Abstracts of the oral and poster presentations (in alphabetic order)
see Addenda, p. 271
sampled and investigated in order to understand the chronology of the Middle and Upper Palaeolithic of the Maghreb and to provide the palaeoenvironmental and archaeozoological background to the human occupation of the region during these periods. One of the key sites for eastern Morocco is Grotte des Pigeons at Taforalt, situated near the border with Algeria. The preliminary results of analyses of faunal remains from the levels at Taforalt are presented here. These results are beginning to provide not only a palaeoenvironmental background to the chronological developments, but also evidence of the exploitation of animals, particularly Barbary sheep, by the Middle and Upper Palaeolithic occupants of the cave. Finally, undisturbed human burials at the rear of the cave associated with the remains of butchered animals provide a unique opportunity to study various aspects of the lifestyles of Upper Palaeolithic humans, from their hunting tactics to their mortuary practices.

55-2, 56-3, General session, poster

Taphonomic Evidence of Intensive Deer (Cervus nippion) and Wild Boar (Sus scrofa) Processing in the Final Jomon

A Final Jomon “bone midden” site characterized by a dense accumulation of deer and wild boar remains was analyzed. The relatively even distribution of limb elements was reconstructed by counting mid-shaft portions. This revealed that elements with high amount of meat and marrow were in fact brought into the site. Gnaw marks were concentrated on the end portions of limb elements. This shows that the low ratio of certain limb elements, such as femur, proximal humerus, and proximal tibia, is largely due to consumption by dogs. On the contrary, traces of burning appeared characteristically on the mid-shaft portion and were associated with fracture points. They are estimated to be the evidence of roasting prior to marrow cracking. The low rate of gnaw marks on mid-shaft portions also shows intense marrow cracking, meaning that marrow was extracted before bones were fed to dogs. The selective transport of nutritionally valuable elements and their intensive consumption as seen in the frequent marrow cracking indicate that the site was a residential base where food was processed. The fact gives new insight into the understanding of the cause behind the formation of bone middens. They are not the result of a population increase nor longer formation period, but are the result of a subsistence shift to a one depending heavily on large mammal hunting. The scarcity of marine animals or smaller mammals and the drastic decline of shell fish in this period also support this assumption.

57-1, New perspectives on taphonomy, oral

55-2, 56-3, General session, oral

Prehistoric Dispersal of Domestic Camels in Northern highland of Peru

The available archaeological evidence indicates that two species of South American camels, llama (Lama glama) and Alpaca (Vicuna pacos) were domesticated in the central and potentially south central Andes by 4000 BC (Wheeler 1984, Mengoni Gonalons and Yacobaccio 2006). However, it is still unclear when and how these domestic animals were adopted in the various environmental settings of pan-Andean regions.

In recent years, the timing of domestic camels dispersal in the northern highland of Peru has been studied by authors based on the faunal data from two large archaeological sites; Kuntur Wasi and Pacopampa. At Kuntur Wasi, the domestic camels first appeared in 800 – 500 BC and became major species of the site in 250 BC. On the other hand, zooarchaeological data from Pacomapa site situated northern end of Andean highland, that is further from origin of domestication than Kuntur Wasi, reveals domestic llama had been introduced at the site by the 1200 – 800 BC and the species dominated in the bone assemblage in 800 – 500 BC. These conflicting results suggest that the dispersal of the domestic camels would have been affected by not only the geographical setting of the site but also cultural factors including the function of the site.
also presented here in order to discuss, if environmental trends could have influenced the use of bone as fuel in response of the possible scarcity of fuelwood biomass in the catchment area of the site.

Charcoal analyses obtained at El Esquilleu show open environments vegetation with Pinus sylvestris dominant. Continuous appearance of Pinus throughout the stratigraphic sequence and the presence of other wood species, make it difficult to think of such fuelwood biomass scarcity in the surroundings of this cave.

In conclusion the appearance of burnt bones in prehistoric domestic hearths as those evidenced at El Esquilleu could be related more to ways of life and behaviour of cantabrian Neanderthal groups.

S4-3, Hominin Subsistence in the Old World during the Pleistocene and Early Holocene, poster

VACCABeatrice

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The hunting of large mammals in the Upper Palaeolithic of southern Italy: A diachronic case study from Grotta del Romito

The results of the study of mammalian remains from the Upper Pleistocene levels of the cave site of Grotta del Romito in Calabria (southern Italy) are presented. The animal bones have been recorded following a method based on diagnostic zones, commonly used for late prehistoric or historic bone assemblages, but more rarely applied to Palaeolithic faunal material. The counting and quantification methods used are presented, with reference to previous applications known from the literature. The study is mainly focused on the comparison of the results obtained from Gravettian (c.29,000-20,000 BP) and Epigravettian (c.20,000-10,000 BP) levels. This will be used to assess similarities and differences in the relationship between animals and hunter-gatherer human communities in the Upper Palaeolithic of the area. The zooarchaeological results are interpreted in the context of human subsistence, economy and society in these two Upper Palaeolithic cultural phases, and on the basis of a detailed taphonomic analysis. Preliminary results on the frequency of species highlight some interesting trends, such as a substantial increase in the frequency of Wild boar in the later Epigravettian levels in comparison with the dominance of Ibex, Chamois and Red Deer in the earlier Gravettian levels. This difference is likely to be due to climatic and environmental change, which affected the subsistence strategies of these human communities.

S4-3, Hominin Subsistence in the Old World during the Pleistocene and Early Holocene, poster

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Hunting or Scavenging? Assessing subsistence strategies in the Middle Stone Age through 3D analysis of cut-marks

To date, the question remains open as to whether scavenging or hunting represented the main subsistence strategy used by early hominines, and when the shift towards hunting occurred. I propose to address this issue by analyzing experimental and archeological cut and percussion marks with a new analytical tool that allows for a precise 3D reconstruction and quantitative analysis of these bone surface modifications. No firm criteria have been proposed so far to establish the degree of freshness of the bone on which cut-marks and percussion marks were inflicted. The identification of these criteria for fresh and delayed cut-marks, and their systematic application to the fossil record may allow one to establish if carcasses had already undergone some alteration at the moment in which hominids produced cut or percussion marks on bone. I will attempt at extending the application of the Alicona 3D Infinite focus which provides an accurate 3D reconstruction of marks on which a variety of morphological and morphometric variables can be computed. My work is divided between experimental work (we will conduct delayed butchering experiments with the Bushmen First), to create a comparative sample of fresh and delayed cut marks (and then analyze of this cut marks, using different techniques: binocular microscope, profilometer, interferometer and Alicona 3D) and comparison between experimental data and archaeological sample (faunal remains from Sibudu, Border Cave and Rose cottage cave).

57-1. New perspectives on taphonomy, poster

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Archaeozoological remains of dogs-wolves hybrids in prehispanic mexico and associated implications with the wolf and man relationship

The hybridism between the gray wolf (Canis lupus) and the dog (Canis familiaris) has been a frequent phenomenon since this last one appear 15,000 years ago, a huge genetic similarity inevitable consequence between these two species. The first documented case for prehispanic Mexico was registered in 1999 and since then more than 40 samples have been identified. The knowledge these civilizations had about the wolf makes us assume that the hybrid creation was intentional, using female dog’s heat to create litters with samples that had the symbolic father strength in its blood in a manageable body. The registered samples exist chronologically since beginning of our era and until XVI century, they are limited to the center of Mexico and the contexts in which these samples are associated show us that they were use by elite people as offering animals or hierarchical associated with the Death World, war and agriculture, being this last option a logical consequence for being a double identity animal, in which one, the wolf one, was related with military, and the dog one, with rain and fertility.

57-2, The animal in funerary space, poster

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Le Roc-aux-Sorciers (Vienne, France): Étude archéozoologique d’une faune magdalénienn dans un abri sous-roche orné

Le gisement du Roc-aux-Sorciers, situé dans le Centre-Ouest de la France, est aujourd’hui bien connu grâce à l’étude de sa frise sculptée sur la paroi rocheuse, datée du Magdalénien moyen (Pinçon, 2009). Devant la frise, les fouilles de Suzanne de Saint-Mathurin dans les années 50-60 ont mis en évidence des occupations du Magdalénien moyen contemporaines des œuvres pariétales, surmontées par des niveaux du Magdalénien supérieur. L'étude porte sur les grands mammifères issus de ces anciennes fouilles. Le cortège faunique, riche de 20 espèces, se caractérise par la présence de deux espèces dominantes: renne et cheval, suivies de deux espèces dites secondaires en termes d’abondance : l’antilope saïga et le bison. On peut déjà souligner que d’après l’âge des chevaux, les magdaléniens ont occupé le site à différentes saisons et selon des durées plus ou moins longues, selon les niveaux. Les restes de chevaux et rennes indiquent une exploitation maximale des carcasses dans un but alimentaire et non alimentaire.

Ce gisement qui présente la particularité d’être un des rares abris sous-roche ornés magdaléniens où sont associés art pariétal et vestiges d’occupation (Pinçon, 2009) permet ainsi de mettre en évi-