ARCHITECTURE OF THE PETRA BEDUIN: A PRELIMINARY REPORT

by Piotr Bienkowski

Introduction

The Bedul tribe of beduin lived within ancient Petra for about 150 years, occupying the caves carved by the Nabataeans. In 1985 most of the tribe was moved to the new nearby village of Umm Saihun. This was part of the reorganisation of Petra along more commercial lines in an attempt to improve facilities for tourists. The prospect of the move presented the last opportunity to record the traditional way of life of the Bedul. The author's first season (May and June 1983) surveyed their architecture in Petra, recording the different types of habitation (Bienkowski 1985). It further suggested that study of the ways in which the Bedul adapted the Nabataean caves to their own needs might shed some light on Nabataean domestic occupation (ibid: 158-159). The second season (September 1986) had two components: study of the now abandoned caves that had previously been surveyed in detail, to compare the visibility of remains before and after abandonment; and an architectural survey of certain houses in the new village. The latter concentrated on houses of families whose habitations we had studied in 1983, in order to make a direct comparison. Parallel work by Anna Ohannessian-Charpin on the socioeconomic history of the Bedul has stressed the social changes caused largely by external forces (Ohannessian-Charpin 1986 and 1987; cf also Banning and Köhler-Rollefson 1986: 161 for Bedul living among

the 'Ammarin in Beida).2

The Bedul in Petra

About 140 beduin families lived within Petra until 1985. Their economy was based on agro-pastoralism, mostly outside Petra in fields and pastures in Beida and Jabal Harun, and on commercial and seasonal employment (cf Ohannessian-Charpin 1987 for a detailed investigation of this aspect). Many of the Nabataean caves they inhabited were very spacious indeed. The number of caves for each family ranged from two to about twelve, which directly reflects the varying sizes of families and their economic status (cf Ohannessian-Charpin 1986 and 1987). The beduin left some chambers in their original state, without alterations or additions. Usually, though, they built stone walls, with a door and windows, across the front. Water had to be fetched from a spring some distance away. In one large complex of caves there was a stone channel to divert runoff rain water into a rock-cut well. Many families planted gardens outside their caves where they grew flowers and herbs such as mint and parsley.

The survey identified three basic types of unit used by the Bedul. Characteristic criteria were use, type of unit, and period of occupation. The three typical types were:

- 1. Caves used for permanent residential occupation (Figs. 1 & 2);
- 2. Caves used as occasional work areas

^{1.} The fieldwork in Petra was supported by the British Institute at Amman for Archaeology and History, the British School of Archaeology in Jerusalem, the Palestine Exploration Fund, the University of Liverpool, and Liverpool Museum. The survey team was Basia Chlebik, Pennie Vickers and the author. We are most grateful to Dr. Adnan Hadidi for all his assistance, and to

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^{2.} The final report on this work will be written in collaboration with Anna Ohannessian-Charpin.

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(Fig. 3);

3. Tents used for seasonal residential occupation (Fig. 4).

(These have been described in detail in Bienkowski 1985: 152-158.)

Some caves were used primarily as living quarters, with spaces for cooking and storage (cf. Figs. 1 & 2). Some were animal pens or middens, and others were used only at certain times of the year, for instance during the harvest. These are situated near fields and were used as work areas or storage spaces for equipment and food (cf. Fig. 3). However, many caves had overlapping uses, and could not be defined by a specific activity. They fulfilled different functions depending on the time of day, the season and the whim of the occupants (Bienkowski 1985: 155).3 Many families set up a tent outside their caves during the summer, and the focus of family life shifted there. The reasons for this are hard to disentangle — tradition, increased living space, life in the open with protection from the sun, and probably other factors are all involved.4 In some cases the cave was vacated in about April, and a tent erected some distance away. Within the tent were stone walls, one to four courses high, which acted as windbreaks and to define the 'living space' (Fig. 4; Bienkowski 1985: 156-158).

The New Village

New purpose-built houses have been provided by the Jordanian Government at Umm Saihun for the Bedul. One hundred semi-detached homes have been built, and more are under construction. Smaller rooms, running water, several shops, the absence of animal pens and the siting of the

village by a road are all factors contributing to a change in family life which is already noticeable. The houses are very close together compared with the spaciousness of Petra, which seems to be leading to a deliberate demarcation of space (as at Mu'addi, cf. Layne 1987: 371-n. 21). Many of the beduin are erecting boundary walls and building extensions, usually for use as guest rooms or shops. Fig. 5 illustrates the plan of a typical house, indicating what has been added by the Bedul within the first two years.

A major change is the presence of several shops in the village and the siting of the village on a road. In Petra, shops were not easily accessible, and bread-making was part of the daily routine. Now fresh bread is bought daily, and the villagers have no need to make their own. Layne has reported a similar development at Mu'addi in the Jordan Valley (1987: 367). Increased availability of commercially produced items, such as bread and yoghurt (which is still made at home by some of the Bedul), may well affect the future use of household storage space and activity loci. The road makes transport simpler, since in Petra many homes were not even accessible by car. The increased mobility of the Bedul is already integrating them far more into regional life, from which they were perhaps isolated previously through their reliance on a tourist economy (Ohannessian-Charpin ms.; cf. Shoup 1985).

The former homes of the Bedul in Petra, now abandoned, are falling into disrepair. Much of the evidence for gardens and painted walls is already disappearing; this is the sort of detail we might cautiously infer on a larger scale for

^{3.} Ohannessian-Charpin (1986 and 1987) argues that in Petra a mixed economy was always accompanied by a greater number of monofunctional caves, while a more intense agro-pastoral economy led to a large number being used for storage and animal pens. Cf also Layne (1987: 365ff) who discusses monofunction and multifunction in relation to economic activities, though Kent (1984: 219) suggests that an increase in

monofunctional activity is a result of sedentism. This is what seems to have happened at Smakieh, though a change to a salaried economy affected the overall physiognomy of the village (Aurenche 1985: 338-341).

^{4.} Cf Layne (1987: 350-351) who reports enjoyment of the life-style as the major reason for moving into a tent among the 'Abbad.

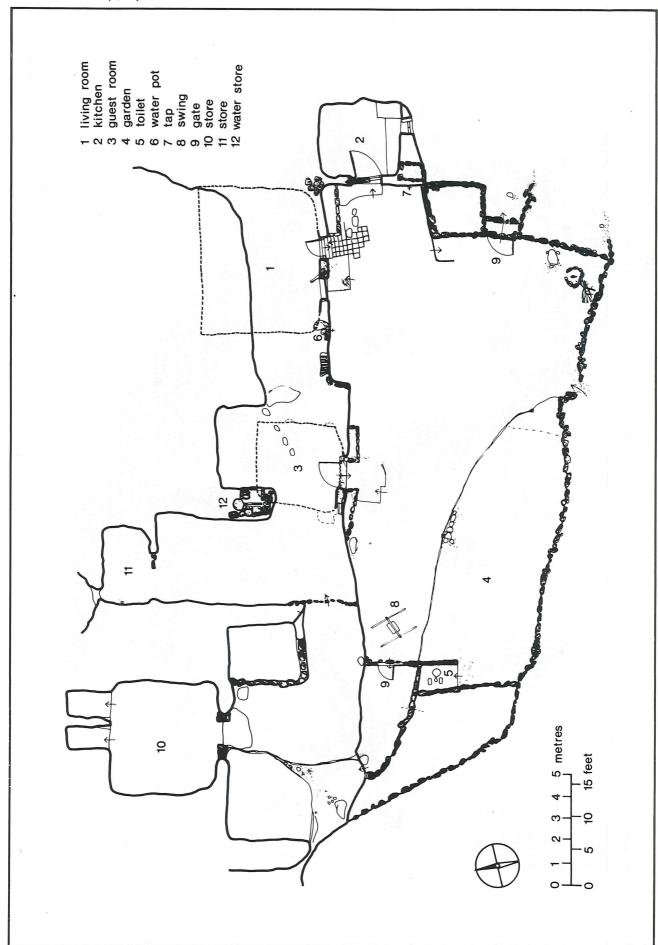


Fig. 1. Residential cave: plan. Shaded walls indicate structures added by the Bedul.

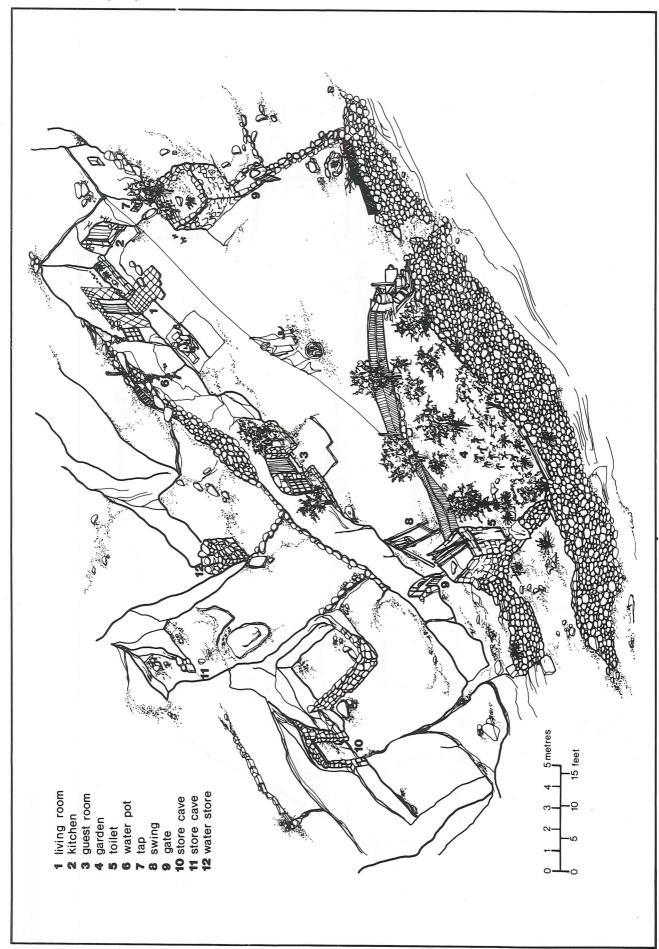


Fig. 2. Residential cave: axonometric projection.

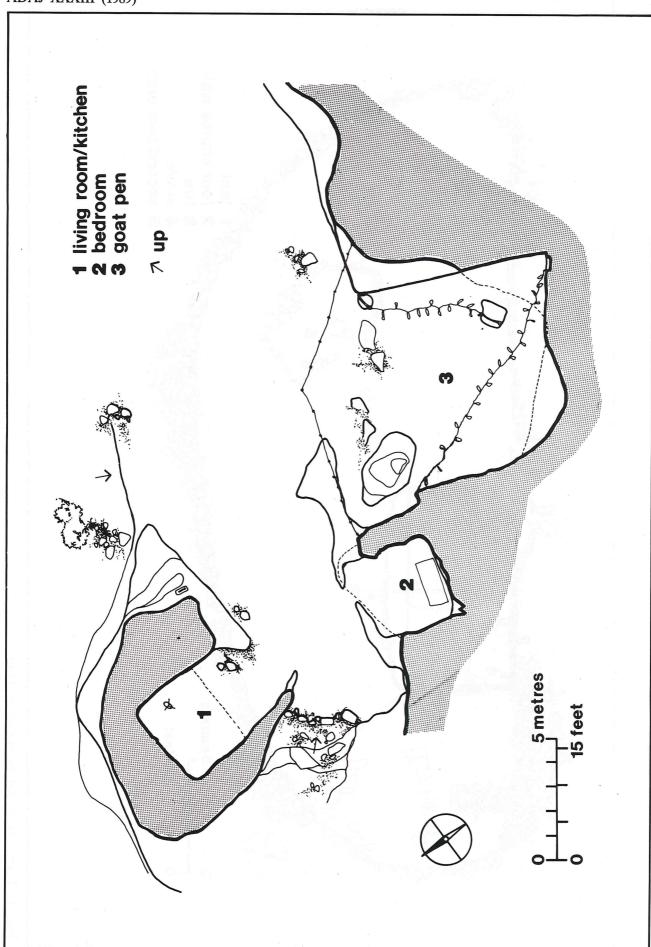


Fig. 3. Work cave - occasional occupation: plan.

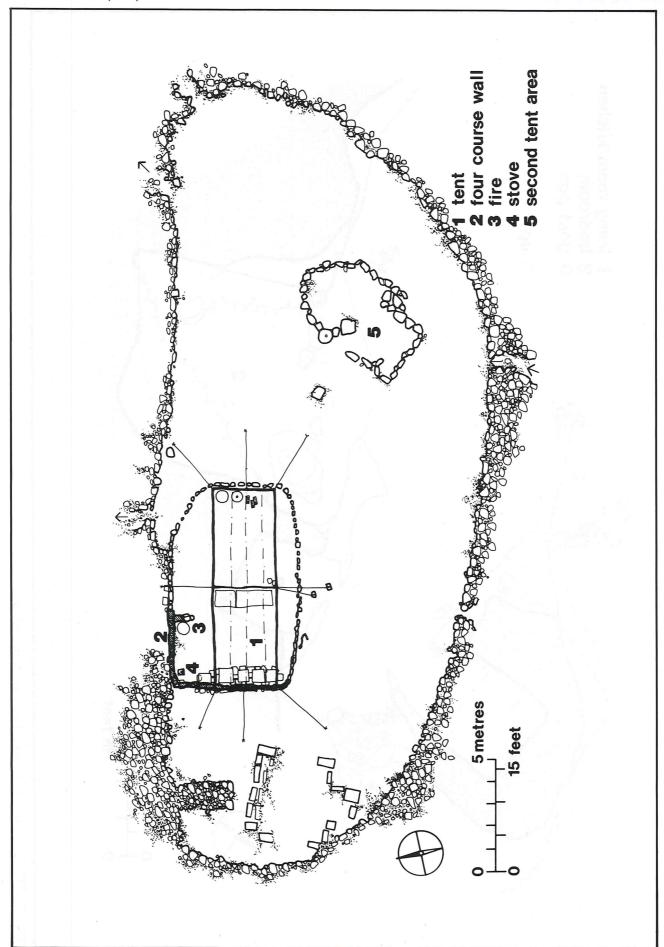


Fig. 4. Tent - seasonal occupation: plan.

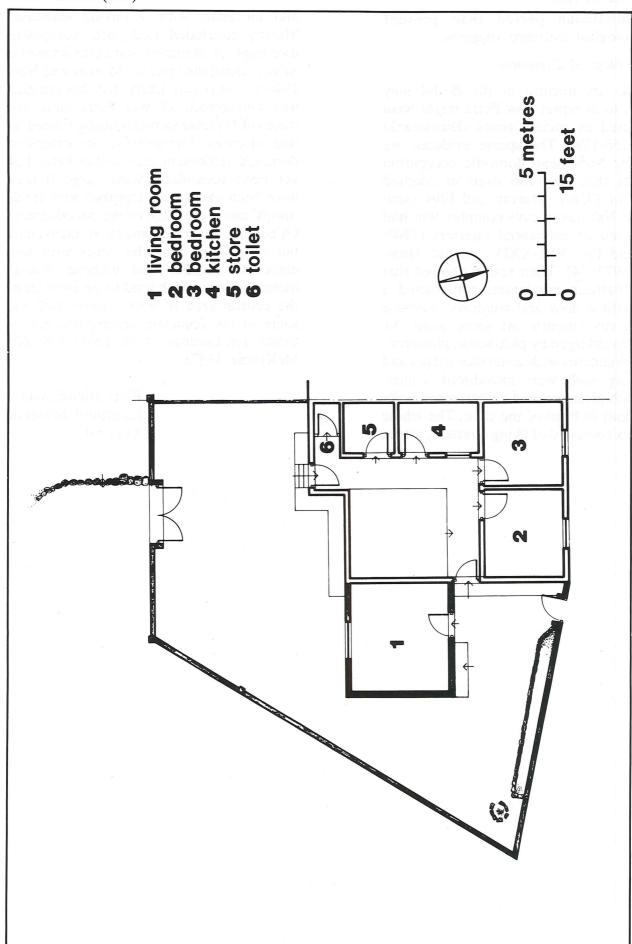


Fig. 5. Plan of family house in Umm Saihun. Shaded walls indicate structures added by the Bedul to the basic unit.

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the Nabataean period than present archaeological evidence suggests.

Archaeological Comment

The architecture of the Bedul may help us to interpret how Petra might have been used in ancient times (Bienkowski 1985: 158-159). The sparse evidence we have for Nabataean domestic occupation suggests that they too lived in adapted caves. In 1936-7, Murray and Ellis excavated a Nabataean cave complex that had been used as residential quarters (1940: 3-12 and Pls. XVI-XXIV; cf, also Hammond 1973: 54). Their results showed that the Nabataean inhabitants constructed a wall, with a door and windows, across a natural cave mouth. At some point the cave was enlarged by pick-work, plastered, and refinements such as terrace ledges and boundary walls were introduced. Chambers with plastered and whitewashed walls were built in front of the cave. The whole complex consisted of living quarters, tombs and an altar, with a linking staircase. Murray concluded that such 'composite dwellings' of chambers and caves formed a 'street' along the terrace (Murray and Ellis 1940:11). It is very likely that this practice was widespread; all over Petra there are traces of Nabataean rock-cutting related to natural caves. Furthermore, no extensive domestic settlement area within Petra has yet been identified. Some large houses have been excavated, together with small 'shops' along the edge of the paved street. Of course, much remains to be excavated, but it is likely that the caves with less elaborate facades and without 'burial niches' inside, which tend to be away from the central area of Petra, were used for some of the domestic occupation, not as tombs (cf. Lindner et al. 1984: 178-180; McKenzie 1987).

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