

Chapter Four

Four-room Structures at Late Bronze/ Iron I Age Hill Country Workstations

by Gloria London

A lack of diversity characterized the material culture at late second millennium B.C.E. sites on remote hilltops in central Israel/Palestine. The preponderance of utilitarian ceramics, ground stone and small structures implies a limited range of activities at sites here designated as workstations. The proposed workstations were contemporaneous with habitation sites, burials, and sacred spaces located elsewhere. Differences in the location, size, and assemblage composition at these four sites categories contrasted with similarities detected in certain ceramics and architecture. When viewed together in terms of the activities carried out at each type of site, despite the apparent discrepancies in artifacts, the sites complimented each other and represented a multi-faceted society that coped with a challenging environment and social landscape.

Archaeology contributes to the awareness and evidence of ordinary people whose leaders and societies are recorded in the Hebrew Bible (Dever 2001: 74). W. G. Dever has observed that names derived from the Bible and assigned to pots, peoples, in fact our entire discipline, have repercussions for the ancient sites chosen for excavation as well as subsequent interpretations of the data (Dever 1985, 1990, 1993, 1995a, 1995b, 1998, 1999). Here I examine archaeological remains excavated in central Israel/Palestine at late second millennium B.C.E. hill country sites known for their limited habitation space and minimal artifact diversity. A proposal follows concerning the function of these small sites, their relationship to other types of sites, as well as an assessment of the archaeological remains of those who are largely invisible in biblical texts.

TRANSITIONAL LB/ IRON I AGE HILL COUNTRY SITES

Hundreds of small sites, often characterized by a relatively short period of duration towards the end of the second millennium B.C.E., have been recorded for the hills of Israel/Palestine (Zertal 1986–87; Finkelstein 1988, 1988–89, 1996, 1999; Mazar 1990a: 334–36; Campbell 1991; Finkelstein and Magen 1993; Finkelstein, Lederman and Bunimovitz 1997; Finkelstein and Zertal 1997). In the region of Samaria, sites frequently located on hilltops adjacent to valleys ranged in size from less than two acres to twenty acres, but further south, architectural remains were found on smaller sites, 1–1.5 acres, hidden on remote hilltops (Mazar 1990a: 335). In addition to small sites were the more substantial LB II and Iron I tell deposits.

Sites traditionally designated as Iron I Age include Shiloh, ^ʿAi, Bethel, Khirbet Raddanah, ^ʿIzbet Ṣarṭah, Tell en-Nasbeh, Tell el-Far^ʿah (N) and Tell el-Fûl. Slightly to the south is Giloh (Mazar 1981). Bloch-Smith and Nakhai (1999) have assembled the pertinent sites in their overview of the Iron I Age landscape (fig. 1).

In the central hill country the proliferation of very small sites began in the fifteenth century B.C.E. and climaxed in the last centuries of the second millennium, based on a study of site size, distribution and date (Gonen 1984). At times, the distinction between LB II and Iron I Age material culture at both large and very small sites mentioned above is unclear (Kletter 2002: 33–35) and based on what is absent, especially decorated pottery. This absence reflects to a large extent, the lack of richness or variety in the assemblages rather than a dislike or unavailability of decorated pots. As a whole, the ceramic repertoire of the last centuries of the second millennium was derivative of Late Bronze Age traditions.

Despite the difficulties in dating the sites, unless the presence of LB II deposits in the central hills is acknowledged, it would mean that the Late Bronze Age population never ventured into the hills. To envisage the forested hills as unknown, unexplored, or outside the purview of the LB II lowland population is untenable. Stager considered the highland villagers as “well advanced in the techniques of terrace agriculture when they established their settlements *de novo* on hilltops ...” but of Iron I date (1985: 6). In contrast, the terrace builders were neither Late Bronze Age urbanites nor nomads, but “local village farmers, long since adapted to natural conditions in Cana’an ...” (Dever 1991: 83). Would people in the adjacent lowlands not have realized that certain grains, fruits, legumes, spices, and medicinal plants as well as wild life, flourished at higher elevations but not at lower altitudes? Would herders not have taken their animals to feed on the slopes? Would the cool summer nights in the hills not have enticed people to leave the hot, humid lowlands and coastal strip? If lowland residents engaged in any of these activities, their archaeological remains would be a challenge to uncover. Ephemeral summer lodgings of plant and animal fibers left little

trace. Summertime picnics left no pottery sherds. If constructed terraced slopes for farming were not part of the Late Bronze Age landscape, the alternative scenario would require a transitional LB/Iron I population to have established permanent settlements predicated on terrace farming, which they immediately mastered. The complex system of converting soil-poor hills into crop-producing agricultural terraces sufficient to provide the necessities for survival required considerable time and effort (Hopkins 1987: 190). Such an endeavor could have started with crops raised on the hills during the LB II and carried down to permanent homes and communities in the lowlands, after initial processing in the hill country.

HILL COUNTRY TERRACED FARMING DEVELOPMENT

Lowlanders would have been induced to cultivate the artificially created terraced fields on the slopes for two reasons, ecology and economy. Ecologically, the higher elevation was better suited to certain trees and plants than the lowlands. Olives and vineyards prefer hills where terraced farms accommodated their needs. Grains thrive in open expanses of valleys of lower elevations. In terms of economics, Egyptian overlords and local rulers extracted taxes and tribute from the populace (Weinstein 1981). To designate types of land surrounding Megiddo, Egyptian documents included one term for the arable plots and another for the fields (considered as non-farmland). Political functionaries, who controlled the arable plots, exacted a tax on the produce. In contrast, the fields of non-farmland were neither arable nor property of the authorities (Na’aman 1981). Presumably it would have been easier to tax produce, such as grains, from the arable lands than from the fields located outside the arable land, possibly in the central hill country. Residents of the lowland could have exploited the slopes to supplement and compensate for the taxed produce, despite initial low and unpredictable yields from trees and crops grown at the higher elevations.

The Egyptian perspective of the region distinguished between the coastal conduit and the less penetrable hilly interior (Gonen 1992: 37). Local residents of the plains and coast were apt to con-



Fig. 1 Map of sites.

sider the highlands a haven. Over generations, low-land residents could have increased their hill country agricultural investment incrementally to include terraced slopes and fruit trees, but never on a grand scale. The geomorphological configura-

tion of the dissected Judaean Hills favored construction of terraced fields on a local scale, rather than large systems of terraced slopes created at once (Ron 1966). To avoid taxes, workstations in the hill country could have been positioned on re-

mote hilltops far from the eyes and ears of the authorities, while farmers still maintained lowland fields. Initially the agricultural terraces provided an additional food resource, and only subsequently could the crops be a year-long part of the diet, sufficient for permanent residency at nearby villages.

Several aspects inherent to terrace farming impose limitations on our ability to establish their date, not the least of which was their structural uniformity throughout the ages (Mayerson 1960: 33). Bedrock composed of hard and soft limestone throughout Judaea and Samaria has resulted in differential weathering rates of the calcareous foundation. Stone terraces formed naturally, but the work required to create agricultural terraces was formidable. In comparison with other rocks, erosion of limestone yielded minimal quantities of soil at a very slow rate of deposition. Without trees or shrubs to hold the soil in place, heavy winter rains washed away the meager, naturally occurring soil. Terrace farming was feasible on the slopes only if soil was brought from elsewhere and piled behind artificially constructed stonewalls. Often, the soil was taken from ancient sites along with ancient sherds, a practice complicating our ability to determine the age of terrace construction. Early and Middle Bronze Age agricultural terraces, associated with domestic debris of comparable date, are among the most reliably dated terraced fields in the Judaeian Hills (Gophna and Porath 1972: 197; Edelstein and Kislev 1981; Edelstein and Gibson 1985; Gibson 2001).

MATERIAL ASSEMBLAGES AT TRANSITIONAL LB/IRON I SITES

The ceramic repertoire, ground stone implements, and vernacular architecture are the three features most indicative of activities carried out at the small hill country sites.

Ceramics

Mazar (1990a: 345–46) noted the limited ceramic repertoire at the unimpressive hill country sites, as had Albright (1949: 119). Whereas the small number of vessel types was once attributed to the egalitarian nature of the society and a “lack

of cultural sophistication” (Albright 1949: 119), Mazar (1990a: 345–46) recognized that the ceramics were restricted to simple subsistence activities, storage jars and cooking pots. Decorated and small portable jugs and bowls, for example, were non-existent or scarce. Regardless of a designation of transitional LB/Iron I, Iron I or Israelite, the paucity of artifacts and lack of diversity in artifact categories allowed for a limited number of activities confined entirely to food production, including growing, harvesting, processing, cooking, preparing, preserving and storing. Ceramics included predominantly food-processing equipment.

At Giloh, cooking ware, storage jars and pithoi constituted eighty percent of the finds (Mazar 1982b: 169). A variety of parallels with the LB II ceramic tradition persisted at Giloh (Mazar 1982b: 170) and Raddanah, while collared rim storage jars are usually associated with the transitional LB/Iron I and Iron Age I.

Ground Stone Implements

Heavy stone tools abound at hilltop sites. At Raddanah, millstones, pestles and mortars were found in “astounding” quantity (Callaway and Cooley 1971: 14), as was pottery useful for food processing. At Giloh, several limestone saddle querns and many limestone or flint hemispherical pestles are the largest artifact category after pots (Mazar 1990b: 80). Another hill country site, Mt. Ebal, yielded comparable pestles (Zertal 1986–87: 148–49). Abundant grinding tools imply that food processing was a primary occupation, especially given the paucity of other artifact categories.

The absence of artifacts, such as decorated pottery indicative of conspicuous consumption, and the abundance of grinding equipment need not imply an egalitarian society, but instead reveal a material assemblage best understood as a workstation for food processing. Sites stockpiled heavy querns, grinding tools, and utilitarian pottery.

Vernacular Architecture

The four-room or “pillared house” type at LB/ Iron I sites, large and small, had a narrow rear broad

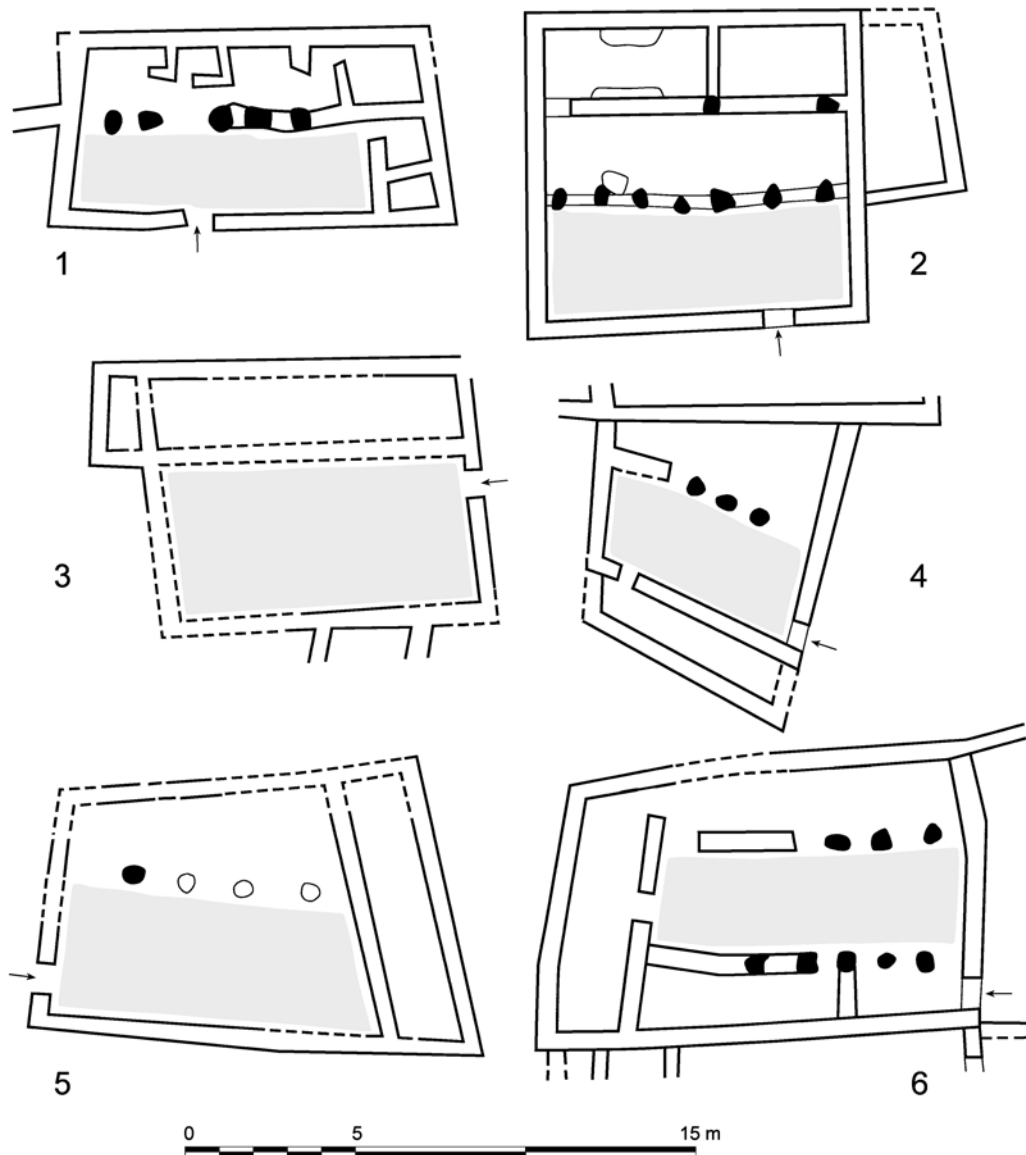


Fig. 2 Four-room houses development based on examples from Tell Masos and Tel Isdar.

room that was situated behind a larger space, which was divided into three narrow rectilinear areas by stone pillars or post bases aligned in two rows (fig. 2). LB II houses at Tel Batash are comparable in form, but the style became more common for all regions in the LB/Iron I era (Mazar 1990a: 340), extending east to Tell el-‘Umayri (Clark 1996), south to Tel Masos (Fritz: 1987: 84–85) and south-east to Khirbet el-Mudayna el-‘Aliya (Routledge 2000: 50–54, fig.10). Pillar construction utilized monolithic round or square stones, smaller circular stones piled on top of one another, and hewn

square shaped stones (Callaway 1970: 14). Floor areas behind the two rows of pillars were sometimes paved in part with cobblestone while the central area was usually of beaten earth. Variations existed in room number, size, and orientation as well as the numbers of pillars.

The central elongated area, at times designated as an open “courtyard,” perhaps was uncovered while one or both adjacent parallel rooms were roofed (fig. 3). Some structures, especially those of a later date, preserve stone steps implying the former presence of a second floor, possibly ex-

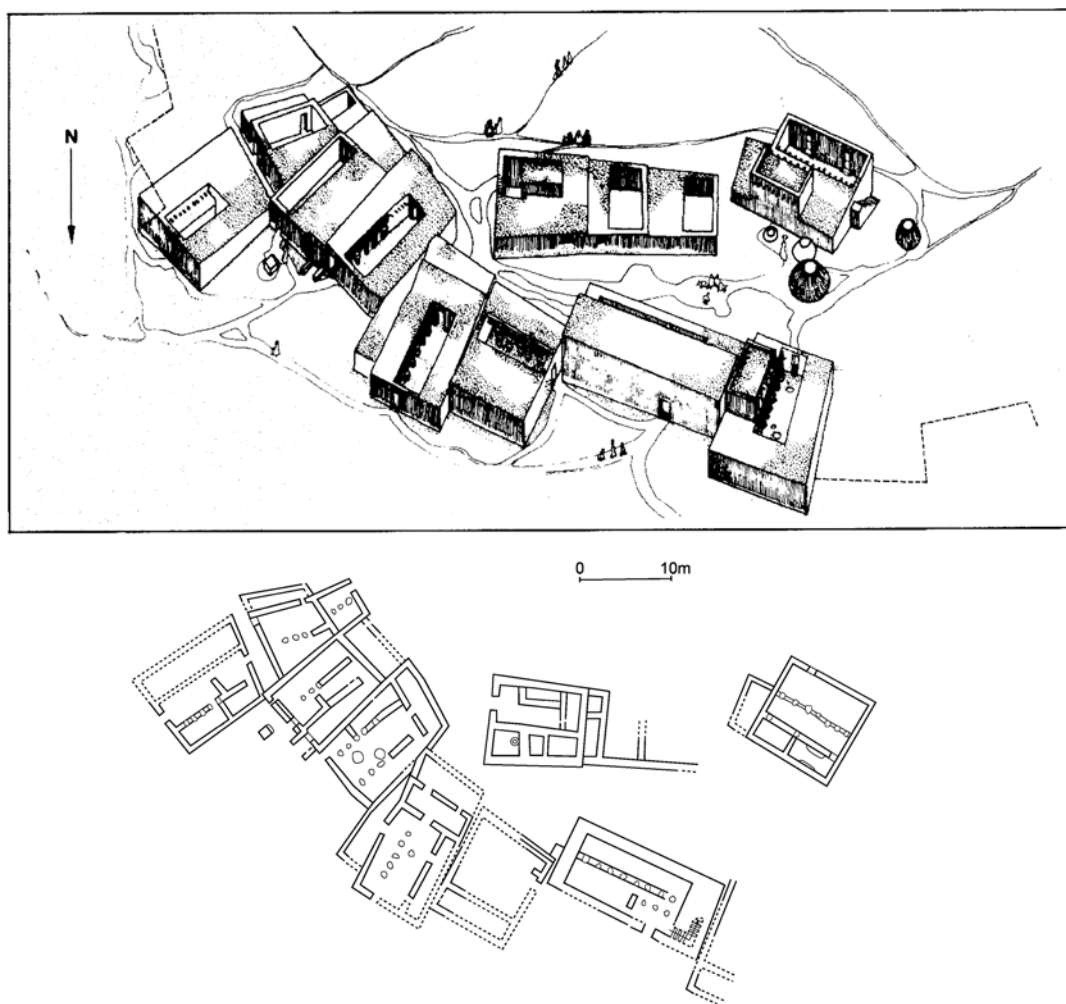


Fig. 3 Layout of Early Iron I structures at Tell Masos reconstructed with open, unroofed center courtyards.

tending over a roofed courtyard as well as the surrounding rooms (Mazar 1990a: 485). The presence of pillars, stone steps, and thick walls (0.60–1.0 m), has been considered evidence of not only a roof, but also a second floor (Stager 1985: 17). At ʿUmayri, both the depth of the destruction debris (0.70–2.0 m) inside Building B (fig. 4) and the thick wall 2.0 m in height, led the excavators to assume that a second story once existed, despite the absence of stairs. The roof and floor of the upper room were composed of organic materials and mud, which covered at least part if not the entire building (Clark 2002: 94, 97). Inside, mendable pottery of over forty collared rim store jars was found in an overturned position, possibly fallen from an upstairs (Clark 2002: 97) or from

raised shelves. The weight of so many storage jars would have required a substantial floor capable of supporting a considerable load.

DESIGN OF THE FOUR-ROOM STRUCTURES

Evidence that the smaller buildings elsewhere carried a second floor is less convincing. An upper story, even for the smallest buildings, has been inferred from wall width, occasional stone stairs, pillars, as well as overall design, small size, and open nature of the lower floor plan. Following most scholars who have considered the building layout, Holladay assumed that the overall design and small dimensions practically required a second floor if

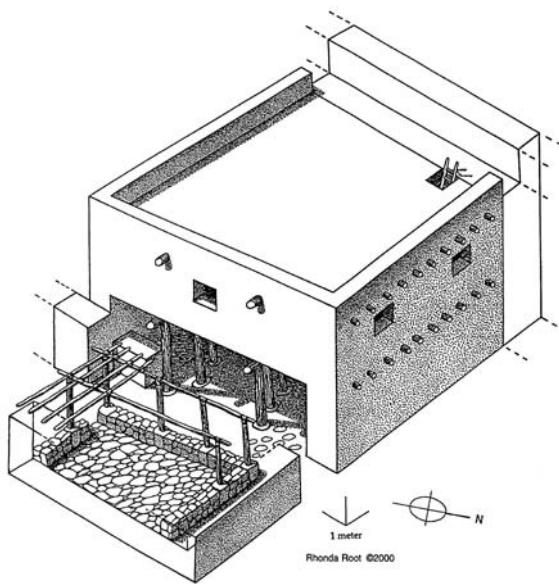


Fig. 4 Reconstruction of the Tall al-ʿUmayri pillared four-room building. Drawing by Rhonda Root. (Reproduced by permission of the Madaba Plains Project-ʿUmayri.)

people were to have lived there (1999: 389). In contrast, at Bethel and Tell Beit Mirsim, “the Israelite family ... lived in the ground floor as a rule instead of using the ground floor for storerooms” (Albright 1949: 119). Hopkins concluded that the structures were “strikingly small,” with roofed space at a premium and room for not more than three or four occupants (1987: 182). At Tell el-Farʿah (N) house interior area of 100 square meters (Bloch-Smith and Nakhai 1999: 71) was comparable to Building B at ʿUmayri measuring about 90.5 square meters (fig. 5). From the limited house size, Hopkins (1988: 2, 4–5) extrapolated that families were small and mortality was high.

With space allotted for seasonal animal protection, work (such as cooking) and storage, little room remained for human habitation on the ground floor. Internally, minimal architectural features characterized the use of space, except for two rows of pillars or post bases designed to support a roof, but not necessarily a second floor. In contrast to solid interior walls, the pillars would have afforded unhindered access to the covered side rooms (Routledge 2000: 54), especially for people at work or highly domesticated animals. Iron II comparable four-room constructions, in which stone lintels have been preserved between the pillars, indicated

that the passageways between the pillars were low, and better suited to use by animals than humans (Callaway 1970: 15; Mazar 1990a: 485). Over low-hanging lintels found at ʿAi, a roof beam 1.60 m above floor level implies that the ceiling would have been 1.85 m or more above the floor height. Lintels were found *in situ*, some with stones above them, in structures at Khirbet el-Mudayna el-ʿAliya. Late Iron I pillared houses there displayed walls 0.60–0.80 m thick and monolithic pillars 1.40 and 1.70 m high (Routledge 2000: 49–54). For the remote site of el-Mudayna in the eastern highlands of Jordan, Routledge (2000: 54) interpreted the pillars as providing entry to the side rooms, which themselves had some type of superstructure above the pillars, thereby creating more reasonable roof heights than would be afforded by the height of the extant pillars and lintels alone. Rubble screen walls of field stones piled between pillars at ʿAi (Callaway 1970: 14) could have been made of skins or cloths hung as a removable covering to separate the two side rooms from the center area.

If the pillars did not support a second story, they could have minimized the distance required for logs to span in order to create a roof. Covered areas, especially if limited to the rear and side rooms, would have been easier to span with the aid of the pillars. A shorter distance from the outermost walls to the internal “wall” created by the pillars meant the builders could work with short logs. Alternatively, at ʿAi, the logs would have spanned 3.0 m of roofed area (Callaway 1970: 14) and twice that length at ʿUmayri (Clark 2002: 57).

Stairs need not imply a second story since they could have led either to a second floor, or a flat roof. While one indicator of a second floor could be wall thickness, the substantial walls might simply have been an earthquake precaution or, as David Hopkins suggests, an example of overbuilding wall thickness, which the ancients often did for buildings and boats (personal communication). Destructions due to earthquakes occurred in the region, precisely in the LB II and following transitional era as noted at Deir ʿAlla (Franken and Kalsbeek 1969: 31) and ʿUmayri where Clark (2002: 55) theorized that an earthquake was a catalyst for the massive Iron I defense system. In addition, overly thick walls at ʿUmayri might have

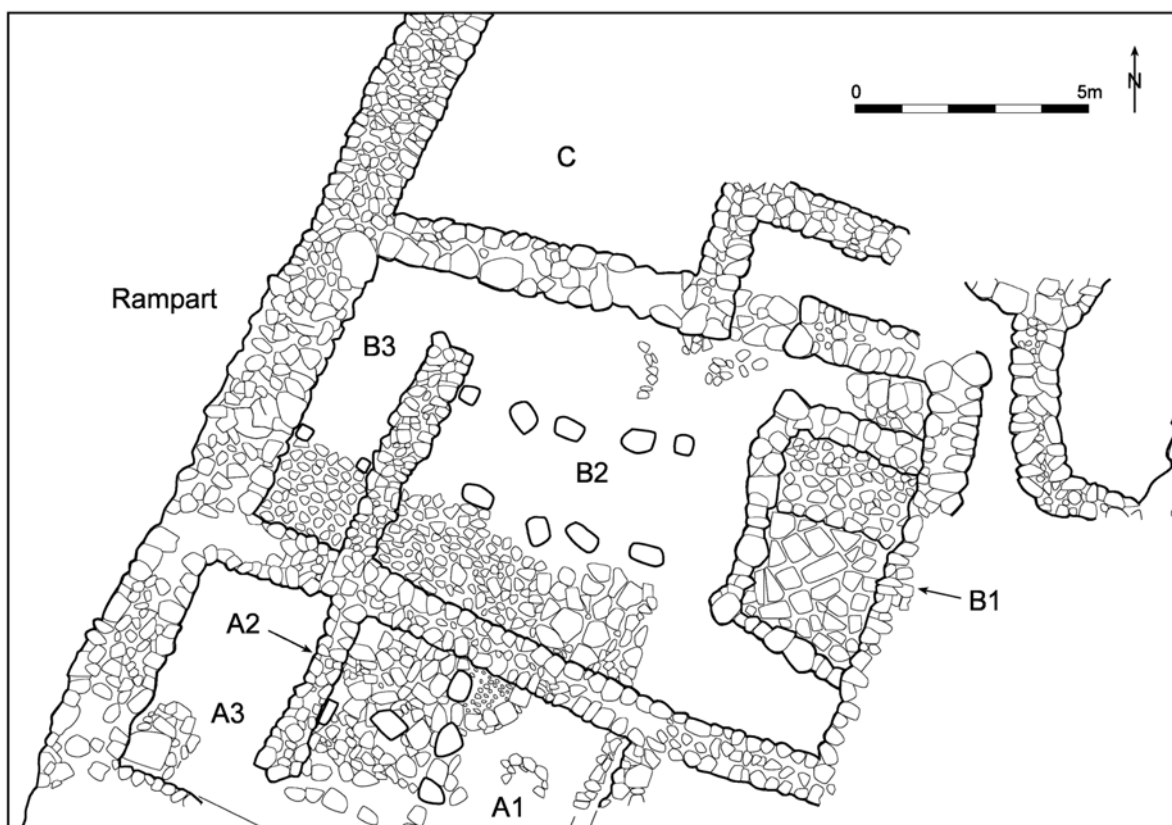


Fig. 5 Tall al-ʿUmayri four-room pillared building in Field B. The large trapezoidal form had interior measurements of 6.0–8.0 m wide and 12.5–13.0 m on the long sides. (Reproduced by permission of the Madaba Plains Project-ʿUmayri.)

compensated for the lack of a foundation trench, which was also missing for the Giloh structure built on uneven bedrock (Mazar 1982b: 168).

If the four-room structures were not large enough to accommodate the workforce and/or families all year, they might have been intentionally small to lodge a limited year-round population responsible for the fieldwork. Rather than four-room houses, I propose that they were storage facilities, workstations, or depots for tools, produce, and the small group of people delegated to work there. At larger sites, especially later in the Iron I and II, the design of four-room structures was modified, enlarged and remodeled into more suitable dwellings.

Limited covered space in the stone structures designed to withstand the cold, wet winters suggests that only a small percentage of the population lived year round at the hill country work sites. Some of the larger constructions could have had a second floor, but not all, especially not the small-

est. It is equally feasible that a flat roof covered part of one-story buildings, since the pillars, thick walls, and stone steps have been explained as essential elements of such a roof and are not necessarily a compelling argument for two floors. Use of the side rooms as shelter for animals normally penned up outside left little room for humans. The meager covered areas imply a small residential population year round, in contrast to the abundance of ground stone equipment and utilitarian pottery, which are far in excess of the number of people resident at the site year round.

TERRACE FARMING AND HUMAN RESOURCES

I have proposed here that hill country sites were normally used by a small slice of the population to accommodate best the restraints imposed by terrace farming. Difficulties in full time living at the hill country sites arose from the uncertain-

ties of food production. These unknowns stemmed, in part, from the vagaries of precipitation in the region. Given the agricultural insecurity, Hopkins (1987: 187–89) suggested that such risks were ameliorated by managed labor using a staggered pattern of sowing wheat and barley and by the utilization of various environmental niches in the highly diversified landscape. Based on my 1979 interviews with Gershon Edelstein and Palestinian farmers in terraced fields north of Jerusalem, individual terraced strips often have space sufficient to accommodate one person only, possibly working with an animal to plow the field. Whereas one farmer and one ox were sufficient to plow, hoe, sow and weed, and prune, considerably more people were needed to pick and process olives or grapes, and harvest, thresh, and winnow summer grains.

Four distinct stages were necessary to create a viable system of terrace farming: 1) soil procurement and wall construction; 2) regular maintenance of the wall along with chores related to planting, fertilizing (with manure) and weeding; 3) harvest activities; and 4) food processing, cooking and preserving. Maintaining agricultural terraces required a small but diligent labor force. Terraced fields left unattended for a season suffered from erosion in times of heavy rainfall. The third and fourth stages of the work, harvesting and food processing, required a larger and different group of workers with specific skills and knowledge of preserving food. If year-round residents in the hill country sites were restricted to the few needed to manage the fields, the community could have increased significantly at harvest time.

In the recent past in northern Jordan and Palestine, extra hands were needed in the spring and summer to help harvest winter grains and legumes, which were important sources of food for people and animals (Palmer 1998: 135). During the summer, tree and shrub fruit such as grapes, figs, and pomegranates ripen. In northern Jordan, villagers moved into their orchards to collect and protect the fruits (Palmer 1998: 157) as was done by villagers in Palestine during the summer months (Amiry and Tamari 1989: 39). Last to be harvested were olives—green olives in late September and black olives in November. Males from Palestin-

ian villages made molasses (Amiry and Tamari 1989: 39) and women processed other sweets. Similarly in antiquity, after the rainy season, when harvest work required additional hands, the workstation population swelled to include individuals who wintered elsewhere.

SUMMER HARVEST AND SOCIAL OBLIGATIONS

During the spring, summer and early autumn, the human and animal populations in the hill country could have been expanded to provide help in the fields and with food processing tasks. Yet their remains would largely have been invisible except for the disproportionately large quantity of ground stone and utilitarian ceramics. An excess of ground-stone equipment hardly suited the small interior space of the buildings unless the small four-room structures sufficed for a residential community that varied seasonally with a peak population during the summer months. Rather than functioning as a four-room house year-round, especially in the early days, it was primarily a storage facility or workstation with tools for a handful of resident workers. In the summer months, the extra workforce could have slept out of doors, near the fields, or on rooftops. Flat rooftops, reached by stone steps or perishable wooden ladders (Mazar 1990a: 485), would have provided ideal accommodations, without a trace remaining. Following summertime subsistence work, fairs at centrally located holy sites could have been the venue of religious feasts with important social obligations. Afterwards most of the people returned to their larger permanent villages in Jordan, the Negev, or in the lowlands, where they had four-room houses stocked with a familiar material culture.

RESIDENTIAL MOBILITY AND ENLARGED SOCIAL NETWORKS

Developments in the social landscape indicative of a new way of life eventually encompassed politics and religion. Isolation, dispersion, and small population size at the proposed workstations made new social networks mandatory to assure adequate food supplies, and access to a sufficiently large gene pool to ensure future generations. A

young healthy population in residence at the workstations would have left few burial deposits. Similarly, small sacred sites, where fairs, food, and the opportunity to discharge a myriad of social obligations existed, have remained largely undetected.

The collapse of elements within the Late Bronze Age society culminated in the displacement of people and the disruption of associated social conventions and customs. New social and economic relationships have been detected in the archaeological remains and artifact distribution, which covered a wider geographic region than previously, with less dependence on the coastal strip and more connections reaching eastward to Transjordan. Tribal entities that embraced both sedentary and non-sedentary people, agriculturalists and pastoralists, could have provided the enabling mechanism for a fluid population to prevail despite the shifts in settlement patterns and creation of new social and economic alliances (LaBianca and Younker 1995: 403–5).

Herr documented evidence of the new networks based on parallels between ceramics excavated at 'Umayri and the Judean Hills, especially that of Mt. Ebal Stratum II (1999: 70*; 2000: 281). Similarities in potter's marks incised in the wet clay on collared rim store jar handles found at Mt. Ebal and 'Umayri attest to possible connections (Herr 1999: 70*). Parallels to the collared rim jars excavated at 'Umayri (fig. 6) are known from Deir 'Alla, Giloh, 'Izbet Šarṭah, Shechem, Shiloh, and 'Ai (Herr 2002: 140 and figs. 4.17–27). Some of the collared rim jars found at 'Umayri were made of clays locally available and there were multiple ways to manufacture the jars (London 1999: 82–6). In addition to similar shapes found at 'Umayri and in the central hills of Israel/Palestine, is consistency in the assemblage composition, which emphasized utilitarian forms. In the 'Umayri Early Iron I deposits in Fields A, B, and F, which included houses and other structures, seventy-five percent of the ceramics were utilitarian comparable to eighty percent at the Giloh workstation (Mazar 1982b: 170). Ties to the Mediterranean coastal region and Negev were negligible (Herr 2000: 281; 2002: 146).

If the initial year-round population at the workstations was minimal, the rest of the population could have found good pasture and conditions suitable for winter fruit trees and cereals in the areas north and south of Amman where the annual minimum rainfall is 200 mm (LaBianca and Younker 1995: 403). Following the harvest and related food processing, people once again dispersed from central Israel/Palestine to return to their winter homes east of the Jordan River as at Tell el-'Umayri, or around Tell Deir 'Alla; others possibly trekked south, to the Negev site of Tell Masos. Tell Deir 'Alla, situated at an open and well-watered position in the Jordan Valley, dominated the approaches to and from the Wadi Zerqa. In former times, the Zerqa flowed in a riverbed directly north of the tell and created suitable conditions for winter crops (Franken and Kalsbeek 1969: 5). Tell el-'Umayri stood adjacent to one of the few springs in the region.

Links to a wider geographic region were necessary given the use of a more agriculturally marginal, less productive and less predictable hill country in a semi-arid environment unlike conditions in the lowlands (Bunimovitz 1995: 327). People expanded their social and economic network and engaged in a high degree of residential mobility encompassing the hill country and Transjordan and perhaps the well-watered twenty-acres site at Tel Masos. In Central Jordan, LB IB–IIA settlement debris is sparse, although there were cemeteries, isolated sanctuaries and burials at Tell Safut, Umm ad-Dananir, plus the Baq'ah Valley burial caves north of Amman (Younker 1999: 194). On the contrary, at least twenty habitation sites in Ammon are designated as transitional LB/Iron I Age, including 'Umayri, Sahab, Jawa, Khirbet Othman, Jebel et-Teweim, El-Mabrak, Khirbet el-'Edhmah, Rujm Beider, and Khilda (LaBianca and Younker 1995: 407; Younker 1999: 195). On the central Transjordanian plateau, sites range from sherd scatters to stratified tells, as at 'Umayri, with LB II, LB/Iron, and Iron I Age deposits (Herr et al. 2001).

Neither a break with the urbanized Late Bronze Age nor a regression to a semi-peripatetic existence characterized the transitional LB/Iron I.

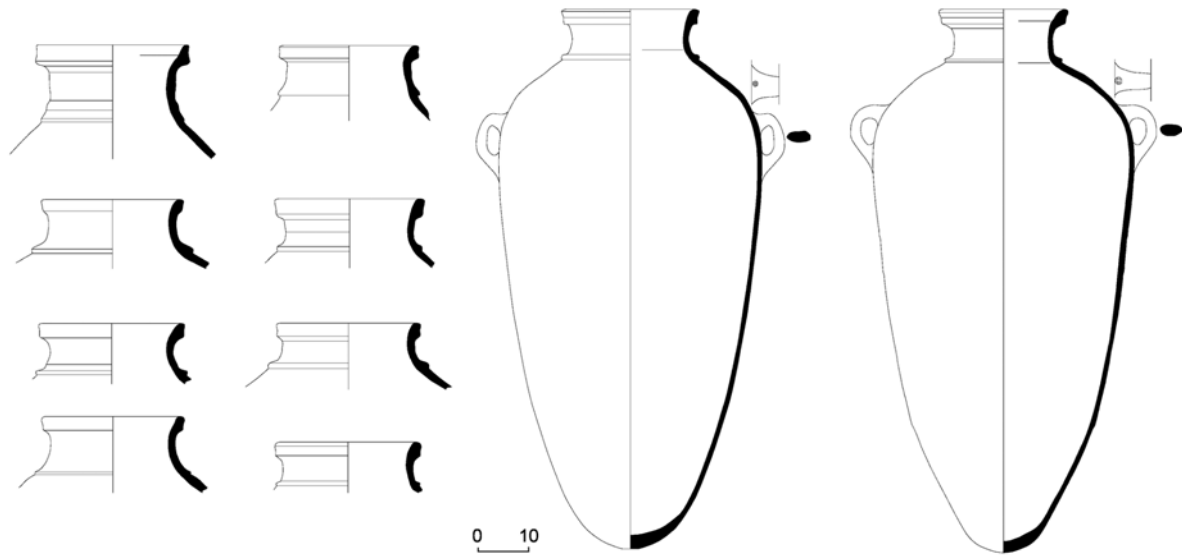


Fig. 6 Collared rim storage jars from Tall al-ʿUmayri. (Reproduced from MPP-ʿUmayri 5 by permission of the Madaba Plains Project-ʿUmayri.)

The lifestyle and distribution of sites minimized risk and maximized the unique environmental diversity of the region as a whole. Similarly, nineteenth and twentieth century residents dissected the region in search of water, fodder, and suitable habitats for themselves and their animals (van der Steen 1995, 1996, 1999; Bienkowski and van der Steen 2001). The Jordan Valley seems to have operated as a conduit for access to different environmental niches rather than as a political or geographical barrier.

SITE DIFFERENTIATION: FOUR CATEGORIES OF CONTEMPORANEOUS SITES

One discrepancy between the hill country workstations and the larger settlement sites was their function, as reflected in artifact diversity. Transitional LB/Iron I sites apparently were highly differentiated in their location, function, assemblages and population despite certain overlaps. I propose that four types of sites co-existed and were utilized by the same individuals. At settlement sites such as ʿUmayri the full range of daily activities occurred. Unlike the hill country workstations, ʿUmayri stood as a walled settlement adjacent to a spring, and has been described as a “richer more

advanced” site than those west of the Jordan River (Herr 1999: 70*). It featured ample storage facilities with forty or more collared rim storage jars excavated from one room in Building B (Clark 2002: 55). With a large array of artifacts and four-room structures, ʿUmayri appears to have been a permanent settlement with a full spectrum of the population who had connections to the workstations. Women, along with old and young people, who might not have regularly participated in the annual sojourn to the central hill region of Israel/Palestine, resided year round at ʿUmayri. Artifacts traditionally associated with women, such as loom weights, spindle whorls, and household fertility shrines of humans and animals were found at ʿUmayri (Clark 1997; 2002: 97). Such artifacts were consistently absent at the workstations. Human skeletal remains of two adults, one likely male and one juvenile aged 15, along with fragments of a child, came from the four-room structure at ʿUmayri (Chase 2002: 220). Faunal debris in a garbage dump in a big pit associated with the house and adjacent structure contained over 25,000 bone fragments. Of the 5,989 bones examined, seventy-two percent were identifiable of which eighty-five percent belonged to sheep and goat plus additional domestic and wild mammals, birds and fish (Peters et al. 2002: 306). Included was Nile Perch

thought to have been brought from Egypt in a preserved state (salted, sun dried, smoked or some type of combination; Peters et al. 2002: 329). Sheep for wool production, goats for milk, and cattle for traction power imply the importance of stock rearing (Peters et al. 2002: 330) and a spectrum of activities for men, women and children.

Another core settlement was possibly at Tel Masos where an unusual assemblage of Mediterranean, local and southern pottery, along with three and four-room houses (Fritz 1987: 95) was found. Positioned on a trade route that connected the Aravah, Transjordan, central hills and the coast (Mazar 1990a: 336) and likely surrounded by ephemeral winter sites, Masos was a link too complex to define here. Large sites were the exception, given the lack of sufficient water resources in both the Negev and Transjordan.

Temporary sites, encampments, caves and seasonal accommodations both around Masos and 'Umayri could account for the small four-room structures and specialized uses of LB/Iron Age sites, some as workstations and others for sacred purposes.

A second category of sites, here designated as workstations, were the small locations hidden in the central hills of Israel/Palestine. They served as the temporary homes for a small segment of the community among whom activities were limited, as was the associated artifact assemblage. Given the initial unpredictability of terraced farming, the result could have been "demographically unstable villages composed of small and demographically unstable households" leading to the eventual abandonment of many small sites (Hopkins: 1988: 6–7). Hopkins described the process of agricultural intensification "as a gradual one that took an extremely uneven course" (1987: 190). Semi-destroyed fields and their associated structures could have been abandoned rather than rebuild the terraced slope. In contrast, well-maintained workstations might have grown into settlements eventually as people adopted a more sedentary lifestyle in Israel/Palestine.

Burials and cemeteries constituted a third type of site. Cave and bench tombs, types known from LB II Canaan, have been described as the exclusive types of Iron I Age burial deposits (Bloch-

Smith 1992: 167–77). Burial sites, in Judaea and Samaria, traditionally dated to the LB II and lacking nearby occupational, include caves and other types of largely multiple burials containing decorated and other LB II–III wares, existed at Dothan, Ta'anach, Shechem, Hebron, Jedur and Gibeon. Kletter (2002: 33–35) acknowledged similarities between LB II and Iron I Age pottery, as well as difficulties in dating deposits to either period, yet he ascribed tomb deposits to the LB II and opted for a near absence of Iron I Age tombs. He rejected the idea that the Tell Dothan cemetery belonged to a non-sedentary people of the thirteenth century Late Bronze Age as suggested by Hess (1993: 136–37). The dating of painted wares in multiple burials is complicated by the practice of curating decorated artifacts for decades prior to their deposition as a mortuary offering. As a consequence, pottery considered typical of LB II could well have been placed into LB/Iron I funerary deposits.

A dearth of luxury items at the workstations implies that decorated pottery was kept elsewhere and/or possibly relegated to one of the cemeteries and burial caves, especially at those sites for which little or no settlement debris is known. For example, at the remote site of Tell Jedur, ten kilometers north of Hebron, no settlement deposit of LB II date was identified, but cave deposits dated to the mid-fourteenth to the end of the thirteenth century include two hundred bowls of both local and imported types as well as metal artifacts and a rare bowl originating in the northwestern corner of Saudi Arabia (Gonen 1992: 66). Instead of booty from a raiding party attack against a coastal people (Gonen 1992: 67), it could represent a transitional LB/Iron I era deposit. At Safed, a Wadi Hamra a tomb with 290 pots was not associated with a settlement (Gonen 1992: 53). At Khirbet Rabud, thirteen kilometers southwest of Hebron, seventy-five percent of nearly one hundred illicitly excavated tombs had Late Bronze Age artifacts. Settlement debris at Rabud was dated to the Late Bronze and transitional LB/Iron Age (Kochavi 1974: 12–19). At Dothan, a tomb with local and imported pots, metals, scarabs and bone artifacts (Free 1960: 10–14) totaling 3140 objects along with a minimum of three hundred skeletons contrasted sharply

with the meager Late Bronze II habitation debris at the site. The stratified Dothan tomb deposit has been dated to the LB II, LB III (1300–1200 B.C.E.) and Early Iron Age (Gonen 1992: 133).

A fourth category of LB/Iron Age site pertains to sacred space. Pilgrimage sites and shrines at small Iron I Age sites contrast with Late Bronze Age temples (Nakhai 2001: 203) and the same could have characterized the transitional LB/Iron I Age. A thirteenth century sanctuary complex at Tell Deir ‘Alla possibly served as a regional sanctuary given the array of imports (Franken and Kalsbeek 1969: 19–20; Franken 1992). The bulls’ head bowl at Raddanah (Callaway and Cooley 1971: 18) was perhaps of cultic significance, as was the bronze figurine at the “Bull Site,” which is an open cult site including a 21–23 m circle of stones, a possible “standing stone” and part of a ceramic cult object (Mazar 1982a: 33–4). The proposed Shiloh sanctuary complex occupied much of the site (Finkelstein 1988: 220–34; 291). Interpretation of the Mt. Ebal main structure as an al-

tar (Zertal 1986–87: 113–18) is still debated (Nakhai 2001: 197–98 n. 29).

CONCLUSION

The proposed workstations belonged to a larger social landscape stretching between the central hill country of Israel/Palestine and the central plateau of Jordan. They were storage depots rather than permanent homes given the small four-room buildings, minimal habitation space, and restricted artifact assemblage. Year-round residents were few in number and concentrated on terrace maintenance. For summer harvesting, the workstation community increased temporarily. Similarities in artifact assemblages have demonstrated a parallelism spreading east and west of the Jordan River and attest to the strength of the transitional LB/Iron I Age society. Archaeological data of hill country farmers and their larger social community suggest that social bonds reverberated among a widely dispersed people whose ties with the Late Bronze Age were enduring.

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