

# World Archaeological Congress 4

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## Symposium: Human Developments, Ancient and Modern

### *Abstract Package*

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***Research in progress ion the later Stone age in northern and south-eastern Zimbabwe***

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The later stone age sequence of the Matobo area in south-western Zimbabwe has been relatively well researched. Until recently little work has been done on later Stone Age sites in the rest of Zimbabwe.

Two sites with later Stone Age occupations have recently been test excavated in northern and south-eastern Zimbabwe. On Cairnsmore Farm in northern Zimbabwe, a 1 X 2m trench was excavated in a granite rock shelter with paintings of eight fat tailed sheep. The trench reached bedrock at a depth of 120 cm. Microlithic industries with backed segments were found in most levels including the deepest strata. Ceramics including diagnostic early Iron Age sherds occurred in the top 35 cm of deposit.

On Malilangwe conservancy in south-eastern Zimbabwe a 2X4 m area was excavated in a small sandstone cave. A scaper dominated industry with few backed segments occurred to bedrock at a depth OF 70 cm. Undiagnostic pottery was also found throughout the excavation.

***Adaptation Pattern of the Mesolithic Culture in the Gundar Basin, Southern India***

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Due to its marginalised location the southern tip of the Indian peninsula has not received much academic attention. Field investigation conducted in this area between 1991 to 1996 have yielded evidence for Mesolithic and Iron Age cultural phases. This paper discusses the adaptation pattern of the Mesolithic inhabitants of the Gundar basin (Between 77 35' to 77 55' E and 9 40' N to 9 55'N). The Gundar basin, drained by the seasonal river Gundar and its tributaries, lies in the Madurai district of Tamil Nadu. This basin receives an annual rainfall of 900 mm an dits bio-climate falls under 'tropical moderate bixeric with two dry seasons interrupted by wet seasons. The investigations under discussion focussed on a 400 square kn area in the upper reaches of the river Gundar, enclosed by hills on three sides, and it brought to light over 50 mesolithic sites. The Mesolithic sites have been classified into three categories taking their size and artefacts density into account. A mobility pattern has been proposed on the basis of the results of locayional analysis, artefacts analysis and

the reconstruction of resource availability using archaeological as well as ethnographical evidences.

***Wild Caprid Economies and Use of the Hinterland during the Upper Palaeolithic in Southern Europe***

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The starting point of this paper is an overview of the faunal evidence available on ibex exploitation during the Upper Palaeolithic of Southern Europe. Its aim is to consider the nature of movement into, and systematic exploitation of, the rugged mountainous hinterland, its correlation with environmental conditions, how it relates to the changes in subsistence and landscape use perceived during the Late Glacial, as well as the features of 'specialised', narrow-range activity sites.

Areas where ibex-dominated sites have been found include Cantabrian Spain, the Pyrenees, the Italian Alps, and the Dolomites. Ibex was not the staple resource in any period, and due to its habitat the sites are located off the beaten tracks, along steep gorges, at, or close to, high altitudes and in more mountainous ecozones.

Hunting methods and attributes (based on mortality profiles, anatomical representation etc.) of the ibex will be evaluated, in order to assess not only the function and role of the sites, but also claims on the implications of such faunas on human strategies, behaviour and organisation of activities. Assumptions prevalent in the archaeological literature regarding the ecological and habitat implications of ibex presence in the faunas, as well as the demands made on human groups to hunt the animal, will be critically reviewed.

By placing the ibex sites in their wider context, I shall assess the timing, nature and significance of movement into, and use of mountainous areas and resources, and evaluate the similarities and differences observed, in regard as well to the phenomenon of Late Glacial 'diversification' and 'intensification'.

***STONE AGE RESEARCH ON THE WATERBERG PLATEAU AND IN THE LOWER LYING BUSHVELD, NORTHERN PROVINCE, SA***

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The site of Olieboompoort, situated near a tributary of the Mokolo river which drains into the Limpopo, forms the focus of my current research. Limited excavations undertaken by Revil Mason at the shelter during the 1950s revealed the importance of this site. He noted that an IA bed overlaid the LSA occupation, below which was found a Pietersburg MSA assemblage followed by an ESA Later Acheulian unit. The LSA lithics were described as Later Smithfield and radiocarbon-dated to 870 BP. It is now evident that the sequence includes Post-Classic as well as Classic Wilton. A marked difference is found in the raw material usage at Olieboompoort when compared with sites on the Waterberg Plateau. Relatively high numbers of polished

bone tools appear to be characteristic of the assemblage. The dry environment also ensured good preservation of plant material. The rock paintings have not preserved well and in most instances are covered by graffiti. Handprints (plain) in red and yellow are prominent. Bambata pottery was recovered. Other decorative motifs in the pottery assemblage show clear affinities with the Eiland/Broadhurst tradition. Glass beads and metal objects are rare. In contrast with the dates for the Waterberg Plateau, which indicate intensive utilisation after AD 1200 only, the dates for the LSA layers at Olieboompoort show that the shelter was in fact occupied by hunter-gatherers at least during the last 2000 years. No occupation is indicated for the mid- and early Holocene. A wide range of raw materials has been used for the MSA assemblage. Ochre crayons as well as grindstones with ochre remains are present. A very worn human molar was recovered from the MSA levels. It has been recognised for some time that Olieboompoort can serve as a key site to unravel the cultural sequence of the Stone Age in the Northern Province. This comparative regional study will also add significantly to the data available on the various aspects of lifestyle of Stone Age hunter-gatherers.

***Cultural dynamics of the late Middle - early Upper Pleistocene and the problem of the Middle/Upper Palaeolithic transition***

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The problem of the Middle/Upper Palaeolithic transition has traditionally been perceived as the problem of the spreading in the Mediterranean zone of Europe and Asia about 40 kyr ago of the complex of new traits which sharply enough separated the culture of this epoch from that of the preceding one. Most conspicuous of these traits are: 1) in the realm of stone working the prevalence of technologies aimed at the mass production of blades and, as a consequence of this, the predominance of tools on blades, including many types not typical for the Middle Palaeolithic, 2) in the realm of bone working the appearance of numerous tools made with the use of techniques which are either inapplicable or not easily applicable to most rocks (cutting, planing, grinding, boring), 3) in the non-utilitarian (i.e. unconnected directly with life-maintenance in its biological sense)sphere the appearance of indisputable and relatively rich evidence of the very existence of such (adornments, pictorial art). As a result of the Europocentric approach to the problem (conditioned by such factors as traditions of thinking, the cultural affinity of the overwhelming majority of the researchers, the provenance of the relevant materials), what has traditionally been discussed was not the question of WHY the mentioned innovations had appeared, but rather HOW they had appeared in the given place (Europe-West Asia) at the given time (around 40 kyr ago). This is why during many tens of years (since the beginning of the century) the discussion has rotated around the replacement-continuity dilemma and despite the appearance of a considerable amount of new data the set of proposed solutions has not undergone any noticeable change. In the present paper I shall try to consider the transition problem not as the question about the causes of the appearance of some classical set of traits (see above) in the classical region (Mediterranean) and in the classical period (around 40 kyr ago), but rather as a part of a broader problem of cultural dynamics at the second half of the Middle and the first half of the Upper

Pleistocene. The major questions to be discussed may be formulated as follows:  
 1) does this dynamics demonstrate any chronological and/or geographical patterning?  
 2) if it does, what do the observable patterns look like? 3) what could have been the causes which shaped these patterns and determined the character of the observed cultural dynamics ?

***Portugal 10,000 years ago: Human Ecology at the End of the Pleistocene***

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During the Late Pleistocene, Western Europe saw important transformations on the ecology of local hunter-gatherers. These transformations are marked by some variability. Portugal, located on the far edge of South-western Europe is one of the outliers of this variability. Unlike the traditional core areas of Upper Palaeolithic research, such as Southern France or Northern Spain, Portugal shows evidence for a continuum in human adaptation between c. 13,000 and 8,000 bp. During these 5 millennia, there was a fairly mild and temperate environment in Portugal due to the distance to the polar front, as well as to the proximity to the Mediterranean, North Africa and the Atlantic warm currents coming from the tropical band. Thus, Portugal was marked by a wide diversity of animal and vegetation species, that were fully exploited by the human population. Final Upper Palaeolithic hunter-gatherers in Portugal were then turning to an adaptive strategy that included a subsistence intensification, through both diversification and specialisation, based on a highly mobile logistical pattern of settlement and land use.

***Russian Paleolithic Archaeology: Retrospect and Prospects***

Sergey A. Vasil'ev

It has been widely admitted that the Russian school of prehistoric archaeology takes a particular place among main national archaeological communities. The Soviet archaeology separated during several decades by a linguistic barrier supplemented by the peculiar character of premises and goals has its own unique history and we could not avoid it trying to analyze current debates. The report presents a review of the history and current situation of the Paleolithic studies in Russia. After brief characteristics of organizational structure, major field discoveries and publications, multidisciplinary environmental studies are examined. Main methodological issues of Paleolithic archaeology are discussed - from the development of field techniques to the study of habitat structures and prehistoric settlement patterns, economy, lifeways and social structure of Early Man communities. Problems of lithic classification and taxonomy, identification of culture entities are discussed followed by more general problems of the analysis of Paleolithic culture patterns in global scale. An evaluation

of theoretical underpinnings, discussions around basic aims and goals of prehistoric research are given. In conclusion one can find general characteristics of the development of Paleolithic research in Russia against the background of biases prevailed in worldwide prehistory. In spite of the appearance of some intriguing lines of inquiry in recent years, Russian prehistorians in general tend to gravitate toward the "mainstream" culture-historical archaeology with some reservations and modifications. Meanwhile Russian school of prehistory has a lot of real achievements, especially in wide-scale studies of Paleolithic cultures. Taking into account the high-quality data produced by leading academic research centers it makes our contributions useful for wide circles of prehistorians, especially to those who tended to see our domain in a broad anthropological framework.

***Selected Aspects of the Mesolithic of the East European Forest Zone.***

Dr. Mickle Zhilin

Drastic ecological changes at the end of the Pleistocene led to the degradation of periglacial landscapes and disappearance of the late Palaeolithic hunters, which gave place to the new population - reindeer hunters of the terminal Palaeolithic . About 10000 B.P. the formation of the forest zone in Eastern Europe begins, which is accompanied with the formation of the Mesolithic cultures at this vast territory. Various aspects, concerning forest Mesolithic adaptation, development of technology of tool production from lithic and organic materials, economy and subsistence strategies are discussed in the paper. Common and specific features of the Mesolithic cultures of the East European forest zone are analysed in comparison with the Mesolithic of Northern Europe and Western Siberia. New data on the chronology of the East European Mesolithic, based on C-14 and pollen analyses are introduced.

***The Aegean in 10,000 BP***

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This paper examines human settlement in the Aegean at around 10,000 BP and asks whether this period coincided with any major changes in patterns of human settlement, strategies of survival or cultural traditions. The paper's comparison of the traits of the late Upper Palaeolithic record with those of the Mesolithic identifies certain differences between them. Unlike that of the Upper Palaeolithic, Early Postglacial record in this region is fairly sparse and in some places shows clear evidence for cultural discontinuity. The paper therefore asks what prompted these changes and with what degree of resolution they can be traced back in time. The discussion takes into account both material from old excavations and the new evidence that has arisen from the excavations of the last few years.

***The Middle Stone Age in Northern Zimbabwe***

Lars Larsson

In 1995-96 two caves were investigated in Mashonaland in northern Zimbabwe, one (Zombampata) in the northern part, the other (Ruchera) in the north-east. The aim of the field investigations was to obtain information about forms of settlement in both the Middle and the Later Stone Age. Both caves had a considerable stratigraphy. In the Zombampata cave a 2.5 m thick layer sequence formed late in the Middle Stone Age was excavated. Most of the slightly thinner stratigraphy in the Ruchera cave was deposited during an earlier part of the Middle Stone Age. The Zombampata cave was dated by means of radiometric dating and thermoluminescence, with interesting comparative results as a consequence. The two caves raise the problem of the latter part of the Middle Stone Age and its relation to the Late Stone Age. Other questions to be considered include the choice of raw materials and the utilisation of the landscape.

### *The Early LSA in South Africa*

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#### Abstract

The Early Later Stone Age (ELSA) was first discussed by Beaumont and Vogel in 1972. According to Beaumont *at al.* (1978), re-analysis of the assemblages from levels 1 BS.LR and 1WA at Border Cave determined that the technology did not represent a transitional industry, but contained an Early LSA industry. This ELSA assemblage dominated by core reduced pieces/*outils écaillés* was dated to 38 000 BP, pushing the final MSA back to between 60 000 to 40 000 BP. Recently, excavations have lead to the classification of several other assemblages as ELSA, including such sires as Heuningneskrans (Beaumont 1978, 1981), Kathu Pan (Beaumont & Morris 1990), Cave James (Wadley 1987), Shongweni (Davis 1975), Boomplaas (H. Deacon 1980), and initially at Rose Cottage (Beaumont 1978). These different assemblages are all classified as ELSA but much variation exists between them, and it has been proposed that the term ELSA has become a catch all category for assemblages which do not fit precisely into the existing definitions of either the MSA or the earliest recognised LSA industry, the Robberg. In an attempt to clarify the issues surrounding the ELSA, the 1WA level from Border Cave, the 20.000 BP levels from Rose Cottage Cave, and the YOL and LPC levels from Boomplaas were examined to determine the technological affinities of the ELSA assemblages at these sites and their place within the chrono-stratigraphy of southern Africa. Preliminary analysis indicates that these three assemblages represent distinct industries which do not adequately fit the definition of an ELSA industry. It is proposed that the term ELSA be dropped from

the literature as it only adds to the confusion surrounding the terminology of MSA and LSA by placing technologically irregular assemblages into the LSA and bringing with them, by definition, the whole package of LSA material culture and behaviour as defined by J. Deacon (1984a).

***Ancient DNA analysis of a Chumash/Takic boarder population***

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Most Native American populations are characterized by mutations in their mitochondrial DNA (mtDNA) that distinguish 5 distinctive genetic haplogroups, A, B, C, D and possibly X. Studies of Native American populations have revealed that the frequency of these haplogroups vary among groups and, consequently, can be used to distinguish groups by the relative proportions of these haplogroups. The automation of the polymerase chain reaction (PCR) has made it possible to extract, amplify, and analyze mtDNA from human skeletal remains dating back several millennia.

We examed mtDNA from a number of individuals recovered from archaeological site CALAN 2233 in Los Angeles County, California. The site was located along what has traditionally been regarded as the boarder between speakers of the Chumash and Takic languages. Chumash speakers are characterized by a prevalence of haplogroup A and virtual absence of haplogroup C while Takic speakers lack haplogroup A show a high percentage of C. Through the analysis of the genetic material recovered we can determine whether this site was occupied by a Takic or Chumash population or if it represented admixture between the two groups.

***MIDDLE PART OF THE UPPER PALAEOOLITHIC: EAST AND WEST***

Dr. Gennadij Grigoriev

At first, I would like to propose the definition of the part of Upper Palaeolithic. The Upper Palaeolithic is defining usually as an epoch, as subdivision on the Palaeolithic. Upper Palaeolithic subdivided into three parts chronologically. It was carried out in France as a result of the separation of the French UP in three stages. The French scheme was extended over all Europe. But the rules according to which the subdivisions of the UP must be defined were not proposed still. Any part of UP must have some features in common for all Europe. The middle part (MPUP) is defined (Grigoriev 1997) as the appearance of the new archaeological groups and the end of Aurignacian and Szeletian/Streletskian cultural groups on the territory where UP existed. Disappearance of the Aurignacian and Szeletian/Streletskian group occurred

between 26000 and 23000 years. The new cultural entities appeared everywhere except southwest France.

The notion: part has a position in the system of the notions for UP. Its position is lower than epoch (UP). MPUP consists of different sub-units as archaeological culture and some others. The definition of the archaeological culture is necessary also. From my point of view the archaeological culture is determined by the direction of its evolution, by stages of these typological evolution and by its territory. Practically archaeological cultures appeared only in MPUP. MPUP is a period also when we observe the most intensive exchange by forms of stone tools. The exchange includes also the new ideas in the art.

The Palaeolithic world was built of many different units of classification still unknown. Besides of archaeological cultures there are the groups of related cultures (Willendorf/Pavlov/Kostenki group [Grigoriev 1996]). Some forms typical for WPK unity are spread over Central and Eastern Europe. The list of forms of Willendorf, layer 9 coincided with Kostenki list of forms; it coincided rather good with the list of forms of Pavlov culture. Only some forms of these lists are represented in Moldavia, layer 7 or in Khotylevo. The Pavlov culture age is known for us only approximately (in comparison with the C 14 age of Kostenki culture). The short list of C 14 age determination give us possibility to speak about time-span 27-24 000 years BP. Reach series of determinations for different sites and layers of Kostenki culture supposed more exact age about 22 000 years B.P. The difference between these determinations suggested the real difference in the age of these cultures, and Kostenki culture later indeed. I am not sure that it is possible to use new determinations of the 9th layer of Willendorf 11. There are two ways of appearance of new quality (new stage of Gravettian, or Gravettian as a MPUP). More often something new appears suddenly, there are no connections with preceding period and earlier forms of stone tools. The slow evolution from one period/assemblage to the next one is a very rare case. The assemblages of MPUP appears on the territory of Check Republic, Poland, Russia suddenly. There is no connections with local assemblages of Aurignacian and Szeletian/Streletskian.

The stratigraphical sequence of Willendorf shows the slow and ideal evolution of main forms from local Aurignacian to Gravettian. New (Gravettian) forms of tools appeared gradually from one layer to the next (leaf points, microblades with symmetrical ends, Kostenki knives). Some Aurignacian forms evolved within Gravettian (points/blades with steep continuous retouch). Only high scrapers disappeared after layer 5. The Willendorfian stratigraphical column gives us unique possibility to see the process of the appearance the new unit of classification - Gravettian. Thus, Gravettian is a local phenomenon represented by single site - Willendorf. The spreading of the Willendorfian traits have as a consequence the transforming the local event into the general stage of the development. The process was asymmetrical: we have the exact copy of the Willendorfian Gravettian to the East (European Russia) and only two or three forms in the assemblages to the West from Willendorf (Kostenki knives in some German Gravettian sites).

The spreading of the art ideas and forms was independent from spreading of stone tool process. Gravettian as we know them after Willendorf or Pavlov culture do not influenced on the synchronous assemblages in southwestern France or in Italy. The tronque envers in some Late Perigordian sites may have independent origin, as well as microblades with symmetrical ends. On the contrary, the female imagery in France most probably was the result of the eastern influence. The structure of French female

figurines family totally compositionally corresponds with Kostenki or Pavlov culture family.

### *Microliths from Eritrea N.E. Africa - A Preliminary Survey*

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A few prehistoric sites were identified at first sight around Asmara, the capital town of Eritrea. Traces of cultural material in the form of microlithic artifacts were sighted at that time and the careful observation of these spots further confirms the prehistoric potential of the sites.

Asmara (38 longitude and 15 30' latitude) is located at the height of more than seven thousand feet above sea level. It was only in the year 1991, Eritrea got separated from Ethiopia as an independent nation. The Topographic extension of Eritrea looks like a paper kite which is bound by Sudan on the west, Djibouti on the East, Red sea is situated at the distance of 115 km. from Asmara. From Northern extreme end of Asmara down to the low lands, the area is studded with hilly terrain.

About people, pygmoid element was known to have been wide spread in Europe, Asia and Africa including Eritrea. Finally, Nilotic Kushitic and Semitic groups remained. There are about nine communities in Eritrea. They are Saho, Kunama, Sahel, Amhara, Nara, Afar, Tigray etc. who may be classified under the three groups mentioned above. The total population of Eritrea is estimated to be 3.5 million. Occupations wise, there are settled agriculturist, agro-pastoralist and coastal nomads.

Explorations in and around Asmara have yielded Microliths and a few other flake tools. A stone bead which might have been used as a neck ornament, was also collected. Microliths include lunates, simple blades, Borers, points and scrapers. except a few implements which are made on quartz most of them were made on obsidian. Few chert tools were also collected. The evidence is identified from various sites such as Sembel, Dek Amhara, Adi Teklezan and Kohawto. In Kohawto our department of Archaeology team including the author conducted explorations and several spots were identified. Most of these are hill-top sites. There is a basin surroundings which are several hills. On the top of these hills Microliths resembling that of post Palaeolithic cultural phase or later stone age were recovered. In certain localities, polished axes, grinding stones, potsherds such as Black ware, red ware, were picked up. Punctured marks are also seen as decorative designs on red ware. There are thick coarse ware and thin ware types. These artifacts could be belonged to pre-Iron age. At two or three spots a few flake tools were also found associated with Microliths. Whether these flake tools can go with the later stone age (Mesolithic phase) or be separately treated as belonging to a different cultural phase like middle stone age, it is yet to be distinguished. Detailed investigations and excavations are to be conducted in order to establish geochronology and exact dating.