

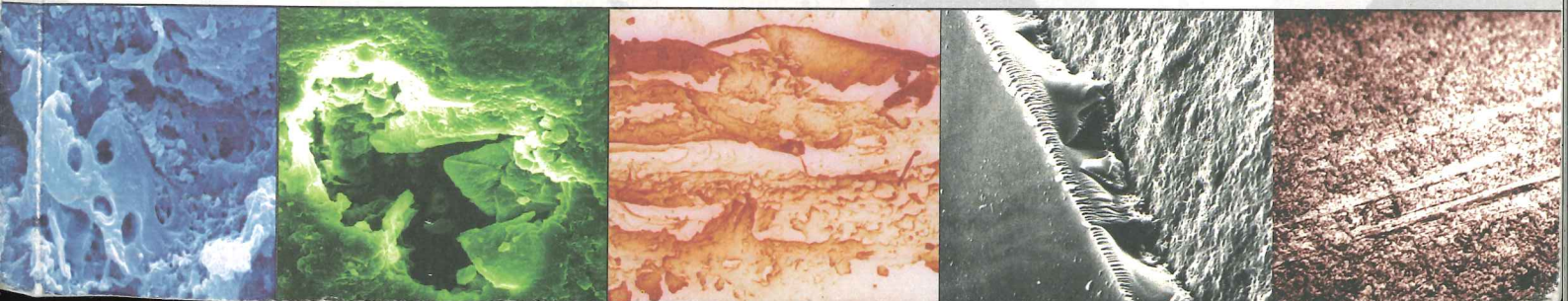
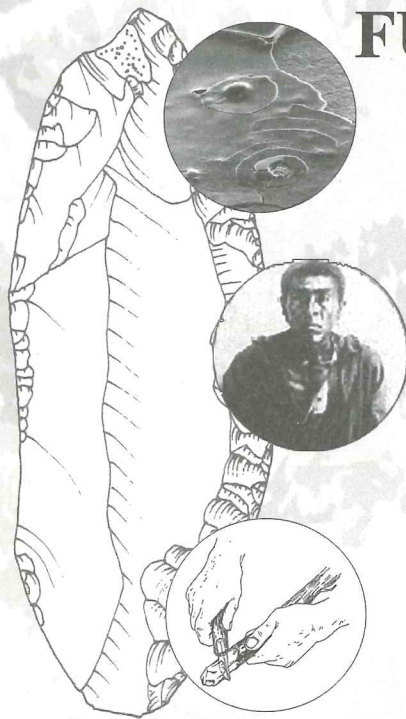
MUSEO CIVICO DI STORIA NATURALE DI VERONA

UNIVERSITA' DEGLI STUDI DI VERONA

**“PREHISTORIC TECHNOLOGY”
40 YEARS LATER:
FUNCTIONAL STUDIES AND
THE RUSSIAN LEGACY**

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BOOK OF ABSTRACTS



BIBLIOGRAPHY

- BIERS W.R., MCGOVERN P.E. (Editors), 1990. Organic contents of ancient vessel: material analysis and archaeological investigation. *MASCA*, 7, Philadelphia.
- CHARTERS S., EVERSHERD R.P., 1995. Evidence for the mixing of fats and waxes in archaeological ceramics. *Archaeometry*, 37, 1: 113-127.
- CHARTERS S., EVERSHERD R.P., GOAD L.J., LEYDEN A., BLINKHORN P.W., DENHAM V., 1993. Quantification and distribution of lipid in archaeological ceramics: implications for sampling potsherds for organic residue analysis and the classification of vessel use. *Archaeometry*, 35, 2: 211-223.
- CHARTERS S., EVERSHERD R.P., QUYE A., BLINKHORN P.W., REEVES V., 1997. Simulation experiments for determining the use of ancient pottery vessels: the behaviour of epicuticular leaf wax during boiling of a leafy vegetable. *Journal of Archaeological Science*, 27: 1-27.
- COLOMBINI M.P., GIACHI G., MODUGNO F., PALLECCHI P., RIBECCHINI E, forthcoming. Identification of a Roman fish-sauce "garum" in a small ceramic bowl from Antinoe (Egypt). Poster presented at 35th International Symposium on Archaeometry, Zaragoza 2004.
- CONDAMIN J., FORMENTI F., METAIS M.O., MICHEL M., BOND P., 1976. The application of Gas Chromatography to the tracing of oil in ancient amphorae. *Archaeometry*, 18, 2: 195-201.
- DUDD S., REGERT M., EVERSHERD R., 1998. Assessing microbial lipid contributions during laboratory degradations of fats and oils pure triacylglycerols absorbed in ceramic potsherds. *Organical Geochemistry*, 29, 5-7: 1345-1354.
- DUNNELL R. C., HUNT T. L., 1990. Elemental Composition and Inference of Ceramic Vessel Function. *Current Anthropology*, 31: 330-336.
- EERKENS J., 2002. The preservation and identification of piñon resins by GC-MS in pottery from the Western Great Basin. *Archaeometry*, 44, 1: 95-105.
- EVERSHERD R., DUDD S., COPELY M., BERSTAN R., SCOTT A., MOTTRAM H., BULLEY S., CROSSMAN Z., 2002. Chemistry of Archaeological Animal Fats. *Accounts of Chemical Research*, 35, 8: 660-668.
- EVERSHERD R.P., HERON C., GOAD L.J., 1990. Analysis of Organic Residues of Archaeological Origin by High-temperature Gas Chromatography and Gas Chromatography-Mass Spectrometry. *Analyst*, 115: 1339-1342.
- EVERSHERD R.P., HERON C., GOAD L.J., 1991. Epicuticular wax components preserved in potsherds as chemical indicators of leafy vegetables in ancient diets. *Antiquity*, 63: 540-544.
- GIOVANNINI F., 1994. Funzioni delle forme ceramiche e modelli alimentari medievali. In: De Minicis E. (a cura di). Le ceramiche di Roma e del Lazio in età medievale e moderna. Kappa, Roma: 14-22.
- GUASH-JANÉ M.R., IBERNO GÓMEZ M., ANDRÉS-LACUEVA C., JAUREGUI O., LAMUELA-RAVENTÓS R.M., 2004. Liquid chromatography with mass spectrometry in Tandem mode applied for the identification of wine markers in residues from ancient Egyptian vessels. *Analytical Chemistry*, 76, 6: 1672-1677.
- HERON C., POLLARD A.M., 1988. The analysis of natural resinous materials from amphoras in Science and Archaeology Glasgow 1987. *BAR International Series*, Oxford.
- KIMPE K., DRYBOOMS C., SCHREVEVS E., JACOBS P.A., DEGEEST R., WAELEKENS M., 2004. Assessing the relationship between form and use of different kinds of pottery from the archaeological site of Sagalassos (southwest Turkey) with lipid analysis. *Journal of Archaeological Science*.
- KIMPE K., JACOBS P.A., WAELEKENS M., 2002. Mass spectrometric methods prove the use of beeswax and ruminant fat in late Roman cooking pots. *Journal of Chromatography A*, 968: 151-160.
- MONTANARI M., 1988 (ristampa 1999). Alimentazione e cultura nel Medioevo. Editori Laterza, Roma-Bari.
- MOTTRAM H.R., DUDD S.N., LAWRENCE G.J., STOTT A.W., EVERSHERD R.P. 1999. New chromatographic, mass spectrometric and stable isotope approaches to the classification of degraded animal fats preserved in archaeological pottery. *Journal of Chromatography A*, n. 833: 209-221.
- PECCI A., SALVINI L., GIORGI G., GRASSI F., forthcoming. Cooking activities in a building yard during the Middle Age. Organic residues in potsherds recovered from the Carmine Convent in Siena. Poster presented at 34th International Symposium of Archeometry, Zaragoza.
- REGERT M., BLAND H., DUDD S., VAN BERGEN P., EVERSHERD R., 1998. Free and bound fatty acid oxidation products in archaeological ceramic vessels. *Proceedings The Royal Society of London B*, 265: 2027-2032.
- REGERT M., ROLANDO C., 2002. Identification of Archaeological Adhesives Using Direct Inlet Electron Ionization Mass Spectrometry. *Analytical Chemistry*, 74: 965-975.
- SALVINI L., VALDAMBRINI C., PECCI A., CITTER C., GIORGI G., forthcoming. Medieval vessels from Grosseto and Castel di Pietra: organic residues and functions. Poster presented at International Symposium on Mass Spectrometry 2004, Bari.
- SCHIFFER M., SKIBO J., BOELKE T., NEUPERT M., ARONSON M., 1994. New perspectives on experimental archaeology: surface treatments and thermal response of the clay cooking pot. *American Antiquity*, 59, 2: 197-217.

Use wear analysis: the application on Ripatetta lithic industry. Preliminary results

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Key words: Ripatetta, use wear, Neolithic, southern Italy.

The earliest phase that has come to light during excavations at the site of Ripatetta can be attributed to an advanced phase of the Impressed Ware

culture that spread throughout central-southern Italy during the Early Neolithic period. The chipped stone assemblage coming from this

site has been already studied and classified following typological and typometrical methods and the results have permitted to assume an exotic origin for this assemblage.

In order to identify the function of an 80-90 sq.m. area, where a cobbled pavement was found, a microwear analysis has been undertaken. The absence of stake-holes or plaster led us to suggest that this was an open working area.

The microwear analysis – in progress as we speak – is

being carried out on a sample of retouched and unretouched pieces, in order to preserve the quantitative relations between the different groups. The assemblage has been examined with stereoscopic binocular microscope at magnifications up to 400x and with the Scanning Electron Microscope (SEM). The results have been compared to experimental wears obtained through an intense experimental activity organised by a research group of the Archaeological Science Department of Pisa University.

BIBLIOGRAPHY

GIAMPIETRI A., TOZZI C., 1990. L'industria litica del villaggio di Ripa Teita (Lucera). *Atti del II° Convegno Nazionale sulla Preistoria, Protostoria, Storia della Daunia*, San Severo 1998: 57-78.
 GIAMPIETRI A., 1996. Torre Sabea, Trasano, Ripatetta, Santo Stefano - Litica. In: Tiné V. (a cura di). *Forme e tempi della Neolitizzazione in Italia Meridionale e Sicilia. Atti del*

Seminario Internazionale, Rossano, 1994, I, Soveria Mannelli: 327-329.
 HAYDEN B., 1979. *Lithic Use-wear Analysis*. New York, Academic Press.
 KEELEY L.H., 1980. Experimental determination of stone tool use. A micro-wear analysis. University of Chicago Press, Chicago.
 MANSUR-FRANCHOMME M.E., 1986. Microscopie du Matériel Lithique Préhistorique. *Cahiers du Quaternaire*, 9, Centre National de la Recherche Scientifique, CNRS, Paris.

Lithic economy during the Proto-Aurignacian: the case-study of Isturitz, layer C4III (Saint-Martin-d'Arberou, Pyrénées Atlantiques)

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Key words: Use-wear, Proto-Aurignacian, Middle to Upper Palaeolithic transition, raw material technology.

We present here the preliminary results of the functional analysis carried out on the material coming from layer C4III, at Isturitz, along with raw material provenance and technological analyses, in order to understand the management of lithic

instruments recovered from the site. On the basis of these results we will discuss the modality of occupation and the role it played during the Middle to Upper Paleolithic transition in western Europe.

BIBLIOGRAPHY

GONZÁLEZ URQUIJO J.E., IBÁÑEZ ESTÉVEZ J.J., 1994. Metodología de análisis funcional de instrumentos tallados en sílex. *Cuadernos de Arqueología*, 14. Universidad de Deusto, Bilbao.
 IBÁÑEZ ESTÉVEZ J.J., GONZÁLEZ URQUIJO J.E., 1996. Fom Tool Use to Site Function. Use-wear analysis in some Final Upper Paleolithic sites in the Basque country. *BAR International Series*, 658.
 NORMAND C. ET AL., 2002. Grotte d'Isturitz. Salle de Saint-Martin (commune de Saint-Martin-d'Arberou). *Rapport Final De Fouilles Programmées Trianuelles 2000-2002 et Projet De Recherches 2003-2005*.
 NORMAND C. ET AL., 2003. Grotte d'Isturitz. Salle de Saint-Martin (commune de Saint-Martin-d'Arberou). *Rapport Intermediaire De Fouilles Programmées Tri-annuelles. Année 2003*.

RIOS GARAIZAR J., ORTEGA CORDELLAT I., IBÁÑEZ ESTÉVEZ J.J., GONZÁLEZ URQUIJO J.E., 2002. Aporte del análisis funcional para el conocimiento del yacimiento aurignaciense de Barbas III. Primeros resultados. In: Clemente I. et al (Editors). *Análisis Funcional. Su aplicación al estudio de las sociedades prehistóricas. BAR International Series*, 1073: 141-150.
 RIOS GARAIZAR J., 2004. La Transición del Paleolítico Medio al Superior en torno al Golfo de Bizkaia: una aproximación desde el análisis de la producción y de la gestión del utillaje lítico de los niveles Musterienses (A-D) de Axlor (Dima, Bizkaia) y de la ocupación Aurignaciense al aire libre de Barbas III (Creyse, Dordogne). Trabajo de Investigación de Tercer ciclo del Dpto. de Ciencias Históricas de la Universidad de Cantabria.
 TARRIÑO A., 2001. El sílex en la Cuenca Vasco Cantábrica y Pirineo Navarro: Caracterización y su aprovechamiento en la Prehistoria. Tesis doctoral UPV.