EXCAVATION OF THE PRE - POTTERY NEOLITHIC VILLAGE AT SEYL AQLAT, BEIDHA.

Three season's work have now been completed at this Pre-Pottery Neolithic site. The excavations are carried out under the auspices of the British School of Archaeology in Jerusalem, and with the help and co-operation of the Department of Antiquities under its Director, Dr. Awni Dajani, Ph. D. By kind permission of the Prior of the Dominican Order in Jerusalem the Reverend Father Coüasnon was able to join the writer for a time as surveyor during the first and second seasons, while the third season was carried out without help. Financial support for the third season was given by the Ashmolean Museum, Oxford; the Museum of Archaeology and Ethnology, Cambridge; the American Philosophical Society; the Palestine Exploration Fund, and a grant from the British Academy through the British School.

The site was originally discovered in 1956, and from surface finds it seemed possible that it might be linked with the Pre-Pottery Neolithic B of Jericho, and additional interest was also aroused by the presence of Mesolithic artifacts. Seyl Aqlat is situated about 1½ hours walk north of Petra in the same mountainous sandstone desert and has fortunately never again been used for settled occupation so its remains are largely intact and close to the surface, although three Nabataean terrace walls cross it with resultant interruptions in the upper levels.

The chief aims of the expedition are to find out the plan of a village of this remote age, and the architecture of its component parts; to establish, if possible, its relationship to the pre-Pottery Neolithic B of Jericho; to obtain evidence for the practice of agriculture and domestication of animals; and to find out what kind of fauna lived in the area as hunted by the inhabitants.

In order to find out as much about the plan of the village as possible the excavations are carried out on a horizontal plane, spreading outwards, although some soundings and a certain amount of work have been done on the earlier phases especially during the third season. The site was laid out on a grid of 5 metre squares of which 23 have been excavated to the main period under investigation. In addition, two trenches were cut into the talus of the Tell to find the Mesolithic horizon, and to determine the character and depth of the deposit, and finally the extent of the Neolithic village was found through a series of small trenches a metre wide.

The village is situated on the bank of a steep, seasonal, torrent bed, Seyl Aqlat, and the fact that the nearest permanent water supply is now $1\frac{1}{2}$ hours' walk away would seem to argue for serious desiccation in the area since the village was built, as presumably

a village of this character would only have been established close to permanent water. The site is about 70 metres long by about 60 wide though an unknown amount has been eroded away down the seyl bank. So far the remains of four superimposed villages have been differentiated, each with its own series of rebuildings. The first, or latest, village exists only in patches behind the uppermost Nabataean terrace wall and so the main work is concentrated on the second village. The buildings of every period seem to have been semi-subterranean, all are approached by three descending stone steps, and so when a new building was erected, the previous one was levelled off and then instead of building upwards on its remains, they first dug down. Thus the later stages partially destroyed the earlier ones.

The second village consists, at present, of a series of central courts with buildings on two opposing sides (Pl. I Fig. 1). Unfortunately those on the east side have been removed with the exception of three stumps, by the second Nabataean terrace wall so it is impossible to ascertain their plan, but those on the west side are fairly complete. These consist of a number of buildings whose ground plans do not vary. They each have a central corridor with small rooms opening off each side, arranged like stalls in a stable. In the most complete unit yet found there seem to have been three rooms on each side, making six in all. These rooms are tiny, only a metre wide and $1\frac{1}{2}$ deep, and they are divided from each other by stone built platform baulks which are sometimes wider than the rooms themselves, these baulks are $1\frac{1}{2}$ or even 2 metres wide (Pl. I Fig. 2). The buildings are solidly constructed with dry-stone walls composed of small limestone boulders and slabs of sandstone, the corners are fairly sharp and the walls fairly straight, and each is approached by three descending stone steps.

The extremely small size of the rooms together with a lack of domestic debris such as hearths poses the question as to whether these buildings served a domestic purpose. Their contents, where undisturbed, seem to suggest that they were workshops. One was full of animal bones, horned heads and articulated joints. The room opposite this, across the corridor, contained a great number of really heavy stone implements, choppers, scrapers, and rollers in addition to sling stones. This could have been the meat store and the tools the butcher used in his trade. Another room in a different complex of buildings was probably used for the manufacture of bone tools (Pl. II Fig. 3). Here, lying on a table made of a slab of sandstone lay a large pair of ibex horn-cores, nearby was another complete pair, while the sawn-off stumps of a third pair lay close to the table. In the corner was a small pile of pestles and an adze, while in the corridor were a polished limestone mortar, a flat, circular polished slab and a loom-weight. The other roooms in this complex were empty.

Yet another complex contained many querns, all on one side of the corridor. These querns had mostly fallen from above, thus suggesting that grinding was carried out on the roofs, but one was in situ on the floor. On the opposite side of the corridor the rooms contained a very large number of ground stone implements. It is possible that this complex was devoted to the grinding of wheat, while that next door contained rooms with walled-up doors which may have been for storage.

Beyond these corridor buildings lie the courts. The main one has a plastered floor of astonishing hardness and depth. Re-laid four times, each main surface running to stone foundations on slightly different lines, and with a total depth of 25 cm., it is composed of small pebbles, lime and ashes, with a thick, hard upper crust of very fine, smooth plaster. This court is 7 metres wide and nearly 9 long. It contains a large, circular hearth with a raised sill, and the walls as well as the floor were plastered. Next to it is another court with a plastered floor of a different kind; it is of sand and lime and very hard indeed. This court is also rectangular, but longer and more narrow than the other, it is 5 metres wide and runs back into the corridor buildings where, owing to the architectural tradition of digging down, it has been cut by later stages of the village. Originally it appears to have divided one complete unit of buildings from the next. It is tempting to think that these courtyards divided the workshops from the residential buildings but beyond the fact that there were buildings on the opposite side as shown by the three stumps of walls left by the terracing, no proof is possible as yet in the area of the second village already uncovered. It is also possible that the small corridor rooms, or workshops were used to live in, and that the very wide stone platform-baulks were used as sleeping platforms; but until the plan of a complete building as found on the other side of the courts on this level no proof is possible.

Beyond the second court is what appears to be a yard, outside the main wall. This yard has a beaten earth floor, and although it is only partially excavated as yet it seems possible that this was where the domesticated animals were kept. So far only the beginning of what seems to be a row of tiny stone-built hutches has been uncovered. Two are fully excavated and a third can be seen running into the section. They are only about 36 cm., wide by 30 deep and 40 high and it is difficult to see what use they served. Experiment with a dog showed them to be too small for dog kennels, and the absence of any trace of burning rules out the possibility that they were very small ovens (Pl. II Fig. 4). From analogies with Beduin and Fellahin animal houses it is possible that birds of some kind were kept in them. In view of the remote age it is unlikely that man would have used his precious grain to keep birds to fatten, of for their eggs, but he might well have kept a bird that could help him in the hunting on which he was dependent for most of his food. Although no proof is possible as yet; it could be tentatively suggested that man had already trained the hawk to augment his dog and the flint arrows and sling stones which seem to have been his only weapons. The art of hawking is still practised in Arabia and its beginnings there are rooted in immense antiquity.

A sounding below the main courtyard shows that a similar one exists underneath, belonging to the third village from the top. This court is smaller than that of the second village, it is $5\frac{1}{2}$ metres wide and its length is not yet known. The surrounding walls were levelled off at a height of about 70 cm., when the court of the second village was laid on top, and the floor is of the same cement-like plaster. Small soundings on opposing sides, separated by the 10 metres of the upper court, show rooms similar to the 'workshop' units of the second village and of like construction, although two rooms are bigger and of a different plan from any yet found in the later village.

Last season a small sounding was made below the worskshops of the second village from which some charcoal was obtained. The result of a C14 test on this material is 8,790+200 years Before the Present (British Museum 111). This season, by enlarging the sounding it was found that this date must be given to the fourth village from the top. So far no material has been found from which to date the three later villages. Other soundings nearby have shown that part of this fourth village was destroyed by a serious fire. Half one large room was excavated and this has gently curving walls, rounded corners and both walls and floors were plastered in one piece merging in a curve. The plaster had been renewed many times, and on the walls it is $7\frac{1}{2}$ cm., thick with at least 12 coats visible. Ten metres away on the other side of the second village court a sounding made in the second season revealed a large rectangulalr room with rounded corners, and gently curving walls which were only one skin deep as they were dug from above. This room was approached by three descending stone steps (Pl. III Fig. 5). At the time it was thought that this type of building might represent the residential house as distinct from the workshop units on the far side of the courtyard. However, the third seasons' excavations have helped to place this type of building in its proper context. It belongs to an early phase of the fourth village. Three other squares adjacent to the original sounding revealed similar buildings, all underlying the third village and all, though in admittedly limited numbers as yet, seem to show an entirely different tradition of architecture and technique of building from any thing found in the second and third villages as yet. Although separated horizontally from the fire destruction level by about 15 metres, nevertheless all the buildings of this fourth village found so far exhibit these same architectural differences from those of the later villages. It seems significant that a serious fire in one part of the village should co-incide with a change of architecture in the next phase.

The fourth village and any earlier one contained individual buildings, each apparently set in an open space or yard. They are rectangular, with slightly curving walls, and like the workshops, are slightly subterranean, both floors and walls were plastered, in some cases the former with the same cement-like plaster as in the later courts. A single unit generally consisted of one room, and in two instances these rooms contained a circular depression with a raised sill, the whole coated with a hard lime plaster. These are close to the walls and in neither case is there any trace of burning so they were not hearths. The walls of these rooms are most beautifully built with carefully chosen flat slabs of sandstone, quite unlike the rather heavily built workshops where small natural boulders were used.

One striking example of this change of architecture is preserved by a third village room dug down inside a fourth village one. The exterior wall of the older house remains, while the interior face is that of the heavily built later period. Another small room was obviously devoted to the preparation of cereals, and this room seems to lead into another, as yet unexcavated. In the small room were three querns, each apparently serving different purposes, their grinding implements still in situ, and in one corner a little pile of sling stones (Pl. III Fig. 6). One quern was worked most comfortably from a sitting position. It was set in a corner angle at a short distance from the walls, and slightly raised on

a pedestal formed by another stone, immediately behind it is a large, flat slab of stone set on edge in the plastered wall. There is exactly enough room to sit with a leg on each side of the quern and one's back against the stone. Subsequent friction by movement of one's back while grinding does not damage the plastered face of the wall as the stone has been carefully set to provide a chair back. The other two querns seem to have been worked from different positions, one from a stooping position, and the other was on the floor.

Although it may still be shown by future work that the two kinds of buildings were present in a single contemporary phase of the village, at the moment the evidence suggests the contrary. Before the fire there is the architectural tradition of individual houses with slightly curving walls built of thin sand-stone slabs and with each unit surrounded by its own court. After the fire come the heavily built corridor units with very small stall-like rooms divided by wide stone platform-baulks built round a central series of courts. However, proof that two different cultures within the Pre-Pottery Neolithic B are represented at Seyl Aqlat must await further excavation as so far the third and fourth villages have been touched only by soundings.

Another custom known from the Pre-Pottery Neolithic B of Jericho is also present at Seyl Aqlat, that of decapitating the dead, although this was not carried out at all burials. So far no burials have been found of the third and fourth villages, but only of the first and second. These burials had been dug down from above into the debris of the collapsed ruins of the earlier, underlying buildings. In one case a headless adult had been buried most unceremoniously at full length and with shoulders lower than feet, while in one of the workshop rooms four intact infant burials were found in the floor. One deep grave contained ibex horncores in the shaft, and a carefully laid out and headless adolescent whose mandible was lying close to the body (Pl. IV Fig. 7), and one other young adolescent was found also buried in an individual grave but in this case the skull had been detached and was lying underneath the body. There is not enough evidence as yet to back up any theories about the burial customs of these people, but some points can be made. Firstly, all seven infant burials found so far have been intact. Secondly, two young, or adolescent people had been decapitated as had one adult. Of these two young ones, each was buried in an individual grave, while the adult seems to have been treated with scant respect. Lastly, in the upper levels two adult burials were found which do not seem to have been decapitated. A tentative suggestion can be made that infants were always buried intact, but that from early adolescence onwards decapitation was practised but not in every case. There is a difference, however, between the headless burials of Jericho and those of Seyl Aqlat; at the former site, the bodies were buried with no apparent attempt to lay them out, while at the latter they are found in individual graves.

Parallels with the Jericho Pre-Pottery Neolithic B present so far include a similarity of flint, ground-stone and bone implements and of querns; there are plastered floors at both sites, although the cement-like plaster has not yet been found at Jericho, and there are headless burials. Architecturally the buildings of the fourth village at Seyl

Aqlat, the individual rectangular houses with rounded corners and plastered walls and floors and yards outside, bear a strong resemblance to the Jericho houses of this period, and the C 14 for this level of about 6,790+200 years B.C., also fits well with the dates for Jericho. On the other hand there is no building at Jericho similar to the cocrridor units of the second and third villages, but from the stratigraphy at Seyl Aqqlat there does not appear to be a break between the two types of building.

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Figures 1-7 — Plates I-IV

- Fig. 1. General view of the site. Showing the courtyards of the second village with the corridor units on the right.
- Fig. 2 One of the workshop units showing the wide platform-bailks which divided the small rooms.
- Fig. 3. A small workshop probably devoted to the making of bone tools.
- Fig 4. The tiny hutches, perhaps used for hawks, with a dog and man as scales.
- Fig. 5 A typical building of the fourth village, contrasting strongly with that of the second village shown on Plate 1.
- Fig. 6. The smaller fourth village room devoted to the preparation of cereals. Three querns in situ, the chair back set into the wall.
- Fig. 7. A carefully laid out headless burial. Scale 30 cm.