

## **Section HUMAN EVOLUTION**

### **ÜÇAĞIZLI CAVE II: MIDDLE PALEOLITHIC ASSEMBLAGES FROM SOUTH-ANATOLIA**

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Most scientists agree that modern humans left Africa relatively recently, and it was traditionally thought that the route taken was northwards, overland through the Middle East and beyond. However, there is growing disagreement about the route or routes taken by humans and when they migrated out of Africa. In this article, we will discuss about Middle Paleolithic archaeological evidence from Üçağızlı II Cave in order to assess the timing and geographic origins of Upper Pleistocene human colonization. Üçağızlı Cave II is a Middle Paleolithic locality situated on the Mediterranean coast of south-central Turkey. Üçağızlı II contains higher densities of lithics and bones as well as residues of hearth features, indicating a higher intensity or frequency of human frequentation. The Cave Lithic technology is dominated by Levallois production and hard-hammer percussion used to reduced the cores. All of the layers systematic reducing of the core is considered with mainly unipolar, secondary centripetal Levallois production. Orientation of the production is mainly flakes and scarcely seen blades manufactures. Typological feature is characterized with higher proportion of Levallois flake, Levallois points, Mousterian points, side scrapers types and lower proportion of upper Palaeolithic tool types. Those technological and typological evidence shows the cave is in Levantine Middle Palaeolithic assemblages.

**Key words:** *Üçağızlı II Cave, Middle Paleolithic, Anatolia, Hatay*

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### **CRANIAL VAULT MORPHOLOGY OF EASTERN EUROPEAN AND EASTERN SIBERIAN MESOLITHIC POPULATIONS: A COMPARATIVE ANALYSIS**

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We carried out a morphometric analysis of cranial vault and upper face in Mesolithic populations of Eastern Europe (Oleniy Ostrov, Zvejnieki, Popovo, Peschanitsa, Vasilievka III, Murzak-Koba, Fatma-Koba). A comparison was made with a newly discovered cranium from Lokomotiv (R-8), Irkutsk, Eastern Siberia. The total number of individuals is 36. Our methods included 3D geometric morphometrics as well as conventional distances. Measurements were taken according to R. Martin. Data were subjected to the principal component analysis. We examined trends of similarity in the neurocranial and upper facial morphology among these individuals. The structure of the upper face is determined by how flat the region immediately below the brow ridges is. Upper facial flatness is usually regarded as a feature differentiating Asian Mongoloids from other populations of the world. However, V. Yakimov (1957, 1960) described the same feature among Upper Palaeolithic and Mesolithic people of Europe. Given that the most ancient individuals from Siberia do not have exceptionally flat upper faces, this characteristic can no longer be regarded as specifically Mongoloid, in keeping with Yakimov's view. Lokomotiv-R-8 cranium was found in 1995. So far this is the earliest complete human skull from Northern Asia, dating to the 7th millennium BC (8690±120 cal. BP, TO-10507). It has very pronounced 'Asian' features in its frontal bone structure. Hence, its comparison with other ancient individuals from Eastern Europe is especially interesting. Results of our multivariate statistical analysis differentiate individuals with

short parietals, short and wide braincase, narrow forehead and large naso-malar angle from those with the opposite trait combination. Although Lokomotiv-R-8 fits within the range of variation of Mesolithic individuals from Eastern Europe, its large naso-malar angle separates it from the rest of the sample in some of the analyses. Surprisingly, Lokomotiv-R-8 reveals affinities with Oleniy Ostrov individuals, whose geographical position is the most distant from Lokomotiv-R-8 within the research area. In conclusion, our results show that upper facial flatness, which is marked among modern Mongoloids, appears among some of the earliest individuals from Russia and Eastern Siberia. However, the patchy geographical distribution of this feature precludes any inferences about its origin and evolution. The study was supported by the Russian Foundation for Basic Research; Grant # 13-06-00045a

**Key words:** *cranial morphology, craniometry, 3D-morphometry, Mesolithic populations*

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### **AGGRESSION, THE AR GENE POLYMORPHISM AND REPRODUCTION IN MALES: HADZA AND DATOGA COMPARED**

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In this paper we test the association between aggression, AR gene polymorphism and reproductive success as expressed in the number of children born in males from two African societies (Hadza, nomadic foragers) and (Datoga, pastoralists). The data on 439 adult African males (210 Hadza and 229 Datoga males, respectively) were collected between 2007 and 2013 in Northern Tanzania, Lake Eyasi region. Men with lower number of CAG repeats of the AR gene rated themselves as more aggressive. Age and the number of CAG repeats were significant predictors of the number of children born. Men with lower number of CAG repeats started reproduction in earlier age and were generally more successful in reproduction in both ethnics. Men with higher numbers of CAG repeats start to reproduce later in Datoga. Supported by RFHR, # 12-01-00032, RFBR # 12-04-31869 and # 13-04-00858.

**Key words:** *aggression, androgen receptors gene, reproduction, Hadza, Datoga*

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