

Travelers to a Permanent Abode: Burial Practices of the Early Bronze Age I in the Southern Ghawrs of Jordan

The large cemeteries of Bāb adh-Dhrā‘, aṣ-Ṣāfi/an-Naq‘ and Fifā of the southeast ghawrs of Jordan (FIG. 1), dated to the Early Bronze Age I period, present major challenges to interpreters. First of all there is a demographic problem. These cemeteries appear to be far too large for the estimated populations of this period. In addition, despite extended surveys in the area, the EB I cemeteries of the southeastern ghawrs cannot be definitely linked to settlements of that period. These concerns along with the documented practice of secondary burials have led the Expedition to the Dead Sea Plain (EDSP) to propose that the burial practices in these cemeteries should be ascribed to transhumant pastoralists that brought their dead to these burial grounds periodically over an extended period of time. Many have objected to that hypothesis, insisting on a demonstrated territorial connection in the anthropological literature between burial grounds and nearby settlements. The differences among supporters and opponents of the EDSP hypothesis often revolve around different definitions of pastoralism and sedentism, and how one is to describe the relationship between the two in the ancient Near East. This study will offer a brief summary of evidence from the BD cemetery for this period and briefly re-state the current hypothesis of the EDSP along with the various criticisms of the current hypothesis. This in turn will lead to considering the evidence of the cemeteries of Fifā and aṣ-Ṣāfi/an-Naq‘ which reinforces the problem of mobility and lack of sedentary occupational evidence. Finally, we will consider some different hypotheses and briefly propose a modified hypothesis that combines the minimal evidence for sedentism together with that for mobile pastoral groups to explain the burial practices of EB I in the southern ghawrs — travelers, over a short or long distance to a permanent abode.

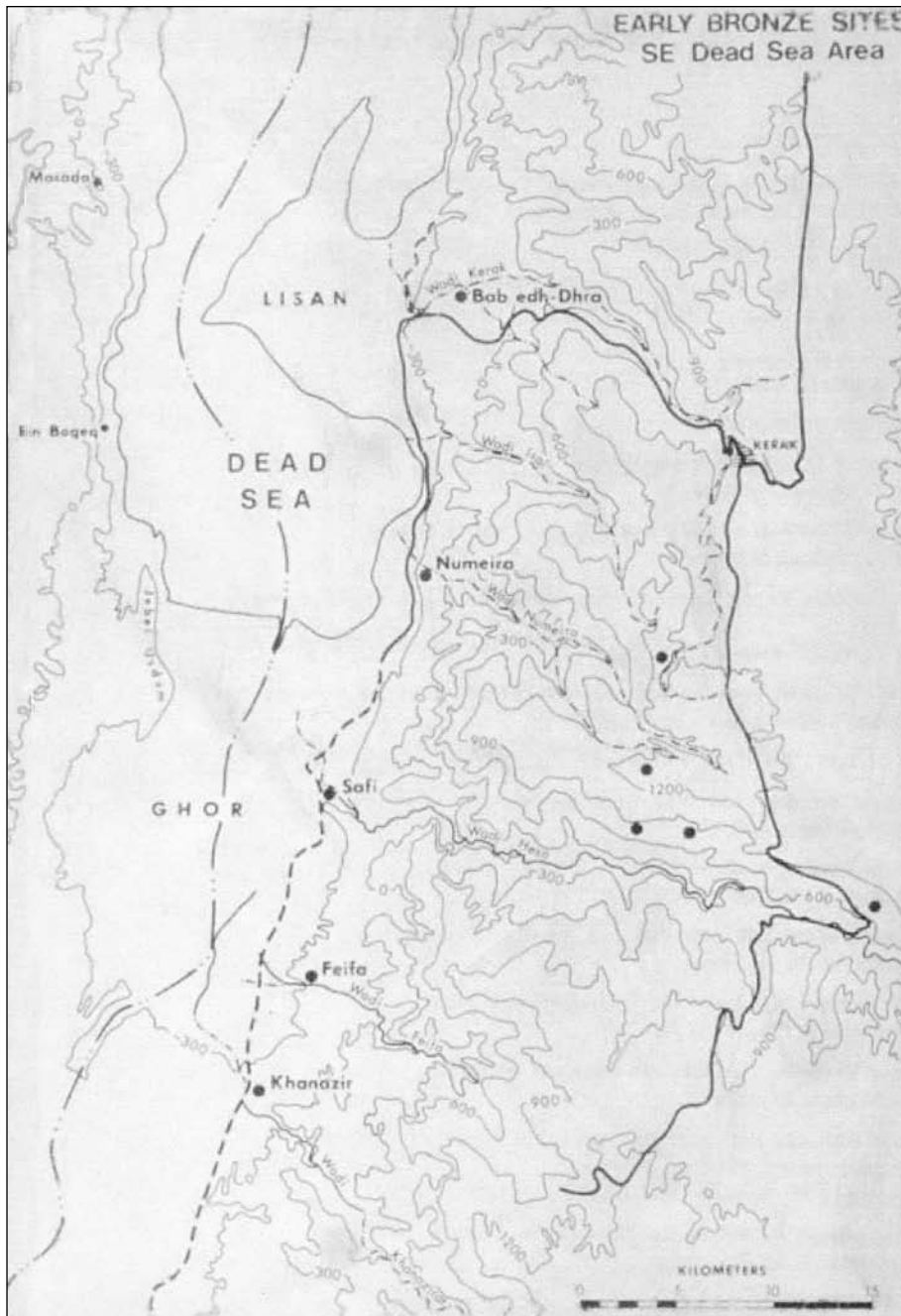
Bāb adh-Dhrā‘

The cemetery of Bāb adh-Dhrā‘ is well known, thanks to the excavations and publications of Paul Lapp (1966, 1968) and the subsequent excavations and preliminary and final reports by the EDSP (Schaub and Rast 1989; Schaub 1993, 2008; Chesson and Schaub 2007; Ortner and Frohlich 2008). Lapp excavated 28 EB IA shaft tombs with 48 chambers in Cemetery A and an additional 6 tombs from Cemetery C. The EDSP added to these EB IA totals with 22 shaft tombs with 63 chambers in Cemetery A, three shaft tombs from Cemetery G and four more tombs from Cemetery C. Three tombs (a surface burial, a shaft tomb and a round charnel house) excavated by Lapp were assigned to EB IB. A similar grouping of a surface chamber, shaft tomb chambers (3) and a round burial house belonging to EB IB were excavated by the EDSP.

The basic hypothesis of the EDSP, based on the four seasons of work in the town site and cemetery, argues that socio-cultural shifts were continuous with a development from:

- 1) A non-permanently settled area in EB IA toward;
- 2) An open village with a settled population in EB IB to;
- 3) A walled city in EB II-III to;
- 4) A new open village settlement, definitely sedentary, following the termination of the EB III walled city (Schaub and Rast 1989: 547).

The changes in burial practices in the cemetery dovetail with these socio-cultural shifts. For the EB IA period, apart from isolated camping areas and some minor structures in the area, there is no evidence for a large settlement (Rast and Schaub 1989: 73). During this period we have argued that the large number of tombs distinguished by formal secondary disarticulated burial practices is best ex-



1. Map of the Southeast Dead Sea Plain.

plained by groups coming from a distance, most likely seasonal pastoralists who made periodical visits. I would emphasize that the large number of tomb chambers with an average of 8 individuals in each chamber is the key factor in positing people coming from a distance rather than disarticulated burial practices. In the latter part of EBI round burial houses become the norm together with the beginning of a major settlement. Secondary burials continue along side some primary articulation.

There has been no lack of opposition to the basic hypothesis of seasonal pastoralists. David McCre-

ery suggested that small Chalcolithic sites in the southeast ghawr were likely predecessors to EB I farmers (1980: 250-56). He proposed limited sedentary agriculture in the area contemporary with the earliest burials. Gillian Bentley was the most thorough going in her analysis (1987: 6-44). She examined the use of the term pastoral nomads and rejected it for the later fourth millennium in this area. In its place she proposed herdsman husbandry, a herding of small flocks close to a sedentary agricultural village. Her main argument focused on the strong territorial connection between land and

the inhabitants. In conclusion she states “secondary burial as evidence of the pastoral nature of EB IA has been given unwarranted significance” (1980: 35).

Other more recent opponents to the pastoralist hypothesis include Eliot Braun, David Ilan, Timothy Harrison and Ben Badhann. Braun spends an unusual amount of time in his reviews of our final reports rejecting outright the hypothesis of seasonal pastoralism, which he interprets as nomadism (1991, 2006). Ilan suggests that there must be a settlement for the EB IA period nearby, perhaps buried under the alluvial fan of the Wādī al-Karak (2002: 95). Harrison acknowledges our arguments for lack of settlement evidence and is willing to allow for a relatively transient EBIA population (2001: 219). Ben Badhann, in a balanced treatment of all of the mortuary evidence of the Southern ghawrs, proposes that the EB I inhabitants of the area could have maintained a certain degree of sedentism. At least, he argues the archaeological evidence and ethnographic data suggest that the current mobile pastoralists hypothesis concerning EB I in the southern ghawrs “needs refinement” (2003: 169).

With the exception of Ben-Badhann most of these commentators did not have the additional evidence from the cemeteries of Fifā and aṣ-Ṣāfi/an-Naq‘ available to them. This data along with new estimates of size and density of the Bāb adh-Dhrā‘ cemetery complicates the picture. Two large cemeteries at aṣ-Ṣāfi/an-Naq‘ and Fifā, apparently as large if not larger, than Bāb adh-Dhrā‘, have been excavated, with well-built cist tombs and predominantly secondary burials. Dating of the tombs ranges from Late Chalcolithic to a few from EB IV but most belong to the EB IA-IB periods. Despite extensive surveys in the areas of these cemeteries no evidence has surfaced for nearby settlements from the late fourth through the third millennium. Where did these people live? Where did they come from?

Cemetery Sizes (see TABLE 1)

Bāb adh-Dhrā‘

Recent estimates by Bruno Frohlich, based on conductivity readings in the cemetery area, offer realistic assessments of the use of the Bāb adh-Dhrā‘ cemetery (Ortner and Frohlich 2008: 260-2). Frohlich determined high-density areas of 170 tombs per hectare and low-density areas with 17 tombs per hectare. These figures yield an estimate

for the entire cemetery area of 2,856 shaft tombs. With an average of 8.1 individuals in each chamber and average of 19.7 burials in each shaft tomb the estimated number of burials for the EB IA period interred in the cemetery would be 56,263. Frohlich further estimates that the living population needed to provide 56,000 burials over a 100 years period is about 9,902 at any point in a given time. A period of 200 years would cut that figure to 6,600 and a period of 400 years would result in a population of about 2500 people to produce the expected 56,263 burials (2008: 262). Frohlich argues further that a population size of almost 10,000 people would have needed an area of 10,000 square kilometers in order to support nomadic or semi-nomadic behavior. The high estimates for 100 or 200 years are at least three to five times the estimated population of the town site of Bāb adh-Dhrā‘ at its’ maximum extent during EB II-III. This fact, along with the estimate of the large subsistence area needed, persuaded Frohlich to argue for the 400 years period as more likely and also for a smaller area for the pastoralists to depend on for their survival (2008: 262). The cultural evidence, however, does not support a long 400 years period for the EB IA tombs. Lack of variation in the ceramic repertoire, in form, decoration and wares, and of other tomb artifacts, is indicative of a much shorter time period. From this perspective the range of 100-200 years is more realistic. The shorter time period with higher estimated living populations necessary to explain the amount of burials raises anew the question of where these people were living. Who were these EB I folks and where did they come from?

Fifā

The evidence from Fifā exacerbates the numbers problem for the southeast Dead Sea region. The ancient site of Fifā is located approximately 20km south of the southern shore of the Dead Sea. The most visible element of the site is a small fortress at the west end. Excavations in the cemetery area to the east were carried out by the EDSP in 1989-90 (Schaub 1991) and again for the Department of Antiquities by Muhammad Najjar in 2001.

During the excavations of the EDSP in the cemetery area three trenches were laid out, 125 m. apart, and cist burials were uncovered in each of the areas. Eleven tombs were excavated in the three trenches and two other exposed tombs were cleared. A trench across the town site exposed three

TABLE 1: Eb I Cemetery data of the Southeastern Ghawrs.

<p>BAB ADH-DHRĀ' Cemetery Size - 33 hectares = 330,000 sq. m - B. Frohlich High Density area -15 hectares – 170 tombs per hectare</p> <p>Low Density area – 18 hectare – 17 tombs per hectare</p> <p>Estimate –High Density Area – 2550 tombs - Low Density Area – 306 tombs</p> <p>Average Burials – 8.1 individuals in each chamber - 19.7 individuals in each tomb</p> <p>Total estimated number of burials in the EB I Bāb adh-Dhrā' Cemetery = 56,263</p> <p>Life Expectancy 17.6 years</p> <p>Estimated size of living population needed to provide 56,263 burials: 100 year period for EB IA – 9,902 +/- at any given time 200 year period for EB IA – 6,601 +/- at any given time 300 year period for EB IA – 3,300 +/- at any given time</p> <p>FĪFĀ - Cemetery Size – M. Najjar – 75 hectares = 750,000 sq. m - Z. Ben Badhann – 17 hectares = 170,000 sq. m - EDSP excavation – 3.5 hectares = 35,000 sq. m (16 excavated)</p> <p>Estimated density in EDSP area = 6 tombs in each 50 sq. m</p> <p>Estimate of tombs in EDSP area at Fīfā - 2000 to 4200 tombs?</p> <p>AN-NAQ' – Cemetery Size estimates vary from 20 hectares to 125 hectares D. of A. /Mutah U. 98 cist tombs Ioannina U. – 14 cist tombs Estimated density = 5 tombs in each 100 sq. m Low estimate of tombs = 10,000?</p> <p>GRAVE CIRCLES Bāb adh-Dhrā' town site – 9 recorded, 3 excavated Potash township site (McCreery/Clark) – 31 grave circles, 14 excavated Wādī Jarra – (Worschech) 47 recorded, 1 excavated Wādī Ḥaditha – (Worschech) 29 recorded Karak Plateau – 60 recorded (Miller), 9 excavated (Worschech)</p>
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more cist tombs underneath the Iron II town wall.

Two types of the cist tombs were identified. The walls of one type were built up and lined with small boulders (FIG. 2). In a second type the walls of the cist were formed of standing slabs in the bottom part and capped by small boulders in the upper part (FIG. 3). Both types were covered with slab capstones. Numerous cist tombs from the cemetery

at Adeimeh appear to be similar to the slab-lined types from Fīfā, although the Adeimeh types do not have boulders on top of slabs (Stekelis 1935: figs. 9-12).

Burials were all secondary and disarticulated. Individuals varied from 1 to 6. Multiple burials, from 2 to 6 individuals were found in 13 of the 16 chambers excavated. Pottery in the slab-lined

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2. Boulder type Cist tomb at Fifā.



3. Slab lined Cist tomb at Fifā.

tombs had many forms which appear to be typologically either very late in Late Chalcolithic or early in Early Bronze I. They are different in basic form and in the range of types from the typical EB I pots from Bāb adh-Dhrā'. In addition to the vessels excavated by the EDSP, I have looked at slides of the large group excavated by Muhammed Najjar. The dominant forms are jars, large-to-medium small, with tall necks equal to the height of the body and without handles. Only a few jars have loop handles and none have ledge handles. Some small bowls occur but none of the large deep bowls

which are frequent at Bāb adh-Dhrā' are found in the Fifā assemblage. The boulder type tombs had forms which are duplicated in the EB IB tombs at Bāb adh-Dhrā' and at aṣ-Ṣāfi/an Naq', including cups with a horned handle above the rim, shallow dishes with a similar horned handle above the rim, juglets with loop handle above the rim, some with vertical painted stripes, and amphoriskoi with lugs on the shoulder. Basalt jars, mostly crude in form, occur along with mace heads. Ceramic vessels in all but one of the tombs ranged from 1 to 8 with 3 to 4 the most consistent grouping. One tomb, dated

to EB IB by forms and decoration, contained 23 vessels.

The size of the cemetery at Fifā remains to be fully determined but all indications are that it is very large (TABLE 1). The area to the east of the town site explored by the EDSP was 35,000 sq.m. Density of the cist tombs in the areas excavated averaged 6 tombs for every 50 sq. m. If that density were consistent throughout the entire area it would come to 4200 tombs. Even halving that estimate would result in over 2000 tombs. Actually, subsequent excavations by the Department of Antiquity and later visits to the site, which documented recently robbed-out areas, suggest a much larger number. Zakariya N. Ben-Badhann estimated the cemetery to be approximately 170,000 sq. m. (2003: 22). Muhammad Najjar suggested a much larger area, 0.50km north south and 1.5km east west or 750,000 sq. m. (2004)

Aṣ-Ṣāfi/an-Naq'

The cemetery at aṣ-Ṣāfi/an-Naq' is south of the town of modern aṣ-Ṣāfi and the Wādī al-Ḥasā. aṣ-Ṣāfi/an-Naq' has been excavated several times. In 1995 the Department of Antiquities and Mu'ta University carried out the most extensive excavations revealing ninety-eight cist tombs and two monumental chamber tombs (Waheeb 1995). In 2000, 14 more cist tombs were cleared by Ioannina U. and further rescue excavations were carried out by Muhammad Najjar for the Department of Antiquities in 2001. The cemetery area has also been system-

atically robbed over the years.

Practically all of the tombs excavated at an-Naq' are cist tombs (FIG. 4) (Ben-Badhann 2003: 54-56). As at Fifā there are two distinctive cist tomb types. One is slab-lined with additional rows of small stones adding to the height and the second is completely stone or boulder lined. Most of the tombs (83/116) belong to the second type (2003: 54-56). Many of the tombs were filled with silt and recovery of the skeletal material was poor. The most consistent observed pattern was of a disarticulated bone group with skull fragments surrounded by artifacts including ceramic vessels and, at times, basalt vessels, mace heads, shell armllets and beads. Most of the burials appeared to be single. Only six tombs were recorded as having more than one burial. Partial or full articulation was recorded in only 8.5% of the tombs (Ben-Badhann 2003: 129).

Ceramics of the aṣ-Ṣāfi/an-Naq' cemetery have been dated by parallels to EB I. Typical aṣ-Ṣāfi cups with handle above the rim have been found in Bāb adh-Dhrā' EB IB tomb A 100N (Schaub 1981b: fig. 6:11) and they are also common at Fifā (personal communication from M. Najjar). Overall the pottery forms range from EB IA to EB IB with many red-painted forms over white slip, there may be a correlation similar to that found at Fifā. Ben-Badhann has argued that the slab tombs are earlier (EB IA) and the boulder tombs are later (EB IB) (2003: 82).

Estimates of the size of the aṣ-Ṣāfi/an-Naq' cemetery size vary widely from 200,000 sq. m. to



4. Cist tomb area at an-Naq' near aṣ-Ṣāfi.

1,125,000 sq. m (Waheeb 1995: 553; Politis 1998: 628-31). According to Ben-Badhann, tomb density seems to be consistent but no estimate is offered. Even using half of the low estimated area and a low estimate of 5 tombs per 100 sq. m. the projected number of tombs would be 5,000 tombs.

Other Theories

The size of the three cemeteries of Bāb adh-Dhrā', Fifā and aṣ-Ṣāfi/an-Naq' poses a major problem. Secondary disarticulated burials are the norm at all three cemeteries. All three cemeteries are very large and generally dated to the EB I period although Fifā could have some earlier material. Despite many surveys in the area over the past fifty years no major settlements dated to this period in the southern ghawr have been recorded. Where did the people live? If seasonal pastoralism is not acceptable, should we return to theories of the late sixties and early seventies of Kenyon and Lapp and look again at some major immigration into the area. Too much evidence has been accumulated since then for rejecting those hypotheses including all the evidence for continuity in indigenous traditions from the Late Chalcolithic. Yet, certain features of a people movement hypothesis remain tempting. A migration of people with their own traditions might explain the unusual and unique pottery traditions of the early Bāb adh-Dhrā' shaft tombs which are yet to find good group parallels in the local areas. In addition, the studies of Ortner suggest that the Early Bronze I population was undergoing significant stress. Life expectancy, excluding fetal and infant burials from the sample, was about 26 years. There is a prevalence of metabolic diseases including scurvy and rickets. "It seems likely that there were at least fairly common periods of famine within the EB IA in which women and young children would be particularly vulnerable (Ortner 2008: 303). Similar health concerns are not associated with the EB IB burials, although the sample is much smaller. The unusual pattern of burials in EB IA Bāb adh-Dhrā' with an average of 9 burials per chamber, including male, female, sub-adults and frequent fetal skeletons is difficult to correlate with patterns of death in a society. Is it reasonable to suppose that they all died at the same time? Did each kinship group have a primary burial site maintained over a considerable period time before the bones were collected for re-burial? It seems at least possible that these unusual burial patterns and the

health status of the EB IA groups could be a result of a migration before which a group collected the bones of their ancestors to move to a different area and during which the population was subject to metabolic diseases and periods of famine. Abrupt changes in burial customs have been cited in studies on central Asia as a result of migrations (Aleshkin 1983: 377-9).

Ritual Landscape

Another possibility that has been insufficiently explored for the Bāb adh-Dhrā' cemetery is that the entire area of the Sahl adh-Dhrā' was a ritual landscape which drew people from a large area including the highlands. That term has been used recently by Steve Falconer to account for the large number of grave circles spread out in the Sahl adh-Dhrā' (2004: 191). Prag had used the term earlier for the ritual landscape north of the Dead Sea area (1995). David McCreery also argued that the Sahl adh-Dhrā' may well have been the setting for cultic festivals or agricultural feasts, linking the spring of 'Ayn adh-Dhrā', some fallen monoliths near Bāb adh-Dhrā' and a large tabular monolith with a platform to the east of the Sahl adh-Dhrā' (1980: 279-302).

Each of these installations, fallen monoliths, the large tabular monolith to the east and the grave circles deserves a closer look. Albright reported six fallen monoliths just to the east of the walled area of Bāb adh-Dhrā' (1924: 6). McCreery was the first to notice the large tabular monolith with a 400m long wall snaking down a ridge far to the east (FIG. 5). This monolith was excavated by Korber (1993) and dated to the Late Chalcolithic and EB. The grave circles appear to play a significant role in the development of this area as a ritual landscape. Lapp excavated two grave circles (B1 and B2) south and east of the Bāb adh-Dhrā' town site on the edge of the cemetery area (Schaub and Rast 1989: 483, 489). One was unusual in its construction with upright slabs forming the outside wall. The EDSP excavated a grave circle with two rings of stone and a central monolithic chamber in 1975. They also recorded a series of fairly even-spaced grave circles in an east-west direction towards the hills and the tabular monolith. Neither the Lapp excavation nor those of the EDSP were able to conclusively date these grave circles but their proximity to the town site and cemetery of Bāb adh-Dhrā', an exclusively EB site, strongly supports this connection. A sur-



5. Walter Rast standing at the Monolith (adh-Dhrā'/al-Wu'ayda) overlooking the Sahl adh-Dhrā'.

vey by Clark and McCreery in 1977 recorded thirty-one of these grave circles to the south of Bāb adh-Dhrā', in the area now occupied by the Potash town site (Clark 1979; McCreery 1979). Clark and McCreery excavated fourteen of the grave circles. They were built of concentric rings of stone varying from 2-4 circles around a central burial cavity which was enclosed by boulders, stone walls or in some case large orthostats. Generally the skeletal material was poorly preserved. The burials were all secondary, disarticulated and incomplete. Several of the circles had no bones at all. Significantly there was an almost complete absence of any grave goods. In addition to the circles they recorded a long, 1m. wide wall that extended E-W through the survey area for 1km (McCreery 1979: 155). Falconer recently observed at least 50 more circles over a two to three km. stretch south and southeast of Potash city (2004: 193). It would appear that this entire area was a ceremonial burial ground during some period.

In 1998, Worschech re-visited many of the cairn sites described in Miller's survey of the Karak plateau (1991: nos. 44-46, 48-51, 125-126, and 130) and located and cartographed 60 'grave circles' (Worschech 2000: 193). He excavated nine of these circles at ar-Raḥa in 1998 and developed a typology of the different types (2000). Earlier he had documented a necropolis of 47 grave circles in the Wādī Jarra (1985: 28 – site 37) and another with 29 Cairns east of Ḥadītha toward the Wādī ibn-

Ḥammād (1985: 34, site 39). His soundings in the circles on the plateau produced the same results as those excavated in the ghawr by Clark and McCreery: very fragmentary skeletal remains and a total absence of grave goods.

The consistent combination of fragmentary skeletal material (in many instances none at all) with no grave goods raises the possibility that some of these circles may have once been used as primary burial sites for an in-between liminal period. Once the flesh had been excarnated the bones were gathered to be transported to a secondary final resting place where grave goods were deposited, such as the cemeteries of Bāb adh-Dhrā', Fifā and aṣ-Ṣāfi/an-Naq'. Intriguing but there are major problems with such a neat solution. Many of the grave circles yielded burials, which were already secondary even though incomplete. There is no indication of primary burials in any of the grave circles. More importantly, dating the circles continues to be elusive.

In the Potash township survey area McCreery states that the great majority of sherds they collected in the area (639 or 81%) were Chalcolithic / EB with the majority of this group (69%) EB I-II (1979: 51). Clark believed the pottery was Early Chalcolithic, Pre-Ghassulian and even possible Neolithic. Falconer recently has argued for a possible MB II date of the grave circles on the basis of a few sherds (2004: 195). One of the sherds he cites is from Tomb B1 at Bāb adh-Dhrā'. The sherd is definitely

MB but the locus was described as nearby and not from the tomb (Schaub and Rast 1989: 489). In his most recent studies Worschech has suggested that the Cairns on the plateau belong presumably to the Late Chalcolithic and Early Bronze Age periods (1986) because of the proximity of other installations of those periods and the immense number of flints from those periods (2000). At least three grave circles very close to Bāb adh-Dhrā' with its extensive EB I cemetery and EB II-IV town site strongly support the idea that some of these circles were used in EB.

Following his survey of the Arḍ-al Karak, Worschech proposed three distinctive ecological regions; 1) the plain of the ghawr near the Dead Sea, 2) the hilly slopes to the east and 3) the top of the Jordanian plateau (1986:40-52). In the ghawr, village dwellers lived along transhumants in a complex socio-ecological milieu in a way also found in the high plateau culture. Furthermore several campsites on the slopes between the ghawr and the plateau suggest that there was communication and trade between the people of the plateau and the ghawr. The same could be said for burial practices. The grave circles in all three regions appear to represent a common burial tradition shared by the inhabitants of the three ecological regions. Prag develops similar arguments linking the areas of the dolmen fields north of the Dead Sea. Some are located on the western fringes of the Plateau, 800m asl., on slopes and ridges above steep wadis. Others are found in the lower western courses of the same wadis between -300 bsl and + 200m. asl (Prag 1995: 76). The two areas correspond to the summer and winter grazing zones of transhumant pastoralists of the 19th and 20th centuries and probably parallel those of earlier periods (1995: 78). "Generally there seem to be increasing agreement that the dolmen cemeteries are those of tribal pastoralists (isolated cemeteries on hill slopes at a distance from settlements and arable land), who are in contact with sedentary groups, possibly linked in social and economic patterns, or who are themselves sometimes semi-sedentary or sedentarising (cemeteries close to arable land and settlements) (1995: 84).

To return to the southern ghawr it is possible, which a sacred burial ground had been established at least in the Chalcolithic period in the Sahl adh-Dhrā'. The large monolith overlooking the ghawr would appear to be used first in that period, along with long walls setting aside sections for ritual

burial grounds. A tradition had been established of this area being used for burials. That tradition may have been followed by EB I folk who introduced the shaft tomb tradition in the soft limestone marl closer to the Dead Sea. Where did these people live who buried their dead in these tombs? One answer might be that they lived in these three ecological zones (much as they do today): in villages in the highlands, in scattered small homesteads in the in-between hills, and in small villages in the plain. Uncertainties concerning the dating and use of the grave circles discussed above however, diminish the attractiveness of this proposal.

Summary

Many problems remain in attempting to identify where the EB I people who buried their dead in the cemeteries of the southeastern ghawrs lived. In a recent article it was stated, "we have no concrete information beyond educated guesses as to where the EB IA people lived, or if they were sedentary farmers or mobile pastoralists" (Chesson and Schaub 2007: 255). In this article I have looked at some possible educated guesses prompted by the statistics associated with the three EB I cemeteries of Bāb adh-Dhrā', aṣ-Ṣāfi/an-Naq' and Fifā. The notion of migration to explain the large number of burials over a short period was considered to be attractive but it runs counter to the large body of evidence that supports continuity in the local population between the Late Chalcolithic and Early Bronze I. Data on the widespread occurrence of 'grave circles' that could be interpreted as sites of primary burials is interesting, especially in the recognition of the three ecological areas of the circles but there are too many uncertainties concerning the dating of these 'monuments' and their function. I am left with re-stating our original hypothesis of mobile pastoralists but would now lean to a more nuanced expression of the relationship of pastoralists and sedentary or semi-sedentary agriculturalists akin to the complex relationship of these groups expressed by Prag in her interpretation of the ritual landscape of the dolmens and burial fields north of the Dead Sea (1995: 84).

Overall, the consideration of the features associated with these three cemeteries of the southeastern Dead Sea plain reinforces the notion that the EB I peoples looked upon this area as a ritual landscape, a prime burial area for the transition of their dead to a more permanent abode.

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