One basic component of the study of worked osseous materials is identification of the raw materials. Although often the answer is obvious, assuming there is an archaeozoologist at hand, sometimes the objects have degraded to the point where identification becomes problematic or all identifying features of the original skeletal element have been completely removed by working of the surface. Differentiating bone from antler or either of these materials from ivories and other teeth, may become problematic. As the way in which these materials decay during burial and upon excavation can vary greatly, correct identification is crucial to their investigation, conservation and future curation.

The skeletons of the animals exploited by people provide a huge number of choices for manufacturing. Nevertheless, the choices made by artisans vary by cultural tradition. In fact, such technical choices, starting with choice of raw material, provide a way for groups of people to distinguish themselves from others. Thus, there is a complex inter-play between the physical characteristics of the raw material which makes them more appropriate for certain kinds of use and the strong, social reinforcing power of tradition described by Bourdieu as the habitus, familiarity, and practice. Not all choice in manufacturing is related to efficiency for that reason, but rather a desire on the part of individuals within the group to conform. Changes in utilitarian bone tool forms and raw materials, thus, tended to be slow. One mark of deep social changes in the past may well be in contexts where sudden changes in choice of raw materials can be observed. Finally, just as meat preferences from parts of the animal body may signal beliefs about particular species, so choice of skeletal elements themselves may also be loaded with culturally specific meanings.

The issue of identification thus has a number of implications for conservation work, reproduction of objects, the physical characteristics of the tool or ornament, availability of raw materials, the materials chosen for procurement and the cultural reasons behind which species and skeletal elements are chosen for working.

**Program**

**S6-1. Raw and Worked Osseous Materials**

**Session organizers**: Alice CHOYKE (1), Sonia O’CONNOR (2) & Carole VERCOUTÈRE (3)

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Bone raw material and variations in the low parana during late Holocene
10:40 – 10:55: HOUMARD Claire

Walrus and caribou exploitation at the Tayara site (Dorset period, Canada)
11:00 – 11:30: Coffee Break
11:30 – 12:30: Poster Session
12:30 – 14:00: Lunch
14:00 – 14:15: VITEZOVIC Selena

Raw and worked osseous material in the Vinca Culture
14:20 – 14:40 Discussion

Social Aspects of Raw Material Selection

Session Chair: Vivian SCHEINSOHN
14:40 – 14:55: HUDSON Jean

Cultural Implications of Worked Bird Bone in Prehistoric Peru
15:00 – 15:15: BECKER Cornelia

The meaning of “smoothing” implements from the Levantine PPNB – still a matter of debate
15:20 – 15:35: FARBSTEIN Rebecca

The Materiality of Production: exploring variability and choice in the production of Palaeolithic portable art made in antler, bone and ivory
15:40 – 15:55: ALLENTUCK Adam

Raw material availability and technological choice: modified sheep and goat metapodia from an Early Bronze Age site in central Israel
16:00 – 16:30: Coffee Break
16:30 – 16:45: MOORE Katherine

Bone raw material and tool production in the Formative period, Bolivia
16:50 – 17:10

Discussion

Non-Destructive Methods of Raw Material Identification

Session Chair: Heidi LUIK
17:10 – 17:25: O’CONNOR Sonia

Exotic materials used in the construction of Iron Age sword handles from South Cave, UK
17:30 – 17:45: ASHYB Steven P., von HOLSTEIN Isabella, van DOORN NIENKE, BUCKLEY Michael, MEIRI Meirav, BARNES Ian & COLLINS Matthew J.

Non-destructive species identification: a case study on bone and antler combs
17:50 – 18:05: MÜLLER Katharina & REICHE Ina

New insights and limits of a non-destructive microPIXE/PIGE study of Palaeolithic bone, antler and ivory objects for materials identification
18:10 – 18:30

Discussion

Contributed Posters (in alphabetical order)

On display - Tuesday 24 August: 11:30 – 12:30 - Wednesday 25 August: 16:30 – 17:30

- 1 - ABUHELALEH Bellal, AL NAHAR Maysoon, BERRUTI Gabriele Luigi Francesco, CANCELLIERI Emanuele & THUN Hohenstein Ursula
Study of Bone artefacts and use techniques from the Neolithic Jordanian site ; Tell Abu Suwwan (PPNB-PN)
• 2 - BOGATKINA Olga
Antler sleeves from Neolithic lake shore sites of Switzerland (Russian museum collection)
• 3 - COLOMINAS Lídia
Specialization or reutilization ? Study of the selection documented in a raw material assemblage.
• 4 - CORNAGLIA FERNÁNDEZ Jimena & BUC Natacha
Evidence of bone technology on the Santa Fe’s Pampa lagoons. The Laguna El Doce site (Santa Fe Province, Argentina)
• 5 - DARÓCZI-SZABÓ Mártá
From the Past to the Present : Archaeological bone tools and their replica in use
• 6 - ÉVORA Marina Almeida
Raw material used in the manufacture of osseous artefacts during the Upper Paleolithic in Portugal
• 7 - GOURICHON Lionel, NISHIAKI Yoshihiro & KUME Shogo
Curious animal teethed gypsum-made objects found at Tell Seker al Aheimar (Pottery Neolithic, north-eastern Syria)
• 8 - IZETA Andres & CATTANEO G. Roxana
Bone instruments from first millenium ad northwestern Argentina occupations. a macro and microscopic approach to study their functionality
• 9 - JÉQUIER Camille, PERESANI Marco & ROMANDINI Matteo
Les retouchois en matière dure animale du Moustérien récent et de l’Uluzzien de la Grotte de Fumane : caractéristiques, critères d’utilisation, abandon
• 10 - MEIER, Jacqueline S.
Experimental Study of Worked Bone Astragali from Two Middle Bronze Age Hungarian Sites
• 11- MIOTTI Laura & MARCHIONNI Laura
Tools beyond of stones : the bone, a raw material non traditional in continental Patagonia
• 12 - PAILLET Patrick, MAN-ESTIER Elena & VERCOUTÈRE Carole
Réflexion sur les rapports entre décor et fonction des objets - Exemple des objets sur baguette de bois de renne du site de Rochereil (Dordogne, France)
• 13 - RILLARDON Maryline, LOMPRE Aliette, BRUGAL Jean-Philip & BAZILE F.
Objets osseux énigmatiques réalisés sur os de cheval dans le Solutréen de la Salpêtrière (Gard, France)
• 14 - ROZWOD Pawel
Selected aspects of bone and horn objects’ use by the inhabitants of medieval Ostrowek in Opole
• 15 - SAÑA Maria, CAMARÓS Edgard, CLEMENTE Ignacio, BOSCH Àngel, CHINCILLA Júlia & TARRÚS Josep
The reuse of long bones as tools in the Neolithic site of La Draga (Banyoles, Catalonia) : Discrete tools not so easy to identify
• 16 - STONE Elisabeth
Osseous Tools in the Ethnographic Record : Usewear on historic and contemporary tools as a standard for identifying perishable raw materials worked in the Late Upper Paleolithic
• 17 - TÓTH Zsuzsanna
Raw material preferences in the worked osseous assemblage on the Final Neolithic site of Aszód, central Hungary
• 18 - VALENSI Patricia & JOURDAN Lucien Utilisation de la matière dure animale -os, bois de cervidés et dents de sanglier- dans deux sites acheuléens du Sud de la France
• 19 - WATSON Adam S.
Spatial Patterning, Use-Wear, and Raw Material Choice of Bone Tools at Chaco Canyon, New Mexico (800-1200 CE)
• 20- WILCZYNSKI Jaroslaw, DIAKOWSKI Marcin, WOJTAL Piotr & SZCZEPANEK Anita
Osseous artifacts from an Aurignacian child’s burial from Borsuka cave (southern Poland)