1980a).

⁹ A reconstruction of the mud brick structures at the eastern end as a postern gate has recently been attempted by Helms (1975).

in burial practices from secondary to primary articulation as well as the need for larger burial houses. The first stage of enclosing the town site area is revealed in mud brick structures at the east and possibly the west end dated to EB II. The massive EB III stone trace is built over these structures at both the east and west end and along the entire southern length. The present evidence suggests a gradual, rather than sudden, development of town planning at Bab edh-Dhra.

The open village of the B tradition, a pattern repeated at many other new sites preceding the walled town development, (see below) maintains a well established tradition of the Chalcolithic periods. The major difference would appear to be that the early EB I villages are located (re-located?) on a high, defensible position in close proximity to water sources.

Other cultural features of the B tradition continue or repeat features found in preceding periods along with limited innovation. In architecture there is extensive use of mud brick¹⁰. Both round and rectangular structures are found, both of which have numerous precedents in the Local Chalcolithic earlier traditions¹¹. In constructing the charnal houses as well as structures at the town site of Bab edh-Dhra the builders frequently cut deep into the slopes of hills leaving the resultant structures partly subterranean. The techniques employed as well as the use of the natural terrain appear to be similar to those associated with the subterranean dwellings of the Beersheba complex (Perrot 1965 and Anati 1955).

Technical innovation is found in the possible introduction of formed mud bricks during the B tradition. The earliest round charnal house at Bab edh-Dhra used small plano-convex bricks only one course wide. The second house, with later pottery, employed large formed rectangular bricks bound in alternate double header stretcher courses. The brick burial house of early EB II is beehive in shape and uses small rectangular mud bricks one course wide. In all three houses there is a forecourt of mud brick which is rounded to circular and appears to perpetuate the idea of a shaft.

A recently completed study of the flints of Bab edh-Dhra describes the assemblage as a distinctively Palestinian tradition dating back to Pre-Pottery Neolithic times. (McConaughy, 1979). The Bab edh-Dhra types closely resemble those of Teleilat Ghassul. The only tool form traced to outside influence is the trapezoidal Canaanite blade which occurs rarely at Bab edh-Dhra.

The plant assemblage demonstrates a similar continuity. Barley, wheat, flax, fig and grape are found consistently in the EB I-II samples. The cultivation of such crops dates back to

Neolithic times in Jordan. There does appear to be a much larger proportion of figs and flax compared to earlier sites. The large size of the linseeds also suggests that this crop was irrigated as early as EB I (McCreery, 1980).

The secondary burial practices found in the early stages of the B tradition have an established precedent in the practice of the Ghassul-Beersheba cultures with the major difference found in use of ossuaries by the latter culture. Skeletal types also reflect a basic continuity with earlier periods in Palestine apart from a few isolated examples found at Bir en-Safadi¹².

It is quite striking that the most distinctive features of the ceramic repertoire of the B tradition, bell spouts, lug handles, tiny ear handles, deep V shaped bowls, and the use of red paint as a decorative feature all appear as technical features of the late Beersheba-Ghassulian tradition¹³. Earlier similarities with the EB IA tradition of Bab edh-Dhra could also be singled out in the uniform practice of secondary burial, the basalt vessel tradition and raised band and puncture decoration.

It is beyond the scope of this paper to enter into full debate on the complex factors involved in the transition between the Chalcolithic and Early Bronze Age but the present evidence from Bab edh-Dhra, while allowing for innovation, seems heavily weighted towards continuity with earlier indigenous traditions. Hennessy's insight (1976a: 17, 47) that there is a strong bond between the late Ghassulian assemblages and the early traditions of the following phase, particularly the B tradition, merits more attention than it has received. Miroshedji's arguments for the resurgence of an indigenous tradition following the apparent disappearance of the Ghassulian tradition also need to be carefully examined.

The B tradition on the West Bank

The comparative isolation of Bab edh-Dhra in the southern Ghor could be used as an argument to limit its evidence as applicable only to remote regions. But a comparison with other cemeteries and major excavated sites of EB I, found mostly on the West bank, reveals a strikingly similar role for the B tradition in the development of the walled town culture.

In the Ai tombs Callaway discerns a gradual development of ceramic types through the EB I period with the B tradition types playing a transition role between EB IA and EB II. (Callaway, 1964: 16-20 & appendix 1, Pl. 3) A comparative study of the Bab edh-Dhra evidence with the pottery of the tombs of Jericho and Tell el-Far'ah(N) also strongly supports a similar gradual introduction of the B tradition at those sites (Schaub, 1980b).

Arad, Ai and Tell el-Far'ah(N) are the only three sites where there has been wide horizontal exposure of the early EB levels. The evidence at all three sites reveals the association of

¹⁰ This feature has been used to suggest a foreign origin for the B tradition from an alluvial environment (de Vaux, 1971: 234). The same reason is given by Kirkbride for the arrival of the foreign settlers at Beidha as early as the Natufian period. Mud brick architecture is consistently found in Palestine in pre-pottery Neolithic A & B, and in the immediately preceding Late Chalcolithic periods.

¹¹ Given the long earlier history of both of these forms in Palestine (c. Kirkbride, 1967; Perrot, 1967, Kenyon, 1967) as well as the limited forms available, it is difficult to see the round form as a foreign introduction at this stage. In the Beersheba culture the rectangular form appears to have been used first, in underground shelters, then adapted to egg-shaped rooms, then round or oval houses on the surface, then back to rectangular. The round mud brick houses at Bab edh-Dhra appear to continue the same form found in the shaft tomb chambers.

¹² Miroshedji (1971: 105-106), relying on the analysis of Ferembach (1959), has pointed out the problems in using these rare examples as evidence for a population shift in Palestine in the Late Chalcolithic period.

¹³ For Beersheba, see de Contenson (1956: FIGS 3: 7, 8; 4: 1-3; 7: 4, 7, 8, 10, 11, 12; p. 226 & FIG. 11: 1-4, 7, 10) and for Ghassul, see Hennessey (1967: FIG. 5: 1; 6: 1, 2, 4, 6, 7).

the B tradition with an open village before the areas are walled.

ARAD At Arad, the earliest phase (V) is assigned to the Late Chalcolithic revealing the cultures of the Ghassul-Beersheba complex. The relationship between this phase and the succeeding phase IV is unclear in the excavation report but Amiran interprets it as a cultural break (Amiran, 1978; 116). Phase IV is an open walled village associated with the B tradition clearly revealed in the ceramic assemblage, architectural features and most recently by a B tradition tomb group (Amiran, 1977; Pl. 36D). On the basis of continuity in pottery forms and installational features such as the cooking platform, Amiran concludes an unbroken development from the non-urban village stratum IV to the urban stratum III of EB II (Amiran, 1978; 116).

AI At Ai the first open village settlement in Phases I–II discloses the definite presence of the B tradition in practically every aspect of the cultural assemblages including the burial practices. Although Callaway assigns the tradition to newly arrived elements in Palestine he also recognizes strong Chalcolithic local influences (Callaway, 1972; 70). A similar blending of continuous and new features is reflected in his conclusions concerning the relationship of the village settlement to the following urban phase. On one hand the B tradition ‘newcomers’ ‘eventually dominate the settlement’ and ‘their culture persists in the succeeding phases at Ai’ (Callaway, 1972; 70). On the other hand the components of the planned building operation of Phase III are perceived as entirely new with ‘no indebtedness to those of the previous unwalled settlement’ (Callaway, 1972; 117). The people are basically the same but ‘leadership’ is imposed by a newly arrived elite group. If one considers the recognized continuity between the B tradition and the urban phase in ceramic features, burial practices, basic architectural techniques, flint tools and agriculture at Ai as well as at other sites, the conclusion of a new group arriving hardly seems justified. The ‘leadership’ group imposing town planning suddenly appears as a rather ethereal ‘elite’ with few artifacts or a material cultural tradition to identify them—only new ideas and new techniques.

TELL EL-FAR’AH (N) Tell el-Far’ah(N) is perhaps the most critical site among those excavated for understanding the emergence of the fortified towns. Its location near Nablus and particularly its pottery assemblages reveal the influences of both north and south. The long earlier occupation of Far’ah also allows the possibility of tracing previous cultural development at the same site. Although de Vaux stresses the new urban elements of his Early Bronze Age levels he is also one of the most definite in assigning a forerunner or stimulating role to the B tradition. A careful reading of his preliminary reports discloses considerable continuity with earlier phases as well as stages of development similar to those observed in

the southern sites. The Late Chalcolithic phase is an open village with stone and brick walls which have ‘les grandes lignes du plan qui se précisera aux trois niveaux de l’Ancien Bronze’ (R. de Vaux, 1978; 63). The ceramic range of the late Chalcolithic levels includes the B tradition wares along with the distinctive red lustrous ware most typical of Tell el-Far’ah for this period. All of the ceramic features of these occupational phases are related to those of the Late Chalcolithic tombs by de Vaux among which the B tradition is well represented (see below). The ceramic forms of the first levels of Early Bronze also appear to be derived primarily from the B tradition. These levels correspond to the first urban levels at Ai (Ph. III) and Arad (St III).

The Early Bronze buildings re-utilize earlier building traces but on the whole these levels reveal a new plan (de Vaux, 1962; 212–221). The town wall section dates to EB I. It is a mud brick wall, 2.60–2.80 metres thick stretching along the west side of the tell. The wall defends the most vulnerable area of the village and has a number of towers associated with it, especially at the corners. The same wall was not found in excavations on the north end nor on the south which has a steep slope descending into the wadi below. The east end was not excavated. In Phase 3 of the Early Bronze Age a major stone wall, at first 6 metres wide and then enlarged to 9 metres wide with a glacis, is constructed on the north side of the tell. This wall is built over the earlier occupational phases of Early Bronze and abuts the first mud brick wall of the western slope at the NW corner. It is clear that the fortification of Tell el-Far’ah (N) went through stages which are remarkably similar to those that are appearing at Bab edh-Dhra. Helms has noted similar stages in the development of complex fortifications and gate systems at practically all of the Early Bronze Age excavated sites in Palestine. (Helms 1975). The gradual development of the towns would seem to argue against the sudden imposition of town planning by a foreign group. As Helms suggests, ‘it seems Palestine may have been a source rather than recipient of ideas’ (Helms 1975: 150).

Distribution of the B tradition

The formative role of the B tradition in the development of the walled town cultures is given added weight by the growing body of evidence for the wide distribution of this tradition. Lapp was one of the first to recognize this feature (Lapp, 1968; 38–39). Wright also pointed out the need to trace this distribution by concentrating on the forms without relying on the group line painting alone (Wright, 1958; 39). The forms with line group painting appear to be concentrated in the central hill country and in the South at such sites as Jericho, Ai, Jerusalem, Tell en-Nasbeh, Arad and Bab edh-Dhra. That this may be due to the accidents of discovery may be suggested from the large cave tomb of Arqub edh-Dhahr in north Jordan (Parr, 1956). The B tradition forms without line group painting certainly have a wide distribution. The column handled jar appears in the north at Megiddo in St XIX

(Shipton, 1939; 213, PL17: 8, type 12) recognized as distinctive in this Stratum, and at Beth Shan XVI (Fitzgerald, 1935; PL. 1: 8). In the lowlands it is found at Gezer (MacAlister, 1912; vol. II., 153, FIG. 316:3) and on the coast at Azor. (Ben-Tor, 1975: FIG. 9:5–8) A similar distribution may be shown for the bell spouted jars which appear in the north at Assawir (Dothan, 1970; 6–9 7:19–20) and Meser (Dothan, 1957: FIG. 4:10) and again on the coast in the cave tombs of Azor (Ben-Tor, 1975: FIG. 5:28–30) and Givaytim (Sussman & Ben-Arieh, 1966; FIG. 9:26).

The recent evidence published from Azor is quite striking. All of the forms upon which line group painting appears at Bab edh-Dhra—spouted bowls, amphoriskoi with ear handles, both wide mouth and narrow necked vessels, column handled jars and medium bowls with sloping sides—appear in quantity at Azor. There are a total of 46 B tradition vessels but only two have line group painting (Ben-Tor, FIG. 5–12). Tomb 17 of Tell el-Far'ah (N) provides another excellent example. Four of the B tradition forms are represented although there is not one painted vessel in the tomb (Vaux, 1955; 550, FIG. 3).

The relationship of this distribution to the changing settlement patterns between the Chalcolithic and Early Bronze ages has been studied by Miroshedji (1971; 76–84, FIGS 21–23). The B tradition is found in his third Pre-Urban phase immediately preceding the urban EB I period. Eight Pre-Urban sites are listed which do not continue into the Early Bronze Age. Most of these sites are small or are located near large Early Bronze Age towns. Twenty seven are described as continuous from Pre-Urban into the Early Bronze Age. Only six sites are noted as Early Bronze Age and not Pre-Urban but at least three of these sites have yielded definite evidence of the B tradition¹⁴. Although Miroshedji's maps need considerable revision based on new evidence and expansion to include the East bank evidence, the pattern is significant in manifesting the predominant distribution of Early Bronze Age towns developing from pre-urban B tradition settlements.

The B tradition on the East Bank

With the exception of Bab edh-Dhra the evidence for the B tradition on the East Bank appears confined to a few soundings, tomb groups and survey evidence. Arqub edh-Dhahr testifies to the presence of the B tradition in the north and tomb groups from Ghor es-Safi and Feifeh represent the tradition further south than Bab edh-Dhra (Rast & Schaub, 1974).

In the Jordan valley the soundings at Tell esh-Shuneh also have yielded evidence for the B tradition. De Contenson describes St II at this site as a mixture of Ghassulian and Late Chalcolithic elements (Contenson, 1960; 25). Red and grey burnished wares represent the Late Chalcolithic but the Ghassulian elements are definitely questionable. The combination of loop, ledge, lug and ear handles is more consistent

with the B tradition and in fact distinctive forms and the painted ware of this tradition are well represented at Shuneh (Contenson, 1960; 23, 25; FIG. 9: 9–10; 12: 15). In addition Mellart illustrates a round mud brick building dated to EB IB which is closely similar to the round charnal houses of Bab edh-Dhra in form and structure if not in function (Mellart, 1962; PL. XXV–XXVI, FIG. 4, 5). It is clear at Tell esh-Shuneh that there was occupation from the middle Chalcolithic into the Early Bronze Age.

At many other sites in the Jordan Valley there is continuity in occupation from the Chalcolithic to the Early Bronze Age. But there are also indications of a shift in settlement pattern. The East Jordan Valley Survey of 1975 by Ibrahim, Sauer and Yassine (1976) lists 47 Early Bronze Age sites, 20 of which were recognized as such for the first time. In general the other Neolithic-Chalcolithic sites are described as located near side wadis in the eastern foothills. The EB sites are also located primarily along the eastern foothills, especially on top of isolated foothills which overlook the valley floor. The same pattern is found at the EB sites of the southern Ghor. Most of the EB sites in the Jordan valley appear to be fortified villages or cities. Band slip pottery, used as diagnostic for EB I, is found at many of the EB sites, and particularly at the eight major sites listed by the survey. Among these latter sites six have either definite or possible Neolithic-Chalcolithic pottery.

Surveys on the plateau have not revealed a similar continuity between Chalcolithic and EB. Almost all the sites in the highlands identified by Glueck were assigned to EB with few Chalcolithic remains reported. Mittmann's recent survey (1970) between the Jabbok and the Jarmuk disclosed a similar pattern (1970). Of the 43 sites attributed to EB 36 included EB I pottery, 32 were also assigned to EB II and only 23 yielded EB III sherds. At only two of the 43 sites were Chalcolithic sherds also reported.

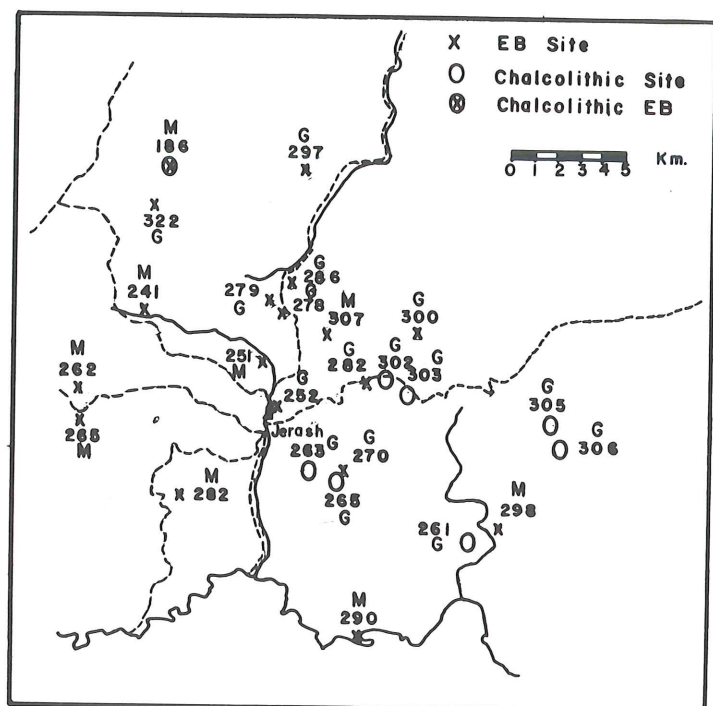
Yet the recent excavations at Jawa report late Chalcolithic–EB I occupation along with a large walled city (Helms, 1976). Soundings at Sahab have also yielded Late Chalcolithic as well as EB I cultural remains (Ibrahim, 1975; 80) and the sounding at Kh. Iskander reports Late Chalcolithic in possible association with a town wall (Parr, 1960). It seems likely that future excavations will continue to yield evidence of continuity at some Chalcolithic sites into the Early Bronze Age.

It is also quite possible that a change in settlement pattern from less defensible Late Chalcolithic sites to the isolated defensible ridges characteristic of EB I on both sides of the Jordan was taking place. In the Jerash region Glueck identified a number of sites described as almost unrecognizable because of the lack of tells and brief occupation evidence. (Glueck, 1951; 71–75). He assigned these sites to the Middle Chalcolithic on the basis of a distinctive squared type of ledge handle which he called 'axe blade'. These handles, as well as other features of the pottery from these sites, appear identical to examples for the EB IA tombs at Bab edh-Dhra¹⁵. The later

¹⁴ Ras el-Ain (Illife 1936: 113–126); Hebron Hammond 1966: 566–569; 1968: 253–258) and Arad.

¹⁵ The pottery from some of the Jerash region sites is illustrated in Glueck 1951: PL. 32 and 163: 3 (Sabri); 65 and 163: 7–9 (Tell el Meghaniyeh); 108 and 163: 1, 2, 4–6 (Umm

1. EB and Chalcolithic sites in the Jerash Region.



very heavy concentration of EB I–II sites in the Jerash region are all located to the north and west of the ‘chalcolithic’ sites (FIG. 1). If these sites indeed are Late Chalcolithic or EB IA a change in settlement similar to that found elsewhere seems indicated.

A second mystery of the Glueck surveys—the apparent absence of EB I–II sites in the south—is also being gradually dispelled. Glueck assigned most of the sites in this area to the EB IV period and the ceramic evidence definitely testifies to abundant occupation during that period. He also described most of these sites as fortified which is contrary to the more recent evidence for this period which reveal the EB IV sites as consistently unfortified. Glueck recognized the difficulty when he wrote that many of the sites he ascribed to EB IV–MB I in southern Jordan probably go back to EB I (Glueck, 1951; 60). Abundant evidence has emerged in soundings and surveys since to support that conclusion. Soundings at Kh. Iskander, Dhiban (Morton, 1955; 5–6) and the excavations at Bab edh-Dhra demonstrate earlier occupation. The 1973 survey of Rast and Schaub discovered EB I tombs at Safi and Feifeh in the Ghor and EB III occupation at Numerira and possibly Feifeh (Rast and Schaub, 1974). A number of other sites examined on the plateau during that survey—especially the large site of Tell el-Muddowrah may be assigned to EB I–III. In addition a recent examination of sherds from the surveys of Glueck stored at the Smithsonian

Beteimeh) and III (Zekhreh). See especially the basalt bowl fragment (PL. 163: 8), and the puncture decoration on jars (PL. 163: 9, 12), the lug handles on a narrow neck jar (PL. 163: 10) and the ledge handles (PL. 163: 1–7). Although the Bab edh-Dhra material remains to be published one can compare the ledge handles and puncture decoration in Schaub's typology of the Bab edh-Dhra material (1973: FIG. 21–25).

Institution in Washington revealed at least one southern EB I site with B tradition evidence¹⁶. The recent survey in Moab conducted by Miller should help to fill in the picture of earlier occupation.

Although the surveys have yielded little information for the B tradition in East Jordan the excavation results from Bab edh-Dhra, Tell esh-Shuneh and Arqub edh-Dhahr, widely separated sites from the southern Ghor, Jordan valley and the plateau region, offer the possibility that the B tradition will emerge in quantity when and if some of the other major EB I sites are excavated.

Summary

Any assessment of archaeological results must recognize the incomplete picture presented by both excavation and survey. This is particularly true of prehistoric periods and for geographical regions where only limited areas of a particular time period have been exposed. The limited facts revealed may also be interpreted according to different models and it is highly unlikely that one model will be convincing to all. That, of course, makes the formation of archaeological hypotheses challenging.

The arguments cited above stress the possible formative role of the B tradition in the origin of the walled town cultures during the Early Bronze Age in Palestine. The evidence from the ongoing excavations at Bab edh-Dhra has been extensively used but that evidence is strongly supported by similar results at the only other EB I sites horizontally exposed. The wide distribution of the B tradition, especially on the West bank but also on the East, suggests a possible similar role for this tradition at other EB I sites.

The indigenous roots of the B tradition also seem supported by the archaeological record, particularly by the fact that many of the cultural traits have local prototypes and others appear only gradually in the B tradition, rather than suddenly, as the argument for extensive migration would demand. The major argument against foreign origin is the lack of foreign parallels and evidence for a route of migration to Palestine. It is possible that future excavations, particularly in Syria and Jordan, may produce those traces but the present available facts seem to strongly favour the indigenous development of the town culture. Although the possibility of limited cultural import from outside Palestine should not be excluded, the origin of the walled towns in EB I Palestine can best be understood at present in terms of the social and cultural dynamics of the local inhabitants.

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¹⁶ Rujm el Qleib (121). The site is located near the Wadi Mujib and is described as having traces of a wall which surrounded the entire site (Glueck, 1934: 57–58).

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