NEMRIK 9
Stefan Karol Kozłowski

In the years 1985–1989 an expedition of Warsaw University directed by the present author conducted extensive archaeological research on Nemrik 9, a site in northern Iraq (Dohuk district) lying some 50 km northwest of Mosul. The investigations were sponsored by the PCMA and the Iraqi Service of Antiquities to whom we owe many thanks for their help and support. The present report covers not only fieldwork, but also some lab analyses, as well as detailed studies, either published already or currently in print.

The site or at least its later phases date to the Pre-Pottery Neolithic. It is a large multi-phase settlement covering a maximum area of 2.5-3 hectares.\(^1\) It lies on the Tigris, just 2.5 km from the modern river bed, on the second terrace some 65-70 m above the present level of the river. The terrace itself is cut by numerous wadis flowing generally from the north to the Tigris and gathering water from the not too distant highlands of the Kurdish Mountains. The Nemrik site lies on a sort of peninsular terrace confined on the east and west by wadis.

**CHRONOLOGY**

The dating of the Nemrik site is based on a long series of $^{14}$C analyses conducted in the Gliwice Laboratory by M. Pazdur. Disregarding dates that are aberrations, the beginnings of the settlement should be put at the close of the 9th millennium b.c. and its end in the middle of the 7th millennium.

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STRATIGRAPHY²

Generally, the stratigraphy of the Nemrik site should be divided into two main layers differing from each other in terms of lithology and in genetics to an extent. The lower part of the profile, directly on top of clayey virgin soil with mole holes is made up of loess-like deposits, mainly of aeolian origin.

In these formations three occupational levels can be distinguished, marked by the occurrence of objects (flint, stone, less frequently bone and clay), charcoal and ashes, animal bones and shells, architecture and burials, as well as clay floors covering more or less continuously the space between the houses.

The upper part of the profile is made up of a thick layer of stone evidently of anthropogenic nature. It constitutes the remains of a stone pavements between the houses, repeatedly repaved. This layer contained the same kinds of finds as described above for the lower part of the profile, with the exception of clay floors. It is possible to distinguish two settlement phases in this upper layer.

SETTLEMENT PHASES

It is clear from the above that five settlement phases have been distinguished. Separating the phases are periods when obviously there was no permanent settlement on Nemrik.

The first three phases which are less well known can be dated from the close of the 9th to the end of the 8th millennium, the last two (IV and V) to the end of the 8th and the first half of the 7th millennium. The latter two also provided most of the small finds as well as architecture and burials to mention the layout of an early Neolithic village.

² S.K. Kozłowski, Nemrik 9, a Pre-pottery Neolithic Site in Northern Iraq, Paléorient 15/1, 1989 and S.K. Kozłowski, op. cit.
ARCHITECTURE

All in all over 20 architectural objects were discovered and investigated completely or in part. They were sunk as a rule into the surface currently in use, sometimes to a depth of as much as 2 m, at other times much less.

In the first four settlement phases the structures were as a rule round or oval, mostly of a dwelling nature (particularly structures

Fig. 1. Nemrik 9, phase IV.

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with a diameter of 5 m or more), sometimes tombs or domestic areas. The fifth phase features subrectangular houses. In the earlier phases the prevailing structures are small and built in the *pisé* technique. In phase III we find walls constructed of large cigar-like mud bricks dried in the sun. The structures are larger now, reaching 7-8 m in diameter.

In many houses some interior "architecture" has survived in the form of benches, pits and post holes with massive pillars in the *pisé* technique appearing in phase IV, a feature that is unique in the entire region. Clay plaster is common and in phase V floors are painted red. No hearths or door openings have been found.

OTHER OBJECTS

A large refuse pit is connected with phase V.

BURIALS

In the earlier phases the dead were buried in graves located among the houses. In phase III mass burials were made under house floors, but also in between the houses. In phase IV or V, a small burial ground was used in the southern part of the village. The inhumations are almost all contracted and lying on one side. Partial burials were encountered as well.

SETTLEMENT LAYOUT (Figs 1 and 2)

The thoroughness of the investigations of phases IV and V permitted an almost complete, if not fully complete reconstruction of the layout of the settlement, a fact that is unprecedented in the research on this region to date.

In both phases a large percentage of the space was paved with broken stone pebbles. Large stone objects such as grinders, mortars, polishing slabs etc. were located on these pavements. A few
houses, circular in phase IV and rectangular in phase V, were sunk into these pavements. At the southern end of the site there was a small burial ground and in phase V a large refuse pit was located in the centre of the settlement.

It would appear that in the last two phases of the settlement it consisted of no more than a few buildings. In each of the houses the space on the clay benches, regarded as beds, was barely enough for ten people. Therefore, there is reason to believe that the Early Neolithic population of the village did not exceed several dozen in the last two phases.

Fig. 2. Nemrik 9, phase V.
FLINT INDUSTRY⁴

The flint industry is extremely numerous and features single-platform cores for obtaining bladelets by the pressure technique. These bladelets were frequently sectioned. The main raw material was a local tertiary flint; imported obsidian is encountered rarely as is a chocolate-coloured flint which was imported in the form of ready blades used subsequently in the production of sickle-blades. Among the retouched tools retouched blades predominate together with perforators, retouched flakes and end-scrapers, all forms making up the Near Eastern standard of the time. Rare picks are distinctive as well as rather more frequent tanged points, both rhomboid and leaf-shaped. These two groups and backed bladelets as well set the industry apart, entitling it to be called Nemrikian. El Khiam points are infrequent. What is more important still is the fact that this industry practically does not undergo any evolution over 1500 radiocarbon years. Therefore, in northern Iraq, we do not observe a clear bipartite cultural sequence such as the classic Levantine sequence (Sultanian – Tahunian).

GROUND STONE INDUSTRY⁵

The Nemrik collection of ground and pecked stone implements is extremely rich (more than 3000 objects) and varied. It consists of grinders, mortars, polishing slabs, polished axes, various pounders, stone "pegs", bolas, "maceheads", flint choppers etc. some rare stone vessels and finally jewellery. Being as it is so rich and varied, the assemblage permits a reconstruction of a full model of this industry for the whole region.

⁴ S.K. Kozłowski, K. Szymczak, Flint industry from House 1-1A-1B at the Pre-pottery Neolithic site in Nemrik 9, Northern Iraq, *Paléorient* 15/1, 1989.

It also develops in time, the process being clearly visible upon analysis of particular settlement phases. As a result the regional model mentioned earlier is enriched by the factor of variability in time. This in turn allows for the verification of the debatable dating of Iraqi sites, for instance, a significant rejuvenation of the Jarmo sequence or suggestions of a mixed, multi-phase character of the assemblages from Zawi Chemi-Shanidar.

**BONE OBJECTS**

Bone objects are rare and fairly standard (awls, perforators, chisels). The needles are distinctive – flat and equipped with a large hole and an oblique engraved ornament.

**CLAY OBJECTS**

The so-called tokens are small, handmade and weakly fired objects taking on geometrical shapes, such as pancakes which are the most numerous, cones, balls and rarely cylinders. Accompanying these there are rare animal figurines (boar and pig, ram, cattle?).

**OBJECTS OF ART**

Deserving special attention are about 20 pieces of stone sculpture, originating from at least phase III or even phase II of the settlement at Nemrik. The objects include small (up to 20cm in length) representations of bird heads, a snake, an unidentified mammal, a lioness, buffalo hoof, and finally a male head and a figure of a woman.

All are homogeneous in style and technique and of high artistic standard. The technique comprised piquetage modeling of a pebble using a flint tool for details, and finally very precise polishing.

The only Near Eastern analogies for the Nemrik series is the sculpture of the Natufians, which is, however, earlier. In most cases the sculptures are damaged and only in one we can be fairly sure
that the piece has survived in almost original form and place (the floor of a burnt house 2A). It would appear that these were household deities.

DATA ON THE ENVIRONMENT AND ECONOMY

The original landscape of Nemrik as well as the economy of its inhabitants can be fairly precisely reconstructed on the basis of several factors: the analyses presently being completed on pollen, dendrology, plant macroelements, malacology; comparative data obtained in interviews of eldest members of the local community, analyses of the remains of the original landscape; Layard's descriptions, and finally geomorphological and pedological data.

It has already been noted that the settlement was located between the highlands and the valley of the great river, on a flat terrace cut by wadi. It appears highly feasible that it was located purposefully at the junction of two or even three biotopes: the steppe (the terrace), the forest (the highlands) and perhaps even the river valley, although water quite certainly came from the nearby streams.

Thus, it can be said that the site was surrounded by what amounted to a steppe parkland with clumps of trees including poplars/willows and ashes. Tamarisks were among the trees which grew in the river valley, while the highlands were covered with a sparse mixed oak forest.

The fauna differed in each of these zones. In the steppe zone there were chiefly antelopes and gazelles, as well as equids, the river valley had boars among others, while in the highlands there lived fauna of the mixed forest including deer, boars, beavers, bison, aurochs, bears and wild goats. Lions and Indian buffalo were also to be found in the district. There were fish in the river, crawfish and turtles in the streams.

The animals mentioned above (without the fish) constituted the mainstay of an intensive hunting economy of the Nemrik
dwellers. Even though domestic animals such as sheep, goats, cattle and pigs were known to these people since at least phase III, they never seemed to be prevalent in the diet.

Hunting and the beginnings of husbandry were accompanied by a gathering economy (seeds of wild grain, lentils, vetch, shells of Helix salomonica and Unio tigris among others). There is no such certainty as far as cultivation of grain is concerned, although pollen analyses seem to answer this question, at least for the later phases. Almost no evidence of fishing was observed.

This data, the source for which are as yet incomplete analyses, shows the Nemrik environment to have been extremely rich and used in an optimal fashion with the economy taking advantage of all the available resources. At the same time it initiated a neolithization process that was most probably contemporary to the one in the Levant.

CONCLUSIONS

The importance of the Nemrik site for learning about a significant part of the prehistory of the Near East at a turning point in its development cannot be overestimated. Thanks to fieldwork (more than eleven months in the field when summed up), it was possible to gather extensive data, permitting the conclusions to be well grounded, even if not in harmony with textbook elaborations.

Foremost, there is the well dated and clear stratigraphical sequence which in many details differs from sequences known from the Levant and the Zagros. It has turned out that the phenomenon of Pre-Pottery Neolithic is far more complex than previously thought with various local solutions to be considered (for instance, the Nemrik flint industry lasting throughout the history of the settlement in unchanged form, a different sequence of the architecture, different architectural details, on original art, partly local ground stone industry etc.). The layout of the settlement was found
to be different from what was known on the subject from Jericho soundings. As a matter of fact, in view of the Nemrik finds, many sites considered typical should be re-dated or at least their homogeneity put in doubt. This is a sobering reflection to realize once again that we are still far from understanding the phenomenon of the Early Neolithic in the Near East.