

Session WS26

Friday , 8 September 2006 / Vendredi, 8 Septembre 2006
And/ Et
Saturday , 9 September 2006 / Samedi, 9 Septembre 2006

Room 6.1.53, Faculty of Sciences, Lisbon University
Salle 6.1.53, Faculté de Sciences, Université de Lisbonne

Babies Reborn

Infant/children burials in prehistory

Bébés renés

Sépultures des nouveau-nés/enfants dans la préhistoire

organized by / organisé par

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SESSION'S ABSTRACT

As distinct age groups, babies and children have their special place in the archaeological record. The examination of the manifold manifestations of their presence in prehistoric contexts would attract scholarly attention with approaches varying from purely archaeological and bioarchaeological analyses of burial contexts through chronology observations to interpretations and reconstructions of ritual and symbolic systems. Cross-cultural comparisons and parallels as well as the multidisciplinary of these considerations would contribute to a more complete picture of the social and ritual structures in prehistory.

RÉSUMÉ DE LA SESSION

Les nouveau-nés et les enfants, représentant deux groupes différents en âge, sont bien attestés parmi les vestiges archéologiques. L'étude des manifestations multiformes de leur présence dans les contextes préhistoriques pourrait devenir attirante pour les scientifiques par des démarches différentes qui comprennent: des analyses strictement archéologiques et bioarchéologiques des contextes funéraires, à travers des observation chronologiques, aux interprétations et reconstructions des rites et systèmes symboliques. Les comparaisons et parallèles interculturelles, aussi bien que leur considération pluridisciplinaire faciliterait la compréhension complète des structures préhistoriques sociales et rituelles.

SESSION PROGRAMME / PROGRAMME DE LA SESSION

8th September 2006 / 8^{ème} Septembre 2006

09:00 **Opening / Ouverture**

09:00-09:30 Anne-Marie TILLIER (Bordeaux, France)

WS26-01 Le Proche-Orient et les plus anciennes sépultures d'enfants.

09:30-10:00 Thomas EINWÖGERER (Vienna, Austria)
 Marc HÄNDEL (Vienna, Austria)
 Christine NEUGEBAUER-MARESCH (Vienna, Austria)
 Maria TESCHLER-NICOLA (Vienna, Austria)
 Ulrich SIMON (Vienna, Austria)

WS26-02 The Gravettian Burial of two Newborn Infants from Krems-Wachtberg, Austria.

10:00-10:30 Anagnostis AGELARAKIS (New York, U.S.A)

WS26-03 Infant Burials from the Proto-Neolithic Cemetery in Shanidar Cave.

10:30-11:00 Françoise LE MORT (Lyon, France)

WS26-04 Infant burials in the Pre-Pottery Neolithic Near East: the particularities of the Cyprus Island.

11:00-11:30 Sharon MOSES (Kalispell, Montana, U.S.A.)

WS26-05 Catalhöyük's Foundation Burials: Ritual child sacrifice or convenient deaths?

11:30-12:00 Krum BACVAROV (Sofia, Bulgaria)

WS26-06 A Long Way to the West: the earliest jar burials in southeast Europe and the Near East.

12:00-12:30 Raluca KOGĂLNICEANU (Iași, Romania)

WS26-07 Children Burials in Intramural and Extramural Contexts from the Neolithic and Chalcolithic of Romania: the problem of "inside" and "outside".

12:30-13:00 Sofija STEFANOVIĆ (Belgrade, Serbia)

WS26-08 Neolithic boys from Vinča necropolis at Gomolava (Serbia).

13:00-14:30 **Lunch / Déjeuner**

14:30-15:00 Yavor BOYADZHIEV (Sofia, Bulgaria)

WS26-09 Infans I Burials from 5th Mill. BC Bulgaria.

15:00-15:30 Maria GUROVA (Sofia, Bulgaria)

WS26-10 Flints as grave goods in infant/children burials: a case study from Bulgaria.

- 15:30-16:00 Tatiana MISHINA (Moscow, Russia)
WS26-11 **Intramural Infant Burials in the Early Bronze Age Bulgarian Thrace: A Social Case Study.**
- 16:00-16:30 Marc F OXENHAM (Canberra, Australia)
Hirofumi MATSUMURA (Sapporo, Japan)
Kate DOMETT (Townsville, Australia)
Nguyen Kim DUNG (Hanoi, Vietnam)
Nguyen Lan CUONG (Hanoi, Vietnam)
Nguyen Kim THUY (Hanoi, Vietnam)
Trinh Hoang HIEP (Hanoi, Vietnam)
Ha VAN PHUNG (Hanoi, Vietnam)
Yukio DODO (Sendai, Japan)
Damien HUFFER (Canberra, Australia)
WS26-12 **Attitudes Towards Children: A Neolithic/Bronze Age Transition Cemetery in Northern Vietnam.**
- 16:30-17:00 Sian Ellen HALCROW (Dunedin, New Zeland)
WS26-13 **Foetal Death in prehistoric Southeast Asia.**
- 17:00-17:30 Erik VAN ROSSENBERG (Leiden, The Netherlands)
WS26-14 **Infant/child burials and social reproduction in the Bronze Age and Early Iron Age (c. 2100-700 BC) of Central Italy.**
- 17:30-18:00 Belinda TIBBETTS (Queensland, Australia)
WS26-15 **Infant Burials in Iron Age Britain.**
- 18:00-18:30 Eileen MURPHY (Belfast, UK)
WS26-16 **Biocultural study of children from Iron Age South Siberia.**
- 9th September 2006 / 9^{ème} Septembre 2006*
- 09:00-09:30 Svetlana Nikolaevna SKOCHINA (Tyumen, Russia)
Viktor Alekseevich ZAKH (Tyumen, Russia)
WS26-17 **Child burials of the early metal epoch on the Tobol-Ishim territory.**
- 09:30-10:00 Sally CRAWFORD (Birmingham, UK)
WS26-18 **Babies, ritual buildings and burials in Anglo-Saxon England.**
- 10:00-10:30 Traci ARDREN (Miami, FL, U.S.A.)
WS26-19 **Infant Offerings in Classic Maya Architectural Contexts.**
- 10:30-11:00 Mariel Alejandra LÓPEZ (Buenos Aires, Argentina)

WS26-20 Enfants Huaca. Sépultures in Ollas des enfants nés sur circonstances spéciaux selon les extirpateurs d'idolâtries andines du siècle XVII.

11:00-13:00 Discussion

ABSTRACTS / RÉSUMÉS

WS26-01 Anne-Marie TILLIER (Bordeaux, France)

Le Proche-Orient et les plus anciennes sépultures d'enfants.

RESUME: C'est du Proche-Orient que proviennent les plus anciens témoignages d'une archéologie funéraire s'appliquant aux enfants, associée à un contexte archéologique moustérien. Selon les données archéométriques, les premières sépultures d'enfants dans la région sont datées autour de 100 000 ans à Skhul et à Qafzeh (Israël) et en dépit de leur nombre limité, elles illustrent une diversité des pratiques qui peut être discutée sur la base de paramètres biologiques et de critères culturels. Quelques dizaines de milliers d'années séparent ces sépultures de celles plus tardives mises au jour à Kebara (Israël) et à Dederiyeh (Syrie). Notre propos est de replacer cette documentation dans le cadre de l'archéologie de la mort au Paléolithique moyen.

KEYWORDS: Earliest child burials, Near East

WS26-02 Thomas EINWÖGERER (Vienna, Austria)
 Marc HÄNDEL (Vienna, Austria)
 Christine NEUGEBAUER-MARESCH (Vienna, Austria)
 Maria TESCHLER-NICOLA (Vienna, Austria)
 Ulrich SIMON (Vienna, Austria)

The Gravettian Burial of two Newborn Infants from Krems-Wachtberg, Austria.

ABSTRACT: Within the last decade the Prehistoric Commission of the Austrian Academy of Sciences focused on the investigation/re-investigation of Paleolithic sites in eastern Austria. Among these, the find-spots at Krems – Krems-Hundssteig and Krems-Wachtberg – became of particular concern.

The Krems-Hundssteig project, carried out between 2000 and 2002, provided evidence for extensive camp sites in this area for the period from 40–27 14C kyr BP.

In succession to this, Krems-Wachtberg, situated just a hundred meters north, and in parts archeologically documented by J. Bayer in 1930, was selected for further investigations. Following drilling-core analyses, which substantiated the existence of a compact cultural layer, excavation work began in April 2005. The incredible richness of artifacts, faunal remains and other objects detected was enhanced by the discovery of a shoulder blade of an adult mammoth. The scapula, partly supported by a large piece of mammoth ivory, covered a pit, where the skeletal remains of two infants covered with red ochre appeared. Due to the comparable metric dimensions of the postcranial elements it is most likely that they died at the same age and were buried together at the same time (charcoal from the cultural layer: Poz-1290: 26,580 ± 160 14C yr BP). The embedment in red ochre as well as the grave gifts (ivory beads) clearly state that this is a deliberate burial associated with a specific ritual.

Present contribution will discuss the archeological findings, certain aspects of hunter-gatherer societies, and the potential of the skeletal remains for answering questions concerning the evolution of early modern humans.

KEYWORDS: Gravettian, burial, newborn infants, Krems.

WS26-03 Anagnostis AGELARAKIS (New York, U.S.A.)

Infant Burials from the Proto-Neolithic Cemetery in Shanidar Cave.

ABSTRACT: A considerable number of infant/child burials, comprising ~30% of the anthropological sample discovered at the Proto-Neolithic component of the cave site of Shanidar, in Northern Iraq, offer a singular opportunity for discussion on aspects of the demographic and paleopathological

profiles of this ancient population, elucidating facets of their perceived environments, features of their cultural traditions, and elements of their organizational capabilities at the temporal juncture of incipient domestication of plants and animals in SW Asia.

KEYWORDS: SW Asia, Proto-Neolithic, Shanidar.

WS26-04 Françoise LE MORT (Lyon, France)

Infant burials in the Pre-Pottery Neolithic Near East: the particularities of the Cyprus Island.

ABSTRACT: Among the Pre-Pottery Neolithic Cypriot sites, six have yielded human remains, ranging from the 9th to the 7th-6th millennium calibrated BC: Parekklisha-Shillourokambos, Kissonerga-Mylouthkia, Kalavassos-Tenta, Khirokitia, Kholetria-Ortos, and Cap Andreas Kastros. The number of individuals ranges from 2 at Kholetria-Ortos to 266 at Khirokitia. The Khirokitia sample includes a large proportion of infants less than one year of age, most of them deceased perinatally, as well as a low proportion of children more than one year old. At this site, all the infants and children were buried under the floors of the houses like the adults; the burials are primaries, most of them single. The Khirokitia burial customs are compared to data from other Pre-Pottery Neolithic Cypriot and mainland sites. They appear different.

KEYWORDS: infants, burials, Pre-Pottery Neolithic, Near East, Cyprus.

WS26-05 Sharon MOSES (Kalispell, Montana, U.S.A.)

Catalhöyük's Foundation Burials: Ritual child sacrifice or convenient deaths?

ABSTRACT: Neolithic Catalhöyük has been not only an example of one of our earliest human settlements but also of socially prescribed ritual behavior. The intramural burials associated with different houses have intrigued many over the years. This paper is concerned with the significance of children's burials in understanding the religious ideology of this community as well as the importance of children as active contributors to the social fabric and creation of sacred spaces. Often, child burials with obvious specialized ritual performed for foundations but in lieu of clear physical/forensic evidence for violence, have been interpreted as "natural deaths" utilized for ritual purposes. I propose contextual evidence can speak just as loudly, and that labeling them "natural," robs our understanding of the depth of meaning and the importance of the role of children in negotiating the sacred. This paper is not a physical/forensic analysis, but rather a theoretical and contextual exploration of children and their place in the religious ideology of Catalhöyük, transmission of memory, and perpetuation of tradition in Neolithic communities.

KEYWORDS: Catalhöyük, foundation burials, sacrifice.

WS26-06 Krum BACVAROV (Sofia, Bulgaria)

A Long Way to the West: the earliest jar burials in southeast Europe and the Near East.

ABSTRACT: Appearing in the early - although probably not the earliest - phases of southeast European neolithization, jar burial developed in several territorially and chronologically restricted 'waves': Neolithic core area in the Struma and Vardar river valleys and the west Rhodope Mountains in the beginning of the 6th millennium BC, and later, late/final Neolithic and/or Chalcolithic - depending on local terminology - examples scattered from Argolis in Greece to the Great Hungarian Plain and dating from the second half of the 6th to the beginning of the 4th millennium BC, with huge chronological gaps within. However, their central Anatolian and Levantine parallels give a solid base for the expanding of our understanding of this obviously cross-cultural phenomenon.

KEYWORDS: Southeast Europe, Anatolia, Levant, jar burial, neolithization.

WS26-07 Raluca KOGĂLNICEANU (Iași, Romania)

Children Burials in Intramural and Extramural Contexts from the Neolithic and Chalcolithic of Romania: the problem of "inside" and "outside".

ABSTRACT: In the study of children burials there are some problems of terminology that have to be cleared first. It is still ambiguous if the burials of children should be analyzed taking the cemetery (if existing) or the settlement as the point of reference. "Inside" and "outside" of which of these two structures should we consider the children burials? We will try to answer this question following two steps: 1) the inventory of all children burials recorded as belonging to the Neolithic and Chalcolithic of Romania and 2) the establishment and analysis of the patterns that can be observed. This analysis, correlated with other factors, will help us in trying to establish, in the first place, which was the spatial point of reference for the children burials and, in the second place, which was the role of children in the Neolithic and Chalcolithic societies.

KEYWORDS: Neolithic/Chalcolithic Romania, child burials, intramural/extramural contexts.

WS26-08 Sofija STEFANOVIĆ (Belgrade, Serbia)

Neolithic boys from Vinča necropolis at Gomolava (Serbia).

ABSTRACT: The Late Neolithic necropolis at Gomolava in Srem (Serbia), is one of the rare examples of mortuary practices of the late Vinča culture. There are 27 graves excavated between 1973-1979. The first anthropological analysis by Z. Zoffmann, established that 20 skeletons belong to adults and 7 to children. All buried adults were male, but children skeletons remained unsexed. The aim of this work is to analyze importance of biological categories of children (sex and age) in getting burial place in this necropolis. This study presents the results of anthropological analysis of children, such as estimation of sex and age at death. DNA-based sex identification shows that all children buried at Gomolava were boys, boys of different age, from the neonate to 7 years old. These results suggest that biological category of sex had a great importance in getting the burial place at Gomolava. Probably, the age of boys was not the limitation factor, because boys of different age are present.

KEYWORDS: Neolithic children, Vinča culture, Gomolava.

WS26-09 Yavor BOYADZHIEV (Sofia, Bulgaria)

Infans I Burials from 5th Mill. BC Bulgaria.

ABSTRACT: The analysis is based mainly on Infans I burials (a total of 248) from the Durankulak cemetery, which existed for a millennium and was used by the bearers of two successive cultures. The use of stone features in the Varna culture makes it possible to establish the presence of burials even when the bones had completely decayed. The comparison between graves with a skeleton, graves with only minute parts of bones and graves with no bones at all provide grounds to find the reason for the minimal number of Infans I burials in other cemeteries. The large number of Infans I burials at Durankulak is also a basis to suggest the social status/differentiation of children up to 7 years old, both in their own age group and in relation to the others.

KEYWORDS: Bulgaria, Chalcolithic, Durankulak, Infans I burials.

WS26-10 Maria GUROVA (Sofia, Bulgaria)

Flints as grave goods in infant/children burials: a case study from Bulgaria.

ABSTRACT: The multiaspect analysis of burial offerings (including flint artefacts) provides a possible approach to consider the challenging, epistemological problem of sacred versus secular/profane in our reading and understanding of the past. The presence of flints as grave goods has significance both for the question of symbolism and for adequately discerning their relevance to other votive offerings and ritual deposits. The infant/children burials represent a special category because of the particular status of the deceased in the kinship and social system and the tempting intention to reveal the meaning of some specific spiritual needs fulfilled through various ritual practices. I have had the opportunity to study from a functional point of view the flint artefacts from the extremely rich cemetery at Durankulak (NE Bulgaria). The results of this analysis offer additional information about the selection (conscious or random) of the flint implements from their characteristic settlement context and life circle and their transition to the sacred function as grave gifts, including in infants/children burials.

KEYWORDS: Northeast Bulgaria, grave goods, flints

WS26-11 Tatiana MISHINA (Moscow, Russia)

Intramural Infant Burials in the Early Bronze Age Bulgarian Thrace: A Social Case Study.

ABSTRACT: The prehistoric tradition of burying infants within the settlements is well known from the wide territory of Mesopotamia, Anatolia and southeast Europe. In the Balkans, this phenomenon has been known as early as the Neolithic; it has been also found in Chalcolithic and early Bronze Age contexts. The early Bronze Age layers at Tell Yunatsite in Bulgarian Thrace have yielded a total of 26 infant burials, all of them within the settlement's area. The burial rite follows two patterns: burials in vessels (22), and burials in grave pits (4 burials). The discussed burials were analysed according to a number of indications, such as: location within the settlement, association of the burials with certain part of the house, its relation to the features of the house interior, burial construction, age details.

KEYWORDS: burial patterns, early Bronze Age, Bulgarian Thrace.

WS26-12 Marc F OXENHAM (Canberra, Australia)
 Hirofumi MATSUMURA (Sapporo, Japan)
 Kate DOMETT (Townsville, Australia)
 Nguyen Kim DUNG (Hanoi, Vietnam)
 Nguyen Lan CUONG (Hanoi, Vietnam)
 Nguyen Kim THUY (Hanoi, Vietnam)
 Trinh Hoang HIEP (Hanoi, Vietnam)
 Ha VAN PHUNG (Hanoi, Vietnam)
 Yukio DODO (Sendai, Japan)
 Damien HUFFER (Canberra, Australia)

Attitudes Towards Children: A Neolithic/Bronze Age Transition Cemetery in Northern Vietnam.

ABSTRACT: Initial excavations by Vietnamese archaeologists followed by further work in collaboration with Japanese and Australian researchers have uncovered 45 individuals from Man Bac, a cemetery site in northern Vietnam spanning the neolithic/bronze transition between 3,500 and 4,000 BP. Over 80% of the sample is teenage or younger while 60% are children or younger. The aim of this paper is to: (1) examine aspects of mortuary behaviour, particularly in terms of what this can tell us of attitudes towards children; and (2) discuss biological characteristics of the sample, particularly the demographic profile and evidence for health and/or disease.

With respect to the first aim children appear to be better endowed in terms of grave goods than young or older adults. For instance, one of the richest graves is that of an 8 year old child buried with a cowrie shell necklace, two large bivalves clasped in each hand and two pots placed by the head. While there are a number of competing explanations for subadult grave-wealth, minimally it would seem that children in death, and perhaps in life, were held in some regard by this community. Regarding the second aim, little in the way of obvious signs of infectious disease was found. Even by prehistoric standards the demographic profile is highly skewed toward the very young. This may indicate an epidemic or simply differential interment patterns with more adults yet to be excavated. This is the first well preserved cemetery from this time period to be discovered in northern Vietnam and as such offers a unique opportunity to explore issues in early Vietnamese behavioural and biological archaeology.

KEYWORDS: Northern Vietnam, Neolithic/Bronze Age transition, child burials.

WS26-13 Sian Ellen HALCROW (Dunedin, New Zeland)

Foetal Death in prehistoric Southeast Asia.

ABSTRACT: Little attention has been given to the lengths of foetal* bones from archaeological sites. This is despite the fact that an analysis of gestational age distributions based on these data can potentially provide a plethora of information about a population. This includes an understanding of why foetuses were dying, sample representativeness and burial rites, aspects of health and disease as well as pertinent issue of the appropriatenesse of age estimation methods. A total of 93 foetuses from seven archaeological sites in Late Prehistoric Thailand provide a rare opportunity to investigate these issues. Using standard regression techniques based on diaphyseal lengths to develop age at death

distributions it is found that the peak in death occurs in the Thai samples approximately two weeks earlier compared to modern data. Possible explanations including in utero growth retardation, premature birth or the inaccuracy of age estimation because of inappropriate standards are discussed. The most probable explanation is the inappropriate use of standards based on British and American populations to age Southeast Asian foetuses.

WS26-14 Erik VAN ROSSENBERG (Leiden, The Netherlands)

Infant/child burials and social reproduction in the Bronze Age and Early Iron Age (c. 2100-700 BC) of Central Italy.

ABSTRACT: Special treatment of the remains of children is a well-known feature for later prehistory in Central Italy. In this paper I will focus on the evidence for the Bronze Age and Early Iron Age in the Abruzzo and Lazio regions. Generally, archaeological visibility of mortuary practice is low for the earlier Bronze Age, but remains of neonates and children have been found at sites of ritual practice connected with domestic symbolism. Despite the overall increase in visibility of mortuary practice for the Final Bronze Age and Early Iron Age, infant/child burials remain underrepresented in the archaeological record, but can still be connected with enhanced domestic symbolism. Sometimes particular features, such as barrows and houses, were singled out for the repeated burial of children. I will argue that the enhanced cultural significance of child burials was related to their social significance. Invested with domestic symbolism, they single out fundamental values in the social reproduction of households and local communities throughout Central Italian protohistory.

WS26-15 Belinda TIBBETTS (Queensland, Australia)

Infant Burials in Iron Age Britain.

ABSTRACT: This paper reports findings from analyses of the method of disposal/burial and spatial placement of infants in Iron Age Britain, concentrating on settlement and cemetery sites in southern England. Assessed were burial dimensions and skeletal orientation, relative care of burial, location of burial with respect to settlement areas, and evidence for regionalisation in burial practices. The resulting account of Iron Age infant burials will form the basis for an investigation of infant burial practices in Roman Britain.

WS26-16 Eileen MURPHY (Belfast, UK)

Biocultural study of children from Iron Age South Siberia.

ABSTRACT: The cemetery complex of Aymyrlyg is located in the Ulug-Khemski region of the Autonomous Republic of Tuva in south Siberia. The burials originated from two main groups, with the majority of the earlier interments dating to between the 3rd and 2nd centuries BC, and attributed to the Scythian period. The later group of burials dated to between the 1st century BC and the 2nd century AD and were attributed to the Hunno-Sarmatian period. Both populations are considered to have followed a semi-nomadic pastoralist economy, which would have involved vertical seasonal migrations between the mountains and steppes.

Osteological and palaeopathological research has been undertaken on a corpus of 225 subadult skeletons from Aymyrlyg. This has provided evidence for a wide variety of palaeopathological lesions, including those characteristic of developmental defects, metabolic disease, infection, traumatic injuries, and dental disease. A biocultural approach was followed which enabled the information derived from the human skeletal remains to be married with archaeological and historical data associated with these cultures. The paper will present a summary of the results of the analysis, which has enabled substantial insights to be gained concerned the health, diet and lifestyle of the subadult individuals from these two cultural groups.

WS26-17 Svetlana Nikolaevna SKOCHINA (Tyumen, Russia)
Viktor Alekseevich ZAKH (Tyumen, Russia)

Child burials of the early metal epoch on the Tobol-Ishim territory.

ABSTRACT: Examination of necropolises dated mainly to the early metal epoch (IV to III B.C.) plays an important role in the reconstruction of the ideological conceptions of Western Siberian native

population. Child burials are distinguished by grave goods abundance. At the Serebryanka 1 settlement (Lower Ishim basin), a 6-8 years old child was buried. Tiny scrapers, arrow heads, fragments of polished tools, stone chips prevail among the grave goods, a stone bead was also found. Use wear analysis of the tools showed that they had been used mainly in tanning manufacture (microscrubbers) and for wood processing (cutters-scrapers). At the Andreevsky lake island, a burial of two boys (4-5 and 10-12 years old) was excavated, sprinkled over with ochre, with broken stone arrow heads and beads of sandstone.

Early burials of this region were simple pit graves; the interred individuals lay mostly on their back. Fire and ochre were used at the burial ceremonies. Pottery is lacking, and the supplementary grave goods - arrow heads, scrapers, polished tools - are often broken. Ornaments - petal-shaped pendants of red sandstone - prevail.

This research was made with the support of the "Ethnocultural interaction in Euroasia" grant.

WS26-18 Sally CRAWFORD (Birmingham, UK)

Babies, ritual buildings and burials in Anglo-Saxon England.

ABSTRACT: With the arrival of Christianity in Anglo-Saxon England, there were a number of dramatic changes to traditional community burial rituals, not least the relocation of cemeteries and the abandonment of burial with grave goods. One noticeable aspect of the new mortuary ritual is the presence of isolated infant burials within early church buildings. What interpretations do archaeologists offer for the presence of infant burials in association with the foundation of a ritual building? To what extent do archaeological explanations correlate with the explanations offered by the Old English documentary sources? This paper will examine infant burial ritual in Anglo-Saxon England, and consider the implications of studying infant burial in a proto-historic culture for the theory and methodology of the interpretation of infant burial in broader pre-historic archaeological contexts.

KEYWORDS: infant burials, Anglo-Saxon England, protohistory, prehistory.

WS26-19 Traci ARDREN (Miami, FL, U.S.A.)

Infant Offerings in Classic Maya Architectural Contexts.

ABSTRACT: Certain infants and very small children are often found buried in large ceramic jars within architectural fill during the Classic Maya period. Other children are found interred as adults, in normative burial locations surrounded by the usual pattern of grave goods. This paper will explore the reasons for selective use of certain infants and children in dedicatory offerings during architectural construction - both from the perspective of their status as non-adult/non-person, but also from the perspective of their embodiment of sacred power and authority. It is argued that infant offerings reflect the ancient Maya view that infancy was liminal yet filled with a supernatural potency that gradually eroded with age.

WS26-20 Mariel Alejandra LOPEZ (Buenos Aires, Argentina)

Enfants Huaca. Sépultures in Ollas des enfants nés sur circonstances spéciaux selon les extirpateurs d'idolâtries andines du siècle XVII.

RESUME: Les exhortations e instructions écrites au Pérou du siècle XVII pour lutter vers les idolâtries dans le monde andin, coïncident en décrire ces catégories de sépultures, «Chuchos» ou «Cutis» et «Chacpas» comme idolâtries lesquelles étaient précis d'extirper.

Il s'agit des sépultures caractéristiques des certains enfants dedans ollas céramiques qui sont fréquemment découvertes dans le monde andin et en particulier, à notre région d'étude, Quebrada de Humahuaca, à l'intérieur d'habitats domestiques dedans les sites archéologiques connus comme «pueblos viejos ou antigales» et «pukaras».

La source consultée révèle la nature et origine de cette habitude qui n'était pas généralisé à tous les enfants. Du point de vue de la cosmogonie européenne, cette habitude parte de un rituel funéraire mais aussi cérémonial du moment qu'on considère ces enfants comme "êtres sacrés" et «huacas» mobiles à cause des particularités de leurs naissances.

Dans cette communication on présentera des donnés provenant de la source citée relative aux "contextes de fonctionnement" de ces découvertes archéologiques, son lien avec le problème de l'extirpation d'idolâtries et les observations actuelles dedans les enregistrements archéologiques des collections et recherches contemporaines.

Session WS28

*Monday , 4 September 2006 / Lundi, 4 Septembre 2006
And/ Et*

*Room 11.02, Faculty of Law, Lisbon University
Salle 11.02, Faculté de Droit, Université de Lisbonne*

Defining a methodological approach to interpret structural evidences

Pour une approche méthodologique pour l'interprétation des structures archéologiques

organized by / organisé par

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SESSION'S ABSTRACT

This workshop aims to enlighten the role and relationship between different features such as, postholes, hearths, rubbish pits, silos, ditches, palisades and other similar features. Although every period has its specific circumstances due to variation in land exploitation or economic strategies, each period has a contribution to make regarding the functionality and relationship between structural evidences and between features and environment. We expect a comparison between different scientific approaches, (including field archaeology, ethnoarchaeology, experimental archaeology, landscape analysis, architecture, anthropology ...) to give new perspectives for the research of these features in archaeology.

Indeed, a commonly reoccurring problem in archaeological excavation is that there are several contexts which consist only of hollow features and no living floors; this is usually due to erosion or modern anthropic activity. The result is that the material culture is well known, but not the function of the area. This leads us to ask: is this a settlement? A working area linked to agricultural activities? Are they storage pits? Underground fire places? Clay mixing pits? Or simply rubbish pits? Simply put, what was the role of these features?

If understanding the stratigraphical nature and the actions that took place in and around the feature we are digging is the basis on which to interpret the function, then the correct excavation of these features is necessary to understand the possible purpose for which it was created. The first step is to establish a methodology for digging these features to be able to reach any interpretation of their function. In order to do this, it is necessary to consider all the evidence of similar features in prehistoric or historic periods by an archaeological and from an ethnographical point of view. The next step is, therefore, to find all the possible functions of these features.

SESSION PROGRAMME / PROGRAMME DE LA SESSION

4th September 2006 / 4 Septembre 2006

- 14:30 **Opening / Ouverture**
- 14:30-14:45 Marie-Chantal FRERE-SAUTOT
WS28-01 **Les structures en creux: exploiter et comprendre, les résultats d'un colloque (« Des trous »- Mars 2006 - France)**
- 14:45-15:00 Walter LEITNER
WS28-02 **Scant structural evidences of Mesolithic sites in high alpine region**
- 15:00-15:15 Christian VERJUX
WS28-03 **The interpretation of the functions of Mesolithic dug structures: the example of Auneau (Eure-et-Loir – France)**
- 15:15-15:30 Leif Inge AASTVEIT
WS28-04 **The use of space in Mesolithic Western Norway – challenges and possibilities**
- 15:30-15:45 Matteo PILATI
WS28-05 **U-shaped scatters: struggling between theoretical models and archaeological facts**
- 15:45-16:00 Fabio CAVULLI
WS28-06 **Experimental Archaeology as a Methodology to Understand the Formative Processes of 'Pits'**
- 16:00-16:15 Giovanni BOSCHIAN
 Marta COLOMBO
 Carlo TOZZI
WS28-07 **Infilling processes of large pit features at Catignano – Neolithic (Italy)**
- 16:15-16:30 Stéphanie BRÉHARD
 Jean VAQUER
WS28-08 **Réflexions sur la fonction d'une enceinte à fossé annulaire du Néolithique final à partir des restes osseux de faune: le cas de Roc d'en Gabit à Carcassonne (Aude, France)**
- 16:30-16:45 Simone MULAZZANI
 Valentina AZZARÀ
 Fabio CAVULLI
 Simona SCARUFFI
WS28-09 **Nouvelles évidences nord-africaines des structures d'habitat. La fouille de la Rammadiya côtière néolithique SHM-1 de Hergla, Tunisie**

16:45-17:00 Dragos GHEORGHU

WS28-10 Invisible architectural features and the uses of indirect evidence

17:00-17:15 Stefano BIAGETTI

Giansimone POGGI

Savino di LERNIA

WS28-11 Unearthing the hearths. Methods, problems, and preliminary results of an interdisciplinary research at Takarkori rockshelter's Fireplaces (Acacus Mts., Libya)

17:15-17:30 Alberto CAZZELLA

Giulia RECCHIA

WS28-12 Sleeping, eating, meeting, working: problems and methods in the study of structures in southern Italy settlements during the Bronze Age

17:30-17:45 Franco MARZATICO

WS28-13 Houses of the alpine area during the Bronze age and Iron age, from the excavation to the hypothesis of reconstruction: some examples

17:45-18:00 A. BERDYMURADOV

D. GIORGETTI

S. MANTELLINI

M. TOSI

WS28-14 The Kafir Kala Fortress: Pakhsa Techniques and Water Management combined in the Military Architecture of Sogdian Samarkand

18:00-18:30 Discussion

ABSTRACTS / RÉSUMÉS

WS28-01 Marie-Chantal FRERE-SAUTOT

Les structures en creux: exploiter et comprendre, les résultats d'un colloque (« Des trous »- Mars 2006 - France).

ABSTRACT: Au vu des innombrables structures creusées qui apparaissent dans les fouilles préventives en contexte rural, en particulier sur les grands tracés (autoroutes, voies ferrées), nous avons conçu dans le cadre d'une société d'aménagement autoroutier (Autoroutes Paris-Rhin-Rhone, France) de réaliser un colloque méthodologique, dont le but essentiel était de réfléchir à une méthode d'approche de ces structures, Grandes consommatrices de temps et d'énergie, donc coûteuses de ce fait, elles livrent parfois des informations abondantes, un mobilier riche, d'autre fois elles s'avèrent décevantes et inutilisables .

La simple lecture des résumés met en évidence la dichotomie entre l'objectif souhaité et l'état de réflexion des archéologues : avant de mettre en place une méthodologie rationalisée les spécialistes qui se sont trouvés confrontés à la fouille de structures excavées se sont surtout penché sur la fonction. L'acquit indiscutable de ce colloque sera sans aucun doute de mettre en évidence la multiplicité et la diversité des usages de ces structures : et peut être sera-t-il possible dans l'avenir de parvenir à une meilleure exploitation méthodologique de ces formes en identifiant leur fonction de

manière plus rapide. Ainsi d'une typologie plus exhaustive à une meilleure définition de la question posée aux structures archéologiques, nous aurons sans doute franchi une première étape de sensibilisation à la recherche sur le terrain qui pourra déboucher à terme sur une exploitation plus performante des observations archéologiques effectuées dans ce type de contexte. Les contributions de nos collègues français et étrangers réalisées lors de fouilles préventives, comme lors de fouilles programmées sur le long terme, nous permettent de percevoir dans ces formes non seulement les prémices d'une architecture mais également une utilisation du sol naturel comme un milieu exploitable directement pour des usages domestiques.

WS28-02 Walter LEITNER

Scant structural evidences of mesolithic sites in high alpine region.

ABSTRACT: Traces of structural evidences of hunter and shepherd camps from the stone age period in high alpine region are rare and mostly badly preserved. Only on well protected places, as for example caves and rock-shelters, the find-situations can be reconstructed.

Some sites in western Austria (Tyrol and Vorarlberg) allow us to try difficult interpretations in this regard. Among the very common post-holes and fireplaces the less frequent structural types like seat-stones, wall constructions, rubbish ditches and wind-breaks, will be considered.

WS28-03 Christian VERJUX

The interpretation of the functions of Mesolithic dug structures: the example of Auneau (Eure-et-Loir – France).

ABSTRACT: In this paper I submit to present the analysis of the archaeological data from the Mesolithic site of Auneau (Eure-et-Loir – France). About 70 dug structures which date between 8000 and 6500 years cal. BC were excavated in a 200 m² area. Due to the lack of any archaeological level, the main purpose was to try to identify the functions of these numerous pits to understand the nature of the Mesolithic occupations.

The first task was to distinguish between the primary and the secondary use of such structures. Although some of them like post-holes, intentional deposits of faunal remains and graves are rather easy to recognise, many other features seem to be rubbish or garbage pits. So the available data (size, shape, stratigraphy, filling, archaeological material, duration of use...) must be examined and compared with those from Neolithic or Protohistoric sites to determine the previous functions of these structures. At least two other main categories could be recognised: cooking pits and storage structures.

Then I will compare these results with data from other Mesolithic sites in Europe, from Portugal to Sweden, and I will discuss the significance and the role of such structures in the lifestyle of these last hunter-gatherers. In conclusion I will debate about the questions of food storage structures and the first attempts of sedentarity during the Mesolithic.

WS28-04 Leif Inge AASTVEIT

The use of space in Mesolithic Western Norway – challenges and possibilities.

ABSTRACT: Recent Stone Age excavations in Norway have focused on spatial and structural issues, and it is now common to open up large areas by digging machine to uncover the prehistoric landscape. This represents a new approach to the Mesolithic, implying new challenges in archaeological fieldwork and interpretation. New types of structures are appearing, with functions and meanings yet unknown to us.

This paper presents recent results from one of the biggest excavations ever taking place in Norway, *The Ormen Lange Archaeological Project*, on the western coast of Norway. Here, the stable mid Holocene sea level has stimulated an accumulation of archaeological sites within limited areas. The occupation phases seem to vary from some hundred to more than 3000 years. Massive cultural deposits and numerous structures are produced - fireplaces, post-/stake holes, walls, trenches and different kinds of pits. It is a major challenge to interpret these structures individually according to function as well as parts of larger multi component structures i.e. house floors, walls and dwellings. This paper will present the methodological challenges as well as indicate some suggestions to solve the problems in the wake of new procedures in fieldwork.

WS28-05

Matteo PILATI

U-shaped scatters: struggling between theoretical models and archaeological facts.

ABSTRACT: U-shaped scatters at Palaeolithic and Mesolithic sites attract the attention of the archaeologist for their apparently ordered structures. Different theoretical-methodological tools and approaches, such as Leroi-Gourhan's model, Binford's and Stevenson's ethnographical observations and models, and Stapert's Ring-and-sectors method, were specifically developed to reach a deeper comprehension of these characteristic features. The usefulness and achievements of these investigations are however at odds with daily practice in archaeology. The specificity and variability of each case make application of the above mentioned methods a tricky affair. The taphonomic vicissitudes of the archaeological context, even the clearest ones, are always more complex than wished, mainly because of the peculiar site-formation processes, anthropic and natural post-depositional processes, excavation strategy, and data availability.

The following paper will discuss the difficulties encountered in the application of the above-mentioned approaches in interpreting the spatial display of human behaviour out of a clear-cut U-shaped flint scatter at the Late-Mesolithic site of Meeuwen-In den Damp I (Belgium). In this case study the tool kit, microliths, cores and microburins constitute a minimal share of the overall flint material (over 16,000 pieces recovered); no postholes and remains of central hearth were found; soil formation and animal activity obliterated any stratification of archaeological value; moreover, field investigation did not consider the hypothesis of an on-site tree fall, preventing us from excluding this possibility. Despite the use of the above-mentioned approaches, such a basic issue as interpretation of site functionality and its evolution suddenly becomes a very challenging question when applied to concrete case studies; the use of these methods and models can ultimately reveal their shortcomings. Should we drop the use of such methods at sites not responding to optimal prerequisites, or is the expedient application of a more case-focused set of, possibly adapted, methods a viable solution?

WS28-06

Fabio CAVULLI

Experimental Archaeology as a Methodology to Understand the Formative Processes of 'Pits'.

ABSTRACT: Although they often represent the only evidence in numerous deposits, the function of many pre- and protohistoric pits, whether deep holes or shallow depressions, is often unclear. Pits probably had multiple functions and archaeometrical analyses do not always help their identification. We tried approaching the matter through experimental archaeology as a way of understanding the main processes that cause the shape and filling of the pits: weather conditions, seasonality, time span, proximity of a mould or degeneration through disuse.

The results show interesting correlations between the archaeological data, weather conditions, and the periods that the pits were dug, filled and disused.

WS28-08

Stéphanie Bréhard

Jean Vaquer

Réflexions sur la fonction d'une enceinte à fossé annulaire du Néolithique final à partir des restes osseux de faune: le cas de Roc d'en Gabit à Carcassonne (Aude, France).

ABSTRACT: Cette communication propose de réfléchir sur la fonction principale d'une vaste enceinte à large fossé de forme annulaire qui a fait l'objet de fouilles étendues au cours des dernières années. Elle a été datée du Néolithique final (fin du quatrième millénaire av. J.-C.) et a mobilisé une énorme quantité de travail si l'on en juge par l'ampleur des terrassements réalisés. Les fouilles permettent une lecture précise du plan de cette enceinte et autorisent une restitution de son état initial et des étapes de son utilisation jusqu'à sa disparition du paysage qui est intervenue un millénaire après sa construction. L'interprétation de ce monument comme celle d'autres identiques et contemporains est discutée car certains aspects évoquent une fonction d'habitat défensif, tandis que d'autres suggèrent des rapprochements avec des centres cérémoniels politico-religieux comme les

Henges britanniques. Dans cette discussion le cas des restes osseux de faune est particulièrement intéressant puisqu'il est possible de caractériser non seulement les traitements qu'ils ont subis mais aussi les règles qui ont guidé la production et la sélection des animaux abattus. Les spectres par espèces ou les courbes d'âges d'abattage établis pour les dépôts de ce site seront comparés avec ceux d'autres sites pour cerner d'éventuelles divergences par rapport aux normes de consommation des aliments carnés de cette époque dans le Midi de la France.

WS28-09 Simone MULLAZZANI
Valentina AZZARÀ
Fabio CAVULLI
Simona SCARUFFI

Nouvelles évidences nord-africaines des structures d'habitat. La fouille de la Rammadiya côtière néolithique SHM-1 de Hergla, Tunisie.

ABSTRACT: L'étude des communautés Holocènes nord africaines est strictement liée à la compréhension des dynamiques d'occupation et de saisonnalité, économiques, et à l'interaction avec l'environnement. Une des majeures difficultés de cette étude concerne la complexité de la lecture stratigraphique des dépôts archéologiques des sites capsien et néolithiques, présents dans tout le territoire maghrébin, et localement nommées Rammadiya. Il s'agit, selon la littérature, de stations saisonnières, ou de campements de courte occupation annuelle, dont la composante principale est constituée de limon et de sables brûlés et noircies par l'action du feu, pierres brûlés, et restes de repas -surtout mollusques, dans la plupart des cas. A partir de 2002, une série de Rammadiya côtières néolithiques a fait l'objet des nouvelles fouilles stratigraphiques, dans le cadre d'un projet de reconstitution du peuplement holocène de la sebkha côtière de Halk el Menjel, en Tunisie. Une des principales Rammadiya du moyen holocène, SHM-1, a été fouillée en extension et à travers des tranchées, en employant les méthodes déjà testés dans des contextes similaires au Sultanat d'Oman. La lecture minutieuse des coupes archéologiques et des espaces fouillées nous a permis de reconnaître une série de macro-séquences d'occupation, structurées avec des aménagements de l'espace occupé évidents à partir de la première phase d'occupation directement sur le sous sol vierge. Des structurations concernent probablement le village et la gestion de ses limites, tandis que des empièvements, interrompus par des espaces vides circulaires interprétés comme trous pour l'emplacement des poteaux, sont visibles en extension, associées à des foyers, et ils permettent d'avancer des premières hypothèses sur la forme et la fonction des structures individualisés (cabanes ?) et sur la gestion des espaces de vie des communautés néolithiques nord africaines qui ont fréquenté la sebkha.

WS28-10 Gheorghiu DRAGOS

Invisible architectural features and the uses of indirect evidence.

ABSTRACT: There are many instances when there is no direct evidence for some architectural features that we suppose to have existed, therefore the excavator being constrained to use indirect evidence.

In this perspective, an interesting methodological study case seems to be the Chalcolithic tells of the lower Danube area.

Research on these tells did not revealed the use of palisades, as in the Balkans, but the study of the environment as well as the iconography of the local Chalcolithic traditions, could bring, complementary data which will support the existence of such architectural features. Additionally, experimental archaeology would support the inferences from the indirect evidence.

WS28-11 Stefano BIAGETTI
Giansimone POGGI
Savino DI LERNIA

Unearthing the hearths. Methods, problems, and preliminary results of an interdisciplinary research at Takarkori rockshelter's Fireplaces (Acacus Mts., Libya).

ABSTRACT: Fire and pyrotechnology constitute traditional topics in the archaeological research worldwide. A large number of papers has been produced, showing the interdisciplinary efforts performed by the specialists aiming at understanding this primary issue of the cultural evolution of humankind. Africanists and especially those working in Sahara desert have adopted peculiar techniques in order to sharpen their capacity of reading the past in a currently arid environment, where open-air fireplaces can be highly visible and recognizable. Matching part of such investigations can be the study of fireplaces during extensive excavation carried out in sheltered locations, aiming at completing and refining the perception of the whole Saharan archaeological landscape.

Examination of the analogies and/or anomalies between open air and cave/rockshelter sites is of the utmost importance in order to understand spatial organization and settlement systems of mobile groups, and the analysis of *structures évidentes* like the fireplaces can be significant. Past excavations in the Tadrart Acacus (South Western Fezzan, Libya) performed by the team of the Italian-Libyan Archaeological Mission have already enlightened the recurrence of combustion structures within rockshelter sequences. Hearts are generally well preserved, *imbriqués* inside of the same archaeological level and normally superimposed.

The phenomenon of the horizontal and vertical overlaying of fireplaces has been recorded during the excavation of Takarkori rockshelter (Tadrart Acacus) that underwent systematic research during latest years. The Takarkori project encompasses the excavation of preserved, large ancient surfaces, with a peculiar attention to positive stratigraphic units such as stone structures and combustion facilities. In this rockshelter the Holocene human occupation created complex palimpsests, affected by several erosional processes. The study of one of the most substantial features – the fireplace – can strengthen the archaeological interpretation where the loose or slightly compacted sediments of sandy matrix can represent faded echoes of the human occupation.

WS28-12 Alberto CAZZELLA
Giulia RECCHIA

Sleeping, eating, meeting, working: problems and methods in the study of structures in southern Italy settlements during the Bronze Age.

ABSTRACT: During the last years more attention was paid in prehistoric archaeology to the functional analysis of sites or parts of them in relation with the studies on the activities carried out: the diffusion of extensive excavations and interdisciplinary researches supported this trend. Several problems linked to the interpretation of intra-site structural evidence are still open: some attempts to analyse specific contexts and their methodological bases are taken into consideration as stimulus to define more precisely questions and ways to carry out research. For example, basic problems in the study of structures inside a settlement rise from the difficulty to distinguish (following reliable principles) residential structures from functional ones and to recognize the cycles of activity carried out in different areas. Starting from some case studies of Bronze Age southern Italy, the authors test the potential of a "global" functional approach to the study of roofed structures (not necessarily huts) and open activity areas equipped with small structures.

WS28-13 Franco MARZATICO

Houses of the alpine area during the Bronze age and Iron age, from the excavation to the hypothesis of reconstruction: some examples.

ABSTRACT: During the last forty years the graphic reconstructions of houses and settlements became also for the researchers in the alpine area an important way for presenting and popularizing the results of excavations. Starting from the data processing of the excavation, the graphic reconstructions are the last stage of the processes of interpretation, and they involve many methodological aspects which are the topic the paper which expounds some cases of study.

WS28-14 A. BERDYMURADOV

D. GIORGETTI

S. MANTELLINI

M. TOSI

The Kafir Kala Fortress: Pakhsa Techniques and Water Management combined in the Military Architecture of Sogdian Samarkand.

ABSTRACT: The Royal Fortress of Kafir Kala, built by the Sogdian rulers of Samarkand in the 5th century AD to control the southern access to the city, combining local traditions with Sasanian and Chinese military experiences from west and east, provides an unique window of observation on Central Asian architecture. Destruction by the Arab invasions between 680 and 720 AD has ensured a fair preservation of the site and its surroundings. The massive structure was built of pakhsa piling the clay from the vast net of irrigation canals the fortress directly overlooked. Excavations of the structures has been combined with those of the canals with an unified stratigraphical matrix as a single sedimentary process, using models largely derived from fluidodynamics.

Session WS29

Tuesday , 5 September 2006 / Mardi, 5 Septembre 2006

*Room 5.1., Faculty of Letters, Lisbon University
Salle 5.1, Faculté de Lettres, Université de Lisbonne*

The idea of enclosure in Recent Iberian Prehistory

L'idée d'enceinte dans la Préhistoire Ibérique récente

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SESSION'S ABSTRACT

In recent years, the archaeology of Recent Peninsular pre-history has gone through a truly empirical revolution. From North to South, from the Mediterranean to the Atlantic, there are few regions that have not been the source of surprises. This fast rate of discovery is made even more interesting by the curious context in which it has occurred: the increasing theoretical diversity in approaches to peninsular Prehistory. The empirical "finds" are now accompanied by different types of interpretation, giving rise to passionate debates, generating resistance from the more orthodox and reckless approaches to the more avant-garde ones. All this not only gives rise to fascinating discussion but also really shows the ideologic and contingent character of the production (construction) of knowledge (in this case archaeological knowledge).

One of the focuses of this dynamic concerns the problems raised by ditched enclosures and their role in the development of the Neolithic and Chalcolithic communities of the Iberian Peninsula. Our ideas on this subject were radically changed in the last decade and the subject quickly took on a central role in theoretical discussion. Many questions relating to scale, meaning, to school, to the centrality of theory and to the growth and autonomy of archaeology make the debate on enclosures, in general, and ditches, in particular, one of the most fascinating areas of contemporary Iberian pre-history.

Ranging from models that are based on World System or Peer Polity Interaction, to the more holistic approaches to human behaviour; from the strictest empiricism and functionalism, to materialism, passing through the most daring (type of) phenomenology and the insufficiencies, indecisions and linguistic prejudices that all of this generates, today, turn the debate surrounding these contexts, is one of the liveliest areas in the production of knowledge and in reflexion on archaeology.

The main aim of this session, to be included in the UISPP program, is to gather researchers from different regions in Iberia, with different theoretical perspectives and for the first time to present together the data and most significant contexts and to compare the different approaches. And because the phenomenon, or the idea, as Chris Scarre puts it, is of European expression, it is essential that researchers who have dealt with this problem in other European regions should be included in this debate centered on the Iberian Peninsula

SESSION PROGRAMME / PROGRAMME DE LA SESSION

09:00 **Oppening / Ouverture**

09:00-09:20 António Carlos VALERA (ERA Arqueologia, S.A.)

WS06-01 **Mapping the Cosmos. A cognitive approach to Iberia Prehistoric enclosures.**

09:20-09:40 Victor HURTADO

WS29-02 **El Territorio De Tierra De Barros (Badajoz, España) En El Iii Milenio A.N.E Desde La Perspectiva Del Modelo Centro-Periferia**

09:40-10:00 Teresa Orozco KÖHLER

Joan Bernabeu AUBÁN

WS29-03 **Los Recintos Neolíticos Como Expresión De Poder En El Mediterráneo Peninsular.**

10:00-10:20 Felipe CRIADO BOADO

Camila GIANOTTI García

Patricia MAÑANA-BORRAZÁS (Laboratorio de Arqueoloxía da Paisaxe. Instituto de Estudos Galegos Padre Sarmiento (CSIC-XuGa)

WS29-04 **Neolithic spatiality: concept and materiality**

10:20-10:40 José Enrique MÁRQUEZ ROMERO

Víctor Jiménez Jáimez (Universidad de Málaga, España)

WS29-05 **Claves Para La Discusión Sobre Los Recintos De Zanjas De La Prehistoria Reciente En La Península Ibérica**

10:40-11:00 Marcelo CASTRO

Francisca HORNOS

WS29-06 **La zona arqueológica de Marroquíes Bajos**

11:00-11:20 Manuel CALADO (Universidade de Lisboa, Portugal)

WS29-07 **As paisagens transfiguradas: fossos sinuosos neolíticos no Sudoeste peninsular**

11:20-11:40 Elena MORÁN

WS29-08 **Organização espacial do Povoado Calcolítico de Alcalar**

11:40-12:00 Pedro DIAZ-DEL-RIO

WS29-09 **Taking Variability Seriously: Scaling The Context Of Copper Age Aggregations In Iberia**

12:00-13:00 **Discussion**

Session WS31

Friday , 8 September 2006 / Vendredi, 8 Septembre 2006

*Room 11.02, Faculty of Law, Lisbon University
Salle 11.02, Faculté de Droit, Université de Lisbonne*

Middle to Upper Palaeolithic Transitional Industries Technological, Typological and Morphometrical characteristics

Federico BERNALDO DE QUIRÓS Universidad de León, Spain - decfbq@unileon.es
Álvaro ARRIZABALAGA Universidad del País Vasco, Vitoria, Spain - alvaro.arrizabalaga@ehu.es
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SESSION'S ABSTRACT

The ideas about Middle to Upper Transition have changed in the last decades, the idea of an abrupt replacement of the Mousterian by Upper Palaeolithic industries were challenged by the presence of the so called Transitional Industries.

The general form of this Transitional Industries was the presence of a strong Mousterian substrata and the presence of some Upper Palaeolithic elements. The coexistence of both were explained in different ways, like acculturation to evolution. The aim of the colloquium is to point together the raw data of this Transitional Industries in order to best understand the complex process of the Middle to Upper Palaeolithic transition.

SESSION PROGRAMME / PROGRAMME DE LA SESSION

09:15 **Opening / Ouverture**

09:15-09:45 F. BERNALDO DE QUIRÓS (Universidad de León, Spain)

WS31-01 **General perspectives about the Middle to Upper Palaeolithic Transition.**

09:45-10:05 A. KRIVOSHAPKIN (Siberian Branch, Russia)

WS31-02 **Middle to Upper Paleolithic Transitional Industries in Central Asia: Evidence from Uzbekistan**

10:05-10:25 K. KOLOBOVA (Siberian Branch, Russia)

- WS31-03** Variability of secondary treatment techniques in Late Middle/Early Upper Paleolithic industries of Gorny Altai (Russia).
- 10:25-10:45 V. SITLIVY
K. SOBCZYK
A. ZIEBA
N. MERCIER
H. VALLADAS
- WS31-04** Middle-to-Upper Palaeolithic Transition in Southern Poland: Technological contribution.
- 10:45-11:05 M. OTTE
J. KOZLOWSKI
F. BIGLARI
- WS31-05** L'Aurignacien au Moyen-Orient
- 11:05-11:30 **Break / Pause**
- 11:30-11:50 A. MARKS
K. MONIGAL
- WS31-06** Human occupation in a Late Glacial landscape: The Federmesser site complex at Lommel (Belgium).
- 11:50-12:10 V. CHIRICA
I. BORZIAC
- WS31-07** Industries du passage Paléolithique moyen-Paléolithique supérieur dans l'espace carpato-dniestrien
- 12:10-12:30 I. ORTEGA
F. GRIGOLETTO
L. BOURGUIGNON
J. RÍOS
- WS31-08** L'Aurignacien, le Châtelperronien et le Moustérien de tradition Acheuléenne aux Vieux Coutet (Creysse, Dordogne, France), un site de transition?: Quelques éléments de réflexion sur les comportements techniques.
- 12:30-12:50 N. CONNET
- WS31-09** Les racloirs châtelperroniens de la grotte du Renne à Arcy-sur-Cure (Bourgogne, France). Sont-ce des outils paléolithiques moyens ?
- 12:50-14:30 **Lunch / Déjeuner**
- 14:30-14:50 V. LHOMME
R. ROCCA
- WS31-10** Les dernières industries lithiques moustériennes d'Arcy-sur-Cure (Bourgogne, France). Un système de production lithique sans avenir ?

- 14:50-15:10 L. EIZENBERG
WS31-11 L'Aurignacien archaïque dans les Pyrénées centrales françaises
- 15:10-15:30 A. ARRIZABALAGA
M^a. J. IRIARTE
WS31-12 Existe-t-il le Castelperronien aux Cantabres?. Quelques réflexions d'abord le concept de transition au nord péninsulaire.
- 15:30-15:50 J. E. GONZÁLEZ
J. J. IBÁÑEZ
J. RÍOS
WS31-13 Les racines de la Transition. Variabilité culturelle avant le 40.000 aux Cantabres orientaux.
- 15:50-16:10 J. M. MAÍLLO FERNÁNDEZ
WS31-14 The Cantabrian Archaic Aurignacian: technology, typology and implications.
- 16:10-16:30 J. BAENA
E. CARRIÓN
F. CUARTERO
R. VELÁZQUEZ
L. DAPENA
M. ROCA
N. VARGAS
A. LÁZARO
S. CANO
D. MARTÍN
E. MORENO
M. MALAGÓN
M. ISIDRO
V. REQUEJO
M. LÓPEZ
I. MANZANO
WS31-15 Technological change and climate variability in the Cueva de El Esquilleu (Cantabria-Spain) sequence .
- 16:30-17:00 **Break / Pause**
- 17:00-17:20 M^a. GARCÍA
G. ADÁN
J. L. ARSUAGA
M. ARBIZU
D. ÁLVAREZ-LAÓ
WS31-16 L'industrie lithique de passage du Paléolithique moyen au supérieur de la grotte de El Conde: premières données.
- 17:20-17:40 A. C. PINTO

G. A. CLARK

WS31-17 Preliminary results about the lithic industry of The Middle-Upper Transition of Sopeña rockshelter (Onís, Asturias).

17:40-18:30 Discussion (Straus, L. G.; G. A. Clark)

ABSTRACTS / RÉSUMÉS

WS31-01 F. BERNALDO DE QUIRÓS (Universidad de León, Spain)

General perspectives about the Middle to Upper Palaeolithic Transition.

ABSTRACT: The Middle-Upper Paleolithic transition become a main investigation subject due to the inconsistencies founded in many of the classical approaches. The necessity of a new paradigma is based in the revision of many of the collections involved and the necessity of new directions in the research.

WS31-02 A. KRIVOSHAPKIN (Siberian Branch, Russia)

Middle to Upper Paleolithic Transitional Industries in Central Asia: Evidence from Uzbekistan

ABSTRACT: Northwestern Central Asia has been in the focus of archaeological research due to the fact that this territory represents a “transitional bridge” connecting the most ancient human populations of East Asia with western Eurasia during the Paleolithic. Information accumulated during the past 10 to 15 years provides new insight into the Stone Age history of human culture, particularly the history of Middle to Upper Paleolithic transition and appearance of Initial Upper Paleolithic complexes. The roughly penecontemporaneous appearance (ca. 50 - 40 ka ago) of such complexes together with the noted common technical-typological features of these collections allows us to make inferences about the transcontinental character of blade industries attributed to early periods of the Upper Paleolithic. The reason for such unification of industries seems to be most intricate. Whether it is a result of convergent technological development (an adaptational-functional model) or such similarity having been stipulated by the phylogenetic connections between the bearers of early Upper Paleolithic cultures is unknown at present. The presentation is focused on an analysis of the Obi-Rakhmat cultural sequence (Uzbekistan) that represents the most thoroughly investigated Middle/Upper Paleolithic locality in western Central Asia; it has yielded a chronologically well-dated stratigraphic sequence of several meters, thousands of lithics, comprehensive set of fauna remains and, recently, well-preserved human remains associated with a transitional lithic industry dated back at least to 50 kyr. The main aim of the presentation is to compare received results with already known information obtained from Late Middle - Early Upper Paleolithic industries of neighboring regions (Near East, Taurus-Zagros region, Russian Altai, and Eastern Europe).

WS31-03 K. KOLOBOVA (Siberian Branch, Russia)

Variability of secondary treatment techniques in Late Middle/Early Upper Paleolithic industries of Gorny Altai (Russia).

ABSTRACT: A presentation concerns the characteristics of secondary treatment of stone tools in the Middle and early Upper Paleolithic of the Gorny Altai. Special attention is given to a study of Transitional and Upper Paleolithic tool collections.

The work confirmed a basic thesis about the development of the majority of Middle Paleolithic industries passed within the limits of united culture; but, they do not give reasons to pick out any industrial versions.

Analyzed Upper Paleolithic industries are of autochthonic origin. Available data based on analyses of secondary treatment techniques is evidence about the gradual transformation of its. Changes are fixed

in the Middle Paleolithic time and continue to the final stages of Upper Paleolithic. However, those changes are the most noticeable during a transition period.

In that period it is possible to isolate two groups of the industries, the development of the secondary treatment of which begins noticeably differ from each other. Differences are rather fixed with the analysis of the general trends in secondary treatment development than with the straight quantitative comparison. Many common features which were inherited from the Middle Paleolithic assemblages are still remain. As a whole, these two groups of Paleolithic industries coincide with two lines of cultural development in Altai (karabomovskoy and ust'karakol'skoy) chosen previously.

WS31-04

V. SITLIVY
K. SOBCZYK
A. ZIEBA
N. MERCIER
H. VALLADAS

Middle-to-Upper Palaeolithic Transition in Southern Poland: Technological contribution.

ABSTRACT: The sites of Piekary IIa and of Ksiecia Jozefa display various models of blade production development and a significant technological variability during the Middle-to-Upper Palaeolithic transition. TL, OSL and AMS dating show that the Upper Palaeolithic blade technologies occurred parallel to the Middle Palaeolithic technologies (Levallois and “non-Levallois” methods) in a time-span from 50 to 32,000 B.P. Lithic assemblages from Ksiecia Jozefa show complex and unique tendencies in knapping types, in activities and in human behaviour.

WS31-06

A. MARKS
K. MONIGAL

Human occupation in a Late Glacial landscape: The Federmesser site complex at Lommel (Belgium).

ABSTRACT: The Levant has long been claimed as the corridor through which modern humans left Africa, revolutionizing the Paleolithic of the Near East and Europe by not only introducing “Upper Paleolithic” typology and technology but by replacing the indigenous Neanderthals. Yet, it is our opinion that in the Levant, small, cumulative shifts in the technological repertoires of Middle and Upper Paleolithic flintknappers are readily discernable and denote a transition *sensu stricto*. This paper focuses on the specifics of lithic technology and typology in use during this period and how our traditional organization of assemblages into a Pan-Levantine unilinear temporal scheme turns what was a dynamic technological process into static blocks of time related technological patterns. However, the lack of demonstrable technological breaks in the lithic systems from the Early Levantine Mousterian (type-D), through the Emiran, through the Initial Upper Paleolithic (Boker Tachtit , Level 4), to the Early Ahmarian precludes the use of the so called Levantine corridor for any large scale movement out of Africa at 50,000/40,000 bp that introduced new, “modern” technological patterns into the Levant .

WS31-07

V. CHIRICA
I. BORZIAC

Industries du passage Paléolithique moyen-Paléolithique supérieur dans l'espace carpato-dniestrin

RÉSUMÉ: Dans l'espace pris en considération il y a plusieurs types d'industries, mais les plus importantes sont ceux de transition du Moustérien au Paléolithique supérieur, attribués à la culture Brynzeni, avec les matériaux du niveau inférieur de la grotte Brynyeni I et des gisements Bobulesti VI et Scoc (entre le Prut et le Dniestr). On peut ajouter les matériaux du niveaux I et II de Ripiceni-Izvor (sur le Prut, en Roumanie). Il faut préciser que le niveau inférieur de Brynzeni est le plus ancien grâce à la présence des multiples formes moustériennes ; les niveaux d'habitat de Scoc, Bobulesti et

Ripiceni-Izvor sont plus tardifs, enrichis en éléments aurignaciens, mais à Ripiceni-Izvor les premiers niveaux appartenant au Paléolithique supérieur sont superposés sur les derniers habitats moustériens (niv. VI). Ici, on a identifié la « culture de Prut » (Ripiceni-Izvor, niv. Aurignaciens I-II) ou les éclats prédominant même dans les outils sur l'éclats, les pièces Levallois atteind 12-17 % , les raccloirs, 15-17 %, les raccloirs et les bifaces étant assez nombreuses.

A l'ouest de Prut, jusqu'à la Tissa, la situation est en peu plus complexe, car il n'y a pas de stratigraphie archéologique ou niveaux d'habitat peuvent démontrer une industrie de transition du Moustérien tardif vers l'Aurignacien précoce, mais seulement quelques technocomplexes avec des pièces de tradition moustérienne.

L'industrie de type Brynzeni est représentée par un groupe à aspect technico-typologique assez uniforme, par la technique de débitage et par la présence des pièces Levallois. Par exemple, dans les établissements de ce groupe, les nucléus à plusieurs plans de frappe prédominant par rapport à d'autres types de nucléus. Le pourcentage des plans de frappe des pièces redressées et facettées est très élevé (à Brynzeni, l'indice de facettage étroit, 25,44 ; large, 46,48 ; à Bobulesti – large, 43,33 ; étroit, 16,66), presque identique pour les éclats que pour les lames. Masis, il y a des nucléus développés à taille sousparallèle, des enlèvements avec nervure qui ont le rôle de produits diagnostiques du débitage.

Dans la grotte Butesti il y a une industrie avec la technique Levallois, mais avec la présence de la taille sousparallèle. Les groupes d'outils sont : Levallois, 49 % ; Moustérien, 18,5 % ; Paléolithique supérieur, 9 % ; denticulé, 1,9 %. On a découvert un fragment – la partie inférieure d'une pointe foliacée.

Probablement, pendant une longue période, dans les Carpates et à l'est de ceux-ci, les industries moustériennes coexistaient à celles du Paléolithique supérieur. Il y a des établissements précoces du Paléolithique supérieur ou « la voie évolutioniste » et « en sauts » se reflète.

WS31-08

I. ORTEGA
F. GRIGOLETTO
L. BOURGUIGNON
J. RÍOS

L'Aurignacien, le Châtelperronien et le Moustérien de tradition Acheuléenne aux Vieux Coutet (Creysse, Dordogne, France), un site de transition ? : Quelques éléments de réflexion sur les comportements techniques.

RÉSUMÉ : Le site du Vieux Coutet est situé sur la moyenne terrasse de la Dordogne. Il compte trois niveaux archéologiques : un niveau moustérien caractérisé par la présence du débitage Levallois et de bifaces (MTA B), un niveau châtelperronien marqué par la présence de pointes de Châtelperrons et par un débitage de petits lames et produits allongés et enfin un niveau Aurignacien ancien caractérisé par la présence de plusieurs productions laminaires et lamellaires.

L'association de ces trois niveaux nous offre donc la période dite de transition entre le Paléolithique moyen et le Paléolithique supérieur si rare en sites de plein air. La présence de ce trois niveaux sur une même site ouvre de nouvelles perspectives en vue de mieux caractériser cette période du Paléolithique.

WS31-09

N. CONNET

Les racloirs châtelperroniens de la grotte du Renne à Arcy-sur-Cure (Bourgogne, France). Sont-ce des outils paléolithiques moyens ?

ABSTRACT: The Chatelperronian appears in Western Europe as the last lithic industry often showing an important part of typological scrapers. In later Upper Palaeolithic industries, even if the scrapers are sometimes indicated by the authors, their proportion is often insignificant and they form a represented groups as not very consistent. In the Chatelperronian of Arcy-sur-Cure, besides their number, they appear as a consistent group, answering stable techno-functional standards. In this presentation, we propose a comparison of this data with those available on the Middle Palaeolithic assemblages.

The scrapers, in the lithic industries of the 5 chatelperronian layers, form important groups representing between 8 and 20 % of the tools.

The site of Arcy-sur-Cure is also one of the rare sites showing a late Middle Palaeolithic sequence enough long and directly located under the Chatelperronian occupations. This direct superimposing of lithic industries gives the possibility to confront the data between lithic production systems using the same raw materials.

The presence of such instruments in Chatelperronian can it be understood as the persistence of characters inherited from Middle Palaeolithic ?

WS31-10V. LHOMME
R. ROCCA

Les dernières industries lithiques moustériennes d'Arcy-sur-Cure (Bourgogne, France). Un système de production lithique sans avenir ?

RÉSUMÉ: La séquence moustérienne des grottes d'Arcy-sur-Cure (nord Bourgogne, France) montre, à travers les grottes du Bison, du Renne et de l'Hyène, la succession de trois horizons culturels : un Moustérien apparenté au Charentien à la base, puis un Moustérien à denticulés et enfin un Moustérien final qui précède les industries châtelperroniennes. Cette séquence stratigraphique se situe à la fin du Pléniglaciaire inférieur et durant la première partie du Pléniglaciaire moyen.

La dernière industrie paléolithique moyen, appelée ici Moustérien final, a été mise au jour dans le porche de la Grotte du Bison (couches F et E) et dans la partie profonde de la grotte du Renne (couche IV2 de la rotonde). Cette industrie lithique montre une structuration techno-économique caractérisée par une production exclusive d'éclats/supports par débitage de conception Levallois et un corpus de types d'outils moustériens classiques : racloirs variés et outils à bords convergents.

Sur les plans technique et typologique cette dernière industrie moustérienne ne montre aucun signe d'évolution vers une gestion de type Paléolithique supérieur. S'agit-il de la dernière manifestation d'un système technique voué à disparaître ?

WS31-11

L. EIZENBERG

L'Aurignacien archaïque dans les Pyrénées centrales françaises

RÉSUMÉ: L'Aurignacien archaïque, originellement défini comme « Protoaurignacien » par Georges Laplace (1966), est depuis lors documenté dans diverses régions du sud-ouest de l'Europe notamment en France, en Espagne et en Italie. Dans le sud de la France, les études ont principalement porté sur des gisements situés dans les Pyrénées occidentales (Isturitz, Gatzarria) et, plus à l'Est, sur des gisements languedociens (Laouza, Esquicho-Grapaou). Le secteur intermédiaire reste donc mal connu. L'étude techno-typologique, notamment dans sa dimension lamino-lamellaire, de séries lithiques récoltées dans cette zone, peut ainsi aider à mieux appréhender ce phénomène dans sa dimension synchronique. Le rapprochement de divers assemblages montre de quelle manière l'Aurignacien archaïque des Pyrénées centrales s'inscrit ou s'écarte de la définition classique que l'on donne de ce technocomplexe. A un niveau diachronique, l'étude de ce type de séries peut également s'intégrer dans les problématiques abordées dans le cadre du passage du Paléolithique moyen au Paléolithique supérieur.

WS31-12A. ARRIZABALAGA
M^{re}. J. IRIARTE

Existe-t-il le Castelperronien aux Cantabres?. Quelques réflexions d'abord le concept de transition au nord péninsulaire.

RÉSUMÉ: La présence, ou non, d'occupations attribuées au Castelperronien au Nord péninsulaire et, d'une manière générale, la transition entre le Paléolithique moyen et le supérieur a été pendant les dernières années l'un des sujets clef dans la recherche archéologique. Dans cette communication nous voulons faire une lecture critique du registre Cantabrique (stratigraphique,

typologique, chronologique, économique, paléoenvironnemental, du comportement, etc.) , en présentant, finalement un panorama très ouvert, dans lequel est difficile de se décanter par un unique modèle de transition parmi les alternatifs qui, au fur et à mesure, sont proposés.

WS31-13 J. E. GONZÁLEZ
J. J. IBÁÑEZ
J. RÍOS

Les racines de la Transition. Variabilité culturelle avant le 40.000 aux Cantabres orientaux.

RÉSUMÉ: Les modèles interprétatifs sur la transition en Europe entre le Paléolithique Moyen et Supérieur se sont occupés surtout de structurer les continuités et les changements connus à partir de 40.000 bp. Presque tous les modèles produits pendant les derniers années ont besoin et assumé de façon plus ou moins explicite que la période antérieure, c'est-à-dire la fin du Paléolithique Moyen, est caractérisé pour la stabilité des comportements des groupes humaines de la période. Grâce aux données connues maintenant aux Cantabres orientaux nous discuterons cette partie des modèles et montrerons la variabilité des sociétés de la région avant 40.000. Plus spécifiquement, nous avons l'opinion de que l'image de stabilité c'est pour la bonne partie un artifice dérivé de l'emploi de techniques d'analyses inadéquates, surtout dans l'étude de l'outillage en pierre taillée.

WS31-14 J. M. MAÍLLO FERNÁNDEZ

The Cantabrian Archaic Aurignacian: technology, typology and implications.

ABSTRACT: The Archaic Aurignacian is the first Aurignacian technocomplex located in the Cantabrian region. The Aurignacian sites are scarce in this region, however they are very important such as Cueva Morín, Labeko Koba, El Castillo and La Viña. Typologically it is characterized by a high rate of Dufour bladelets, lateral retouched blanks and sidescrapers. Technologically we define the Archaic Aurignacian by *schemes opératoires* of prismatic cores type for obtaining blades, carinated endscrapers and carinated burin types for obtaining bladelets and Discoid type for obtaining flakes. We link this technocomplex to the cantabrian transitional technocomplexes, specially with the Chatelperronian and its implications in the Middle to Upper Palaeolithic Transition in the cantabrian region.

WS31-15 J. BAENA
E. CARRIÓN
F. CUARTERO
R. VELÁZQUEZ
L. DAPENA
M. ROCA
N. VARGAS
A. LÁZARO
S. CANO
D. MARTÍN
E. MORENO
M. MALAGÓN
M. ISIDRO
V. REQUEJO
M. LÓPEZ
I. MANZANO

Technological change and climate variability in the Cueva de El Esquilleu (Cantabria-Spain) sequence .

ABSTRACT: El Esquilleu Cave (Cantabria-Spain) is one of the most important sequences of the Upper Pleistocene of Spain. The site is located in the rocky landscape of Picos de Europa mountains, within a dense distribution of Mousterian sites. Dates obtained shows that this part of Iberian Peninsula has a very recent Mousterian occupation. With more than 35 stratigraphical levels, plenty of archaeological and paleoenvironmental remains, this site provides an exceptional study case of the

human behaviour changes during the Middle Palaeolithic. The study of this material has shown important changes both in technical and technological issues, in a clear correlation to climate changes.

WS31-16

M^a. GARCÍA
G. ADÁN
J. L. ARSUAGA
M. ARBIZU
D. ÁLVAREZ-LAÓ

L'industrie lithique de passage du Paléolithique moyen au supérieur de la grotte de El Conde: premières données.

ABSTRACT: Tous près de Santo Adriano de Tuñón, dans la région centrale d'Asturies (N de l'Espagne), se trouve la grotte de El Conde, fouillé premièrement en 1915 par le Comte de La Vega del Sella, et postérieurement par d'autres chercheurs dans les années 1962 et 1965. Le site est objet d'un Project de recherche pluridisciplinaire dès le 2001. Les nouveaux donnés chrono stratigraphiques pointent vers une période entre 40 et 30 ka, dans lequel on détache une industrie lithique qu'on peut appeler comme de passage du Paléolithique moyen au supérieur, avec des éléments qui continuent l'ensemble industriel du premier et d'autres qu'appartient au début du second.

WS31-17

A. C. PINTO
G. A. CLARK

Preliminary results about the lithic industry of The Middle-Upper Transition of Sopeña rockshelter (Onís, Asturias).

ABSTRACT: Sopeña is a limestone rock shelter 400 m high over sea level in eastern Asturias (northern Spain). A test excavation of 2x1 m reached 3 m. depth and discovered a continuous stratigraphic sequence that starts possibly in the Gravettian (level I), descending after 10 Early Upper Palaeolithic levels (levels II to XI) down to the final Mousterian (levels XII to XV) and it is thought that under these there are even older archaeological levels. The very early dates offered for the Early Upper Paleolithic in the northern Iberian Peninsula, and particularly those of el Castillo cave (Santander), quite near of Sopeña, enhance the interest of this new site to shed light in some of the most debated issues relating to the age of the disappearance of the Mousterian and the start of the EUP. Although with comparatively more blades than the Mousterian levels, the EUP of Sopeña does not seem ascribable to the Aurignacian given the scarcity or absence of type fossils. In this paper we present a more detailed typological analysis of lithic materials from the levels nearing the Middle to Upper Palaeolithic transition in Sopeña, levels IX to XV as well as new AMS dates.

Session WS32

Friday, 8 September 2006 / Vendredi, 8 Septembre 2006

*Room 5.2, Faculty of Letters, Lisbon University
Salle 5.2, Faculté de Lettres, Université de Lisbonne*

Interdisciplinary Studies In Human Evolution

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SESSION'S ABSTRACT

Both the rock art either the more recent philosophical texts reveal a typically human characteristic: the man's reflection on himself and his role in the world. For that reason Man always worried to classify and systematize the elements that surround him. Following this logic, he also tried find his place in the natural world, and for that it is necessary to know his origins. However this evolutionary exercise, when applied to the human species, finds a series of difficulties and impediments difficult to overcome. In that sense, the understanding of the Human Evolution should have in consideration a multiplicity of approaches. There are hiatuses that don't allow rebuild, with certainty, from beginning to end, the history of the human evolutionary past. The overcome of these hiatuses is only possible as a result completion of the complementarity that an interdisciplinary approach allows.

Taking into account all these elements, the Group of Studies of Human Evolution (GEEvH) tries to develop a body of research that demonstrates the importance of the crossing of perspectives coming from the most varied branches of the science, for knowledge of the Man's run since about 8 million years witch separate anatomically modern Human from our closer relatives, the chimpanzees. With that purpose, GEEvH has been developing investigations in the following areas: archeology, anthropology, biology of the skeleton, paleodemography, primatology, ethology and genetics. From this exchange of theories and methodologies can appear new insights that allow completing the gaps separating us of the complete knowledge of human history.

RÉSUMÉ DE LA SESSION

L'art Préhistorique ainsi que les textes philosophiques les plus récents révèlent une caractéristique typiquement humaine: la réflexion de l'homme a propos de lui-même et de son rôle dans le monde. L'espèce humaine a toujours eu besoin de classer et systématiser les éléments qui lui entourent vis-à-vis la détermination de sa place au Monde Naturel, indissociable de ses origines. Cependant, cet exercice, dans le cadre de notre espèce, trouve toute sort d'obstacles difficiles à surmonter. La compréhension de l'Homme doit nécessairement contempler une multiplicité d'approches. Il y a des espaces vides dans notre compréhension de l'histoire du passé évolutionnaire humain. Le remplissage de ces espaces vides seulement devient possible, dans le cadre d'un abordage qui prend en considération l'avantage d'une complémentarité inhérent à l'approche interdisciplinaire.

En prenant en considération tous ces éléments, le Groupe d'Études en Évolution Humaine (GEEvH) essaye de développer un ensemble d'enquêtes démonstratifs de l'importance du croisement de

perspectives provenant des branches les plus variées de la science, pour la connaissance de l'histoire évolutive humaine le long des 8 million d'années qui nous séparent a nous, hommes anatomiquement modernes, de nos parents les plus proches, les Chimpanzés.

GEEvH développe des enquêtes aux domaines de l'archéologie, anthropologie, biologie du squelette et paleodémographie, primatologie, éthologie et génétique. Cet échange de théories et de méthodologies permettront peut-être la parution des perspectives innovatrices, capables de éclaircir des moments de l'histoire humaine ou des ombres, cependant, demeurent.

SESSION PROGRAMME / PROGRAMME DE LA SESSION

- 09:00 **Opening / Ouverture**
- 09:00-09:20 A. SOUSA (Coimbra, Portugal)
WS32-01 **Interdisciplinary study of a skeletal sample recovered from Biblioteca Municipal do Porto.**
- 09:20-09:40 S. CARVALHO (Coimbra, Portugal)
 T. MATSUZAWA (Kyoto, Japan)
 C. SOUSA (Lisboa, Portugal)
 Eugenia CUNHA (Coimbra, Portugal)
WS32-02 **Hammers, anvils & nuts: Chimpanzees technology? Applying the concept of “Chaîne Opératoire” to “nut-cracking” – Interdisciplinary research.**
- 09:40-10:00 Alejandro BONMATÍ (Madrid, Spain)
 C. LORENZO (Tarragona, Spain)
 Juan Luis ARSUAGA (Madrid, Spain)
WS32-03 **AL 288-1 vs. sts 5/sts 14: A comparative study of postcranial development.**
- 10:00-10.20 David GONÇALVES (Algueirão, Portugal)
WS32-04 **Radiology's contribution on cremations studies.**
- 10:20-10:40 Rui DA COSTA MARQUES (Sesimbra, Portugal)
 Cristina DA SILVA CRUZ (Coimbra, Portugal)
WS32-05 **Function and Origins of Language: recent genetic mutation or ancient innovation? What are the functions of these adaptation?**
- 10:40-11:00 M. MARTÍN-LOECHES (Madrid, Spain)
WS32-06 **Working memory and modern human mind.**
- 11:00-11:20 Ricardo GODINHO (Lisboa, Portugal)
WS32-07 **Colégio de Santo Antão-o-Novo: potencialidades de um estudo bio-antropológico de um período histórico aplicado a contextos pré-históricos.**
- 11:20-11:40 Sandra ASSIS (Condeixa-a-Nova, Portugal)

- WS32-08** Marcadores de stress ocupacional numa amostra de esqueletos. Abordagem interdisciplinar.
- 11:40-12:00 Vânia CARVALHO (Leiria, Portugal)
- WS32-09** A Etologia e a Arte Paleolítica. Cervídeos e caprídeos na arte paleolítica do Vale do Côa
- 12:00-12:20 Ana Maria SILVA
Maria Teresa FERREIRA
- WS32-10** Diet and dental health of the Late Neolithic/Chalcolithic sample from Praia das Maças (Sintra, Lisbon)
- 12:20-12:40 Ann MARGVELASHVILI
- WS32-11** Dmanisi dental remains morphology
- 12:40-13:00 Discussion

ABSTRACTS / RÉSUMÉS

- WS32-01** A. SOUSA (Coimbra, Portugal)
Interdisciplinary study of a skeletal sample recovered from Biblioteca Municipal do Porto

ABSTRACT: The project that here we present has the goal know better the characters anonymous that were part of a disturbed period of the Portuguese history that was marked by wars, diseases, epidemics (cholera), hunger. For such, we propose an interdisciplinary and transdisciplinary study that including historical, archaeological and anthropological data allows elucidate us on the happened facts.

The skeletons that they will be studied, were exhumed of the place corresponding to the actual Municipal Library of Porto, place of the Old Convent of Santo António of the City (Antigo Convento de Santo António da Cidade), that after the disentanglement worked as campaign hospital, and later as burial space - Cemetery of Santo Ildefonso.

They will be object of our study 49 exhumed individuals of 12 inhumation graves ditches. Although in most of the cases they have recovered several individuals of the interior of a same ditch, we are facing a necropolis of individual inhumation where a group of ditches was reused continually.

On behalf of the materialization of the proposed objective, will be done firstly a summary analysis of the main visible morphologic alterations of the surface of the bones. The inference of the taphonomic alterations of the skeletons will have for base the contextualization of the anthropological record tends for base the type of the soil and the different action of taphonomics agents. We also intend do a paleodemographic characterization. For such it is necessary establish the age to the individuals' death and the sexual diagnosis. Continuously will be done an analysis of the metric traits in way to determinate certain several parameters as the robustness index, flattening index and stature. Equally will take place the analysis of the non- metric traits. (...)

- WS32-02** S. CARVALHO (Coimbra, Portugal)
T. MATSUZAWA (Kyoto, Japan)
C. SOUSA (Lisboa, Portugal)
Eugenia CUNHA (Coimbra, Portugal)

Hammers, anvils & nuts: Chimpanzees technology? Applying the concept of “Chaîne Opératoire” to “nut-cracking” – Interdisciplinary research.

ABSTRACT: “Nut cracking” behaviour in natural habitat has been reported since 1951, in different communities of chimpanzees and today it’s recognised as cultural behaviour. Recent study indicate that chimpanzees recognize the function of a tool and adapt it to execute more than just its function, actually transporting it, substituting an original raw material and reusing it, if necessary, in order to optimize a task. For this project we combined primatological and archaeological methodologies during fieldwork in Guinea and attempted to detect an operational sequence by means of direct and indirect observation, during the practice of nut-cracking by wild chimpanzees. Do we have a “Chaîne Operatoire” in this process? Can we talk about “nut-cracking” typology and technology? These questions involve a complex cognitive capacity which is, often, exclusively related with human primates.

WS32-03

Alejandro BONMATÍ (Madrid, Spain)
C. LORENZO (Tarragona, Spain)
Juan Luis ARSUAGA (Madrid, Spain)

AL 288-1 vs. sts 5/sts 14: A comparative study of postcranial development.

ABSTRACT: Differences in developmental patterns recognized between modern humans and great apes have also been studied in early members of the human lineage. The chronological age and somatic development in fossil human individuals is generally estimated based on either dental calcification or postcranial maturation criteria, but rarely have these been considered in together in a single individual. The present study relies on the dental and postcranial development seen in the *Australopithecus africanus* specimen “Lucy” to assess the plausibility that the Sts 5 cranium and Sts 14 partial skeleton from the site of Sterkfontein (South Africa) represent a single individual. Further, dental and postcranial features of both specimens will be considered to establish the relationship of chronological age and somatic development.

WS32-04

David GONÇALVES (Algueirão, Portugal)

Radiology’s contribution on cremations studies.

ABSTRACT: Computerized axial tomography is becoming a precious tool for archaeosciences. The study of cremations has strongly benefited from radiology’s development, mainly in cases of secondary cremation burials usually deposited in cinerary urns. Among the main advantages is the possibility of identifying the cinerary character of any given vase before proceeding to its excavation. The radiological probe allows also to identify the kinds of material concealed by the vase by analysing their relative density. One other advantage relies on the possibility of planning a excavation strategy which is compatible with the distribution and kind of material found on the cinerary urn. The poster to display will present some case studies from cremation necropolis of Roman and Iron Age origin situated in portuguese territory.

WS32-05

Rui DA COSTA MARQUES (Sesimbra, Portugal)
Cristina DA SILVA CRUZ (Coimbra, Portugal)

Function and Origins of Language: recent genetic mutation or ancient innovation? What are the functions of these adaptation?

ABSTRACT: On one hand, we try to discuss the anatomical, morphological, cerebral and skeletal themes relevant to the origin and evolution of language, allowing us to understand the advantages that this characteristic confers to humans; on the other hand, we observe the fact that language, as an excellent adaptation, enables us to maximize our reproductive fitness. We also acknowledge the fact that this is an essential ability in the context of our strategies for obtaining reproductive partners, being an ethological perspective that sustains that language, along with the perfect form of bipedality, a distinct characteristic of our species.

Therefore, the objective is to give a broadened vision of the possible evolutive paths towards one of the most distinctive characteristics of our species – articulated verbal language – and to present some of the functions this adaptation contains.

We start by presenting some of the “communication modes” we can witness in the animal kingdom specifying, then, what composes the verbal articulated language we use. This exercise shows basic concepts of cerebral external morphology and functional areas in association, as well as the structures

involved in the dynamic of the vocal apparatus. The evidences related to the vertebral channel of thoracic vertebrae are, also, taken in account.

Consecutively, two origin of language models are illustrated. The first points towards a sudden and recent genetic mutation, which altered the cerebral software, preparing it for these functions. The other defends an ancient innovation, naturally selected as a characteristic, which presents very clear advantages for our species.

Lastly, we present the final comments this exploratory paper allows.

WS32-06

M. MARTÍN-LOECHES (Madrid, Spain)

Working memory and modern human mind.

ABSTRACT: A recent proposal on how modern mind emerged will be described and developed. According to this proposal, a single additive genetic mutation yielded enhanced working memory (EWM) capacity in our species. As a consequence, Homo sapiens became able to transiently store and actively manipulate more information in the mental framework, resulting in a noticeable enhancement of our cognitive abilities. Among these, language was particularly favoured, developing into a highly complex hierarchical system. It is also proposed that EWM could be caused by an increase in the number of neurons that can be activated simultaneously and, then, that EWM could have occurred in an already anatomically modern brain.

Session WS34

Saturday, 9 September 2006 / Samedi, 9 Septembre 2006

*Room 6.1.56, Faculty of Sciences, Lisbon University
Salle 6.1.56, Faculté de Sciences, Université de Lisbonne*

Symbolism in Rock Art

Le Symbolisme dans l'art Rupestre

organized by / organisé par

Fernando COIMBRA	Universidade de Salamanca, Spain – coimbra.fernando2000@hotmail.com
Léo DUBAL	Virtual Laboratory for Archaeometry, La Canourgue, France – dubal@archaeometry.org

SESSION'S ABSTRACT

Strikingly similar Rock Art Symbols - painted or engraved - have been found all over the world. Whatever types of symbols are considered, e.g.: iconical (such as : stroke, pubic triangle, hand, foot, horned head, orant, a.s.o.) or artifactiform (such as paddle, shoe print, horseshoe, metallic artifacts, a.s.o.), or those one could call "initiativ" (such as: cupmark, concentric circle, spiral, labyrinth, cruciform, yin-yang rose, pentagramme, snake-like, disk and crescent, a.s.o.), a comprehensive inventory remains to be made. The meaning of Rock Art Symbols can of course diverge or even be non unique. Those symbols bring unpalatable difficulties to the one who tries to decipher their meaning(s). Some researchers believe those difficulties too large to be dealt with, while others tend to imagine too much of subjective meanings.

Our point of view attempts to stay between those two extremes, based on the conviction that scientific conclusions of their interpretation are possible. In this respect, it is most important to notice that some symbols do not only appear in Rock Art but also on pottery, metal works or other artefacts and even on monuments. This presence on other materials may be a leading thread to analyze how a symbol works.

As Mircea Eliade used to say, "The danger of the studies about symbolism lays on hasty generalizations". This researcher pointed out the importance of symbolism in the primitive thinking and its fundamental role in the life of traditional society. Since Rock Art is the oldest archive of Mankind activities, it is of prime importance to better understand the cognitive abilities of our ancestors through the symbols they carved onto the rocks.

RÉSUMÉ DE LA SESSION

La similarité des symboles trouvés dans des sites d'Art rupestre de tous les continents est frappante, p.ex.: cupule, trait, triangle pubien, main, pied, serpentiforme, cercle concentrique, spirale, labyrinthe, croix, carré, tête cornue, face anthropomorphique, disque et croissant, étoile, palette, semelle de chaussure, fer à cheval, artefact métallique, pentagrammes, etc. L'inventaire complet reste à faire...

La signification des symboles présents dans l'Art rupestre peut, bien sûr, diverger voir même ne pas être unique. Ces symboles sont porteurs d'encombrantes difficultés pour celui qui tente de déchiffrer leur(s) signification(s). Certains chercheurs se complaisent à croire que la tâche est simplement impossible, alors que d'autres tendent à imaginer trop de significations subjectives.

Notre point de vue vise à rester entre ces deux extrêmes. Il se base sur notre conviction que des conclusions *quasi*-scientifiques de leurs interprétations sont possibles. Il est essentiel de remarquer qu'au moins quelques symboles apparaissent non seulement dans l'Art rupestre, mais aussi sur des poteries, des outils métalliques ou d'autres artefacts voire même des monuments. Cette présence sur d'autres supports est un fil conducteur à une meilleure compréhension de la manière dont un symbole *marche*.

Comme Mircea Eliade avait l'habitude de le dire, "Le danger des études sur le symbolisme réside dans les généralisations hâtives". Ce chercheur soulignait l'importance du symbolisme dans la pensée primitive et son rôle fondamental dans la vie de la société traditionnelle. Comme l'Art rupestre constitue la plus ancienne archive des activités humaines, il est de toute première importance de mieux comprendre les capacités cognitives de nos ancêtres grâce aux symboles qu'ils ont tracés sur la roche.

Dans ce symposium thématique, toutes les communications - qu'elles soient de caractère théorique ou empirique - traitant de l'interprétation des symboles dans l'Art rupestre sont les bienvenues.

SESSION PROGRAMME / PROGRAMME DE LA SESSION

09:00-09:10 (COIMBRA and DUBAL)

Presentation

09:10-09:25 Leo DUBAL

WS34-01 **Faceless anthropomorphic symbols: the shift from men to gods.**

09:25-09:40 Fernando COIMBRA (Salamanca, Spain)

WS34-02 **The pentagram in rock art: some interpretive possibilities.**

09:40-09:55 Terence MEADEN (Oxford, UK)

WS34-03 **Spirals and lozenges in the rock art of Britain and Ireland.**

09:55-10:10 Nobuhiro YOSHIDA (Hiroshima, Japan)

WS34-04 **Symbolism in Rock Art of Japan.**

10:10-10:25 George DIMITRIADIS (Philippi, Greece)

WS34-05 **The bull horn symbolism in Dionysus cult as coming out from the Prehistoric rock art iconography.**

10:25-10:40 Carmelo PRESTIPINO (Pallare, Italy)

WS34-06 **La simbologia pediforme nell'entroterra ligure.**

10:40-10:55 Leo DUBAL

WS34-07 **Footprint and Handprint symbols, having or being?**

- 10:55-11:10 Terence MEADEN (Oxford, UK)
WS34-08 **Circles and cupmarks in Neolithic art in Britain.**
- 11:10-11:25 George ILIADIS (KRINIDES GREECE)
WS34-09 **Labyrinths: changing societies, changing symbols?**
- 11:25-11:40 Adolfo ZAVARONI (Reggio Emilia, Italy)
WS34-10 **On the symbolism of net-patterned and ruled rectangles from the Neolithic to the Iron Age.**
- 11:40-11:55 Nuno RIBEIRO (Sobral de São Miguel, Portugal)
 Susete FERREIRA (Sobral de São Miguel, Portugal)
 Jorge FERREIRA (Sobral de São Miguel, Portugal)
WS34-11 **Open air Rock Art in the valleys of Ceira and Alva rivers - Some symbols.**
- 11:55-12:10 Nobuhiro YOSHIDA (Kitakyusyu, Japan)
 Kiyoshi ABE (Tokyo, Japan)
WS34-12 **Symbolism in Rock Art.**
- 12:10-12:25 Giancarlo SANI
WS34-13 **Circles with cupmarks: in search of a possible meaning.**
- 12:25-12:40 Jose GALOVART (Vigo)
WS34-14 **Le Mont Pindo de Galicia et les pétroglyphes préhistoriques.**
- 12:40-12:55 Dusko Aleksowski
WS34-15 ---
- 12:55-13:10 Stevce Donev
WS34-16 ---

ABSTRACTS / RÉSUMÉS

- WS34-01** Leo DUBAL (France)
Faceless anthropomorphic symbols: the shift from men to gods.

ABSTRACT: Until Neolithic Era, faceless anthropomorphic symbols seem to refer to human, and faced or masked figures to refer to gods. Later, with the emergence of individuality, the situation is reversed, Gods lose their face while human win one.

- WS34-02** Fernando COIMBRA (Salamanca, Spain)
The pentagram in rock art: some interpretive possibilities.

ABSTRACT: The pentagram, or five pointed star, is a symbol that appears in the rock art of countries like Portugal, Spain, Andorra, France, Italy and Austria. There are examples dated from

Bronze Age, Iron Age and others from the Middle Ages. Their meaning is not always easy to understand, but there are some cases that allow an easier approach to their symbolism.

In this paper, the author presents some examples of pentagrams in rock art whose associations with other engravings make possible their interpretation. He will also consider the presence of this symbol in artefacts like pottery, coins, good-luck charms, shields and in monuments like funerary tombstones, and medieval churches, among other examples, because some of these cases help to understand better the pentagrams that appear in rock art.

The survival of this symbol, in the present days, as a charm against the “evil-eye” among Portuguese and Italian peasants, will be also considered as a “clue” for the research about the pentagram.

WS34-03 Terence MEADEN (Oxford, UK)

Spirals and lozenges in the rock art of Britain and Ireland.

ABSTRACT: Typical examples of carved spirals and coexisting lozenges in the Neolithic rock art and megalithic art of the British Isles are considered. Discussion and analysis includes the examination in context of left-turning and right-turning spirals together with the two forms of paired returning spirals. In addition, examples involving the juxtaposition of spirals and lozenges are considered, and their interpretative consequences deduced.

WS34-04 Nobuhiro YOSHIDA (Hiroshima, Japan)

Symbolism in Rock Art of Japan.

ABSTRACT: For 26 years, we have found 4500 engraved rocks in Japan scholarshiped by Ministry of Science and Education and identified a lot of rock-wall paintings. The most remarkable are paintings at old chambered tombs in the 500's A.D., for they are similar to ancient Egyptian, Korean ones.

Other notable ones are cupules and petroglyphs found at 850 sites, because 40% of them are similar to European or American ones, which implies that waves of immigrations and diffusions carried them to the Far East. We intend to analyze the typical symbols of Rock Art with comparative studies on the western and the eastern symbols of rock art.

WS34-05 George DIMITRIADIS (Philippi, Greece)

The bull horn symbolism in Dionysus cult as coming out from the Prehistoric rock art iconography.

ABSTRACT: For the primitive and prehistoric societies mythology isn't only simple tales who describe different ancestral events but is mixed with the ordinary life of the tribe. In this sense mythology founds the culture. The culture of bull was born in the Upper Palaeolithic time and spread around the Mediterranean area: evidences are present by rock paintings and engravings in Spain, the Italian and Balkan Peninsula until the bank of the Caspian Sea in Azerbaijan. The same diffusion pattern was reserved also to the olive tree and wine plants culture. The demon of the forest called Dionysus, which frequently is represented as a shaman in a lot of cave paintings, on pottery decorations handling a bend alpenstock, symbol of the regeneration, is also the demon of fertility for the pastors and the beekeepers. If now we consider these images as shamanistic elements (cf. Lascaux Cave) is clear that the Dionysus is the bull spirit, which was expressed later in Greek culture as Zeus and frequently appeared as bull (cf. Venus rapture). Zeus was born according of the mythological version in a 'grotto' meanwhile Curetas and Datiles playing bronze age instruments made by bull horns. The expressed concept is the same: “cult” horns, expression of the fertility (cf. moon $\frac{3}{4}$ shape). We are in front of social/culture elements which are detect how the ancient and prehistoric and tribal mentality was organized in a system based on the Goodness epiphany. Finally when we talk about the horns forms we can suggest that in the prehistoric culture of Taurus is high probably to be connected with the fertility, the birth and the death, as qualities of the Mother Goodness Earth. In the same time can be also considered according the cosmogonic mythological tales as a primitive entity is well stress with the world sacrifice.

WS34-06 Carmelo PRESTIPINO (Pallare, Italy)**La simbologia pediforme nell'entroterra ligure.**

ABSTRACT: L'incisione pediforme è particolarmente diffusa nell'arte rupestre delle Alpi italiane; simili segni si trovano sul monte Bego, in Val Camonica e nella Savoia. L'interpretazione di questo simbolo passò, nel cammino del tempo, attraverso un meccanismo culturale che generò varie leggende che - pur diversificandosi per i protagonisti delle stesse - rispondono sempre ad un ben preciso meccanismo di ridefinizione culturale del simbolo stesso, per inquadrarlo nell'orizzonte della propria cultura. Così avvenne già nel mondo celtico, col caso del mitico Cu Chulainn, che avrebbe impresso la sua orma sulla roccia, per terminare in un ipotetico "post quem" del caso di Sebastian Illung di Asburgo, che - nel 1446 al termine del cammino di Santiago- vide l'orma del Signore sulle rocce di Finisterre.

Nell'entroterra ligure sono noti numerosi casi di segni pediformi - o assimilati a questo simbolo dalla credenza popolare - attribuiti alla Madonna, a santi vari o al demonio. In questa sede se ne propone l'inventario con le leggende ad essi connesse.

WS34-07 Leo DUBAL**Footprint and Handprint symbols, having or being?**

ABSTRACT: While pictures of Moon boots' imprints on Moon's dust symbolized newly conquered territory, handprints over the last four millennia might be appreciated as the signature of *Homo individualis*.

WS34-08 Terence MEADEN (Oxford, UK)**Circles and cupmarks in Neolithic art in Britain.**

ABSTRACT: In ancient British and Irish rock art, cupmarks, with or without concentric circles, are a feature of many Neolithic and Bronze Age sites. Despite much study their meanings remain elusive. Examples are discussed, including the engraved portable stone from Nottingham Hill, Gotherington, in southern England with its singly-ringed cupmark. Two newly-found portable stones, each with a single hollowed cup -- also from southern England -- are announced here. Their particularities may shed light on the use to which some cupmarks were put. One stone is a splendid isosceles-triangular sarsen weighing 31 kg with a 70-mm diameter cupmark, 50-mm deep at the centre, hollowed out at the major apex. Consideration is given as to what this type of cup or cupule may signify in this context and whether the explanation may have a wider applicability elsewhere in the British Isles.

WS34-09 George ILIADIS (Krinides, Greece)**Labyrinths: changing societies, changing symbols?**

ABSTRACT: The history of the labyrinth is one part of the global history of the symbolic past. Carved on rocks or as a decoration in pottery and walls, labyrinths can be found all over the world. From prehistory to the medieval period and then to present days, labyrinths and mazes were and are still used to express different meanings for several cultures. The very few systematic approaches on this subject though and the complexity of the symbol itself cause not only controversial interpretations but also a great field for research and new discoveries.

WS34-10 Adolfo ZAVARONI (Reggio Emilia, Italy)**On the symbolism of net-patterned and ruled rectangles from the Neolithic to the Iron Age.**

ABSTRACT: The word *eltnas* ("of/to [the goddess] Growth" or "of/to the Nourisher") written near a net-patterned rectangle incised with the same sharp point on a rock of Foppe di Nadro (Valcamonica, Italy, I century BC) has driven us to suggest that net-patterned or checkered rectangles drawn on rocks, stelae, potteries and other artistic items of the Bronze and Iron Age could represent the universal fertility power of the so-called "Great Goddess" and her husband. Another inscription, found

at Garda (Garda Lake, Northern Italy) confirms this interpretation. To our mind, examination of shield-shaped figures and striped rectangles carved on the rocks of Luine (Valcamonica) support this thesis. The checkered rectangles on the Alpine stelae, in comparison with the net-patterned ones, seem to add the further concept of the opposition of life and death, of the cyclic alternation of rebirth and destruction. Reconsideration of Gimbutas' works show that this symbolism was already applied on items of the Early Neolithic and even of the Upper Paleolithic. The Epigravettian idol of the Gaban Shelter (Trentino) is a clear example of it.

The presence of net-patterned rectangles on both rocks and pottery oblige us to find an interpretation which may be suitable for any item. Net figures engraved on rocks cannot be interpreted as decorations (this is generally the interpretation given to rectangles drawn on pottery) and net-patterned rectangles incised or painted on pottery cannot be considered as allusions to clothes and ornaments worn by divinities or priests or important dead (this is often the interpretation given to rectangles drawn on stelae). For instance, the petroglyphs of Mont Bego containing net figures and the bird bodies with net-patterned "feathering" painted on both vases of the Late Minoan period and on Camunian rocks admit a more suitable overall comprehension of the protostorical religious and metaphysical *Weltanschauung*, if we adopt the thesis of the symbolic meaning suggested in this paper.

WS34-11

Nuno RIBEIRO (Sobral de São Miguel, Portugal)
Susete FERREIRA (Sobral de São Miguel, Portugal)
Jorge FERREIRA (Sobral de São Miguel, Portugal)

Open air Rock Art in the valleys of Ceira and Alva rivers - Some symbols.

ABSTRACT: The archaeological investigation project "Rock art in the valleys of Ceira and Alva rivers" is been developed by the Portuguese Association of Archaeological Investigation in the centre north of Portugal since 2001. The goal of this project is to investigate and study the phenomenon of rock art in this region.

Characterised by the existence of more than 100 archaeological sites, most of them higher than 700m, a large majority of them have a schist base.

The represented symbols are schematic, geometric and naturalistic.

WS34-13

Giancarlo SANI

Circles with cupmarks: in search of a possible meaning.

ABSTRACT: This paper is inspired by the presence of circles containing cupmarks and other circles surrounded by cupmarks on an unpublished rock near Limano (Lucca province, Italy). Many figures are carved on this rock which could have been engraved since the Bronze Age. In particular, some net-patterned rectangles and a pointed arch (ogive) filled by curved lines, that could be interpreted as symbols of life growth and proliferation (see Zavaroni's paper), lead me to verify if such combinations of circles and cupmarks might be a further expression of the symbolism inhering (divinities of) fertility. Therefore I take into consideration other rock carvings of Sweden, Switzerland, Spain and some examples on ancient pottery. To my mind, this first quick survey shows that to interpret the association of circles with cupmarks as a symbolism concerning the cyclical fertility and regeneration could be a productive working hypothesis.

WS34-14

José GALOVART (Vigo)

Le Mont Pindo de Galicia et les pétroglyphes préhistoriques

RÉSUMÉ: Comme beaucoup de temples romans, la cathédrale de Saint Jacques de Compostelle s'oriente vers l'Ouest, mais si l'on considère cette question sur une carte, nous pouvons observer son alignement horizontal avec le cap Finistère. Sur la côte, entre ces deux points, se trouve le Mont Pindo, un Mont sacré légendaire, un endroit très granitique où les grands rochers figuratifs sont très nombreux.

Dans une chronologie comprise entre le dernier dolmen et le premier couteau de métal, cet alignement équinoxial du mont Pindo et Finistère avec le soleil, a été représenté par deux spirales entrelacées à travers une saillie, dans un pétroglyphe trouvé près du sommet du mont Pindo. Les pétroglyphes galiciens constituent un discours géométrique et circulaire qui depuis leur début va se caractériser par une grande liberté et de très riches développements. L'ensemble est d'une grande hétérogénéité, et ne semble pas avoir d'autres références communes que la seule circularité. Il ne

semble pas avoir de symboles emblématiques, mais une forme élémentaire a un grand protagoniste : un petit cercle avec un point au centre. Dans beaucoup de compositions figuratives, ce symbolisme introduit l'émotion du sacré dans les dessins d'animaux ou les scènes de chasse et garde du bétail.

L'isolement de ce motif dans une collection de gravures géométriques permet quelques interprétations et séquences chronologiques inédites.

Finalement quelques mots sur la question du labyrinthe préhistorique : ses plus anciennes représentations en Europe, ont été trouvées en Galice. Le labyrinthe naît quand l'essai primaire de construire le plus long chemin possible à l'intérieur d'une forme ronde, se considère depuis des structures géométriques ou approches assez grandes et labyrinthiques; depuis des formes complexes qui contiennent leurs éléments les plus caractéristiques. Il y a dans les pétroglyphes galiciens un groupe de gravures qui posent ouvertement ces questions.

Session WS36

Saturday, 9 September 2006 / Samedi, 9 Septembre 2006

*Room 12.02, Faculty of Law, Lisbon University
Saale 12.02, Faculté de Droit, Université de Lisbonne*

Learning Archaeology At the cross-road of Sciences

Étudier l'Archéologie Au Carrefour des sciences

organized by / organisé par

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SESSION'S ABSTRACT

The teaching of archaeology and prehistory faces, currently, an unforeseen challenge. In the past, the education of archaeologists has been made in the framework of either scientific or humanistic sciences, accordingly to the research interests that guided it. Yet, human resources training in archaeology has a major part to play in order to allow to overstep the threshold which presently separates research from conservation and cultural development: quite often, development of archaeological assets mainly bears on the creation of related knowledge (excavations).

Currently archaeology became, in an increasing number of countries, a liberal profession as well, namely in the framework of environment assessments. Archaeologists trained in universities are intended to undertake a carrier in a large range of profession from teachers, researchers, up to governmental or private company decision makers on development matters, via a large range of patrimonial professions (curators, museographers and local responsables).

The need has arose, then, to discuss and define both the epistemological status of the archaeologists and prehistorians and the minimum required cursus they must follow. The WS proponents share the view that prehistory and archaeology must be kept as an interdisciplinary subject, with a strong background both on human and natural sciences. Yet, we are aware this is not an universal option, and that societies require a definition, given its economic and labour implications. Being promoters of an integrated programme of studies, from B.A. to Ph.D., the session promoters invite colleagues from various universities to discuss this issue, namely focusing on:

- internationalizing the teaching programmes;
- promoting a structured , fully integrated in the cursus practical training (e.g. on patrimonial sites and collections);
- actual participation, during the cursus, to actions of dissemination of scientific results.

SESSION PROGRAMME / PROGRAMME DE LA SESSION

- 11:00 **Opening / Ouverture**
- 11:00-11:20 John COLLIS
WS36-01 **An overview of university and professional training in Europe.**
- 11:20-11:40 Carlo PERETTO (Ferrara, Italy)
WS36-02 **Le master Erasmus Mundus en Quaternaire et Préhistoire et la «Laurea Specilistica» en Préhistoire au sein de l'Université de Ferrara.**
- 11:40-12:00 Luis OOSTERBEEK (Tomar, Portugal)
WS36-03 **Bologna and Archaeology.**
- 12:00-12:20 Janusz K.KOZLOWSKI
WS36-04 **L'enseignement universitaire d'archeologie: comment l'uniformiser sans perdre la diversite des approches**
- 12:20-12:40 François SÉMAH (Paris, France)
 Christine HERTLER (Frankfurt, Germany)
 Eusebio DIZON (Manila, Philippines)
WS36-05 **Teaching Prehistory at the Cross-roads of Research, Training and Patrimonial Concerns: The Exemple of Southeast Asia**
- 12:40-13:00 **Discussion**

ABSTRACTS / RÉSUMÉS

WS36-01 John COLLIS

An overview of university and professional training in Europe.

ABSTRACT: Under the Bologna process it was hoped that we would move towards compatible systems of training and qualification across Europe. For Archaeology this is very difficult given the very different educational systems and traditions within which we work – is archaeology taught as a first degree; is a degree a necessity for professional practice; if so, at what level, Doctorate, Masters, or Bachelor, should that qualification to practice be, etc. We also have very different attitudes towards Continuing Professional Development (CPD) – compulsory in France, optional in Britain, non-existent in many other countries. We also suffer from a profession which is extremely varied in the sorts of jobs archaeologists do, from the general writing of history to the detailed skills of the laboratory based scientist or of the field worker. I shall propose that the only way forward lies in the development of a system of Personal Development Plans and Life Long Learning which starts with university training linked with the detailed definition of the skills needed to carry out specific archaeological roles (in Britain 'National Occupational Standards').

WS36-02 Carlo PERETTO (Ferrara, Italy)

Le master Erasmus Mundus en Quaternaire et Préhistoire et la « Laurea Specialistica » en Préhistoire au sein de l'Université de Ferrara.

ABSTRACT: La "Laurea Specialistica" en Sciences Préhistoriques et le Master Erasmus Mundus en Quaternaire et Préhistoire, activés au sein de l'Université de Ferrara (Italie), représentent un cas unique dans le cadre des enseignements supérieurs en Italie. Ils sont finalisés à fournir de connaissances approfondies dans le domaine de la Préhistoire et du Quaternaire et à former des cadres spécialisés ayant une solide préparation culturelle et un bon contrôle de la méthode scientifique de recherche et les connaissances nécessaires à l'actuation de la recherche inhérente l'histoire de l'Homme soit dans son cadre culturelle que environnemental/ préhistorique.

De plus, le Master Erasmus en « Quaternaire et Préhistoire », fait en partenariat avec Le Muséum d'Histoire de Paris, l'Universitat Rovira i Virgili de Tarragona, l'Instituto Politecnico de Tomar et l'Universidad de Trás-òs-Montes e Alto Douro, permet aux étudiants de faire une importante expérience dans le cadre de la recherche internationale puisque les étudiants vont acquérir au moins le 30% des crédits au sein d'une institution partenaire différente de celle d'inscription initiale. Toujours dans ce cadre, chaque année, environ 24 bourses d'études, financés par la CE, sont mis à disposition des étudiants provenant des Pays Tiers et 3 bourses sont finalisé à faire participer à l'enseignement des professeurs provenant des Pays Tiers.

WS36-03 Luiz OOSTERBEEK (Tomar, Portugal)

Bologna and Archaeology.

ABSTRACT: Society sees archaeology with the romantic eye of the memory but, increasingly, with a pragmatic eye on tourism and promotion. Archaeology, having embraced all matters of the territory, is presently the main instrument of society to perspectivise itself. It's a fact that sites, museums and events are opportunities to project the image, an essential factor of the market. Society requires, therefore, archaeologists aware of this phenomenon, able to be active from the point of view of the preservation of archaeological heritage and never jeopardizing the interpretative framework. But is this what Universities are training for? And what will the room for research within this new framework?

WS36-05 François SÉMAH (Paris, France)
Christine HERTLER (Frankfurt, Germany)
Eusebio DIZON (Manila, Philippines)

Teaching Prehistory at the Cross-roads of Research, Training and Patrimonial Concerns: The Exemple of Southeast Asia

ABSTRACT: Recent efforts have been made between European and Asian institutions to build an integrated network allowing efficient training students around graduation in Prehistory. Though respecting the specificity of each institutional academic project, mitigation is considered under several points of view in order to benefit to:

- the students' perspectives for their scientific and/or professional future;
- the synergy between institutional projects;
- the emergence of important scientific topical issues;
- addressing important patrimonial questions in a developmental perspective.

Using together different institutional and international cooperation instruments, the main activities bear on the organization of :

- Common teaching modules taught in Europe and in Asia, and e-learning projects as well;
- International field schools, some of them on ancient outstanding patrimonial sites whose valorisation is locally considered as a developmental challenge which can be achieved mainly by means of patrimonial discovery (excavations) and museographic actions;
- Co-promotion of Master thesis, some of them helping to design, in the frame of a recurrent inter-institutional scholars' dialogue, future doctoral researches.

Session WS37

Monday, 4 September 2006 / Lundi, 4 Septembre 2006

*Room 6.1.49, Faculty of Sciences, Lisbon University
Salle 6.1.49, Faculté de Sciences, Université de Lisbonne*

Current State of North American Rock Art

État de l'art rupestre en Amérique du Nord

organized by / organisé par

James KEYSER

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SESSION'S ABSTRACT

An examination of trends in current rock art research focuses on work in the continental United States. In this region, rock art studies are pursued by people from a variety of backgrounds, and results of different approaches to rock art topics reflect the current state of knowledge. Specific examples of research in progress provide insights into problems currently under investigation and demonstrate directions rock art research is taking in this region.

RÉSUMÉ DE LA SESSION

Cette examination des directions actuelle dans la recherche en art rupestre met au point les études dans les États Unies continental. Poursuits par les chercheurs de formation diverse, les approches reflètent l'état courante de nos connaissances. Les exemples spécifiques dans la recherche poursuite fourniront une compréhension des problèmes sous investigation, et montreront les directions prise dans notre région.

SESSION PROGRAMME / PROGRAMME DE LA SESSION

- 14:30 **Opening / Ouverture**
- 14:30-15:00 Mavis GREER (Casper, WY, U.S.A.)
 John GREER (Casper, WY, U.S.A.)
- WS37-01** **Rock Art Research in the Continental United States of America.**
- 15:00-15:30 Donna GILLETTE (San José, CA, U.S.A.)
- WS37-02** **PCN Rock Art in California, USA.**

- 15:30-16:00 Evelyn BILLO (Flagstaff, AZ, U.S.A.)
WS37-03 **Colorado Plateau, USA: Rock Art's Place in the World.**
- 16:00-16:30 James KEYSER (Portland, OR, U.S.A.)
WS37-04 **Bear Comes Out: A Distinctive Plains Rock Art Shield Image**
- 16:30-17:00 Maarten VAN HOEK (Oisterwijk, Holand)
WS37-05 **Mogollon Rock Art and the Status of the "Flute Player".**
- 17:00-17:30 John GREER (Casper, WY, U.S.A.)
Mavis GREER (Casper, WY, U.S.A.)
WS37-06 **Archeological Cave Use in the Northwestern Plains of the USA.**
- 17:30-18:00 Evelyn BILLO (Flagstaff, AZ, U.S.A.)
Robert MARK (Flagstaff, AZ, U.S.A.)
Lawrence LOENDORF (Albuquerque, NM U.S.A.)
WS37-07 **Canyon del Muerto, Arizona, USA -- Rock Art Assessment Project.**
- 18:00-18:30 Maria BELTRÃO (Rio de Janeiro, Brasil)
Martha LOCKS
WS37-08 **Sur la découverte d'une représentation de tigre à dents de sabre.**

ABSTRACTS / RÉSUMÉS

- WS37-01** Mavis GREER (Casper, WY, U.S.A.)
John GREER (Casper, WY, U.S.A.)
Rock Art Research in the Continental United States of America.

ABSTRACT: Rock art research is actively pursued in the continental United States by people representing a variety of disciplines and individual interests. Published outlets include rock art journals, general archeological or art history forums, newspapers, popular magazines, and books. Researchers share ideas formally through organized local to national groups and conferences and through informal email correspondence and List Serve discussion groups. An examination of the ways in which rock art researchers are promoting the study and knowledge of North American rock art within the United States finds that many people operate within a vacuum outside the formal groups, and even within and between groups communication could be improved regarding what kind of recording is conducted and by whom, methods of analysis, and how to approach conservation.

- WS37-02** Donna GILLETTE (SAN JOSÉ, CA, U.S.A.)
PCN Rock Art in California, USA.

ABSTRACT: The PCN (Pecked Curvilinear Nucleated) rock art tradition in the Coastal Ranges of California is the focus of current contextual research designed to better understand the markings on boulders that are believed to be the remains of ritual expression, with possible great antiquity. Identified as pecked circles and ovals, with a raised center, they have now been identified at approximately 100 sites within an expanse of more than 700 miles. Current research, employing

landscape theory, also embraces recent technology with 3 D Laser Scanning methodology. Ethnographic literature has linked similarly marked boulders to fertility ritual within the Pomo culture, opening the door to 'informed' ethnographic analogy.

WS37-03 Evelyn BILLO (Flagstaff, AZ, U.S.A.)

Colorado Plateau, USA: Rock Art's Place in the World.

ABSTRACT: Some rock art images are unique to the Southwestern United States' Colorado Plateau and the cultures who lived there through the ages. However, many similarities exist with North American and worldwide images. Are there universal human themes that link distant places and times past? When no cultural ties exist between two or more distant regions of the Earth, visual clues are used to identify where similar images may possibly depict corresponding themes in religious beliefs, history and warfare, domestic life, tools, ceremony, etc.

WS37-04 James KEYSER (Portland, OR, U.S.A.)

Bear Comes Out: A Distinctive Plains Rock Art Shield Image

ABSTRACT: Bear Gulch, an extensive rock art site in central Montana, has more than 700 shield bearing warriors among the several thousand images recorded there. Among these shields are several specific designs, shown as the heraldry of numerous warriors. Among these heraldic designs are several examples of a distinctive shield image that shows a bear emerging from its den. This design is known from both ethnographic shields and other rock art images across the Northwestern Plains, including two shields at the Castle Gardens site in Wyoming. The comparison of the designs from Bear Gulch with others from both ethnographic sources and other rock art sites illustrates part of the potential contained in the images recorded in Plains pictographs and petroglyphs.

WS37-05 Maarten VAN HOEK (Oisterwijk, Holand)

Mogollon Rock Art and the Status of the "Flute Player".

ABSTRACT: In this survey two different issues regarding the "flute player" of the Southwest of the U.S.A. will be discussed. In the first section the status of the "flute player" is questioned, and it will be demonstrated that not all "flute players" inevitably are actual flute players. The Mogollon were neighbors of the Hohokam and Anasazi peoples, the latter abundantly using the "flute player" in their iconography. The second issue discusses and investigates the apparent lack of the "flute player" in Mogollon rock art, focusing at Three Rivers, New Mexico.

WS37-06 John GREER (Casper, WY, U.S.A.)
Mavis GREER (Casper, WY, U.S.A.)

Archeological Cave Use in the Northwestern Plains of the USA.

ABSTRACT: Prehistoric and early historic Native American use of caves in the mountain islands of the northwestern Plains of the United States appears to have been limited to areas within or near entrances. Habitation debris mostly is in open entrance areas, while rock art sometimes extends back into twilight zones and dark areas necessitating artificial light for viewing. Some rock art is intentionally placed to interact with natural light coming through the cave entrance. Night use of enclosed cave rooms in isolated areas of difficult access would produce a similar ritual effect to activities done in a true dark zone setting. Modified collected speleothems expands cave use into noncave landscapes.

WS37-07 Evelyn BILLO (Flagstaff, AZ, U.S.A.)
Robert MARK (Flagstaff, AZ, U.S.A.)
Lawrence LOENDORF (Albuquerque, NM U.S.A.)

Canyon del Muerto, Arizona, USA -- Rock Art Assessment Project.

ABSTRACT: Canyon de Chelly National Monument is possibly the most intensively painted network of canyons with habitation sites in the USA. Canyon del Muerto and its side canyons were completely

surveyed in the 1990's when over 300 rock art sites were identified. Results of an intensive photographic recording of a select sample of these sites that emphasized lower canyon locations will be discussed.

Images from Basketmaker, Ancestral Puebloan, and Navajo will be shown along with preliminary analysis of distribution of headdress styles and also radiocarbon dates from mud lines over paintings.

WS37-08

Maria BELTRÃO (Rio de Janeiro, Brasil)

Martha LOCKS (Rio de Janeiro, Brasil)

Sur la découverte d'une représentation de tigre à dents de sabre.

RESUME: Il s'agit ici de la représentation picturale d'un +Smilodon, connu populairement comme tigre à dents de sabre. Son identification a été rendue possible par la taille et certains aspects caractéristiques des crocs de l'animal. Cette découverte vient s'ajouter à neuf autres représentations d'animaux pléistocènes dans la région archéologique de Central, dont un ours, un tatou géant, un paléo-lama, un toxodonte, une paresse géante et une paresse d'un autre genre, pléistocène également, de plus petite taille, deux genres de chevaux et un mastodonte.

Session S01

Monday, 4 September 2006 / Lundi, 4 Septembre 2006

Room 12.06, Faculty of Law, Lisbon University
Salle 12.06, Faculté de Droit, Université de Lisbonne

History, Archaeology and Society

Histoire, Archéologie et Société

Miscellanea

SESSION PROGRAMME / PROGRAMME DE LA SESSION

- 14:30 **Opening / Ouverture**
- 14.30-14.45 Eduardo VERA-CRUZ PINTO (Lisboa, Portugal)
S01-01 **O direito primitivo da Lusitânia: a possibilidade de o estudar**
- 14:45-15:00 Liliane PLOUVIER (Bruxelles, Belgium)
S01-02 **À La Table Du Roi Hammourabi De Babylone, d'après les tablettes de la Yale Babylonian Collection.**
- 15:00-15:15 Elena BACIU (Bucarest, Romania)
S01-03 **Archaeological discoveries and Antique Byzantine Documents in accordance with Religious Cult in Old Dacia between I-XI centuries.**
- 15:15-15:30 Viorica ENACHIUC (Giurgiu, Romania)
S01-04 **Le Codex Rohonczy – un monument historique de l'ancien roumain et de l'ancienne littérature roumaine aux XI^e - XII^e siècles de notre ère**
- 15:30-15:45 Durga BASU
S01-05 **Transition from Protohistory to Early history in Bengal . An impact of iron.**
- 15:45-16:00 Sanjay KUMAR JHA
S01-06 **The day to day life of nomads.**
- 16:00-16:15 Peter J. SHEPPARD (Auckland, New Zeland)
Richard WALTER

- S01-07** “Shrines, Land Rights and Power: Archaeological Study of Cultural Landscapes in the Western Solomon Islands”.
- 16:15-16:30 Mário Nuno DO BENTO ANTAS (Lisboa, Portugal)
- S01-08** Dolmens used as Christian Temples in Portugal.
- 16:30-16:45 Maria Lúcia PERRONE PASSOS (São Paulo, Brasil)
- S01-09** Urban Archaeology at São Paulo: The Role of the Department for Historical Heritage.
- 16:45-17:00 Maryzilda COUTO CAMPOS (São Paulo, Brasil)
- S01-10** Archeologie Au “Pateo Do Colégio”, Dans La Ville De São Paulo, Au Brésil.
- 17:00-17:15 José G. VARGAS-HERNÁNDEZ (Guzmán, México)
- S01-11** Co-operation and conflict between firms, communities, new social movements and the role of government - the cerro de san pedro case
- 17:15-17:30 Soejono RADEN PANDJI (Indonésia)
- S01-12** Archaeology and Power in Indonesia today
- 17:30-17:45 António Manuel PISSARRA XAVIER LOPES DIAS (Castelo Branco, Portugal)
- S01-13** O Centenário do Museu Francisco Tavares de Proença Júnior, em 2008 em Castelo Branco (Portugal).
- 17:45-18:30 Discussion

ABSTRACTS / RÉSUMÉS

- S01-01** Eduardo VERA-CRUZ PINTO (Lisboa, Portugal)
- O direito primitivo da Lusitânia: a possibilidade de o estudar**

RÉSUMÉ: O direito primitivo da Península hispânica tem sido um dos temas mais negligenciados da jurishistoriografia hispânica. Salvo raras excepções, que só confirmam a regra, a dificuldade em encontrar fontes e a necessidade de conhecer com algum rigor as ciências auxiliares, muletas imprescindíveis do investigador jurista para tratar, com pormenor e especialização, estas matérias, é o obstáculo de maior monta e aquele que mais contribui para a aridez dos textos e o distanciamento dos jovens estudiosos.

Em Portugal, o tema seria quase inexistente, não fosse a necessidade de referi-lo no estudo das instituições e institutos da Idade Média no plano foraleiro que não podem ser directamente identificadas com o passado celtibero, romano, visigótico, árabe-islâmico. O método residual - isto é, se não se pode identificar a instituição/instituto jurídicos encontrados no foral medieval com os direitos precedentes dos povos instalados nessas zonas, então são primitivos - sem características próprias e destinado a cobrir uma área de ignorância da investigação jurishistoriográfica, contribuiu para que esta temática se mantivesse fora do interesse e da atenção dos jurishistoriadores.

Dado o impasse da tensão metodológica entre a tese da origem expontânea de instituições e institutos jurídicos entre povos que se encontram a viver os mesmo problemas e conflitos, em

ambientes idênticos e a tese do “direito primitivo” para explicar manchas de direito foraleiro recenseadas nos seus contornos jurídicos mas não identificadas nos seus fundamentos históricos, importa dar o passo necessário para um conhecimento mais completo do direito primitivo antes de forçar identidades institucionais transhistóricas e plurilocalizadas.

Um forte contributo para esse caminho é o avanço permitido pelas modernas técnicas de investigação arqueológica e histórica, com a informática a permitir uma recolha quase simultânea dos elementos dispersos nas fontes, a sua tradução-compreensão, a contextualização muito completa pela rapidez no cruzamento de informações para a mesma época e território.

Por outro lado, o avanço dos estudos de parameologia jurídica, com uma investigação apuradíssima sobre as fontes das adivinhas, provérbios e brocardos jurídicos, conjunto que constitui uma verdadeira pré-dogmática do Direito, constitui um incentivo para os que se dedicam ao estudo das fontes primitivas. Os estudos de “direito popular” no espaço que foi a Lusitânia são um importante contributo para o estudo do direito dos povos primitivos que habitaram estes territórios.

Assim, com um método centrado no recenseamento e conhecimento das fontes possíveis do Direito dos povos primitivos da Lusitânia; aceitando a existência de um verdadeiro direito entre esses povos como pressuposto investigativo; recusando os efeitos do método residual na investigação do direito primitivo; contextualizando os dados conhecidos, é possível conhecer melhor as formas de censura social e de sanção jurídica dos povos primitivos que habitaram o território que hoje é Portugal.

Esse conhecimento é importante para a jurishistoriografia portuguesa medieval, sobretudo porque permite compreender melhor os fenómenos de recepção/rejeição dos direitos dos povos invasores/ocupantes; o grau de penetração do Direito Romano e romano-vulgar nas camadas populares; e os contributos possíveis para a formação de um direito nacional peculiar face aos demais.

S01-02 Liliane PLOUVIER (Bruxelles, Belgium)

À La Table Du Roi Hammourabi De Babylone, d'après les tablettes de la Yale Babylonian Collection

RÉSUMÉ: Les tablettes des YBC 4644, YBC 8958 et YBC 4648 présentent un intérêt tout-à-fait exceptionnel, puisqu'elles contiennent les premières recettes culinaires actuellement connues. Originaires de la Mésopotamie méridionale, elles ont été rédigées en écriture cunéiforme et en langue akkadienne entre - 1700 et - 1600. Comme le pense Eveline J. van der Steen, leur extrême raffinement et complexité reflète les fastes épulaires déployés à la cour de Hammourabi, roi de Babylone entre - 1792 et -1750. La Maison du célèbre souverain juriste est la seule à pouvoir disposer d'une brigade de professionnels capable de les exécuter. Il est en effet le monarque le plus puissant de l'époque paléo-babylonienne, surtout après la conquête de Mari (- 1760) et la mainmise sur ses inestimables trésors (-1759).

(...) Si la gastronomie paléo-babylonienne ne repose pas exactement sur les mêmes fondements que sa descendante gréco-romaine, elle se rapproche par contre du modèle barbare tardo-antique voire haut-médiéval tel qu'il est décrit par les observateurs (cf. le médecin byzantin du VI^e siècle, Anthime). Celui-ci privilégie aussi la bière et le pain, quoique l'une et l'autre ne soient pas exactement confectionnés de la même façon en Occident et en Orient. En outre, les deux peuples adorent le lait et ses dérivés (babeurre, petit-lait, fromage, crème et beurre).

S01-03 Elena BACIU (Bucarest, Romania)

Archaeological discoveries and Antique Byzantine Documents in accordance with Religious Cult in Old Dacia between I-XI centuries.

RÉSUMÉ: The work presents an inventory of the Old Dacia whereby one has been writing down the religious cults and their role in social, political and economical organisation of Dacians and Blaks (old Romanians) respectively in I-XI centuries, Christian era.

Also we discuss about only the antique and Byzantine documents that demonstrate the role of Dacians and Blaks respectively, in East and South-West of Europe in mentioned period of time.

S01-04 Viorica ENĂCHIUC (Giurgiu, Romania)

Le Codex Rohonczi – un monument historique de l’ancien roumain et de l’ancienne littérature roumaine aux XI^e - XII^e siècles de notre ère

RÉSUMÉ: Le Codex Rohonczi se trouve aujourd’hui dans des Archives de l’Académie des Sciences de la République d’Hongrie. Il comprend dans ses 448 pages des œuvres en vers appartenant à des genres divers: des discours, une chronique des solies et des alliances, un hymne séculier, un pòeme au sujet historique; l’hymne possède même une notation musicale, qui préserve, de ce fait, la plus ancienne mélodie roumanie connue.

Le codex Rohonczi a été composé dans une mounastère qui se trouvait dans la partie Sud – Est du territoire de la Roumanie; il est écrit en langue «vulgaire» roumaine et fait usage d’une écriture valaque spécifique aux XI^e - XII^e siècles.

Vu-tout cela, il en résulte que le Codex Rohonczi est d’une très grande importance pour l’étude de la pensée poétique roumaine, sans oublier qu’il offre aussi beaucoup de nouvelles données historiques concernant l’organisation, la vie peuple roumain pendant les XI^e - XII^e siècles et relations des valaques avec l’Empire Byzantin, les Pétchénegues, les Coumans, les Gotes, le Unars et le Comitat de Flandre.

S01-05

Durga BASU

Transition from Protohistory to Early history in Bengal . An impact of iron

ABSTRACT: West Bengal has a special position with regard to the Proto-historic culture, revealing all its major characteristic features. In early sixties, the archaeological investigations brought to light a firm stratigraphical sequence of chalcolithic culture, for the first time in this region. Since then a number of Proto-historic chalcolithic settlements were discovered in various parts of West Bengal. It is true that West Bengal comprises of different physiological units, the chalcolithic culture people occupied mainly the regions spread over the Mayurakshi-Bakreswar , Ajoy-Kunnur-Damodar river valleys, bodering the districts of Burdwan and Birbhum.(...)

The purpose of Present paper is to assess archaeo-metallurgically, the role of iron for the transition from the Proto-history to the early historic culture. Though this issue has gained much attention in recent archaeological researches in other parts of the country, West Bengal Proto-historic study needs a careful archaeo-metallurgical study, for getting a clear picture of such transition. For the present study, a site of Mangolkot in the district of Burdwan, West Bengal is to be taken as a case study. Since this site has a stratigraphical record of transitional phase as well as a continuation of various cultural sequences.

S01-06

Sanjay KUMAR JHA

The day to day life of nomads

ABSTRACT: Dinesh Mahato, a resident of Chikrauta village of Samastipur district of Bihar, was tied to a pole and tried by an adalat (court) comprising 16 Judges on the first day of the three day Kangaroo Court of Karori Caste in the campus of Kameshwar Singh Sanskrit University of Darbhanga of North Bihar on last week. He was found guilty by the court of stabbing a fellow villager and asked to pay a fine of Rs 5051. The accused was letter released when his family members paid the amount. (...)There are no records of the community’s history but the sociology department of the L.N. Mithila University is now working on it and Dr G.N. Chaudhary and Dr Vinod Kumar Chaudhary have already started their research. Says Dr Vinod: “This community does not participate in mainstream politics as most of its members live like nomads. Barring one or two exceptions, it is not possible to add their names to the voters’ list. Besides, these people own neither land nor houses. The fear is that it may slowly vanish because of poverty and illiteracy.” Which will not be surprising in a state where only votebanks count.

S01-07

Peter J. SHEPPARD (Auckland, New Zeland)
Richard WALTER

“Shrines, Land Rights and Power: Archaeological Study of Cultural Landscapes in the Western Solomon Islands”

Ancestral shrines constructed of stone are scattered across the landscape of the Western Solomon Islands. These shrines materialize a complex web of social and political relationships. Today they serve to demarcate tribal land rights in the context of logging operations by foreign companies. Prior to

the conversion to Christianity in the early 20th century they also served as loci where chiefs were able to invoke ancestral power or man. This paper discusses the many uses and meanings of shrines using both archaeological and ethnographic data.

S01-08 Mário Nuno DO BENTO ANTAS (Lisboa, Portugal)

Dolmens used as Christian Temples in Portugal

ABSTRACT: As time went by dolmens were used for different purposes. In Portugal throughout the Middle and the Modern Ages they were assumed by the Christian religion, in the way that they were used for building chapels. It is my aim to present some of these dolmens, as well as to explain the different types of temples they were.

S01-09 Maria Lúcia PERRONE PASSOS (São Paulo, Brasil)

Urban Archaeology at São Paulo: The Role of the Department for Historical Heritage.

ABSTRACT: Archaeology in third-world countries is not always understood as a priority. In a metropolis like São Paulo, with an exponential rate of economical and populational growth since the 1950's, doing archaeology is an endeavor that collides not only with the traditional economical powers. Contrary to what usually happens in other South American countries, Brazilians in general (and inhabitants of São Paulo in particular), often do not regard themselves as descendants of indigenous populations, or having any kind of cultural link with pre-contact peoples. In this background, we will present some of the actions aimed to the preservation of archaeological sites taken by the Department for Historical Heritage (Departamento do Patrimônio Histórico - DPH), a São Paulo County's administration organ.

S01-10 Maryzilda COUTO CAMPOS (São Paulo, Brasil)

Archeologie Au "Pateo Do Colégio", Dans La Ville De São Paulo, Au Brésil.

La ville de São Paulo est née en 1554: une petite maison a abrité les prêtres et lécole de la Companhia de Jésus, avec le but d'élever et apprendre la réligion aux indiens. En 1585, José de Anchieta, en écrivant aux autres missionnaires, a décrit, avec précision, un "puit de bonne eau". Cette "information" a donné naissance à un projet de prospection archéologique sur la partie la plus ancienne de la ville, qui garde encore un fragment de "taipa" du vieux cloître. Le projet est basé dans le prévelement géophysique àtravers une méthodologie de haute résolution, le "radar". La recherche a été faite sur la zone ouverte du "Páteo do Colégio". L'antène a été celle de 250 mHz blindée.

S01-11 José G. VARGAS-HERNANDEZ (Guzmán, México)

Co-operation and conflict between firms, communities, new social movements and the role of government - the cerro de san pedro case

ABSTRACT: The aim of this paper is to analyze relationships of cooperation and conflict between a mining company and the involved communities, New Social Movements and the three levels of government. The presence of the mining company (MSX) in Cerro de San Pedro has caused a severe social conflict among the inhabitants of San Pedro, Soledad y San Luis and has called the attention of all who are concerned by historic heritage, cultural and environmental issues. At the center of the controversy is the cheap and efficient technology. Federal and state Laws were violated. It is quite evident the lack of sensitivity of foreign mining companies toward the consequents of their activities upon the communities and environment. This case also shows the lack of negotiation between firms, communities, new social movements and governments.

S01-13 António Manuel PISSARRA XAVIER LOPES DIAS (Castelo Branco, Portugal)

O Centenário do Museu Francisco Tavares de Proença Júnior, em 2008 em Castelo Branco (Portugal).

ABSTRACT: O rio Tejo (ou Tagus Valley). Tavares Proença Jor. nasceu inteligente e, para mais, – Quixote, sem a companhia ditosa e compensadora do escudeiro – Sancho.

Session S02

Thursday, 7 September 2006 / Jeudi, 7 Septembre 2006

*Room 5.2, Faculty of Letters, Lisbon University
Salle 5.2, Faculté de Lettres, Université de Lisbonne*

Euro-Mediterranean Prehistoric Art

Art Préhistorique Euro-Méditerranéen

Miscellanea

SESSION PROGRAMME / PROGRAMME DE LA SESSION

- 09:00 **Opening / Ouverture**
- 09:00-09:20 José FERNÁNDEZ QUINTANO (Catellón, Spain)
S02-01 **Pannel with notations in the East of Iberia.**
- 09:20-09:40 Carme OLÀRIA (Castello de la Plana, Spain)
S02-02 **Burial's Epipaleolithic and Mesolithic in Levantin territory art rock.**
- 09:40-10:00 Umberto SANSONI (Niardo, Italy)
S02-03 **I caratteri d'area nei grandi siti d'arte rupestre: luoghi dedicati a specifiche cultualità in un contesto tipo santuario?**
- 10:00-10:20 Dusko ALEKSOVSKI (Kratovo, Republic of Macedonia)
S02-04 **Cocev Kamen", (Tsose' s Stone), excavation site which joins the Grounds for sacrificial rituals, a temple, painted Rock Art, and a prehistoric observatory.**
- 10:20-10:40 Angelo FOSSATI (Cerveno, Italy)
S02-05 **News from Alpine and Italian Rock Art.**
- 10:40-11:00 **Discussion**

ABSTRACTS / RÉSUMÉS

S02-01 José FERNÁNDEZ QUINTANO (Catellón, Spain)

Pannel with notations in the East of Iberia.

ABSTRACT: The astronomical hypothesis initiated by A. Marshack (1918-2004) in its analysis of the two plaquetas of Lartet and Blanchard; and applicable also to groups of notaciones in panels of Cantabria and France caves, some of them related to astronomy, like the puntiformes signs of the Cave del Castillo (Spain) and the Bulls of Lascaux (France); they help to also consider the existence of a rationalist and precientific, observant thought reasonable of the natural world and of the astral world. Not always the groups of notaciones can be associated to astral reasons. But always, the presence of notaciones, less efectista than the presence of naturalistic representations, forces to us to consider in its idealización and accomplishment, a greater degree of abstraction, a greater effort of rationality. This communication alludes to a panel with notaciones in the Iberian East, that by its geographic distance to the panels of Cantabria and France, aid to consider this type of cultural manifestations of global form.

S02-02 Carme OLÀRIA (Castello de la Plana, Spain)

Burial's Epipaleolithic and Mesolithic in Levantin territory art rock.

ABSTRACT: In this paper we show the preliminary results of the last excavations, 1999-2003, carried out in the prehistoric sites of Cave Fosca and Cingle of Mas Nou which present the burials in the Epipaleolithic and Mesolithic of the phases of high interest. Both sites demonstrate the type of people who habited this territory which is characterised by the Levantine rock art.

The C-14 chronology show a large sequence from 12000 BP until 7000 BP

S02-04 Dusko ALEKSOVSKI (Kratovo, Republic of Macedonia)

Cocev Kamen", (Tsetse' s Stone), excavation site which joins the Grounds for sacrificial rituals, a temple, painted Rock Art, and a prehistoric observatory.

ABSTRACT: The mentioned Locality which contain: Observatory from Bronze Age, sacrificial place etc. is unique according its form. That Stone Locality help us to know how was craeted the other ritual places created on the soil which were ruined during millenia.

Session S03

Tuesday, 5 September 2006 / Mardi, 5 Septembre 2006

*Room 12.06, Faculty of Law, Lisbon University
Salle 12.06, Faculté de Droit, Université de Lisbonne*

Hunter-Gatherers Studies

Études sur les Chasseurs

Miscellanea

SESSION PROGRAMME / PROGRAMME DE LA SESSION

09:00 **Opening / Ouverture**

09:00-09:20 Juan Luis ARSUAGA (Madrid, Spain)
E. BAQUEDANO
A. PÉREZ-GONZÁLEZ

S03-01 **Neanderthal and carnivore occupations in Pinilla del Valle (Community of Madrid, Spain).**

09:20-09:40 Joan DAURA LUJÁN (Barcelona, Spain)
Montse SANZ BORRÀS

S03-02 **The pleistocene site of Cova del Rinoceront (Barcelona, Spain)**

09:40-10:00 Jesús BARBA REY (Madrid, Spain)
Alberto MINGO ÁLVAREZ (Madrid, Spain)

S03-03 **Analysis of lithic microdebris from a Mousterian level (20) of Cueva de El Castillo (Puente Viesgo, Cantabria, Spain)**

10:00-10:20 Silvério FIGUEIREDO (Lisboa, Portugal)

S03-04 **The Avifauna of the Pleistocene in Portugal**

10:20-10:40 Valerie BOURDILLAT (Bayeux, France)

S03-05 **Data from the Hyena Den of Bois Roche (Charente, France) ; a Taphonomical fossil reference of carnivore action.**

10:40-11:00 Marie OUVILLE (Paris, France)
Caroline PAUTRET-HOMERVILLE (Paris, France)

S03-06 **Validation of the V.S.I. method. Application to Deer (*Cervus elaphus*) and cave Hyaena (*Crocuta spelaea*).**

- 11:00-11:20 Marie LIOUVILLE (Paris, France)
S03-07 **Biometry and palaeoecology of the Red deer (*Cervus elaphus* Linné, 1758) during middle and upper Pleistocene in Western Europe.**
- 11:20-11:40 Thierry REBMANN (Basel, Switzerland)
S03-08 **Les variétés pérographiques différentes du silex utilisés par l'Homme Moustérien en vallée du Rhin et Moselle . Pétroarchéologie et aires de circulation des industries moustériennes différentes du silex entre la Moselle luxembourgeoise et le Jura suisse.**
- 11:40-12:00 Eva DASCHEK
S03-09 **Des chasseurs néandertaliens au gisement d'Érd (Hongrie) ? Etude archéozoologique des grands mammifères.**
- 12:00-12:20 Paolo GAMBASSINI (Siena, Italy)
Francesco MALLEGNI (Pisa, Italy)
Stefano RICCI (Siena, Italy)
S03-10 **Grotta del Cavallo: the finding of a Neanderthal deciduous tooth associated to uluzzian industry.**
- 12:20-12:40 Stéphane PÉAN (Paris, France)
S03-11 **Diversity of mammoth procurement and treatment strategies at Upper Palaeolithic in Ukraine.**
- 12:40-13:00 M. Laurent CRÉPIN (Paris, France)
S03-12 **New zooarchaeological data from Magdalenian's cave: about the "Berry" (Indre – France), and hypothesis on Reindeer's statute in Europe.**
- 13:00-14:30 **Lunch / Déjeuner**
- 14:30-14:50 Silvério FIGUEIREDO (Tomar, Portugal)
S03-13 **The Prehistory of the Cabo Espichel**
- 14:50-15:10 Rebecca MILLER (Liège, Belgium)
John STEWART (London, UK)
Nicolas ZWYNS (Liège, Belgium)
Pierre NOIRET (Liège, Belgium)
S03-14 **The Mesolithic of Trou Al'Wesse Cave (Belgium) in Regional Context.**
- 15:10-15:30 J. M. MUÑOZ-GAMBERO
Juan Luis ARSUAGA (Madrid, Spain)
I. MARTÍNEZ
Ana GRACIA (Madrid, Spain)
José Miguel CARRETERO (Burgos, Spain)
Maria CRUZ ORTEGA (Madrid, Spain)
S03-15 **A new Mesolithic cranium from the Cueva del Higueron (Malaga).**

15:30-15:50 Karen HARDY

S03-16

Plant residues and ethnoarchaeology in Central Australia: traditional processing methods and starch grain identification.

15:50-16:10 Sándor GULYÁS (University of Szeged, Hungary)
Pal RACZKY (University of Budapest, Hungary)
Pal SÜMEGI (University of Szeged, Hungary)

S03-17

Shellfishing at the Körös site of Nagykörü, Hungary

16:10-16:30 Caroline PAUTRET-HOMERVILLE

S03-18

Cave hyena study in western Europe at upper Pleistocene. Paleontological, taphonomical and zooarchaeological results

16:30-16:50 Carole VERCOUTÉRE

S03-19

Traitement des animaux: entre technique et subsistence

16:50-17:10 Ana CRUZ

S03-20

Questions and Methods. A case study: Amoreira, Change or Continuity

17.10-18:30 **Discussion**

ABSTRACTS / RÉSUMÉS

S03-01

Juan Luis ARSUAGA (Madrid, Spain)
E. BAQUEDANO
A. PÉREZ-GONZÁLEZ

Neanderthal and carnivore occupations in Pinilla del Valle (Community of Madrid, Spain).

ABSTRACT: An assemblage of archaeological and palaeontological sites dated in the late Middle and Late Pleistocene has been found in Pinilla del Valle (Comunidad of Madrid, Spain), some of them are correspondent with *Homo nenderthalensis* habitation places and other are *Crocota crocuta* dens. These sites are located in the cavities of a carbonated karstic system, in a promontory of the field called El Calvero de la Higuera. This communication informes about the discoveries and emphasizes the importance of the interdisciplinary studies to know the possible competition relationship, to have access to herbivores, between the different groups of large predators sharing the same territory, the high Valley of Lozoya river.

S03-02

Joan DAURA LUJÁN (Barcelona, Spain)
Montse SANZ BORRÁS

The pleistocene site of Cova del Rinoceront (Barcelona, Spain)

ABSTRACT: Cova del Rinoceront (Barcelona, Spain) is a prehistoric deposit, with a long stratigraphy about 11 meters, and a very wide chronology from the Middle Pleistocene until the beginning of the Upper Pleistocene. In this karstic deposit there are abundant remains of fossil vertebrates with a special interest for the reconstruction of the palaeoenvironmental picture of the northeast of the Iberian Peninsula in the Mediterranean coast. There are also some stone tools that verify the older human presence. This is one of the most important places to understand the

environmental, human and animal evolution of the Quaternary in this area. Here we present the first results of the research.

S03-03 Jesús BARBA REY (Madrid, Spain)
Alberto MINGO ÁLVAREZ (Madrid, Spain)

Analysis of lithic microdebris from a Mousterian level (20) of Cueva de El Castillo (Puente Viesgo, Cantabria, Spain)

ABSTRACT: Through the analysis of microdebitage it is possible to identify the exploitation and use of raw materials, and therefore, to verify the manufacture, use, and maintenance activities of tools. In the same way, we can observe, through density maps, the spatial distributions of microdebris. In this study, we present the study of the lithic microdebitage from level 20 (Mousterian) from Cueva de El Castillo.

S03-04 Silvério FIGUEIREDO (Lisboa, Portugal)

The Avifauna of the Pleistocene in Portugal

ABSTRACT: Some palaeolithic sites in Portugal are rich of vestiges of bones remaining portions of animals of the past. The study of these vestiges of the past fauna it has happened over all on the mammals, in detriment of the other groups of vertebrates. The present presentation has as objective to contribute for the knowledge of avifauna present in the Pleistocene of Portugal.

Leaving of the definition of the theoretical bases where this work goes to seat will be made an evolutive retrospect of the birds and its palaeoambiental adaptation, with sight to understand the birds of the Pleistocene. Through the study of the birds in archaeological context we will be able to not only know the relation of the Man with the birds, but also the natural way where it inserted itself.

S03-05 Valerie BOURDILLAT (Bayeux, France)

Data from the Hyena Den of Bois Roche (Charente, France) ; a Taphonomical fossil reference of carnivore action.

ABSTRACT: During the last 30 years, the taphonomic research has focussed on the extent to which bone assemblage represent human as opposed to animal and more especially to carnivores. The literature contains a large number of actualistic studies, which have tried to simulate and/or quantify bone modification by hominids and/or hyaenas.

Face to the variability of the assemblages created by the extant and extinct hyaena, we report here the data from the rich, diverse and well preserved Upper Pleistocene hyaena den of Bois Roche (Charente, France) as a taphonomic fossil pattern.

S03-06 Marie OUVILLE (Paris, France)
Caroline PAUTRET-HOMERVILLE (Paris, France)

Validation of the V.S.I. method. Application to Deer (*Cervus elaphus*) and cave Hyena (*Crocuta spelaea*).

ABSTRACT: The Variability Size Index method was developed at the early 80's by Uprmann. Weinstock used this method in 2000 with Reindeer Upper Pleistocene populations.

We suggest to try this method with two quaternary mammal species, Deer (*Cervus elaphus*) and Cave Hyena (*Crocuta spelaea*).

S03-07 Marie LIOUVILLE (Paris, France)

Biometry and palaeoecology of the Red deer (*Cervus elaphus* Linné, 1758) during middle and upper Pleistocene in Western Europe.

ABSTRACT: This study's main goal is to characterize the size variations of the Red Deer (*Cervus elaphus*, Linné 1758) on a large chrono-stratigraphical scale. Therefore, we study in parallel, for different western European sites, the biometry of the various deer populations encountered and the climatic and environmental changes which occurred at the time of the deposit. Moreover, the archaeozoological approach also allows us to estimate the impact of the human factor within the bone accumulation and to have a better understanding of the variations of the surrounding fauna, linked to these climatic changes.

S03-08 Thierry REBMANN (Basel, Switzerland)

Les variétés pérographiques différentes du silex utilisés par l'Homme Moustérien en vallée du Rhin et Moselle . Pétroarchéologie et aires de circulation des industries moustériennes différentes du silex entre la Moselle luxembourgeoise et le Jura suisse.

RESUME: L'abris sous roche du Felsbourg est situé sur terrasses du grès vosgien (commune de Mutzig, Bas-Rhin). Il a révélé une occupation préhistorique sur une quinzaine d'horizons d'habitats successifs rythmiques à foyers, à industrie lithique moustérienne et vestiges osseux de grande faune prédatée du Paléolithique moyen. Les Néandertaliens utilisèrent des roches siliceuses volcaniques et volcano-sédimentaires du Permien et Dévonien, ou filoniennes et cristallophylliennes du grès du Trias vosgien de faciès germanique. L'aire d'implantation des groupes moustériens de Mutzig s'étale entre Rhin et montagne vosgienne.

Des ateliers à industrie paléolithique au Nideck, à 15 km en amont, confirment l'origine locale des roches exploitées. La technique de débitage sur rhyolite y est principalement de type Discoïde : c'est une adaptation opportuniste à la roche siliceuse choisie, fonction de sa structuration en affleurements et modules des blocs exploitables.

(...) Les roches débitées esquissent des circulations et approvisionnements et nous permettent de mieux comprendre le fonctionnement en matière de comportement de recherche de ressources de ces groupes humains anciens.

S03-09 Eva DASCHEK

Des chasseurs néandertaliens au gisement d'Érd (Hongrie)? Etude archéozoologique des grands mammifères.

RÉSUMÉ: La présente étude alimente le débat sur l'économie de subsistance et le mode d'acquisition des ressources carnées par les Néandertaliens. Si l'existence conjointe de la chasse et de la pratique du charognage est couramment admise, ces deux types d'acquisition de ressources animales orientés vers les Carnivores, notamment les Ursidés, ont rarement pu être démontrés.

Le gisement archéologique d'Érd (Érd-Parkváros, Hongrie) est un des plus importants gisements du bassin Carpatique, dont l'intérêt réside, d'une part, dans la présence d'un très abondant matériel faunique, dominé très largement par l'Ours des cavernes, et, d'autre part, dans son attribution au Paléolithique moyen, période rare en Hongrie. Bien documenté, il permet la conduite d'une étude pluridisciplinaire et offre la possibilité d'effectuer une révision archéozoologique pertinente. Cette révision concerne l'ensemble des accumulations osseuses mis au jour dans les deux parties de ce gisement, et dans laquelle un accent particulier est mis sur l'approche taphonomique afin d'identifier et de comprendre les différents processus qui ont contribué à la formation de cet assemblage faunique.

Cette présentation s'attache à relever et à discuter les conclusions publiées en 1968 dans une monographie exemplaire. Elles sont liées, entre autres, à la fonction et au type de site, ainsi qu'à l'interprétation de l'origine des restes fauniques exhumés dans les années soixante. Les conclusions publiées à l'époque sont ici discutées, notamment les interprétations relatives à la présence de l'ours des cavernes, espèce particulièrement abondante, qui résulterait d'activités cynégétiques récurrentes. Notre étude a pour objectif d'évaluer le statut des herbivores et des carnivores en fonction des problématiques désormais bien classiques d'une étude archéozoologique. Celle liée aux Ursidés, traitée à l'échelle de ce gisement, est en cours d'analyse.

S03-10 Paolo GAMBASSINI (Siena, Italy)

Francesco MALLEGNI (Pisa, Italy)
Stefano RICCI (Siena, Italy)

Grotta del Cavallo: the finding of a Neanderthal deciduous tooth associated to uluzzian industry.

ABSTRACT: Uluzziano is a culture described for the first time at Grotta del Cavallo in the Uluzzo bay - Puglia, Italy. In the rare cases in which it appears in stratigraphic series, Uluzziano interposes between the mustertian layers and the aurignacian layers, similarly to the French Castelperronian. The finding in the lowest Uluzzian levels of Grotta del Cavallo of a deciduous tooth morphometrically analogous to Neanderthal homologous teeth (also in the use wear typology), allows us to attribute this cultural horizon to *Homo neanderthalensis*.

S03-11 Stéphane PÉAN (Paris, France)

Diversity of mammoth procurement and treatment strategies at Upper Palaeolithic in Ukraine

ABSTRACT: Several Ukrainian open air sites from Upper Palaeolithic, such as other ones in Central and Eastern Europe, yielded mammoth bone heaps. The innovative zooarchaeological analyses of these assemblages provide first results about the debated issues of mammoth procurement (hunts and/or scavenging and/or collects) and treatment. The different observed behaviours are linked to the diversity of use of mammoth resources, for food and technical purposes, notably as building raw material.

S03-12 M. Laurent CRÉPIN (Paris, France)

New zooarchaeological data from Magdalenian's cave: about the "Berry" (Indre – France), and hypothesis on Reindeer's statute in Europe.

ABSTRACT: Magdalenian offers a big variety of sites, with bones of great mammals, but there isn't much information in several parts of Europe, mainly for subsistence behaviour. With this communication, we would like to present our last zooarchaeological results about the cavities of the hill of "la Garenne" (Saint-Marcel, Indre – France) which contain a succession of levels from middle Magdalenian "à navettes" to Upper Magdalenian.

To test some hypothesis for the statute of Reindeer during the last Pleniglacial, we would like to compare our study with other parts of Europe.

S03-13 Silvério FIGUEIREDO (Tomar, Portugal)

The Prehistory of the Cabo Espichel

ABSTRACT: The first retractions in the Cabo Espichel had been lead by Carlos Ribeiro, in the end of the XIXth century. At the beginning of years 40, prospections for H. Breuil had been carried through and Zbyzewski enters the Boca do Chapim and Areias de Mastro (CUNHA SERRÃO, 1994).

In years 60 and 70, the Municipal Museum of Archaeology of Sesimbra and the Grupo de Estudos do Paleolítico Português had discovered new Paleolithic deposits. (CUNHA SERRÃO, 1994).

With the works developed for the CPGP, a considerable number of new prehistoric stations was uncovered. The collected material is constituted in its majority by remaining portions of cuts. In what to the raw material, it dominates the quartz, but also they appear archaeological materials of sílex and of quartzite.

In these works 11 new sites with archaeological vestiges had been identified. It is intended, in this presentation, to make a historical summary of the several archaeological works, in special of the CPGP and describing the small farms most important.

S03-14 Rebecca MILLER (Liège, Belgium)
John STEWART (London, UK)
Nicolas ZWYNS (Liège, Belgium)

Pierre NOIRET (Liège, Belgium)

The Mesolithic of Trou Al'Wesse Cave (Belgium) in Regional Context

ABSTRACT: Recent excavations at the cave site of Trou Al'Wesse (Modave, Belgium) have yielded significant new data concerning the Mesolithic occupations at the site that contribute to understanding of the chronology and environmental context of the Belgian Mesolithic. We present the results of analyses of lithic and faunal assemblages, site taphonomy and spatial distribution, and discuss the relationship of the site with other Mesolithic sites in Belgium.

S03-15

J.M. MUÑOZ-GAMBERO
 Juan Luis ARSUAGA (Madrid, Spain)
 I. MARTÍNEZ
 Ana GRACIA (Madrid, Spain)
 José Miguel CARRETERO (Burgos, Spain)
 Maria CRUZ ORTEGA (Madrid, Spain)

A new Mesolithic cranium from the Cueva del Higueron (Malaga)

ABSTRACT: The "Cueva del Higuero" is located in the town of "El Rincón de la Victoria", 10 km east of the city of Málaga (Spain). 12 human cranial remains and 2 postcranial elements were found out of context and have remained unpublished until now. It was possible to reconstruct a portion of the cranial vault. Despite the great thickness and robusticity of the specimen, the size and shape of the vault lead us to assign this cranium to *Homo sapiens*. Direct C14 analysis of the human bones has yielded a calibrated age of 8,710-8,450 years BP.

S03-16

Karen HARDY

Plant residues and ethnoarchaeology in Central Australia: traditional processing methods and starch grain identification.

ABSTRACT: The Pitjantjarra/Yankuntjatjarra of Central Australia retain traditional collection and processing methods of certain types of berry and seeds. As part of an ongoing investigation into the nature of starch grain diagenesis, an ethnoarchaeological programme was conducted to explore the ways in which a) certain plant foods were processed by the Pitjantjarra/Yankuntjatjarra and b) the way in which these different processing methods (drying, grinding etc) affected the resultant starch grain morphologies when compared to unprocessed samples. Finally a sample of archaeological grinding stones from the same area were examined to determine whether the ancient processed starch grains could be recognised and successfully compared to the modern reference material.

S03-17

Sándor GULYÁS (University of Szeged, Hungary)
 Pal RACZKY (University of Budapest, Hungary)
 Pal SÜMEGI (University of Szeged, Hungary)

Shellfishing at the Körös site of Nagykörü, Hungary

ABSTRACT: This presentation is an add-on to the numerous zooarchaeological studies, which were recently carried out on freshwater shellfish material retrieved from Neolithic and Bronze Age sites located on the watershed area of Hungary's second largest stream the River Tisza. The Körös site of Nagykörü is located on the floodplain adjacent to the active riverbed of the modern Tisza River, on an elevated lag-surface enjoying protection from floods and thus being ideal for human settlement. Approximately 150 kgs of shell remains were retrieved from a 1.5 m deep refuse pit at the site along with numerous bone and pottery fragments. According to the received radiocarbon dates, the collected material of the pit represents 450 years. The material subjected to study was retrieved in individual units along a vertical profile enabling a temporal study of the shellfishing activities as well. (...) Thanks to the layered nature of the dumped shells, the temporal aspects of shellfishing practices could have also been studied at the site for the inferred period of 450 years, revealing a reduction in mean size of both the gastropod and bivalve shells following the peak periods of shellfishing, which is a clear sign of human overexploitation. As the intensity of shell gathering was reduced the targeted populations also had a chance to recover, as shown by the mean size values restored to almost the original conditions.

Finally, when we compare our findings with those related to other Hungarian Körös sites, and Romanian Gulmenita sites, we can see that the season of shellfish gathering is the hot and dry late summer period of the year in the majority of the cases. This may presume a gathering implemented at times of low crop yields, corroborating the role of shellfish as a food supplement in the diet.

S03-20

Ana CRUZ (Centro de Pré-História, Instituto Politécnico de Tomar, Portugal)

Questions and Methods. A case study: Amoreira, Change or Continuity

ABSTRACT: O Povoado da Amoreira é caracterizado como um arqueosítio pós-pleistocénico implantado tipograficamente em ambiente ecótono, de cariz temporário, inscrevendo-se em termos de indústria lítica numa produção tendencialmente macrolítica coexistindo a produção laminar e lamelar e a produção cerâmica (formas esféricas), anunciando uma continuidade cronológica, que a fazer fé nas datações absolutas de amostras de carvão recolhidas na camada C, se terá estendido desde o período Atlântico ao Sub-Atlântico (Raposo; 1993:121).

A conjugação dos vestígios de cultura material apontam para um modo económico misto, onde a recolha terá porventura um peso fundamental no modo de vida destas comunidades vivendo num período de transição ainda de difícil definição. Os seus territórios de captação de recursos teriam de ser necessariamente mais latos, implicando uma mobilidade quase contínua e uma especialização de tarefas relacionadas também com a exploração da matéria-prima.

Não é de pôr de parte a hipótese deste local ser apenas mais um dos muitos locais requisitados por este grupo num quadro mais amplo de estratégia de captação de recursos, num regime de deslocação e mobilidade contínuo, que pode até não ter sido estritamente sazonal, obrigando a permanências curtas e repetitivas. O quadro mais verosímil parece demonstrar a existência de "aldeias" de trabalho especializado obrigando a deslocações curtas no intuito de recolha primária e específica de determinados recursos existentes em abundância, após o que se retorna a um outro local, para de novo retomar o ciclo.

Esta lógica de mobilidade implica que a noção de "lugar central" tenha se adaptar em termos conceptuais, sendo cada pequeno habitat o "lugar central" de especialização consoante as necessidades do grupo humano. Esta ideia deriva então para a existência de vários "habitats", que poderão situar-se mais ou menos distantes entre si subordinados, cada um deles, aos recursos disponíveis nas várias fases do ano.

Session S04

Thursday, 7 September 2006 / Jeudi, 7 Septembre 2006

Room 12.06, Faculty of Law, Lisbon University
Salle 12.06, Faculté de Droit, Université de Lisbonne

Agro-pastoralism and early metallurgy

Agro-Pastoralisme et début de la métallurgie

Miscellanea

SESSION PROGRAMME / PROGRAMME DE LA SESSION

- 14:30 **Opening / Ouverture**
- 14:30-14:45 Sándor GULYÁS (Szeged, Hungary)
Pál RACZKY (Budapest, Hungary)
Pál SÜMEGI (Szeged, Hungary)
- S04-01** **Shellfishing at the early Neolithic Körös site of Nagykörű, NE Hungary.**
- 14:45-15:00 Ana Cristina GRAÇA (Tomar, Portugal)
- S04-02** **Canteirões' Caves (Tomar, Portugal) – chrono-typology within lithic industries.**
- 15:00-15:15 André FREITAS (Tomar, Portugal)
Laurent CARON (Tomar, Portugal)
Luiz OOSTERBEEK (Tomar, Portugal)
- S04-03** **Quinta do Paço: Aanalysis of a late prehistoric complex in the Alto Ribatejo.**
- 15:15-15:30 Vladimir I. IONESOV (Samara, Russia)
- S04-04** **Transitions and Cultures: Archaeological Resources of Anthropological Knowledge.**
- 15:30-15:45 Barbara ARMBRUSTER (Toulouse, France)
Alicia PEREA (Madrid, Spain)
- S04-05** **Changes in identity of Atlantic Late Bronze Age Iberia - A view trough the technology of luxury metal objects.**
- 15:45-16:00 S. Rama KRISHNA PISIPATY (Deemed, India)
- S04-06** **Climatic changes & socio-cultural evolutions during the Early Bronze Age.**
- 16:00-16:15 Caroline PAUTRET-HOMERVILLE (Paris, France)

Ginette AUXIETTE (France)

S04-07 **Exploitation d'*Ursus Arctos* sur un site de la transition Bronze final / Hallstatt ancien, a Villiers-sur-Seine (Seine-et-Marne, France).**

16:15-16:30 Raimon GRAELLS (Lleida, Spain)
Enriqueta PONS (Girona, Spain)
Mariona VALLDEPEREZ (Tarragona, Spain)

S04-08 **La formation des sociétés proturbaines dans le nord-est de la péninsule ibérique d'après les contextes funéraires (1100-550 ANE cal.).**

16:30-16:45 Natalia MATVEEVA (Tyumen, Russia)
Svetlana BERLINA (Tyumen, Russia)

S04-09 Dwelling of ancient people as form of adaptation to cold climate conditions.

16:45-17:00 Ana CRUZ

S04-10 **Santa Margarida da Coutada - Contribution for an insight on the calcolithic settlements (Alto Ribatejo – Portugal)**

17:00-17:15 Viorica ENĂCHIUC (Giurgiu, Romania)

S04-11 **Rite et rituel du Néolithique précéramique dans le cadre de nécropole de Dridu, Romania.**

17:15-17:30 Peter J. Sheppard
Richard WALTER

S04-12 **"Shrines, Land Rights and Power: Archaeological Study of Cultural Landscapes in the Western Solomon Islands"**

17:30-17:45 Joaquim Oltra PUIGDOMENECH

S04-13 **Food production in the Southeast of the Iberian Peninsula (1500-900 cal...)**

17:45-18:00 Maria Rosario TERZAGHI
Maria CAMELINO
Sandra ESCUDERO

S04-14 **Theoretical models ruling in the archaeology of the North East Argentina: The Corrientes and Santa Fe provinces cases**

18:00-18:15 Luisa DIAZ ARRIOLA

S04-15 **El Complejo Arcaico Marcavilca Y La Movilidad Ciclica de las Poblaciones Tempranas de Chorrillos**

18:15-18:30 G. BALASSONE
M. BONI
G. DI MAIO

S04-16 **Analisi metallografiche e degli isotopi per la caratterizzazione delle tecniche e delle reti commerciali/approvvigionamento antiche – il caso delle culture dell'età del ferro della Campania – Italia.**

18:30-18:45 Discussion

ABSTRACTS / RÉSUMÉS

S04-01 Sándor GULYÁS (Szeged, Hungary)
Pál RACZKY (Budapest, Hungary)
Pál SÜMEGI (Szeged, Hungary)

Shellfishing at the early Neolithic Körös site of Nagykörü, NE Hungary.

ABSTRACT: This presentation is an add-on to the numerous zooarcheological studies, which were recently carried out on freshwater shellfish material retrieved from Neolithic and Bronze Age sites located on the watershed area of Hungary's second largest stream the River Tisza. The Körös site of Nagykörü is located on the floodplain adjacent to the active riverbed of the modern Tisza River, on an elevated lag-surface enjoying protection from floods and thus being ideal for human settlement.

(...) Thanks to the layered nature of the dumped shells, the temporal aspects of shellfishing practices could have also been studied at the site for the inferred period of 450 years, revealing a reduction in mean size of both the gastropod and bivalve shells following the peak periods of shellfishing, which is a clear sign of human overexploitation. As the intensity of shell gathering was reduced the targeted populations also had a chance to recover, as shown by the mean size values restored to almost the original conditions.

Finally, when we compare our findings with those related to other Hungarian Körös sites, and Romanian Gulmenita sites, we can see that the season of shellfish gathering is the hot and dry late summer period of the year in the majority of the cases. This may presume a gathering implemented at times of low crop yields, corroborating the role of shellfish as a food supplement in the diet.

S04-02 Ana Cristina GRAÇA (Tomar, Portugal)

Canteirões' Caves (Tomar, Portugal) – chrono-typology within lithic industries.

ABSTRACT: At the Nabão valley various Holocenec cave burials have been studied. The lithics associated to them are reviewed. Beyond the typological characters we can discover a broader significance at a local and regional aspect within a chronological frame.

S04-03 André FREITAS (Tomar, Portugal)
Laurent CARON (Tomar, Portugal)
Luiz OOSTERBEEK (Tomar, Portugal)

Quinta do Paço: Analysis of a late prehistoric complex in the Alto Ribatejo.

ABSTRACT: Aquando do acompanhamento arqueológico da construção de uma estrada, foram registados na localidade de Quinta do Paço (Tomar) um conjunto de sítios arqueológicos da pré-história recente. Deste conjunto destaca-se um sítio com a presença de uma série de estruturas, desde fossas a "pavimentações", com um eventual cariz ritual, associadas ao uso constante de fogo, testemunhado pelos inúmeros restos de carvões e de terra queimada registados. Estes vestígios corresponderão a uma única ocupação, ou pelo menos a uma sequência de ocupações sucessivas e similares a nível cultural. Nesse sentido também apontam as componentes artefactuais que incluem fragmentos cerâmicos e líticos, que indicam uma cronologia entre os finais do Calcolítico e o Bronze Inicial.

Além das estruturas e do espólio cerâmico e lítico recolhido neste sítio, toda a paisagem envolvente foi também marcada pela presença humana, como o testemunham outros três sítios a escassas centenas de metros, de onde se destacam a presença de lajes menires, e de inúmeros fragmentos líticos à superfície.

Este complexo localiza-se numa zona de transição geomorfológica, entre os antigos relevos do Pré-Câmbrico e do Paleozóico (xistos, granitos, gneiss, quartzo) a Oeste e os calcários do Mesozóico a

Leste. O estudo do megalitismo da Região do Alto Ribatejo revela efectivamente divergências entre as necrópoles meridionais (Zêzere e Tejo), e a área calcária (mais associada às grutas e ao litoral). No contexto antrópico até ao IIIº milénio são os *marcadores de território* associados à morte: grutas-necrópole, antas, menhires, que dominam a região. Numa segunda fase, no IIIº milénio, emergem os grandes povoados, cuja dimensão simbólica parece suplantar uma eventual dimensão funcional económica.

S04-04 Vladimir I. IONESOV (Samara, Russia)

Transitions and Cultures: Archaeological Resources of Anthropological Knowledge.

ABSTRACT: It is the study of the phenomenology of transitional culture, its abilities to adaptation, renewal and development under conditions of the social conflicts and transformations. Culture as anthropological phenomenon expresses transitional essence of human nature. This transition we can fix and define by best way in ancient time. The methodological significance of ancient artifacts consists in them original and pure cultural manifestation. The present configurations of cultures are reflected in early historical times as in mirror. That's why the archaeological resources are very important means of anthropological knowledge.

The transitional stage is the most difficult and significant period in the history of the society. It is the time of a total examination of central values and principles of culture on their authenticity and viability. Changing of rituals and symbols and the transformation of the social objectives is taking place here as well as a foundation for the new cultural reality is being constructed. It is just the design of this foundation that determines the design of the future culture, its stability and development. The study of cultural transformations in transition gives an opportunity to solve a few important tasks: 1) to comprehend the nature of the radical shifts; 2) to find out the ways to prevention and resolution of conflict situations in culture; 3) to offer models of cultural adaptation and survival of the society within the crisis system; 4) to define the set of protecting means of culture in transitional time.

The Bronze Age was historically the first radical and qualitative transition of culture from the primitive state to state organization, from barbarism to civilization, from egalitarianism to social ranking, from the settlement to the early town, etc. The proto-state culture experienced a powerful challenge of the epoch to which ritual was one of the responses. The study of culture in transition seems to be very important as the truth of man existence and predestination of culture are better seen in the time of historical changes.(...)

S04-05 Barbara ARMBRUSTER (Toulouse, France)
Alicia PEREA (Madrid, Spain)

Changes in identity of Atlantic Late Bronze Age Iberia - A view through the technology of luxury metal objects.

ABSTRACT: This paper deals with Mediterranean influences in the Atlantic world of the Iberian Peninsula during the Later Bronze Age, more precisely with changes in metal technology and its impact in form, style and function of luxury objects. Several case studies of prestigious objects, ornaments and table ware, made up of gold and bronze will show the transformation in metalworking traditions that reflect changes in cultural identity at the end of the Late Bronze Age. Amongst the case studies figure the gold hoards of Villena, El Carambolo and Lebrija, and the bronze complex of Baiões. In antiquity the Iberian Peninsula was famous for the supply of gold, copper, tin, lead and silver. The abundance of mineral resources attracted traders and encouraged foreign cultures to establish mercantile relations, culminating at the end of the Late Bronze Age in the establishment of colonial settlements on the coast of Iberia, bringing new social and religious practices. (...)

The study underlines the immense skill and inventiveness of the metal workers, their ability of adoption and integration in a new identity. The ideas suggested in this paper are designed to highlight the place of the technological approach in the study of ancient metalwork and to encourage further collaboration.

S04-06 S. Rama KRISHNA PISIPATY (Deemed, India)

Climatic changes & socio-cultural evolutions during the Early Bronze Age.

ABSTRACT - The main object of this paper is to assemble evidence for climatic changes from the South Asia and surrounding regions for the middle Holocene and relate this evidence to responses on

the part of early human societies and cultures in general and particularly on the river valley settlements like Nile and Sindh. The evidence for desiccation in the region under study, at the end of the Third millennium BC coincides with indications of drought in many regions notably Northern Mesopotamia, Egypt, Laventa, Indus, etc. these environmental changes has undeniable impact on the complex agricultural based societies. Of course, environmental changes can provided both problems and opportunities for living things in general and particularly more on human communities. Using examples drawn form recent environmental, geomorphological, archaeological, anthropological, etc., investigations, many significant factors have been noticed behind the formation of socio-cultural systems. New evidences for human-environmental inter-relationship provided by inter disciplinary micro contextual analysis of the study region further reveal many new influencing factors related to the early human societies and formation of cultural and traditions for the first time in the history of human.

S04-07 Caroline PAUTRET-HOMERVILLE (Paris, France)
Ginette AUXIETTE (France)

Exploitation d'*Ursus Arctos* sur un site de la transition Bronze final / Hallstatt ancien, a Villiers-sur-Seine (Seine-et-Marne, France).

RÉSUMÉ: During summer 2005, we discovered, on the site of Villiers-sur-Seine (Seine-et-Marne, France) a radius from a brown bear (*Ursus arctos* L., 1758). This bone wore two cut marks on its diaphyse. We also discovered a canine tooth from this animal.

The exploitation proof of the brown bear are very rare, so we don't hesitate to present you this discovering. Is it a real butchery activity? What is the meaning of this act?

The aristocratic site of Villiers-sur-Seine is dated Late Bronze Age and its function is uncertain. Through the study of these bones, we will discuss some hypothesis about this very particular site.

S04-08 Raimon GRAELLS (Lleida, Spain)
Enriqueta PONS (Girona, Spain)
Mariona VALLDEPEREZ (Tarragona, Spain)

La formation des sociétés proturbaines dans le nord-est de la péninsule ibérique d'après les contextes funéraires (1100-550 ANE cal.).

RESUME: À la fin de l'âge du bronze, l'Europe occidentale se transforme en une scène sociale et culturelle complexe, formée en toile de fond par les populations autochtones qui accueillent, tout en s'en distinguant, d'autres populations de provenances diverses, notamment continentale et méditerranéenne. Le mélange des groupes humains entraîne une série de transvasements nécessairement porteurs d'un changement culturel profond des sociétés proturbaines émergentes. Les archéologues utilisèrent le terme de « Urnenfelder Kultur » ou phénomène des « Champs d'urnes » pour décrire cette situation qui s'étendit jusqu'au nord-est de la péninsule ibérique, en son point le plus méridional. Leur position géographique, entre la Méditerranée, les Pyrénées et la voie fluviale de l'Ebre, constituera le cadre idéal de cette installation, à la fois qui suscita une véritable fracture sociale, économique et culturelle.

(...) Dans ce sens historique, le bus de cet étude est double : identifier les caractéristiques des différents groupes archéologiques présents sur le territoire catalan, formés à partir de ces événements, et mettre à jour les processus de stratification sociale (le passage d'une population rurale et fragmentée à une population urbaine et à parement plus équilibrée) qui marquera une société, chaque fois plus diversifiée socialement.

La base documentaire utilisée pour cette étude est le registre funéraire (fourni, varié et riche), qui présente une répartition homogène sur tout le territoire, pendant la fin de l'âge de bronze et la transition vers l'âge de fer.

S04-09 Natalia MATVEEVA (Tyumen, Russia)
Svetlana BERLINA (Tyumen, Russia)

Dwelling of ancient people as form of adaptation to cold climate conditions.

ABSTRACT: Dwelling is a key achievement of human culture, symbol of occupied area. The historical experience of northern development shows that the possibilities of human advancement into new territories and inhabitation of cold areas were conditioned by both the level of economical development and by peculiarities of natural climate conditions, which was reflected in the types and

forms of dwellings. By analyzing the stationary dwelling of ancient people used in the wintertime, it is possible to distinguish between different forms of adaptation of communities to cold conditions.

One of the main functions of the dwelling is providing of the necessary closed space, protecting humans from the negative impact of the environment. Together with this, climate and landscape determined the technical decisions during the construction process. Thus, along with social-economical factors such as demographical structure of the society, social activity, household economy, migration processes, material-energetic resources, the level of development of the construction industry, the distance and connection with the developed centers, introduction of progressive constructions and materials, the type and form of the dwelling was greatly impacted by natural conditions. In ancient house construction process the following factors were considered: temperature, light, wind, precipitation, vegetation, relief, frost conditions, and the availability of construction materials.

Let's consider several peculiarities of ancient dwelling construction during the Early Iron Age of the forest-steppe zone of Western Siberia (Culture of Sargatka).(...)

S04-10

Ana CRUZ (Centro de Pré-História, Instituto Politécnico de Tomar, Portugal)

Santa Margarida da Coutada - Contribution for an insight on the calcolithic settlements (Alto Ribatejo – Portugal)

ABSTRACT: O Povoado de Santa Margarida da Coutada (Constância - Portugal) insere-se na região do Alto Ribatejo em terrenos do MioPliocénico e do Quaternário.

É caracterizado como um povoado de cumeada sem aparente definição de áreas muralhadas.

No plano da cronologia relativa foram detectados dois momentos.

1. Período Pleistocénico em contexto remexido: indústrias sobre seixo e sobre grandes lascas, correspondendo ao Paleolítico.

2. Período Holocénico em contexto *in situ* (Camada B):

2.1. Indústrias líticas sobre lasca - (núcleos de lascas, percutores, seixos tallados, raspadores, lâminas, lamelas, pontas de seta, grande quantidade de produtos de debitage); polidas (machados polidos de secção rectangular), elementos de moagem (mós manuais - dormentes e moventes);

2.2. Indústria cerâmica (dominância de fragmentos atípicos, bordos predominantemente redondos, apontados ou rectos, e raros espessados internos, apontando para recipientes abertos cuja morfologia se enquadra no universo das formas esféricas);

2.3. Ideoartefactos: “ídolos corniformes”, enquadradas em estrutura de planta sub-circular, correspondendo classicamente ao Calcolítico.

A continuidade dos trabalhos de campo poderá esclarecer o seu enquadramento no Calcolítico da Estremadura ou no Calcolítico do Sueste, conquanto se devam observar particularidades regionais.

S04-11

Viorica ENĂCHIUC (Giurgiu, Romania)

Rite et rituel du Néolithique précéramique dans le cadre de nécropole de Dridu, Romania.

RESUME: Les fouilles effectuées dans la Dridu, district Ialomitza, située sur la rive droite de l'Ialomitza ont permis la découverte d'un établissement et d'une nécropole avec tombes à inhumation. Le fait que la céramique est absente de ce niveau ainsi que les formes microlithiques des outils en silex et pierre polie permettent de les dater à l'époque Néolithique précéramique.

La habitation est de type hutte et avait un plancher enduit d'une couche d'argile sous laquelle on a trouvé un crâne humain. Les tombes à inhumation découvertes contiennent les squelettes couchés en position accroupie sur le côté droit ou gauche et possédaient comme inventaire de coquillages, outils microlithiques de silex ou des os de chèvres et de chien.

La décapitation et de sépultures à caractère rituel témoignant de la pratique d'une cérémonie d'offrandes et de sacrifices humains en rapport avec les occupations agricoles sont des analogies dans les régions du Proche – Orient.

Les nos recherches archéologiques et les reconstitutions anthropologiques (entreprises de Cantemir Riscutia et Irina Riscutia) ont posé le problème du développement génétique de la culture Dridu –

Snagov du début de l'âge du Néolithique précéramique tenant compte du fond autochtone et du rôle actif joué par les éléments orientaux.

S04-12

Peter J. Sheppard
Richard WALTER

"Shrines, Land Rights and Power: Archaeological Study of Cultural Landscapes in the Western Solomon Islands"

ABSTRACT: Birth and death are basic biological and, amongst humans, fundamental social facts. Together they provide the basis for almost endless cultural elaboration and social reproduction. Death creates durable physical remains which can be manipulated in many ways, but which tend ultimately to be associated with the specific locations in which they are deposited. Human remains can be curated at these locations for long periods and occasionally for thousands of years. They can materialize in a very powerful fashion the social identity of the deceased individual, and in doing so serve to signify or reproduce the web of social and cultural relationships within which the individual participated, as well as the broader relations of identity and power characteristic of a culture. Although the individual is dead their social role may continue. Power in most politically simple societies is a reflection of differential support or access to human labour. Generally this labour is recruited from social groups to which individuals or the group have social ties, most often ties of descent or shared social identity. Although the individual is dead their social identity and efficacy can remain alive with their descendents and in some cosmologies the boundary between the living and dead members of a social group may be blurred. This point is well made by Raharijaona and Kus with reference to the Betsileo people:

The fact that in Madagascar (as in numerous other cultures) the ancestors are critical to the continued health and well-being of their living descendents does not allow for any straightforward quarantining of death and the dead, nor does it allow for the development of any simple logical schema of direct opposition between the domains of life and death (2001:58). (...)

S04-13

Joaquim Oltra PUIGDOMENECH

Food production in the Southeast of the Iberian Peninsula (1500-900 cal...)

ABSTRACT: Food production has been a constant occupation in society since the beginnings of humanity. Further away from the distinction between hunter/gatherers or producers, labor relates a wide range of different activities in order to obtain food. Far away from understanding food production only from the domestic point of view, it has a wide scope of study and it is linked to a complex net of different aspects of quotidian life, food production *starts* with the obtention of raw materials which will be transformed in some way before consumption.

The former paper makes a reflection about the point of view in which food has been looked in archeology, proposes a line of approach and argues about how we create knowledge about food production in the past, remarking that is not enough with the usual faunal or plant analysis nor any technique, but to view globally the production, more than only the phenomenic aspects of the different materials.

S04-14

Maria Rosario TERZAGHI
Maria CAMELINO
Sandra ESCUDERO

Theoretical models ruling in the archaeology of the North East Argentina: The Corrientes and Santa Fe provinces cases

ABSTRACT: For the past 20 years the prevailing models in the archaeology of the North East Area in Argentina, are those proposed by Jorge A. Rodríguez and Carlos N. Ceruti.

In this paper, it will be exposed their archaeological models explaining the cultural dynamic about hunter-gatherers in the region and their limitations, on the light of other theoretical views and development of new archaeological research under different theoretical approaches, focusing on Santa Fe and Corrientes provinces.

S04-15

Luisa Diaz Arriola

EL COMPLEJO ARCAICO MARCAVILCA Y LA MOVILIDAD CICLICA DE LAS POBLACIONES TEMPRANAS DE CHORRILLOS

ABSTRACT: El presente documento presenta de manera resumida la tesis titulada “Estrategias de Ocupacion del Litoral Durante el Arcaico Medio y Tardio: El Conchal San Genaro”. En este trabajo de investigacion se da cuenta del proceso de ocupación cultural identificado en la ladera Sur del Morro Solar del distrito de Chorrillos (Lima), al que hemos denominado “Marcavilca”, siguiendo las fuentes etnohistóricas que señalan a este nombre como la denominación más antigua de esta zona.

Los más de 4,000 m² correspondientes al “Conchal San Genaro” presentan una deposición cultural densa y profunda, que en algunos sectores sobrepasa los 2m de profundidad, y que representan una ocupación prolongada en la zona, debido a los ecosistemas próximos existentes, que la convirtieron en una zona de captación de recursos especial, que permitió la subsistencia de las poblaciones arcaicas que constantemente la visitaron y se asentaron en ella.

Consideramos, que la identificación permanente y concentrada de distintos contextos arqueológicos arcaicos en toda la ladera sur del Morro Solar, nos han permitido identificar la existencia de un complejo cultural temprano, tanto en términos cronológicos como corológicos, que es necesario investigar. En esta zona, no es extraño encontrar permanentemente las fogatas y estaciones dispersas de las poblaciones arcaicas, sino que también en las partes bajas de esta ladera se concentraron los sitios Chira – Villa y el Conchal San Genaro, los que dan cuenta del establecimiento permanente de los pescadores – agricultores tempranos. (...)

S04-16

G. BALASSONE

M. BONI

G. DI MAIO

ANALISI METALLOGRAFICHE E DEGLI ISOTOPPI PER LA CARATTERIZZAZIONE DELLE TECNICHE E DELLE RETI COMMERCIALI/APPROVVIGIONAMENTO ANTICHE – IL CASO DELLE CULTURE DELL’ETÀ DEL FERRO DELLA CAMPANIA – ITALIA.

ABSTRACT: Petrographic/mineralogic/metallographic analyses are currently under way on several metallic objects and slags sampled in several archaeological sites belonging to the Iron Age cultures in Campania (Southern Italy). The samples consist both of different types of slags and objects found in several tombs occurring in the necropolis of Caudium, from the Longola-Poggiomarino village and from the nearby necropolis of the Sarno River Plain. Other objects have been sampled in the necropolis of Monte Vetrano (Salerno), Pontecagnano and Sala Consilina. Pb-isotopic analyses carried out on several samples, show a prevailing provenance of the source materials from “Hercynian type” ore deposits in the Mediterranean area (Boni et al. 2000). The isotopic signatures can be referred so far to the old mining districts of southern Sardinia and southern Spain (with some hints to possible sources from northern Italy mines). The mentioned isotopic data, if compared with the “Alpine type” signatures (typical of Etruscan and Greek mines), commonly observed in the archaeological objects found in Campania between the VI and the III sec. B.C. point to a drastic change in the metal supply and/or in the commercial routes throughout these periods.

Session S05

Saturday, 9 September 2006 / Samedi, 9 Septembre 2006

*Room 6.1.49, Faculty of Sciences, Lisbon University
Salle 6.1.49, Faculté de Sciences, Université de Lisbonne*

American Archaeology

Archéologie Américaine

Miscellanea

SESSION PROGRAMME / PROGRAMME DE LA SESSION

09:00 **Opening / Ouverture**

09:00-09:15 Sandra ESCUDERO (Rosario - Pcia. de Santa Fe, Argentina)
 Maria Rosario FEUILLET TERZAGHI (Santa Fé - Pola. De Santa Fé, Argentina)
 María NUÑEZ CAMELINO (Corrientes - Pcia. de Corrientes, Argentina)

S05-01 **Theoretical models ruling in the archaeology of the North East Argentina: The Corrientes and Santa Fe provinces cases.**

09:15-09:30 Luisa DÍAZ ARRIOLA (Lima, Perú)

S05-02 **El complejo arcaico Marcavilca y la movilidad ciclica de las poblaciones tempranas de Chorrillos.**

09:30-09:45 Fabio PARENTI (Roma, Italy)

S05-03 **South American megafauna at the Pleistocene-Holocene boundary: the Lagoa do Quari Swamp (São Raimundo Nonato, Northeastern Brasil).**

09:45-10:00 Fabio PARENTI (Roma, Italy)

S05-04 **Upper pleistocene peopling of brazilian *caatingas*: recent data from Serra da Capivara national park (São Raimundo Nonato, Brazil).**

10:00-10:15 Ana Luísa SANTOS (Coimbra, Portugal)
 Philip ALLSWORTH-JONES (Kingston, Jamaica)
 M. GARDNER

S05-05 **Context and dating of a skull with treponemal disease found at Bull Savannah cave, Jamaica.**

10:15-10:30 Giannina BARDALES (Lima, Perú)
 Pedro V. CASTRO MARTÍNEZ (Barcelona, Spain)
 Juan Carlos DE LA TORRE ZEVALLOS (Barcelona, Spain)

Nicolau ESCANILLA ARTIGAS (Barcelona, Spain)
Trinidad ESCORIZA MATEU (Almería, Spain)
Maria Concepción GODOY ALLENDE (London, UK)
Bárbara LAPI (Barcelona, Spain)
Israel NAVARRO MAYOR (Barcelona, Spain)
Julio César ZAVALA VARGAS (Lima, Perú)

S05-06 **La Puntilla Project: Investigations on sociology of centralization in communities of the valley of Nasca (1st millennium BC).**

10:30-10:45 Robert H. TYKOT (Tampa, FL, U.S.A.)

S05-07 **Panorama of Dietary Adaptations in Southern America Using Stable Isotope Analysis.**

10:45-11:00 Silvana BUSCAGLIA
Victoire NUVIALA

S05-08 **Material construction of culture contact at Floridablanca (San Julián, 18th Century).**

11:00-11:15 Carlos FARFÁN

S05-09 **O culto da água: Perú antigo e Perú contemporâneo. Na zona de Huaros - Chillón Alto**

11:15-11:30 Jorge SILVA

S05-10 **Evolução cultural e política na América pré-hispânica. Desde as jefaturas até ao império arcaico**

11:30-11:45 Lilian REVELATO

S05-11 **La búsqueda del pasado a través de los análisis químicos: un estudio de caso del sitio arqueológico Hatahara y de su tierra preta**

11:45-12:00 Santiago MORA

S05-12 **Identificando los contenidos del pasado: indígena, restos botánicos, tiestos y piedras en la prehistoria amazónica**

12:00-12:15 Thomas van der HAMMEN

S05-13 **Paleoambientales para la arqueología amazónica: el caso de Chiribiquete**

12:15-13:00 **Discussion**

ABSTRACTS / RÉSUMÉS

S05-01 Sandra ESCUDERO (Rosario - Pcia. de Santa Fe, Argentina)
Maria Rosario FEUILLET TERZAGHI (Santa Fé - Pcia. de Santa Fé, Argentina)
María NUÑEZ CAMELINO (Corrientes - Pcia. de Corrientes, Argentina)

Theoretical models ruling in the archaeology of the North East Argentina: The Corrientes and Santa Fe provinces cases.

ABSTRACT: For the past 20 years the prevailing models in the archaeology of the North East Area in Argentina, are those proposed by Jorge A. Rodríguez and Carlos N. Ceruti.

In this paper, it will be exposed their archaeological models explaining the cultural dynamic about hunter-gatherers in the region and their limitations, on the light of other theoretical views and development of new archaeological research under different theoretical approaches, focusing on Santa Fe and Corrientes provinces.

S05-02 Luisa DÍAZ ARRIOLA (Lima, Perú)

El complejo arcaico Marcavilca y la movilidad ciclica de las poblaciones tempranas de Chorrillos.

ABSTRACT: El presente documento presenta de manera resumida la tesis titulada "Estrategias de Ocupacion del Litoral Durante el Arcaico Medio y Tardío: El Conchal San Genaro". En este trabajo de investigacion se da cuenta del proceso de ocupación cultural identificado en la ladera Sur del Morro Solar del distrito de Chorrillos (Lima), al que hemos denominado "Marcavilca", siguiendo las fuentes etnohistóricas que señalan a este nombre como la denominación más antigua de esta zona.

(...) El hilo conductor de la investigacion gira en torno al tema de la movilidad o trashumancia de las poblaciones tempranas de Chorrillos, a partir del cual se pudo plantear un modelo de ocupación del territorio estudiado, y proponer el proceso de ocupación cultural identificado. Por lo cual, se realizó el estudio detallado de los ecosistemas existentes, así como la procedencia de los ecofactos y artefactos recuperados durante nuestras investigaciones. De tal manera, que pudieramos reconstruir los distintos ecosistemas y zonas de captación utilizados por los pobladores tempranos. Como resultado, proponemos que en la costa central peruana durante el periodo Arcaico (10,000 a 1500 aC) estas poblaciones desarrollaron un patrón de movilidad ciclica entre los nichos ecológicos existentes, como una estrategia de subsistencia que se dio en dos ejes: Uno, longitudinal, a lo largo del litoral de la línea costera, y el otro transversal que sigue la línea del valle, junto con sus lomas; de tal manera que no desarrollaron una economía especializada únicamente en los recursos marinos, sino que por el contrario desarrollaron una economía complementaria entre los recursos del mar y del valle, que les permitió superar las carencias de recursos estacionales propios de la ecología de la región o los ocasionados por los paleo ENSOS. Asimismo, entendemos que radica en esta estrategia de subsistencia la condición especial, que sentó las bases para el origen de las sociedades complejas de la región durante el Arcaico Tardío, y que las identificamos plenamente establecidas durante el Arcaico Final.

S05-03 Fabio PARENTI (Roma, Italy)

South American megafauna at the Pleistocene-Holocene boundary: the Lagoa do Quari Swamp (São Raimundo Nonato, Northeastern Brasil).

ABSTRACT: A small lacustrine basin in semi-arid northeastern Brazil has yielded a rich vertebrate fauna, older than 8770± 55 uncalibrated years BP, composed by *Eremotherium*, *Haplomastodon*, *Catonix*, *Toxodon*, *Glyptodon*. Upper Holocene unifacial lithic industry has been recovered on the top of the sequence: it is mainly on quartz and local chert. The site has the typical traits of the widespread upper Pleistocene fossiliferous *Caçimbas* formation of northern Brazil, so this test-case is useful for the general understandig of the evolution of palaeoenvironment at the very beginning of Holocene, when human presence in South-America hade a sudden growth.

S05-04 Fabio PARENTI (Roma, Italy)

Upper pleistocene peopling of brazilian caatingas: recent data from Serra da Capivara national park (São Raimundo Nonato, Brazil)

ABSTRACT: More data on debated "long" chronology of human peopling of South America from the core region around Pedra Furada come from rock-shelters as Sitio do Meio, Caldeirão dos Rodrigues, Coqueiros, Serra Branca or palaeontological sites as Garricho, where human teeth have

been dated at XV millennium BP, or the Pedra Furada itself, where the oldest lithic industry has been analyzed for microwears. They point to a difficult but solid evidence of a Pleistocene peopling of eastern south America. Palaeoenvironmental implications of these results at the Pleistocene-Holocene boundary are debated in the frame of Brazilian archaeology and vertebrate palaeontology.

S05-05

Ana Luísa SANTOS (Coimbra, Portugal)
Philip ALLSWORTH-JONES (Kingston, Jamaica)
M. GARDNER

Context and dating of a skull with treponemal disease found at Bull Savannah cave, Jamaica

ABSTRACT: This cave, situated north of Port Kaiser on the south coast of Jamaica, was identified as a Pre-Columbian burial site by Dr James Lee in March 1968 (EC12 in his notation). He stated that “one fairly complete skull with flattened forehead and a second badly decomposed one were found on the cave floor together with a number of teeth, other bones, and pottery”. According to Dr Lee’s sketch plan, the two skulls were found at the back of a low narrow recess, the total area of the cave amounting to no more than 4 square meters. Fragments of two pottery vessels were considered to be Redware (Ostionan) in style, but the material from the cave now kept at the University of the West Indies includes at least one rim of White Marl (Meillacan) type. Both skulls show signs of artificial modification, with flat frontals and parietal expansion, and in both cases the base is damaged. This damage may be connected with the practice of secondary burial. The skull described by Dr Lee as “fairly complete” (it has a well preserved vault and face) has been radiocarbon dated both at the Beta Analytic and the Oxford laboratories, thanks to financial support provided by the Institute of Bioarchaeology. Three directly adjacent samples from the right side of the occipital bone were used for the purpose. The second and third samples produced three uncalibrated dates from Oxford as follows 1101±27, 1123±25, and 1069±23 BP. The first sample was tested twice by Beta Analytic, producing two uncalibrated dates of 1080±40 and 1050±40 BP, as well as two older ones of 1870±40 and 2760±40 BP. The laboratory regards these inconsistent results as due to contamination of its sample, whereas Oxford regards its results as unproblematic. On general grounds, the older dates for this skull are considered unlikely, both because they do not accord with what is otherwise known of the Jamaican archaeological sequence, and because elsewhere in the Greater Antilles (e.g. in Puerto Rico, on the basis of the evidence from Maruca and Tibes) the practice of artificial skull modification is not known before the first millennium AD. What is undoubtedly clear, however, is the Pre-Columbian date of the skull. This is important because it has clear signs (lytic lesions) indicative of treponemal disease.

S05-06

Giannina BARDALES (Lima, Perú)
Pedro V. CASTRO MARTÍNEZ (Barcelona, Spain)
Juan Carlos DE LA TORRE ZEVALLOS (Barcelona, Spain)
Nicolau ESCANILLA ARTIGAS (Barcelona, Spain)
Trinidad ESCORIZA MATEU (Almería, Spain)
Maria Concepción GODOY ALLENDE (London, UK)
Bárbara LAPI (Barcelona, Spain)
Israel NAVARRO MAYOR (Barcelona, Spain)
Julio César ZAVALA VARGAS (Lima, Perú)

La Puntilla Project: Investigations on sociology of centralization in communities of the valley of Nasca (1st millennium BC).

ABSTRACT: The project aims to produce sociological research on the communities living in the valley of Nasca in the 1st millennium BC. We are working in several sites in the area. The excavations have provided evidence about singular buildings for centralised work, with at least two courtyards, and, also, domestic units that show the availability of the products manufactured in the central building of the settlement. This means it will be possible to analyse production of social life and whether there was a dominant class controlling production, or not.

S05-07

Robert H. TYKOT (Tampa, FL, U.S.A.)

Panorama of Dietary Adaptations in Southern America Using Stable Isotope Analysis.

ABSTRACT: The domestication and spread of maize was a critical dietary and socioeconomic aspect of cultural development in the Americas. Stable isotope analysis of skeletal remains provides quantitative estimates on the importance of maize, and seafood for coastal populations, for individuals which may be compared based on sex, status, local ecology, and chronology. A synthesis is presented here based on collagen, apatite, tooth enamel, and hair data now available for many sites in Latin America. When combined with complementary data from faunal, paleobotanical, and ethnohistoric studies, this provides a clearer picture of the importance and variation of food in ancient times.

S05-08

Silvana BUSCAGLIA
Victoire NUVALA

Material construction of culture contact at Floridablanca (San Julián, 18th Century).

ABSTRACT: By the end of 18th century the Spanish Crown decides to create the “Nueva Colonia y Fuerte de Floridablanca” as part of an occupation plan, in one of its moved away dominions in South America, the Patagonian coast (Bay of San Julian, Province of Santa Cruz, Argentina).

With the foundation of the “Colonia de Floridablanca” a particular scene was created for the configuration of the interethnic relations between indigenous *-tehuelches-* and Spaniards. Studies of the material culture generate a different image from the one shaped by the official discourse; especially in the definition of those scenes, objects and social identities implied in the construction of the interethnic relations in Floridablanca.

The emphasis in the particular contexts within the framework of colonial expansion, allows us to discuss the variability in the construction of culture contact, emphasizing the heterogeneity of the involved actors, especially the individual agency of the indigenous through interethnic dynamics. From the idea of contact as a social practice, we reevaluate the social role of the written discourse, social practices and material world in the structuration of the relations between /within both societies.

Session S06

Saturday, 9 September 2006 / Samedi, 9 Septembre 2006

*Room 11.04, Faculty of Law, Lisbon University
Salle 11.04, Faculté de Droit, Université de Lisbonne*

Methods

Méthodes

Miscellanea

SESSION PROGRAMME / PROGRAMME DE LA SESSION

- 09:00 **Opening / Ouverture**
- 09:00-09:30 Stefano RICCI (Siena, Italy)
S06-01 **Proposal of a new reconstruction of Neanderthal man typical calvary.**
- 09:30-10:00 Jesús BARBA REY (Madrid, Spain)
S06-02 **The butchering marks. An experimental study.**
- 10:00-10:30 Myrian ALVAREZ (Ushuaia, Tierra del Fuego, Argentina)
S06-03 **Theoretical perspectives in the analysis of lithic technology in Argentina.**
- 10:30-11:00 Emanuele CANCELLIERI (Roma, Italy)
 Gianluca FRINCHILLUCCI (Fermo, Italy)
 Giansimone POGGI (Roma, Italy)
S06-04 **Artisan activities in a village of *fugà* (Wolaita-Ethiopia): notes of journey.**
- 11:00-11:30 Ana VLAD (Iasi, Romania)
S06-05 **Tracing ancient civilisations: lead finds analyses.**
- 11:30-12:00 Louis GILBERT (Sainte-Foy, France)
 Ariane BURKE (Montreal, Canada)
 Nuno Ferreira BICHO (Faro, Portugal)
S06-06 **Describing the Algarve, predictig the Alentejo; Field-testing of a predictive model for the Palaeolithic settlement of the Alentejo (Portugal).**
- 12:00-12:30 Nicholas J. CONARD (Tübingen, Germany)
 Knut BRETZKE (Tübingen, Germany)

Katleen DECKERS (Tübingen, Germany)
Philipp DRECHSLER (Tübingen, Germany)
Michal KUCERA (Tübingen, Germany)
Simone RIEHL (Tübingen, Germany)
Mohammed MASRI (Damascus, Syria)

S06-07 **Modelling Stone Age Landuse and Environmental Change in the Central Levant.**

12:30-13:00 Ariane BURKE (Montreal, Canada)
D. EBERT

S06-08 **Building palaeoethological data into predictive models.**

ABSTRACTS / RÉSUMÉS

S06-01 Stefano RICCI (Siena, Italy)

Proposal of a new reconstruction of Neanderthal man typical calvary.

ABSTRACT: On the bases of morphometric features of classic European Neanderthal Humanity (*Homo neanderthalensis*), a new complete reconstructive model of a typical calvary of Neanderthal Man (skull + jaw) is proposed. The model, made in resin, is directed towards didactic activities and museum aims.

S06-02 Jesús BARBA REY (Madrid, Spain)

The butchering marks. An experimental study.

ABSTRACT: In this work we expose the employed methodology in the execution of an experimental study of butchering, as well as the results obtained. We have carried out all the chain of prosecution (skinning, carving, dismembering, stripping, and extraction of tendons) of a doe. The experiment was carried out by a professional butcher, using flakes and lithic tools carried out in flint in order to analyse the characteristics of the cut marks produced by these raw materials.

S06-03 Myrian ALVAREZ (Ushuaia, Tierra del Fuego, Argentina)

Theoretical perspectives in the analysis of lithic technology in Argentina.

ABSTRACT: The aim of this paper is to debate the theoretical perspectives in the analysis of lithic technology in the archaeological research carries out Argentina and to evaluate the influence of different frameworks of Europe and North American theory. The purpose is to discuss why the use-wear analysis was practically ignored in the agenda of lithic studies in that country. We intend to recover this method within the frame of the theory of practices and social agency.

S06-04 Emanuele CANCELLIERI (Roma, Italy)
Gianluca FRINCHILLUCCI (Fermo, Italy)
Giansimone POGGI (Roma, Italy)

Artisan activities in a village of *fugà* (Wolaita-Ethiopia): notes of journey.

ABSTRACT: The poster presents the photographic documentation realized in sphere of an international co-operation project in Wolaita.

It describes the processing of two activities in a village of *fugà*: the traditional production of earthenware and the hide working with lithic technology.

There is also a short ethno-historical presentation based on existing literature, on change in manufacture of hide happened in the space of 20 years, when ethnoarchaeological researches were conducted in the same area.

S06-05 Ana VLAD (Iasi, Romania)

Tracing ancient civilisations: lead finds analyses.

ABSTRACT: Lead, occurring as major or minor constituent of lead or leaded alloys (pewter, leaded bronze, etc.) pieces, or present as traces in silver, copper, iron or zinc archaeological items, as well as in minerals used for the glass and glaze production, is useful in provenance studies and permits to find out the metal ore sources by lead isotope technique.

The work presents the results of analyses carried out by thermal ionization mass spectroscopy (TIMS) on some lead items (sling bullets), accidentally found at different locations, spread near the Black Sea shore. This area was the place of Greek settlements during the VI-th and the I-st century BC and was occupied by the Romans at a later date.

An attempt to assign the lead finds to one or another of the civilizations is done, by comparing the analyses results with the already established lead isotope field for the ore deposits from Mediterranean region.

S06-06 Louis GILBERT (Sainte-Foy, France)
Ariane BURKE (Montreal, Canada)
Nuno Ferreira BICHO (Faro, Portugal)

Describing the Algarve, predicting the Alentejo; Field-testing of a predictive model for the Palaeolithic settlement of the Alentejo (Portugal).

ABSTRACT: A predictive model, built using environmental and archaeological data from the Algarve, in southern Portugal, is tested during surveys of the Sado drainage system, in Alentejo. The goal is to determine if the descriptive model established for the Palaeolithic settlement of the Algarve is representative of Palaeolithic settlement elsewhere in Portugal despite the existence of regionally distinct geographic features. This initial model is the first step in a study of Middle Palaeolithic settlement in Algarve, which will be used to assess which classical data types should be used when modeling prehistoric settlement patterns.

S06-07 Nicholas J. CONARD (Tübingen, Germany)
Knut BRETZKE (Tübingen, Germany)
Katleen DECKERS (Tübingen, Germany)
Philipp DRECHSLER (Tübingen, Germany)
Michal KUCERA (Tübingen, Germany)
Simone RIEHL (Tübingen, Germany)
Mohammed MASRI (Damascus, Syria)

Modelling Stone Age Landuse and Environmental Change in the Central Levant.

ABSTRACT: Since 1999 a joint German-Syrian research team has conducted surface survey for Stone Age sites and excavations in caves and rockshelters in Damascus Province of Syria. This work has resulted in a high quality data base for landuse from the Acheulean until the Neolithic. At present we are using GIS to develop diachronic models for floral and faunal resources as well as water and lithic raw materials.

Using a combination of paleoenvironmental data from continuous terrestrial and marine records and floral and faunal data from archaeological sites, we are working to produce dynamic models of environmental change and human adaptations during the Middle and Late Quaternary. In this paper we focus on the Pleistocene – Holocene transition to examine environmental change as a causal factor for the shift from Paleolithic to Neolithic economies in the central Levant. We use one hectare cells in our digital elevation model and work with a temporal resolution in the range between a century and a millennium. We consider variables including wetness indices, geological substrate, topographical position and others for modelling environmental change. This GIS-based approach provides new tools for reconstructing prehistoric landuse and settlement dynamics.

S06-08

Ariane BURKE (Montreal, Canada)
D. EBERT

Building palaeoethological data into predictive models.

ABSTRACT: The use of predictive models as a tool for designing archaeological surveys is now well-established. Models typically consider topographical features, such as slope and aspect, and proximity to water or to other designated resources. Prehistoric hunter-gatherer groups will have responded to the distribution of fixed resources, such as lithic raw material sources and shelter, but also to mobile resources such as game animals. Both types of resource should logically be included in our predictive models, therefore. Paleoethological models can help us predict the distribution of game across the landscape and their patterns of movement. The combined use of topographic and paleoethological models to predict archaeologically significant areas of interest is explored here.

Session S07

Saturday, 9 September 2006 / Samedi, 9 Septembre 2006

*Room 12.06, Faculty of Law, Lisbon University
Salle 12.06, Faculté de Droit, Université de Lisbonne*

Global State of the Art

État Global de l'Art

Miscellanea

SESSION PROGRAMME / PROGRAMME DE LA SESSION

09:00 **Opening / Ouverture**

09:00-09:30 Matt GATTON
Leah CARREON
Madison CAWEIN
Walter BROCK
Valerie SCOTT

S07-01 **The Camera Obscura and the Origin of Art: The Case for Image Projection in the Upper Paleolithic.**

09:30-10:00 Elyas SAFFARAN (Teheran, Iran)

S07-02 **Etude et présentation de l'art rupestre en Iran (exemple d'étude dans les régions du province central et Kermân d'Iran).**

10:00-10:30 Nobuhiro YOSHIDA (Kitakyusyu, Japan)

S07-03 **Aesthetics of the Ancient Calls for the Modern.**

10:30-11:00 Sue O'CONNOR (Australia)

S07-04 **In accordance with the ancestors...but whose ancestors? : an exploration of cultural transmission in East Timor.**

11:00-11:30 Claudia CUNHA KACHIMARECK (Feira de Santana, Bahia, Brasil)
Flávio FRANÇA (Feira de Santana, Brasil)
Efigênia DE MELO (Feira de Santana, Brasil)
Jacqueline MIRANDA GONÇALVES

S07-05 **Nota Prévia sobre um complexo de sítios de pinturas rupestres da Pedra Grande na região dos Inselbergues de Itatim – Bahia, Brasil**

11:30-12:00 Nobuhiro YOSHIDA (Kitakyusyu, Japan)

S07-06 Aesthetics of prehistoric people seen in Rock Art.

12:00-13:00 Discussion

ABSTRACTS / RÉSUMÉS

S07-01 Matt GATTON
Leah CARREON
Madison CAWEIN
Walter BROCK
Valerie SCOTT

The Camera Obscura and the Origin of Art: The Case for Image Projection in the Upper Paleolithic

ABSTRACT: There are several theories on the origin of art: mutation, magic, sexuality, eidetics, and shamanism. However, a more practical explanation is that the initial conceptualization of visual communication came about as the byproduct of the need to keep warm. A harsh climate forced humans to adopt heat-retaining dwelling strategies that included the employment of thick hide tents. Our research shows that small holes in the hides would have projected moving images from the outside world into the interior, making a functional camera obscura. Over time, people gained command of this technology, tracing projected images on plaquettes inside of hide tents.

S07-02 Elyas SAFFARAN (Teheran, Iran)

Etude et présentation de l'art rupestre en Iran (exemple d'étude dans les régions du province central et Kermân d'Iran).

RESUME : Il existe beaucoup d'endroit sur l'art rupestre dans les différentes provinces et villes de l'Iran. En particulier, dans les régions de province centrale et les autres provinces comme Kermân de l'Iran, dans ces régions nous avons trouvé de nombreux lieux concernant l'art et les gravures de la période préhistorique d'Iran. Grâce à notre étude, travail et recherche archéologique sur ses des œuvres cet endroit, les historiens d'art, les archéologues et les ethnographes peuvent reconnaître les images de l'art préhistorique de l'Iran et le rôle important joué par ce pays pendant cette période.

Donc pour bien connaître cet art, on présente dans cette communication avec des documents archéologiques les différentes étapes de nos études scientifiques, notamment :

- I. Etude sur la situation géographique et historique.
- II. Circonstances de ces découvertes.
- III. Description et analyse des peintures et des gravures rupestres.

S07-03 Nobuhiro YOSHIDA (Kitakyusyu, Japan)

Aesthetics of the Ancient Calls for the Modern

ABSTRACT: For 26 years, we have found 4500 engraved rocks in Japan scholar shipped by Ministry of Science and Education.

The most remarkable are rock-wall paintings of old chambered tombs in the 500's A.D., for most of them are similar to ancient Egyptian, Korean or Chinese ones. Other notable ones are cupules and petroglyphs found at 850 sites, because 40% of them are similar to European or Polynesian ones, which implies that waves of immigrations and diffusions carried them to the Far East. We intend to analyze the aesthetics and religions of the ancient with comparative studies on the western and the eastern civilizations.

S07-04 Sue O'CONNOR (Australia)

In accordance with the ancestors...but whose ancestors? : an exploration of cultural transmission in East Timor

ABSTRACT: The landscape in which the small *sucu* of Tutuala is positioned is the main painted rock art province in East Timor and one of the richest yet known in Island Southeast Asia. The subjects depicted in art, the style and the locational contexts of the images have been argued to place them within the large corpus of painted art known by the sobriquet “the Austronesian painting tradition”(Ballard 1992). The “Austronesian painting tradition ”is recognized across much of Island South east Asia and Western Melanesia and is thought to have accompanied the spread of Austronesian speakers (AN) into the region within the last 4,000 years.

Today the caves and shelters of Tutuala, whose walls are adorned with the painted images, are regularly used for contemporary ritual and ceremony by the members of the landholding *ratu*, who speak a Non-Austronesian (NAN) language, known as Fataluku (Trans New Guinea Phylum). The images, while not attributed to human action, are explained within Fataluku creation cosmology and are reproduced in contemporary woven ritual cloth and even on modern Catholic concrete graves “in accordance with the ancestors”. There are however good historical and linguistic grounds for believing that the Falaluku are fairly recent settlers of this area and that the landscape of Tutuala was formerly populated by Austronesian language speakers. This paper looks at the ways in which specific motifs, composition and ‘style’ may reproduce themselves through time and across space, and the implications of this for assigning style in material culture with linguistic or ethnic groupings.

S07-05

Claudia CUNHA KACHIMARECK (Feira de Santana, Bahia, Brasil)
Flávio FRANÇA (Feira de Santana, Brasil)
Efigênia DE MELO (Feira de Santana, Brasil)
Jacqueline MIRANDA GONÇALVES

Nota Prévia sobre um complexo de sítios de pinturas rupestres da Pedra Grande na região dos Inselbergues de Itatim – Bahia, Brasil

ABSTRACT: O complexo de Sítios da Pedra Grande está localizado em Itatim, semi-árido da Bahia, Brasil em um inselbergue "Koppje". Este complexo é a presença mais oriental de arte rupestre no estado. O suporte para a arte é granito-gnaiss-migmatito. O complexo é dividido três sítios: Pedra Grande, Torre Pintada e Sítio do Conflito. A grande maioria dos painéis é composta por um único estilo de pinturas, muito frequentemente encontrado nas terras baixas da Bahia, Piauí e Pernambuco. Há uma predominância de motivos geométricos monocromáticos, com raros casos de motivos não-geométricos e ainda mais raro o uso de policromia. A extração de blocos para pavimentação pública é a principal atividade econômica da região e é visível o avanço das pedreiras a cada dia que passa, fazendo esmaecer as esperanças que os sítios sobrevivam. A conservação dos sítios passa pela ação integrada de educação patrimonial da população que resgate a auto-estima da comunidade a partir da valorização das antigas expressões artísticas, e da sua utilização para atividades economicamente sustentáveis, entre elas o estímulo à visitação turística.

POSTERS

All posters integrated in Sessions will be displayed September 6th and 7th. The remaining posters, listed below, will be displayed the 8th and 9th.

Tout les posters intégrés dans les Sessions seront affichés le 6 et 7 Septembre. Les autres posters, listés en bas, seront affichés le 8 et 9.

Faculty of Science, Hall

Faculté de Sciences, Hall

ABSTRACTS / RÉSUMÉS

Adriana IONIUC

The civilization of Cucuteni in the European context

ABSTRACT: The History Museum of the National Complex of Museums "Moldova", Iasi, contains the richest and the most important Romanian collection of Cucuteni ceramics at an European level. The culture of Cucuteni represents one of the last significant civilizations of the eneolithic / chalcolithic period of the South - Eastern Europe. Between 4600 - 3500 B.C., this culture spread over the eastern Romania, the Republic of Moldavia and Ukraine.

In Romania, there are 2000 Cucuteni sites, discovered during more than 125 years, a great number of them belonging to the stage of development Cucuteni A (4600 – 4050 BC), and among all these, Scanteia is the most famous of all, with regards to its form and painting.

The ceramic material discovered at Scanteia between 1985-1996 shows that the processing of the ceramics had a well-defined role in the life of the Cucuteni community.

Almost 77% of this material is painted: containers, cups, amphora, vessel stands, spoons and figurines, using red, white and black.

The restoration – conservation of the Scanteia ceramics was done at the Center for Restoration and Conservation of the Cultural Heritage, Iasi, and raised difficult problems, especially with regards to the variety of forms of the plates and also to the painted parts.

This culture became known in Europe through international exhibitions.

The archeological discoveries done at Scanteia and Cucuteni caused an extraordinary interest for both of them. Thousands of hundreds of tourists are interested in visiting the local archeological sites, which lead to the development of the economical and cultural life of Scanteia and Cucuteni villages.

There is a close cooperation among the townhalls of the villages, the museum's specialists, the school and the Faculty of History from the 'Alexandru Ioan Cuza' University of Iasi, all of them aiming at rebuilding the villages which existed 3500 years ago.

Alain TUFFREAU
V. CHIRICA
S. BALESU
Paul HAESAERTS
M. LAMOTHE

The Transitional Industry of Mitoc-Valea Izvorului (Romania): an Erroneous interpretation.

Alberto Mingo ÁLVAREZ

Jesús Barba REY
Miguel Ángel García VALERO

The new middle Palaeolithic site of Los Almendros (La Roda, albacete, Spain) in its geographical context.

ABSTRACT: In this work, we present a study of the lithic industry of the recently discovered open-air site of Los Almendros and a comparison with the other regional Palaeolithic sites. The characteristics of this lithic assemblage allow us to attribute it to an advanced moment of the middle Palaeolithic. We also show the methodology employed in collecting the lithic material during the prospection works.

Alberto Mingo ÁLVAREZ
Raquel Aliaga ALMELA

An approach to the symbolic study of the "occulate idols" in the Iberian Chalcolithic.

ABSTRACT: This work attempts to be an approach to the symbolic side of these kind of Chalcolithic pieces. We bring forward some data and ideas which allow to review the existing interpretative hypothesis and open new lines in the research concerning the symbolism of these idols. Besides, we pose some questions and introduce other elements not ever considered when performing this type of studies.

Ana Maria da SILVA
Rui MARQUES

Development defects detected in the spine of Medieval male skeleton exhumed from the Capela de Nossa Senhora da Vitória (Aljubarrota, Portugal).

ABSTRACT: In 1959, the partial excavation of the Capela de Nossa Senhora da Vitória, uncovered 19 individuals besides many disarticulated bones. Nowadays the bones are curated in the Department of Anthropology of the University of Coimbra. Both sexes and all age categories are represented.

In this paper we present the congenital anomalies detected in the spine of a young adult male skeleton, namely, cleft posterior arch of the atlas, fusion of C7-T1 and sacralization of L5.

Ana Maria da SILVA
Zélia RODRIGUES
Tiago GOMES

Supranumerary teeth in the Medieval Portuguese population of Ribeira de Santarém.

ABSTRACT: The partial excavation of the Medieval Necropolis of Ribeira de Santarém, carried out in 2003, led to the recovery of 144 skeletons besides some disarticulated bones. The sample includes individuals of both sexes, adults and non-adults.

This poster describes supranumerary teeth detected in the upper maxilla or mandible of three skeletons.

Corneliu BELDIMAN
Diana-Maria SZTANCS

**Symboles du Néolithique, morphologie anatomique et parure:
un bracelet en os découvert dans le site de la culture Vinča de Gornea,
Roumanie**

ABSTRACT: L'ouvrage étale les résultats d'une analyse morfo-technologique détaillée sur un rare objet de parure en os, découvert dans le site de Gornea-„Căunita de Sus”, dép. de Caras-Severin, appartenant à la culture Vinča (phase A) du Néolithique ancien. On continue ainsi la série des publications des auteurs qui traitent la parure néolithique en matières dures animales du pays. On passe en revue les problèmes liés aux artefacts qui font partie de la série des objets de parure interprétés hypothétiquement comme bracelets en matières dures animales. Dans le cas de la pièce de Gornea-„Căunita de Sus” il s'agit d'un objet récupéré dans un contexte bien précisé (logement) pendant les fouilles menées par le Dr. Gheorghe Lazarovici. Cet artefact (portant l'indicatif GCS 105) est entier, appartient au type de bracelet demi-circulaire ayant les extrémités perforées (*III G1 e4*); il a été réalisé sur segment proximal (tête) de fémur de bovinés (taureau probablement); son diamètre intérieur mesure 55 mm. On constate le choix de la matière première selon sa convexité anatomique accentuée qui se prête d'une manière idéale à la confection d'un bracelet. Le débitage a été réalisé par percussion directe. Le façonnage a été achevé par percussion directe oblique, raclage, évidage de la *spongiosa* en but de créer une partie concave (face inférieure) apte à la fixation sur la base du poignet; perforation par rotation rapide sur une ou deux faces pour aménager le dispositif de suspension. Les traces d'usure sont superficielles et observables au niveau des perforations qui ont les marges émoussées par le lien qui a servi pour attacher le bracelet à la poignée. Parmi les découvertes de Roumanie et de cette partie du continent, la pièce GCS 105 paraît un *unicum*. Finalement on peut souligner la rareté de ces types d'artefacts, l'exemple d'adaptation idéale de la morphologie anatomique d'un os de boviné/taureau (espèce/emblème pour le Néolithique) aux paramètres de l'artefact et le rôle possible des bracelets en os comme *fossiles indicateurs* pour la dite période de la Préhistoire dans les régions du Sud-est de l'Europe.

Carmen MARIAN

Impressions of Prehistoric Textiles on Archaeological Ceramic.

ABSTRACT: Archaeological excavations in prehistoric sites only rarely point out perishable items such as textiles which difficultly survive in the given conditions. In most cases, the only testimonies about the existence of textile materials are either the tools associated to the technology of the production of the concerned textiles (spindle whorls, parts of the loom), or the impression of textile materials on ceramic wares.

The poster presents the research of some textile structures impressed on shards from sustaining base of pots uncovered on the site of Cucuteni-Romania (ca 5000 BC). The research pointed out textile materials produced by knitting, plaiting, weaving, documenting the evolution of such domestic occupations throughout the millenaries. The information obtained by such investigations also completes, economically and socially, the picture of the prehistoric civilizations.

Codrin LACATUSU

Cucuteni ceramics artworks: preservation and restoration aspects.

ABSTRACT: The culture of Cucuteni, an essential part of the cultural complex of Cucuteni – Tripolie, is one of the last major civilisations of the southern – eastern European Eneolithic / Chalcolithic.

For more than a millenium (4600 – 3500 B.C.), the culture of Cucuteni gave birth to a unique civilisation, which occupied a vast territory, including the S-E of Transylvania, almost the entire region of Moldavia, and a part of Ukraine.

In Romania, there are over 2000 Cucuteni sites, most of them being assigned to the first period of development, Cucuteni A, which was also the longest.

The archaeological material resulted from the diggings shows a vast range of ceramic typologies: household ceramics and cult ceramics, various antropomorph and zoomorph representations. The analysis of the decorative art of the Cucuteni ceramics betrays the existence of numerous kinds of ornamentation, starting with the deeply-cut bicoloured ornamentation, characteristic to the first phases

of the period Cucuteni A, and ending with the tricoloured setting (white, red, black), specific to the Cucuteni culture. The setting is represented by geometrical forms (spirals, concentric lines, criss-crosses, etc.)

The conservation – preservation of this heritage has been done extremely carefully, and supposed the collaboration of a great number of specialists from various fields (historians, archaeologists, chemists, physicists, biologists, etc.), first with regards to the investigation, as well as concerning the process of conservation – restoration itself. The work was done according to the five great principles accepted by the international community: the reversibility of the restorations, the visibility of the interventions, the respect for the ancient techniques, the faithfulness of the setting, the compatibility of the materials.

Our interventions resulted in a long-term optimum conservation. The process of restoration has contributed to the discovery of archaeological information of the object and to a better understanding of its cultural significance, while preserving its physical, historical and aesthetic integrity.

M. DUVAL
C. FALGUÈRES
J.J. BAHAIN
P. VOINCHET
J.M. DOLO
Toro I. MOYANO
B. MARTINEZ-NAVARRO
H. DE LUMLEY

Datation par ESR du site paléolithique inférieur de Fuente Nueva 3 (Orce, Bassin de Guadix-Baza, Espagne).

ABSTRACT: The archaeological site of Fuente Nueva 3 is located in Andalusia, Spain. The archaeological excavations have delivered an archaic lithic industry, divided into two archaeological levels, associated with numerous palaeontological remains. The reversal polarity of the deposits and the microfauna and macrofauna allow placing this site among the oldest one of Western Europe.

The ESR dating method on tooth enamel and bleached quartz grains was chosen to complete the chronostratigraphic framework already obtained. The preliminary results of the present study complete the chronological framework of the first human settlements in Europe during the Early Pleistocene.

Emanuele CANCELLIERI (Università degli Studi “La Sapienza”, Roma)
Gianluca FRINCHILLUCCI (Museo Polare Etnografico “S. Zavatti”, Fermo)
Giansimone POGGI (Università degli Studi “La Sapienza”, Roma)

Artisan activities in a village of *fugà* (Wolaita-Ethiopia): notes of journey

ABSTRACT: The poster presents the photographic documentation realized in sphere of an international co-operation project in Wolaita.

It describes the processing of two activities in a village of *fugà*: the traditional production of earthenware and the hide working with lithic technology.

There is also a short ethno-historical presentation based on existing literature, on change in manufacture of hide happened in the space of 20 years, when ethnoarchaeological researches were conducted in the same area.

Esteban ÁLVAREZ FERNÁNDEZ
Olaf JÖRIS

On the Origin of Early Upper Palaeolithic Personal Ornaments. An Evaluation of the Chronometric Data Base.

Francisco Carrión MÉNDEZ
José Antonio Esquivel GUERRERO
Paulo FÉLIX
David García GONZÁLEZ
Carmen Fátima López RODRÍGUEZ
José Antonio Lozano RODRÍGUEZ
Israel Mellado GARCÍA
Teresa Muñiz LÓPEZ
A Geoarchaeological research program in the dolmenic group of Antequera (MÁLAGA, SPAIN)

A Geoarchaeological Research Program In The Dolmenic Group Of Antequera (Málaga, Spain)

ABSTRACT: On May 2005, by request of the Junta de Andalucía (Dirección General de Bienes Culturales), a geoarchaeological research program was designed to further investigate the dolmenic monumental group of Antequera (Málaga, Spain), one of the most visited archaeological sites in the Iberian Peninsula. To fulfil the proposed objectives, we developed a geoarchaeological approach, which encompassed the following main lines of investigation:

1. Geological mapping of the surroundings at the scale 1:10,000;
2. Study and classification of the lithologies present in the constructive system of the megalithic monuments;
3. Localization of the possible quarries used by the prehistoric builders;
4. Geotechnical evaluation of the megalithic monument of Menga;
5. Excavation of the megalithic tomb of Menga, both inside the chamber and outside, at the mound, and subsequent restoration.

Gergö PERSAITS
Pál SÜMEGI

The connection between man and environment in the area of the Sárrét from 11600-800 CAL BC (Transdanubia, Hungary).

ABSTRACT: The purpose of our work is the presentation an evolutionary history of the Sárrét basin from the viewpoint of the former human community. We summarized the available geological, palaeontological, geomorphological, archaeological data in a GIS-database. These data were collectively evaluated in a GIS system, yielding new information about the study area. We present the different states of the evolutionary history of the environment in different archaeological ages. The connections between man and environment was evaluated in depth. We will show how the environment influenced the life of humans, and how humans changed their natural environment.

Ghiocel IONID
Dorina PARPAUTA

Conservation Methods based on HF plasma for archaeological composite artefacts.

ABSTRACT: The usual conservation treatments of archaeological objects make use organic solvents or solution with no selectivity, rendering difficult their application on composite items made up of organic and inorganic materials.

The use of HF cold plasma for decontamination, cleaning and protective coating eliminates the above mentioned drawback, being in the same time efficient, ecological and harmless for organic and inorganic materials.

The especially designed installation for archaeological items treatment offers the advantage of successive application of these treatments in the same enclosure, achieving a perfectly clear and decontaminated surface for protective coating. The coating is carried out by direct surface plasma polymerization of special monomers, resulting in film with fungicidal and bactericidal properties.

Giuliano PELFER

An archaeological GIS for the study of the origin of the city at Tarquinha between X and VIII centuries B.C.

ABSTRACT: The formation process of the urban centers in South Etruria, between the Final Bronze Age and the First Iron Age, is yet a relevant problem in the archaeological research. This process produced important transformations in the settlement organization on the territory, connected with the changes in the economical and social structures. The settlement evolution process in the territory of the so-called "first" Tarquinia, between the X and VIII centuries B.C., has been investigated, for the first time, with the spatial analysis tools of the archaeological G.I.S., and with the available data. The used G.I.S. is the Open Source GRASS GIS for Linux, interfaced with the database PostgreSQL and the packages R for statistical analysis. The analysis concerns some of the main factors affecting the development of the "first" Tarquinia as an urban center. In fact, the main topics considered in the G.I.S. have been the land evaluation for cereal production, the reconstruction of the roads network, the available and exploitable resources, the strategic control of the territory, the distribution and location of the activity areas. The analysis results, new for specific aspects, seem to demonstrate that some of the factors considered necessary for the existence of an urban center, as concentration, accessibility and spatial interaction, explaining its formation, its location and its shape, existed in some extent; and that the social structure based on the central role played by the extended families and on the familiar private property of the land is confirmed.

György LENGYEL
Zsolt MESTER

Coprophilous fungi as a source of information of anthropic activities during the Prehistory in the Amblés Valley (Ávila, Spain): the archaeopalynological record.

José Antonio LÓPEZ-SAEZ
Pilar LÓPEZ-GARCIA
Lourdes LÓPEZ-MERINO

The Neolithisation process in the Iberian Peninsula from a Palaeopalynological point of view.

Maria GEBA

Contribution to the study of ancient ceramics by physical-chemical methods.

ABSTRACT: In order to study the ceramics discovered with the occasion of the archaeological excavations done at Dumbrava-Iași, dating from the centuries I-II A.C., there have been done analyses of microscopy in polarized light in order to identify the mineral clay compounds and the

degreasing substances. In order to complete the data obtained through petrographic analyses, we used the X-rays diffraction. The analyses focused on eight samples (no.1-8). According to the data obtained with the petrographic analyses, they were grouped as following: 1-5; 2-3; 4-6-7-8.

The differences of composition among the samples are minor and accidental. Among these samples, there are minerals such as mica, feldspars and some other mineral specific to these sorts of clay, and quartz, whose predominant presence makes us think that the sand was the main degreasing substance that was used.

With regards to the work procedure, the orientation of the inclusion in parallel layers, shown by the thin sections, indicate that the ceramics was executed using a wheel.

Concerning the combustion temperature, there can be done only an approximate judgment. Taking into account the glassy aspect of the paste and the presence of some minerals that decompose themselves or become amorphous over a certain temperature, such as the calcite, the sericite, the orthoclase, etc., we can conclude that the combustion temperature varied between 600°C and 750°C.

The hematite, present in most of the samples, indicates the presence of an oxidant medium.

The same samples were submitted to X-rays diffraction analyses.

The comparative study of the diffractograms points out a similar composition of the eight samples. The minerals identified with the help of the diffractograms are the following ones: quartz, biotite, potash mica, sericite, orthoclase, oligoclase, albite, hematite, calcite. These minerals were found in all the analyzed samples, in different proportions.

Taking into account the aspect of the diffractograms, the samples were grouped as following: 1-3-4; 5-6-7-8; 2.

Marie-Anne JULIEN

Nouvelle étude archéozoologique du site Paléolithique supérieur d'Amvrosievka (Ukraine): résultats préliminaires et perspectives.

ABSTRACT: The Epigravettian site of Amvrosievka is located in the Pontic steppes. The site actually consists of a camp site and a kill and processing site. In the kill site, steppe bison (*Bison priscus*) remains are concentrated in a bone-bed with an estimated surface area of about 300 m². Original excavations at Amvrosievka indicate that Palaeolithic hunters may have killed up to 500 bison over an unknown number of occupations marking the site as unique in Eastern Europe.

We are studying the bone remains from new excavations (1992-1994) of the bone-bed. Exhaustive zooarchaeological analyses have not yet been realised for the kill/processing site; our research has as its main objective the identification of the number and nature of the different occupation horizons. In this paper, we will present our research goals and methodology as well as preliminary results.

Mona COURT-PICON
Jacques-Louis de BEAULIEU
Alexandre BUTTLER

Modern pollen/vegetation/land-use relationships in the Champsaur valley (French Alps) and their potential in the interpretation of fossil pollen records of past cultural landscapes

ABSTRACT: This study aims at elucidating modern pollen spectra/environmental data relationships from both natural and human-induced vegetation types as an aid for palaeoecological reconstructions. A set of 51 surface moss polsters was sampled from different vegetation and land-use types in the Champsaur area (French Alps) and analysed to obtain modern pollen analogues of ancient cultural landscapes in mountain ecosystems. Samples were selected from grazed areas, mown meadows, cultivated fields, fallow land and deciduous and coniferous forests. Vegetation composition around the sampling points and seventeen types of environmental variables (e.g. management type, soil and topography) were collected all for these 51 sites. Patterns of modern local pollen variation in relation to the environmental variables were explored by means of canonical correspondence analysis (CCA) and associated statistical tests. This correlative model allows us to determine the major explanatory

variables and taxa indicative of particular anthropogenic activities, and thus may help to calibrate fossil pollen assemblages.

The indicator pollen types are evaluated in the light of comparable material from lowlands and mid elevation areas of western Europe. The results of the French data-set confirm some of the conclusions drawn from the North European data-sets, but also show some site specific features. Pollen markers with a broader global significance common to other regions include *Rhinanthus* type, Apiaceae and Dipsacaceae for mown meadows, *Urtica* type, *Plantago media/major*, *Trifolium* type and *Potentilla* type for grazed areas, and *Cerealia* type, *Centaurea cyanus*, *Polygonum aviculare* for cultivated fields. New pollen anthropogenic indicators typical to our study area are *Sanguisorba officinalis*, *Vicia* type (mowing), *Lotus* type, *Onobrychis* type, *Centaurea nigra* type, *Serratula* type (grazing), *Sinapis* type and *Papaver rhoeas* (cultivation). This study provides potentially valuable analogues for human-induced vegetation types, and it will then become possible to interpret more objectively local pollen diagrams from Alpine mountain environments in terms of past cultural landscape development.

Paola CASSOLA
Susy CAROZZA
Alessandro CANCI

The Bronze Age Castelliere of Sedegliano (Udine, Northeast Italy).

Rémy CRASSARD

Non-American fluting at Manayzah (Hadramawt, Yemen).

ABSTRACT: Discovered during the 2004 campaign of the RASA project, Manayzah is an exceptional Early to Mid-Holocene site in the province of Hadramawt, Yemen. Lithic industries are widely diversified with worked obsidian, bifacial arrowheads and numerous other tool types. The fluting technique appears in stratigraphy and is now well dated by radiocarbon to the beginning of the 6th millennium BC Cal. In addition to an exceptional corpus of stone tools, this site revealed a large amount of animal bones, activity areas and dwelling areas preserved under silt deposits, as well as elements of stone and shell jewelry.

This poster will present the supposed *chaîne opératoire* of the fluting operations on the site, thanks to a wide assemblage of fluted points, fluted bifaces and channel-flakes in stratigraphy. Eventually, the poster will include remarks about the functionality of the obtained tools and the technical investment of the knappers.

Robert H. TYKOT
Carlo LUGLIÈ
Teddi J. SETZER
Giuseppa TANDA

A Preliminary Report on the Survey and Excavations (2002-2006) of the Obsidian Workshop at Sennixeddu (Sardinia, Italy).

ABSTRACT: Three seasons of survey and excavation have been conducted at the large obsidian workshop site of Sennixeddu. Artifacts from the nearby Monte Arci geological sources are found throughout Sardinia and Corsica, on mainland Italy and southern France, and a few sites in the Balearics and eastern Spain. Systematic survey, and excavations in different areas, have produced information on the organization and intensity of obsidian production during the Neolithic period, ca. 6000-3000 BC. This study of more than 200,000 obsidian artifacts is integrated with research on obsidian technology, trade and use, and other parts of the *chaîne opératoire*.

Robert TYKOT
Lisa BEYER
Michael GLASCOCK
Robert SPEAKMAN

Sources and Trade of Obsidian from Lipari (Aeolian Islands, Italy).

Simona MOSCADELLI

Rock Art and Pharaohs: Some new territorial prospective.

ABSTRACT: A review about the Nile Valley Predynastic Rock Art, in Upper Egypt and the possible role of the images linked to the territoriality relationships in predynastic times. The growing power and the hypothesis of an ideological unification previous to the political one, both seen through the Art. Contests, shared ideology, ethnicity, boats and meetings among the Wadian: some new prospective of study.

Ulla RAJALA

Towards the understanding of funerary rituals of a protohistoric community - the excavations at Cisterna Grande, Crustumerium, Italy.

Vincenzo Di AGOSTINO
Mauro MAGNATTI

Restoration of fossil vertebrate using reversible materials and non destructive techniques.

ABSTRACT: Paleontological Section of Natural Science Museum of Camerino University used both consolidated and experimental methodologies during recovery and restoration of fossil vertebrate material from Collecorti and Cesi – Madonna del Piano, Colfiorito basin (Umbria-Marche Apennine). Special attention was paid to use thoroughly reversible materials, such as acetone-diluted Mowilith 50, and non-destructive techniques, in order to permit any possible future operation on the specimens. For this reason no internal metal supports and no epoxy resins or other non-reversible substances were used which might prevent the use of new materials or of innovatory methodologies.

Viorica DESELNICU
Maier STELIAN
Adrana IONIUC
Maria GEBA
Nicoleta MELNICIUC
Maier VASILICA
Deselnicu Dana CORINA

Special leathers to be used in the restoration of historical objects.

ABSTRACT: The conservation and preservation of our cultural heritage has become one of the main concern within Europe today. Studies have been performed for evaluation of the condition of historical leather, to determine the causes of leather deterioration and to establish what tannages and treatments conferred long term durability on a leather.

The aim of this paper is to develop a stable type of leather to be used in restoration. It is intended to develop specific processing system, such non-chrome, combination and /or resin tannage which gives desired blend of properties for the restoration of historical leathers to be exhibited in museums. Experimental plan involved different vegetable tanned leathers: Mimosa, Quebracho, Chestnut and Chome tanned leathers.

The old and new leathers were characterized by physical and chemical analysis to test physical changes (shrinkage temperature) and chemical changes (pH of water extract, total soluble, tannin, extractible grease, and moisture content). The samples were artificially aged and analysed in order to

follow the behaviour of the new leathers. The samples were analysed by thermogravimetric (TGA) techniques in order to follow the changes in thermophysical behaviour of new leathers in comparison with old leather.

New leather have been used in restoration of a book from Romanian Literature Museum, lassy.

Research for the protection of cultural heritage is an example of co-operation between science, end users and cultural heritage owners, which is necessary for sustainable development, environmentally, economically and socially.

Will ADAM

Landscape setting and Archaeoastronomy of the Neolithic early long barrow tradition in Northwest Europe.

ABSTRACT: This poster **presents** the background and aims of a new doctoral research project begun in September 2005 at Queen's University Belfast. The project examines the Neolithic early long barrow tradition that includes earthen long barrows in Poland, Germany, Denmark, France and England, and chambered long cairns in England, Scotland and Ireland. Special reference will also be made to other linear constructions of earlier Neolithic Europe such as LBK/TRB long houses and British cursus monuments, as well as circular passage tombs. The study will review evidence on the landscape setting and general orientation patterns of long barrow monuments before integrating a new systematic fieldwork strategy that will focus on a number of regional groups of sites in each of the aforementioned countries. Fieldwork will enable further aspects of landscape setting to be explored, and more importantly, will provide new sets of measured orientation and declinations to enable discussion of the astronomical potential of this class of site. Where possible, measurements will be gathered in the field using a prismatic compass and small scale map controls, with symbolic orientations being considered more important than precision in view of the very design of the sites. It is hoped that analysis of these data will bring forward patterns of monumental expression within these morphologically-related constructions that can subsequently be interpreted to shed light on the ideology of northwest European Neolithic peoples.

Frank BRONIEWSKI

Development of a predictive model in the EPC – Project

ABSTRACT: The development of a predictive model is part of the project EPC (Espace et Patrimoine Culturel, Space and cultural heritage) organized by the prehistorical department of the National Museum for art and history in Luxembourg and funded by the National Research Fund (FNR). The research area is located in the southeastern part of Luxembourg and in parts of the federal states Saarland and Rheinland Pfalz in Germany with the Moselle river valley as the eminent part of the study. Numerous finds through all ages, a solid research base and the special valley shape make this area suitable for the development of a predictive model.

Morgan Roussel

Soft-stone percussion (limestone) during the Middle Palaeolithic experimental approach

ABSTRACT: Three possible soft stone hammers (limestone) were recovered in the Quina Mousterian of Chez-Pinaud, France. I tested the hypothesis these limestone blocks were used as hammers for the production of bifacial-scrapers. I created an experimental reference frame, utilizing soft stone hammers and soft hammers in shaping bifacial scrapers. On the basis of distinction of various features, it appears that soft stone percussion is identifiable by associations of several marks. My results confirm that Quina soft stone hammers were indeed used at Chez-Pinaud in an action of shaping bifacial-scrapers, in a

proportion equivalent to the use of soft hammers.