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The prehistory of the Land of Nineveh

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Introduction

Since the middle of the last century, when Ralph Solecki excavated the Neanderthals at Shanidar and Robert Braidwood began his work at Jarmo, the 'hilly flanks of the Zagros' have been a mythical place for the study of prehistory (Braidwood & Howe 1960; Solecki 1971). Despite its crucial importance for early human history and its high archaeological potential, this extensive region—encompassing parts of Iraq, Iran and Turkey—has, until the recent establishment of several research projects, not been subject to systematic exploration. In September 2015, a joint team from the universities of Udine, Rome ('La Sapienza') and Milan initiated a field project focused on the prehistory of the provinces of Nineveh (Mosul) and Dohuk, in the northernmost part of Iraqi Kurdistan. The purpose of this study is to outline the main chrono-cultural aspects of the region's prehistory, from the Lower Palaeolithic to the early Chalcolithic, and to relate them to environmental changes that have occurred since the Middle Pleistocene. This research is part of the broader 'Land of Nineveh Archaeological Project', led by Udine University, that has been running since 2012 with the aim of understanding the formation and evolution of the cultural and natural landscape of this region from the Palaeolithic to the Islamic period (Morandi Bonacossi & Iamoni 2015).

The survey

The study area covers 2900km^2 and is delimited by the plain of Dohuk and the Zagros foothills to the north, the lake formed by the Eski Mosul Dam to the west, the piedmont plain that extends to the Jebel Maqlub and Bardarash regions to the south, and the River Al-Khazir to the east (Figure 1). The region being investigated here consists of different geographical units, including mountains, foothills, intermontane basins and valleys, and river terraces.

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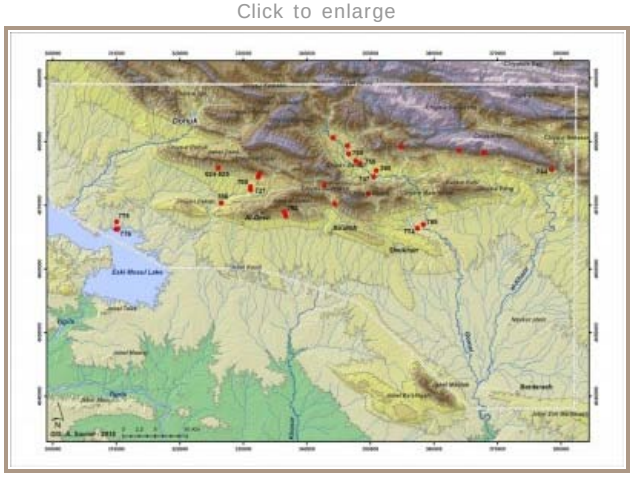

Figure 1. Map of the region under investigation, showing the position of the prehistoric sites identified during the field survey (numbers = sites quoted in the text).

The first field season was devoted to a geoarchaeological survey of three sample areas: the intermontane valleys (Mkeris and Merseeda Valleys; the upper course of the River al-Khazir); the piedmont areas and river terraces (from the River Gomel to the Rubar Dashqalan); and finally, the plain and terraces above the former Tigris Valley along the left shore of the Eski Mosul Dam. A further goal of the survey was to locate sources of lithic raw materials.

The region's geological bedrock mostly consists of limestone strata (Jassim & Goff 2006), which are prone to karstic processes, the most pertinent of which, for our purposes, is the occurrence of caves and rock shelters formed by rock dissolution. In the Land of Nineveh, caves and rock shelters are common, and in many cases they contain evidence of human occupation continuing until just a few decades ago.

We can distinguish three main categories of rock shelter that may be of potential interest regarding the search for prehistoric sites. Caves correspond to the initial portions of long and complex karstic cavities (Figure 2), with high vaults and large, flat floors. The latter are generally covered by thick layers of dung, the result of long-term pastoral use. Sparse lithics occur on the floor surfaces and near cave entrances. Caves are also important for palaeoclimate studies, as speleothems preserve information on local variation in rainfall. We have also found lithic scatters in rock shelters and beneath collapsed roofs related to former caves or rock shelters. For example, site 744 features a thick breccia deposit containing Middle Palaeolithic artefacts, charcoal and faunal remains that were protected from erosion by the collapsed blocks of the rock shelter's vault (Figure 3).

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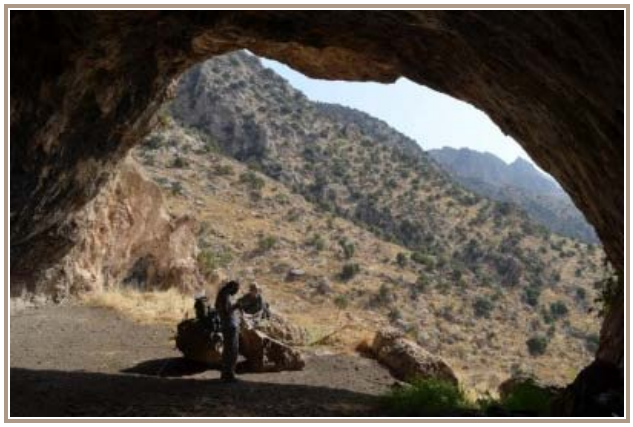

Figure 2. The cave containing site 533, Kaf Serdakni.

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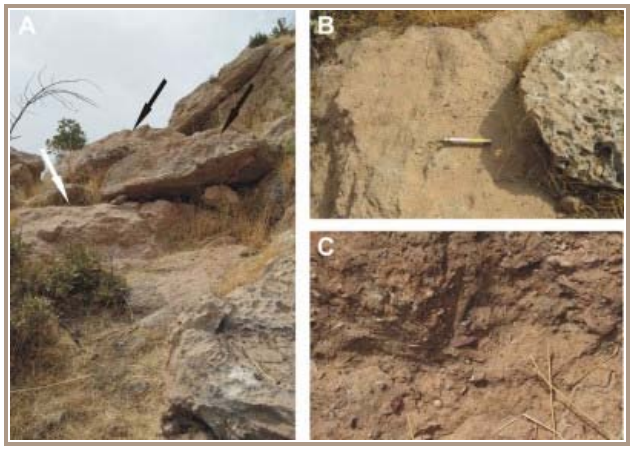

Figure 3. Site 744: the breccia layer with Middle Palaeolithic industry and faunal remains; A: general view of the deposit (white arrow) and the blocks of the collapsed roof (black arrows); B & C: details of the deposits.

During the first survey campaign, 7 caves, 11 rock shelters and a collapsed roof sealing an anthropic deposit were found. Fifteen open-air sites were also identified, featuring lithic material from the Lower Palaeolithic to the Late Neolithic–Chalcolithic. These lithic scatters were found mainly on fluvial terraces and in correspondence with chert outcrops in the mountains (Figure 4).

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Figure 4. The fluvial terraces along the Gomel River.

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Figure 5. Site 782, the Skafta Zeri mine.

Surveys along the Zagros foothills (Chiya-e-Zihera) overlooking the plain between the River Gomel and the village of Al Qosh revealed rich outcrops of chert and three chert mines of the 'room-and-pillar' type (Figure 4) with highly complex underground plans (site 782, Skafte Zeri Cave and sites 824 and 825), possibly dating from the Neolithic onwards (Figure 5).

Chronology and finds

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Two pebble cores collected on a fluvial terrace in a tributary wadi of the River Gomel (site 774) constitute the first Lower Palaeolithic evidence in the region (Figure 6A). Middle Palaeolithic (Levallois) cores, débitage and tools were identified in the valleys of Merseeda at site 744 and Atrush at site 758 (fluvial terrace), and, in the piedmont area, on fluvial terraces at sites 774, 727, 785 and 786. Late Palaeolithic materials (blade/bladelet cores and débitage products) were collected from fluvial terraces at sites 260, 747 and 755 (intermontane valleys), in the piedmont area at sites 765 and 727, and on the plain at site 775. A large number of lithic artefacts of Late Neolithic–Chalcolithic date were found at the open-air site of Gali Dakhas (776), on the north-east shore of the Eski Mosul Dam.

Conclusions

The sites identified in the area explored so far show the richness and variety of solutions adopted by human groups in prehistoric times, such as the early use of the mountains and intermontane valleys for seasonal subsistence activities and raw material exploitation, and the shift to more

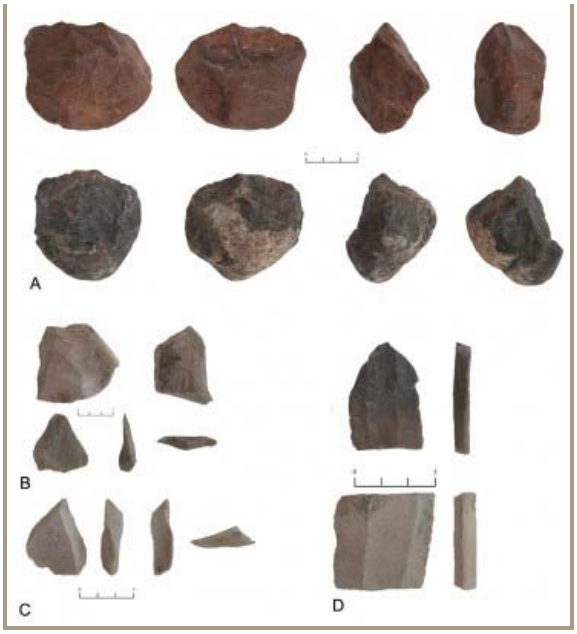

Figure 6. A: Site 774, Lower Palaeolithic, pebble cores; B: site 785, Middle Palaeolithic, preferential Levallois core, Levallois point; C: site 786, Middle Palaeolithic, centripetal flake; D: site 776, Chalcolithic, burin, blade fragment.

open areas, adjacent to the plains and near perennial water sources, during later phases. Furthermore, the identification of Lower Palaeolithic tools offers the opportunity to contribute to the discussion on hominin dispersal from Africa to Eurasia. A programme is planned for future field seasons, including surveys of zones not yet investigated, intensive surveys of limited areas and test trenches in caves and shelters in order to verify the extent of the deposits.

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