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## ON THE JUBE LINE: CAMPSITE STUDIES IN KURDISTAN

## Christopher Evans

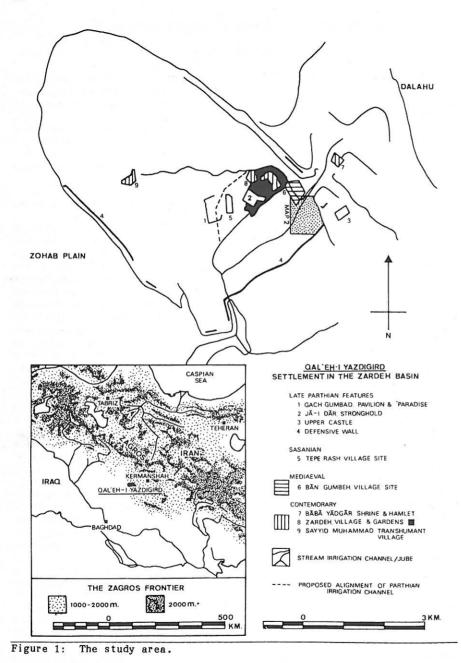
As a part of an ethnographic research programme which was conducted in conjunction with the Royal Ontario Museum's archaeological investigations at Qal'Eh-i Yazdigird, Iran, in October 1978, a survey of recently abandoned campsites of the local transhumant population was undertaken. These campsites were recognised and recorded by what were essentially archaeological criteria. However, this study was not primarily conducted as an ethnoarchaeological experiment in site recovery, but rather as an attempt to examine the spatial organisation of a transhumant community's seasonal campsites and tent dwellings.

This work was undertaken as part of a general research programme to study the contemporary population of the Zardeh basin, which, during the final years of the late Shah's reign, was rapidly changing due to an influx of cash into the area brought about by the Shah's economic policies and the inflated prices paid for animal produce. This programme of ethnographic research was approached as an extension of the overall archaeological project in the basin, in which the present Zardeh communities are the most recent or final phase in its settlement sequence. In this context, information that could be obtained concerning the contemporary settlement patterns and economy in the basin could prove to be relevant for our understanding of its archaeological settlement, through analogy based on the apparent continuity of land-use patterns in the area. Therefore, as an ethnoarchaeological study, this work is more closely related to human ecology studies and historical geography than to current material culture studies.

As a study of the campsites of a transhumant group, this work has a specific relevance for much of the archaeological work which has been undertaken in the Zagros uplands during the last two decades. Pastoral transhumance, unlike specialised nomadism -- which is thought to be a frontier response to the political stability and economic prosperity of sedentary societies (Adams 1965:52, 109; Barth 1961:118) -- is a cultural and economic adaptation to ecological conditions. As such, transhumant communities in given highland areas of Western Asia have shown "exceptional historic stability based on permanence of an economic function" (Planthol 1966:295). In this regard, pastoral transhumance, which has not been so extensively studied as specialised nomadism, may well have a direct relevance for the study of early animal domestication and prehistoric communities in Western Asia.

The valley of Qal'Eh-i Yazdigird is located in the Kermanshah province of western central Iran and lies on the westernmost flanks of the Zagros Mountains, overlooking the Mesopotamian plains (Figure 1). The valley is situated at the northwestern end of a geological syncline which extends as a trough for 20km southeast to Rijab. The valley of Qal'Eh-i Yazdigird proper corresponds to the area of the Zardeh basin and covers an area of some 24km<sup>2</sup>. This basin is, in fact, an elevated

(Archaeological Review from Cambridge 2:2 (1983))



tableland with sheer cliffs on its western and northern perimeters. The eastern side of the basin is met by the western flanks of the Dalahu uplands which reach over 3000m (a.s.l.) in elevation.

Although the Zardeh basin can be considered as a self-enclosed and relatively isolated geographical unit, immediately south of Rijab is the pass of the 'Zagros Gates', through which ran one of the major trade routes in antiquity, the fabled 'Silk Road'. Today this road, which runs up from the Iraqi plains to Kermanshah and Hamadan, is one of the key passageways through the central Zagros. In antiquity it was the main highway connecting the Mesopotamian lowlands and the central Iranian plateau. The Zardeh basin is, therefore, located on both a geographical and a cultural frontier, and its strategic relationship to the 'Zagros Gates' has been a major factor in its settlement and historical development.

As a place-name, Qal'Eh-i Yazdigird ('the castle of Yazdigird', the last of the Sasanian kings) is without specific territorial or ethnic significance. However, the association of Yazdigird, as an historic figure of semi-mythical status, with the valley is very important within local legend and the naming of topography. Yazdigird has become directly associated with a number of the upstanding archaeological features within the valley, which for the most part predate his reign by four centuries.

The limited scope of this paper does not allow a full discussion of the Zardeh basin's archaeological sequence. However, a brief synopsis can be presented. Thus far, the earliest occupation found in the valley is of late Parthian date, when a monumental and semi-aristocratic building programme took place, and the entire area of the basin was fortified (Figure 1). The location of a later Sasanian domestic site immediately adjacent to the Parthian palace and garden enclosure in the middle of the valley floor would seem to indicate that the Parthian irrigation system must have continued to function into the succeeding centuries. The original irrigation system has not yet been discovered, though this may be because it could have been re-dug and incorporated into the present system of jube irrigation ditches which traverse the entire valley floor. The Parthian canal system would have had to be more than two kilometres in length if it linked the 'paradise' garden to the stream which descends through a gorge from the Dalahu to the southeast part of the valley. After the Sasanian occupation, there appears, to have been a break in the settlement sequence in the valley. The location of the later mediaeval domestic settlement at the foot of the gorge could suggest that the original irrigation system had ceased to function (Keall 1976, 1977, 1979b).

Limited investigations in the local uplands have revealed extensive wall systems running along the lower western flanks of the Dalahu uplands. This defensive system could have been constructed to guard against attack from the uplands, or to maintain access into them. Certainly it would seem likely that the local uplands were being exploited as a source of fuel and pasture from, at the very latest, the Parthian period onwards.

The Zardeh basin falls within the southern border of the ethnic province of Kurdistan, and in the broadest sense, the valley's population can be 'classified' as Kurds. However, in so far as this region is considered a geographical frontier, so too is it a complexly interwoven ethnic frontier. The area of the Dalahu uplands is the territorial core of the tribes of the Guran confederacy. The Gurans are thought to have migrated into the western Zagros from the area south of the Caspian Sea sometime before the fourteenth century (Bruinessen 1978:123-4). The main cultural trait with which the Gurans are associated is the AhI Haqq faith, which is a non-Muslim religion, though it has strong affinities with Islam (Minorsky 1953:17-20). The inhabitants of the Zardeh basin are Ahl Haqq ('Followers of the Truth'), and their religion plays a major role in the valley's social organisation.

To determine the ethnic origins of the valley's inhabitants is thus extremely difficult. They may have been Kurds, possibly Jaf or Kalhurs, who have adopted the religion of the Gurans. Alternatively, the local population may originally be Guran who have adopted a Kurdish dialect (Bruinessen 1978:124,129), or they could be an ethnic mixture of Kurds and Gurans.

Currently, the Zardeh basin supports a population of some 850 inhabitants, of whom approximately 700 live in the village of Zardeh, which is located in the southeastern quarter of the valley. On the western side of the valley is the more recent settlement of Sayyid Muhammed, which is the winter village of an entirely transhumant community of some 150 members. At the upper end of the gorge, at the foot of the Dalahu uplands, are the shrine of Baba Yadgar and a small hamlet which is economically dependent upon the pilgrimage market generated by the shrine.

When Major Rawlinson visited the valley in 1836, he noted that there then existed "... the little village of Zardeh, surrounded by gardens which are watered by a delicious stream descending from the gorge" (Rawlinson 1839:33). While we cannot make an estimate of Zardeh's population at that time, from Rawlinson's description it would not appear to have been considerable. The 'folk memory' or oral tradition of the oldest villagers currently in the Zardeh communities extends back two or three generations, roughly to the beginning of this century. According to them, Sayyid Muhammed was not settled until early in this century and Zardeh then had an estimated population of 100 inhabitants. Although these population figures are extremely vague, there certainly has been a population rise is evident in the valley during this century. This marked population rise is evident in the rapid and serious deforestation which is occurring in the local uplands and in the increased distances travelled for summer pasture.

The climate of the Zagros is characterised by extreme variations.

Summer temperatures in the Zardeh basin often rise above 37°C, while in winter, temperatures in January can average -5°C. From December until Spring the lower Dalahu flanks can be blanketed in snow, and the basin can have snow in harsh winters.

The predominant factor which has determined the settlement and traditional economy of Iran is rainfall and the availability of water. The flanks of the western Zagros act as a rainshadow and consequently the Zardeh basin receives a reasonable level of rainfall when considered in a Middle Eastern context. However, all of this falls between November and April, so that during the summer the basin is completely arid. It is this extreme precipitation pattern which dictates the nature of the pastoral and agricultural calendar of the Zardeh communities. While the Dalahu uplands do not receive a substantially greater annual volume of precipitation, they do store water in year-round snow. The highland hinterland thus provides a more lush environment for the valley's pastoral sector during the dry summer months.

The transhumance of the Zardeh communities involves approximately one-third of the valley's inhabitants, and it traditionally begins 40 days after the Kurdish New Year (March 21st). The first groups to begin their summer migration are usually those from the low-lying Zohab plain, whose villages are without a reliable source of water and therefore the first to suffer from the summer drought. These lowland communities will pass through the Zardeh valley and ascend to the small plateau which rings the upper Baba Yadgar gorge. By the time the Zardeh communities begin to migrate, this intermediary pasture may be exhausted and they will travel directly into the highlands. Once in Dalahu, the migrating groups will gradually ascend to the uppermost pasture (ca. 2500-3000m). This ascent occurs in a sequence of stages, with each campsite being occupied for two to three weeks. By late July and August the transhumant groups will have begun a slow descent as temperatures in the upper reaches begin to cool.

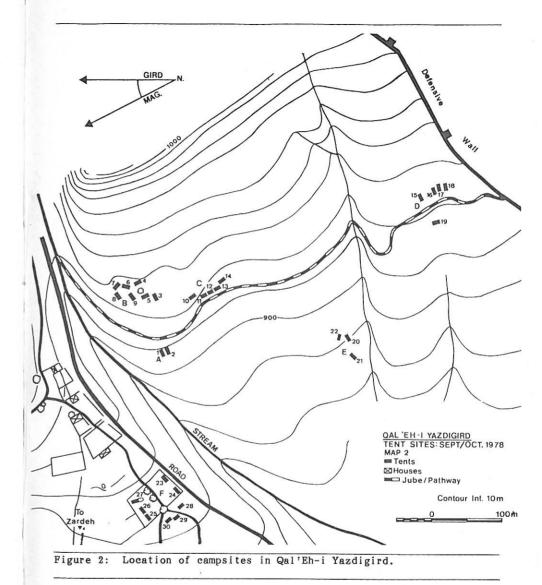
The overall extent of the summer migration of the Zardeh groups is roughly 30-35km, and by mid-September they will have returned to the valley, camping in its southeastern quarter. During this time pasture is available within the valley from the stubble left after the August harvest. In this final stage of their transhumance, the migrating groups are only 500-1000m from Zardeh itself. The inhabitants of Sayy'd Muhammed often return earlier to their home village than the Zardehis do, as it has a more open ranch-like settlement plan which enables them to erect their tents immediately beside their winter homes.

Earlier in this century the Zardeh villagers practised transhumance during the summers, but only as far as the nearby hilltop of Ban Gumbeh, which lies approximately 500m from their village. This may seem a rather minor migration to justify the expense and maintenance of a tent. However, this hill, which is located at the foot of the gorge and at an elevation of some 100m above their village, is locally considered to be the valley's internal 'winter zone'. This is because of the hilltop's relatively moderate and pleasant summertime conditions, which are due to its proximity to the gorge and the cool winds blowing down it from Dalahu. At that time, the only pasture which was normally utilised was the plateau area in the upper gorge, which today serves as the intermediary pasture before reaching the highlands. On the basis of this information, it is evident that the increase in the range of the annual summer migration from the Zardeh basin has been the result of increased competition for pasture produced by a rapid growth in local population.

During their summer transhumance, it is the black tent which houses the migrating households. As a 'structure', the black tent is remarkably sophisticated and ideally suited to its arid environment. What makes the 'classic' black tent almost unique among native tent types is the fact that it is non-skeletal. This is because it is the goat-hair vellum of the tent which carries the structural stress and not its timber uprights.

There are three basic components in the construction of the black tents of the Zagros Mountains: the black goat-hair roof cloth, three parallel, longitudinal lines of roof-supporting poles, and the skirting wall panels of reed matting. The Kurdish tent is distinctive among Persian tents in that it is supported by a central row of closely set poles which project through the top of the roof and give it a circus 'big top'-like profile (Feilberg 1944:81-6). However, the tents of the Zardeh communities are not of this characteristic Kurdish fashion, but are rather based on Luri designs. Luri tents are dominated by central poles which are two-pieced and form a longitudinal 'T'-shaped ridge support (Feilberg 1944:fig.9). By this means of construction, the tent requires fewer central poles, usually only four, compared with the Kurdish tent which needs twice that number. It is because the black tent is non-skeletal that there is no need for post-holes to be dug, and their central posts are either set on flat stones or sit directly on the ground.

The Zardeh campsites which were studied had been pitched on the terraced and recently harvested fields within the southeastern quarter of the valley itself. These campsites had been utilised from mid-September until early October and our examination of them took place a week after they had been vacated. In total 30 tent sites (1-30) were recorded and these had been organised in six campsites (A-F) (Figure 2). The tent sites were recognised by a number of characteristics, the most obvious of which was the absence of field stones within the areas of the trampled earth floors of the tents. This was in contrast to the scatters of stones and dung which surrounded the tents. The most readily recognisable features within the tent sites themselves were hearths and rectangular stone platforms for the storage of household items, these features being present in all but two of the tents (Figure 3). Small settings of stone-packed post-holes were found within four of the tents and these, it would seem, were used to support a tripod for the churning of milk produce. Also recorded on a number of the sites were ash dumps



and small middens of seeds and shells. These had been deposited within a 10m radius of the tents. In three instances subsided pits were recognised, and those which were associated with tent 1 proved to be subterranean vats for the production of cracked wheat biscuits (Evans, in press). The only faunal remains recovered from the 30 tent sites

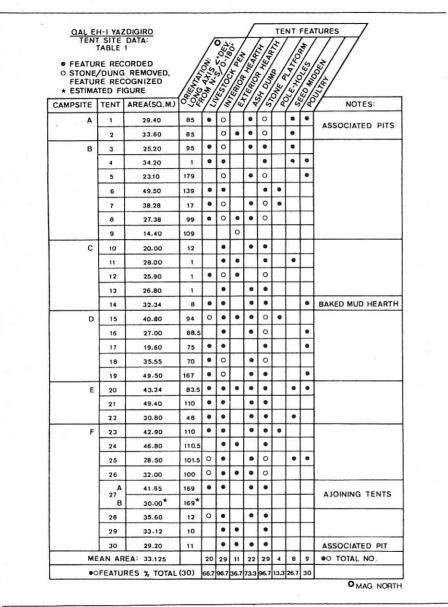


Figure 3: Qal Eh-i Yazdigird, tent site data.

were the bones of a single slaughtered goat, which had been scattered over campsites A and B by children and dogs. In 20 tents there had been livestock enclosures. These were situated within the tents themselves and were for the penning of lambs. These dung-filled pens, which covered from one-quarter to one-third of a tent's overall area, had been sealed off from the living area of the tent, and it was evident that there had been a separate entrance-way into them.

This sub-division of the interior of the tents is guite important, for unlike many circular tents where there is an obvious central focus which often has sacred and/or social associations (Faegre 1979:91-3), the interior of the black tent is organised 'architecturally'. This occurs in so far as the interior is physically subdivided and the focus of its internal organisation is around its perimeter (Watson 1979:fig. 10.3). This organisation of tent space relates directly to the tent's rectangular shape and its design. It is relevant to note that the roof of the black tent does occasionally serve as a temporary architectural component (roof) in stone-walled enclosures (Edelberg 1966-67:382-4). Moreover, black tents are often erected within the courtyards of winter houses and so become an extra household room for part of the nonmigrating year. The internal organisation of the black tent and its structural interaction with solid or 'permanent' architecture due to the sophistication of its non-skeletal design could suggest that it developed from a village-based architecture. It would therefore seem unlikely that the black tent developed from a pre-neolithic context.

The overall floor area of the Zardeh tents ranged in size from 14.40 to  $49.50m^2$  and 50% of the tents had an area of between 25 and  $35m^2$  (Figure 3). The average tent area was found to be  $33m^2$ . This figure can be compared with the size of living areas in household compounds in the central Zagros by using Watson's data from Hasanabad (Watson 1979:129-51), where the average living room size was  $22m^2$ . While the average size of the Zardeh tents was substantially greater, it should be born in mind that the sedentary household compound also includes various storage and secondary rooms, and storage space, as much as living area, is a major function of the tent.

In four of the campsites (B,C,E and F) there were either one or two (campsite F) tents with a floor area greater than  $45m^2$ . Similarly, in campsite C, tent 14 was located slightly apart from the main body of the camp and was significantly larger and certainly more carefully pitched than the other four tents in the camp. Therefore, we can recognise what appears to be an indication of personal status and/or wealth reflected in the physical size of the tents and in their location within the campsite. This conclusion has been subsequently verified by separate anthropological research in the area (Rice, pers. comm.).

The spatial organisation of the campsites within the Zardeh basin relates directly to the shape and extent of the available terraced fields. Within the four larger campsites studied there appear to be two organisational patterns: one linear (camps C and D), and the other roughly clustered (camps B and F). The areas selected as campsites all seemed to provide some degree of shelter from the prevailing winds blowing down the gorge. While the orientation of the tent entrance-ways did not follow a uniform pattern, in no recorded instance were they oriented upwind towards the gorge.

In the Zagros highlands, campsites are usually organised in 'avenues' of tents, with their long axes uniformly aligned. One of the reasons for this camp pattern is that the tents house family units, or portions thereof, and this arrangement provides some degree of household privacy. Upland camps will often be organised so that two or more of these avenues will form part of an enclosure or open square in which flocks can be protected from wolves and sheep-raiding. Campsites within their home valley or territory do not require this degree of defence and therefore, apart from campsite F, this pattern was not found in the lowland sites studied.

One factor in the location of the inter-valley campsites was their access to pathways by which the gorge and Zardeh could be reached. It is for this reason that the camps in the southern fields were all located either on, or with direct access to, a major <u>jube</u> ditch, which was dry at that time of year and made an excellent path through the scree and terrace walls.

As far as could be ascertained, the location of the lowland tent encampments does not relate to the ownership of the field by members of the camp group, nor is it dependent on their social relationships with the field's owner. This apparent freedom of choice in the selection of campsites within the valley derives from the symbiotic relationship which exists between the agrarian and pastoral sectors of the community. The owners of the campsite fields not only reap the benefits of having their property extensively manured, but also have a significant quantity of stones removed from their ground. The evidence for this latter activity was found in the stone cairns which were associated with campsites A, B, D and E. Moreover, care is also taken by the transhumant groups to leave the fields relatively undisturbed, and in a number of instances the blackened stones from hearths and platforms had been intentionally removed and placed in adjacent cairns.

The social organisation of camp communities can be extremely complex, especially as there is a great deal of individual movement between the campsites and home villages during the migration period. On one hand, the social relations within a camp will reflect those of its home community, but at the same time a temporary campsite does allow for a physical re-shuffling of spatial relationships between kin, friends and religious affiliations, which the solid architecture of the home community does not allow.

Pastoral transhumance is a relatively complicated economic and cultural phenomenon, and certainly its archaeological recognition is fraught with difficulties. This is true if for no other reason than that the physical remains of pastoral campsites are extremely insubstantial. There does seem to be, however, a great potential for further ethnoarchaeological research relating to transhumant populations. Clearly, further work will be necessary if we are to identify and understand transhumance in the archaeological record.

## Acknowledgements

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