



Mesolithic burials – Rites, symbols and social
organisation of early postglacial communities
Mesolithische Bestattungen – Riten, Symbole und soziale
Organisation früher postglazialer Gemeinschaften

International Conference
Halle (Saale), Germany, 18th–21st September 2013

Edited by Judith M. Grünberg, Bernhard Gramsch,
Lars Larsson, Jörg Orschiedt and Harald Meller



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Edited by
Judith M. Grünberg,
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and Harald Meller

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The Castelnovian burial of Mondeval de Sora (San Vito di Cadore, Belluno, Italy): evidence for changes in the social organisation of Late Mesolithic hunter-gatherers in north-eastern Italy

Federica Fontana, Antonio Guerreschi, Stefano Bertola, François Briois and Sara Ziggliotti

Zusammenfassung

Das Castelnovien Grab von Mondeval de Sora (San Vito di Cadore, Belluno, Italien):
Belege für Änderungen in der sozialen Organisation
bei spätmesolithischen Jäger-Sammlern im
nordöstlichen Italien

Das spätmesolithische (Castelnovien) Grab von Mondeval de Sora wurde 1987 in einer archäologischen Abfolge unter einem großen Findling in den Dolomiten bei Belluno (Südostalpen, Italien) auf einer Höhe von 2150 m ü.d.M. entdeckt. Bestattet ist eine 40-jährige männliche Person, die in Rückenlage mit ausgestreckten Gliedmaßen begraben wurde. Sein unterer Körper war mit Steinen bedeckt. Sechzig Objekte, die aus unterschiedlichen Materialien hergestellt worden waren – Hornstein und anderem Gestein, Knochen und Geweih vom Hirsch sowie zwei Agglomeraten bestehend aus Propolis bzw. Harzen, waren mit dem gut erhaltenen Skelett vergesellschaftet.

Neue Daten aufgrund erneuter Analysen des reichen Bestandes an Hornsteinartefakten, die einen wichtigen Teil der Beigaben (36 Objekte) ausmachten, werden hier vorgestellt. Die Ergebnisse zeigen ein Mosaik von Aspekten mit Elementen von Kontinuität und Diskontinuität zu jungpaläolithischen und frühmesolithischen Traditionen. Diskontinuität betrifft vor allem die Technologie der Herstellung von Artefakten, während funktionale Studien auf eine Intensivierung einiger Aktivitäten hinweisen, die bereits in der frühmesolithischen Phase festgestellt wurden. Rohmaterialbeschaffungssysteme zeigen die Einrichtung von erneuerten Mobilitätspfaden an. Diese Veränderungen in der technisch-wirtschaftlichen und territorialen Organisation der Castelnovien Gruppen im Nordosten Italiens scheinen sich auch auf rituelle Praktiken auszuwirken, die möglicherweise Veränderungen in ihrer sozialen Organisation widerspiegeln.

1 Introduction

New data from re-analysis of the grave goods of the Late Mesolithic burial of Mondeval de Sora are presented here, in particular the results of techno-economical and use-wear studies of the flint knapped assemblage. Discovered in 1987 in the Belluno Dolomites [south-eastern Alps, Italy] (Fig. 1) this burial yields several clues for understanding ways of life and death of the Castelnovian hunter-gatherers of north-eastern Italy. In particular, the rich set of lithic artefacts that compose the assemblage of burial goods allows investigation of the social meaning of the innovations that have characterised this period.

Summary

The Late Mesolithic (Castelnovian) burial of Mondeval de Sora was discovered in 1987 within an archaeological sequence located under a large erratic boulder in the Belluno Dolomites (south-eastern Alps, Italy) at an altitude of 2150 m a.s.l. It belongs to a 40-year-old male individual who was buried in supine position with outstretched limbs and his lower part covered with stones. Sixty objects made out of different materials - chert, stone, deer bone and antler and two agglomerates composed of propolis and resins respectively - accompanied the well-preserved skeleton.

New data from re-analysis of the rich repertoire of chert artefacts that compose an important part of the burial goods (36 objects) are here presented. The results obtained indicate a mosaic of aspects with elements of continuity and discontinuity with Late Palaeolithic and Early Mesolithic traditions. In particular, discontinuity involves the technology entailed in the manufacture of artefacts, while functional studies indicate an intensification of some activities already documented in the Early Mesolithic phase and raw material provisioning systems reflect the establishment of renovated mobility paths. These changes in the techno-economical and territorial organisation of the Castelnovian groups of north-eastern Italy seem also to affect ritual practices, possibly reflecting transformations in their social organisation.

We start from the theoretical principle recognised by most authors that burial rituals reflect at least three main aspects – the environmental, the symbolic and the social – which are closely connected to one another (Binford 1971; Saxe 1970; Tainter 1978; Hodder 1982). As far as the social aspect is concerned, according to a neo-marxist approach, burials constitute the result of the »social work« of the group to which the deceased belonged (Lull 2000). As already noted, this assumption involves at least two main consequences: on the one hand funerary rituals can yield information on the society the individual comes from; on the other the analysis of ritual practices cannot be carried out independently from that of other aspects of daily life

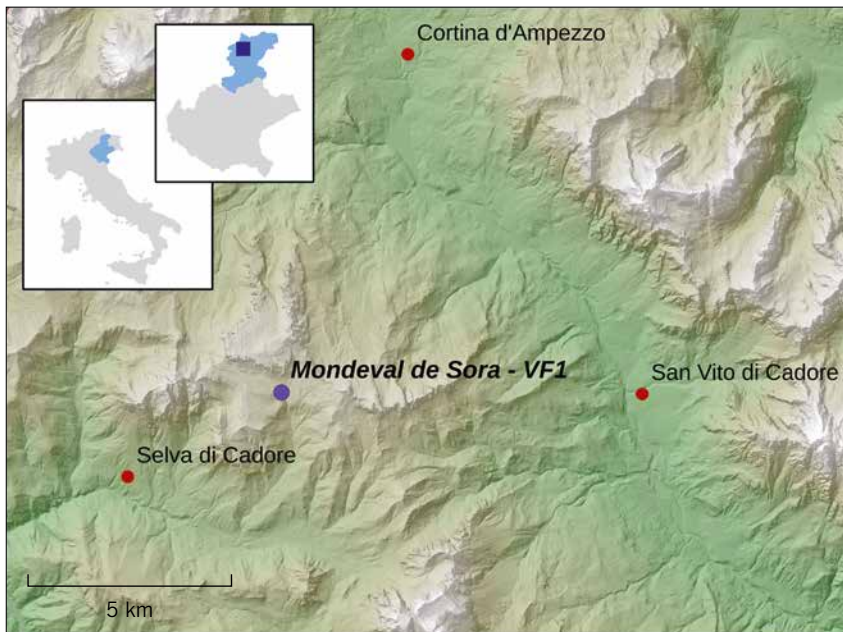


Fig. 1 Location of the site of Mondeval de Sora in the south-eastern Alps (Belluno Dolomites).

(Fontana/Gazzoni 2011). Another closely related aspect concerns the concept of social complexity intended as an increase in the dimensions of the society, its scale and organisation. The main basis used to identify social complexity is represented by the analysis of its consequences, i.e. evidence of past behaviours as reflected by the archaeological record (Price/Brown 1985). The most relevant parameters are considered to be the following:

- a) productivity in the way of providing resources, which is testified by the tools and technologies adopted, their variety and the intensification of their use;
- b) settlement strategies, which are reflected by the variety of site functions, site dimensions and density of artefacts;
- c) status differentiation based on the analysis of burials and the grave goods with which they are associated (Neeley/Clark 1990).

2 The site of Mondeval de Sora and its stratigraphic context

The site of Mondeval de Sora (VF1, Val Fiorentina 1) is located under the overhang of a large erratic boulder on a terrace at 2150 m a.s.l. in the high valley of the Cordevole River, a tributary of the Piave River (Fig. 2). Field-works at the site were carried out yearly between 1987 and 2000 revealing consistent traces of human occupation under two sides of the mass (Sectors I and III). In Sector I, located along the south-western side, research led to the unearthing of a complex stratigraphic series explored over a surface of about 60 m². This series included layers dated to different phases, corresponding to a chronological span between the Early Mesolithic and the sub-present age (Alciati et al. 1994).

Mesolithic layers were preserved only in the southern portion of the site. The Early Mesolithic (Sauveterrian) sequence has yielded some dwelling structures (a paved area delimited by an artificial arrangement of dolomite blocks and a sub-circular structure interpreted as a fire-place)

along with two layers containing abundant lithic artefacts, faunal remains and charcoals (Bietti et al. 2004; Fontana et al. 2009; Fontana/Guerreschi 2003; Fontana/Vullo 2000; Peretto et al. 2004). The reconstruction of the site function during the Late Mesolithic (Castelnovian) is more uncertain. If we exclude the burial, layers belonging to this phase were severely disturbed by the later occupation of the site.

3 The Castelnovian burial

The Castelnovian burial was identified in a central position with respect to the area protected by the overhang of the boulder, close and parallel to its wall. The corpse was deposited in a pit of an elliptic shape and a slightly concave section, oriented north-south and naturally delimited by two dolomite boulders (Gerhardinger/Guerreschi 1989; Guerreschi 1992; Fontana 2006). The skeleton lay in a supine position with outstretched limbs and the feet located on a stone, and appeared well preserved, missing only the most fragile components of the facial part and some distal bones of the left foot. The left hand was placed along the body, with the fingers slightly bent, as if the individual had been clutching something. The lower part of the body was covered with selected stones (Fig. 3).

One AMS radiocarbon date (OxA-7468) carried out on a bone from the skeleton has yielded a date of 7425 ± 55 BP (8379–8071 cal BP). Of the two other dates conducted on charcoal samples collected within the sediment filling of the burial pit, one is chronologically close to the one carried out on the skeleton sample [R-1939: 7330 ± 50 BP, 8304–8015 cal BP] while the other one is much older [R-1937: 8380 ± 70 BP, 9531–9144 cal BP] (Gerhardinger/Guerreschi 1989).

The human skeleton has been attributed to a robust male around 40 years old and 167 cm tall. From a pathological viewpoint the individual had suffered from a poliostotic displasia of an unknown etiology (Rosy-Cajal disease). Another pathological feature was identified on the diaphysis

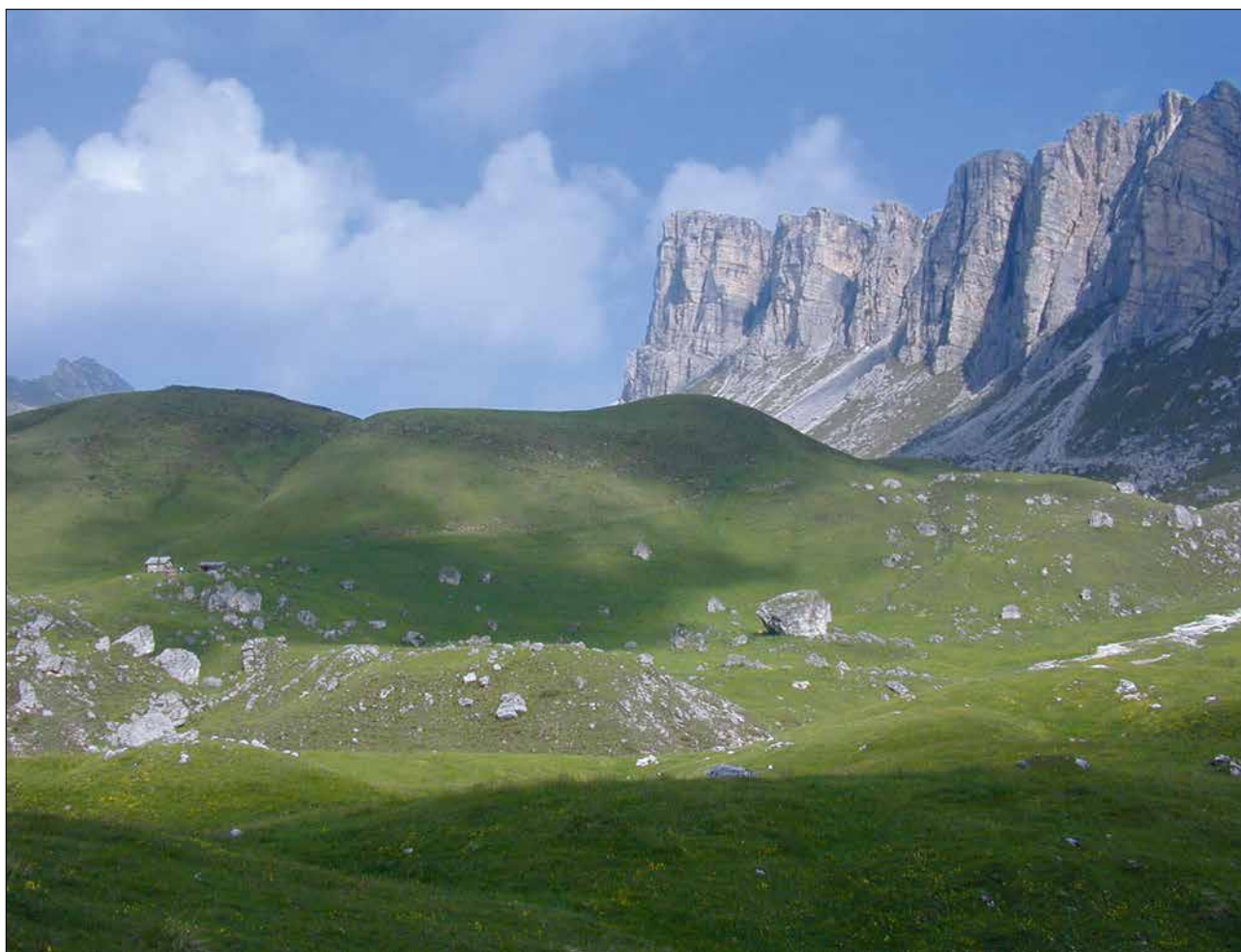


Fig. 2 Panoramic view of the terrace of Mondeval de Sora with the erratic boulder protecting the site located on the right.

of the second right metacarpal indicating the outcome of a repaired oblique fracture (Alciati et al. 1997). Further analyses have highlighted the presence of alterations derived from an intense involvement of the upper dental arch in excessive chewing activities (Alciati et al. 1995).

4 Composition of the burial goods

The assemblage of burial goods was composed of 60 items of various typologies which had been arranged near different parts of the body while at the level of the hand, on the right side of the skeleton, a small patch of red ochre was observed (Fig. 4). Three large blades were disposed above each shoulder and under the head, while two awls, respectively made of elk and deer bone, were placed on the breastbone and between the knees. They were probably used to close the hunter's leather shroud (Guerreschi 1992). Seven pierced atrophic deer canines were variously located in the upper part of the body. Traces of wear identified on them have suggested a use as pendants.

Along the left side of the body three groups of objects were discovered, which were probably contained in three bags (Guerreschi 1992). The first one, located near the forearm, was composed of 34 objects, 22 of which are lithic artefacts, three deeply altered limestone/dolomite pebbles and

nine osseous objects. The latter were respectively composed of four deer antler tines, a point made from a large bone diaphysis and one with four longitudinal grooves obtained from a deer antler, a harpoon with alternate tangs made from deer antler, a large articular fragment of a deer left scapula and a dorsal deer vertebra. Most of these objects have revealed the traces of wear at specific positions (Cilli et al. 2001). The other two groups were found lower down, at the height of the left hand. One was composed of three elements: a lump of organic substances and two lithic artefacts. The other one comprised eleven items: a second lump, a boar tusk and nine lithic artefacts. The two lumps found in the second and third assemblage were the object of previous analyses which had enabled their respective composition to be defined (Alciati et al. 1994; Cattani 1993). They both turned out to contain pine pollens, confirming the presence in both samples of a resinous component which was then observed macroscopically only in the first of the two, which also appeared harder and more compact. By contrast the second one was revealed to be mostly made of propolis, which was also present in the second one although in smaller quantity. Due to the prevailing presence of resins, the use as glue was thus suggested for the lump found in the second assemblage while the dominance of propolis in the second lump has allowed us to interpret it as a medicament (as an antibiotic, anaesthetic or healing medicine).



Fig. 3 The burial of Mondeval de Sora, covered with selected stones.

5 The lithic assemblage

5.1 Methodology

This work specifically focuses on the rich repertoire of lithic elements that compose the grave goods. These have been analysed in order to identify the raw materials employed, the manufacturing processes and their eventual use. Determination of lithic raw materials was carried out with a stereomicroscope with the purpose of recognising the chert microfacies and to assign each element to its proper geological formation. The second step has been aimed at detecting the areal distribution of the formations and their horizontal variations, while other important information was deduced by analysing the features of the natural surfaces of archaeological artefacts. By this means the presence of an association between local and extra-regional cherts has been recognised. Local materials are represented by the Buchenstein Formation of the Dolomite area and extra-regional materials by the Scaglia Variegata Alpina and Maiolica from the Baldo-Lessini area along with Scaglia Variegata Alpina and Scaglia Rossa from the Non Valley. Extra-regional cherts outcrop in the southern-central Alps respectively 70 and 100 km south-west of Mondeval.

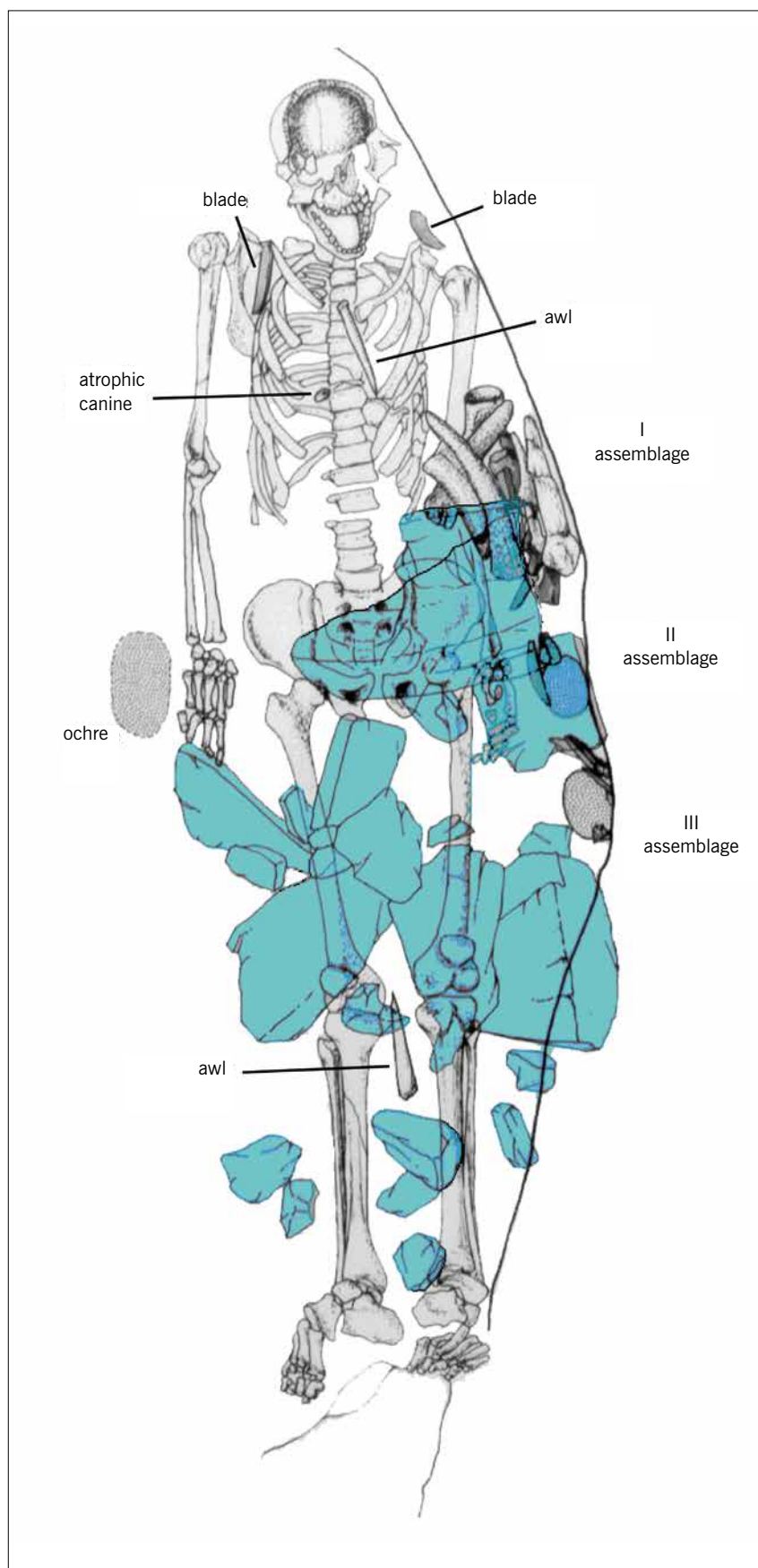
The technological study has followed the method of the *chaîne opératoire* (Tixier et al. 1980), consisting of the attribution of each element to a specific phase of the reduction sequence while recognition of the techniques applied has been carried out by comparison with experimental specimens obtained by one of the authors (F.B.).

Functional analysis has been carried out using both a low and high power approach, according to the protocols adopted by Semenov (1964) and Keeley (1980). The larger part of the artefacts is affected by post-depositional alterations (19 pieces out of the 28 analysed) [soil-sheen, patina]; despite this it has been possible to reliably recognise traces of wear on ten pieces.

5.2 The blades above the shoulders and under the head

The three blades respectively located above the shoulders and under the head of the individual have been obtained from the same exogenous material, an ochre yellow chert from the Scaglia Variegata Formation of the Baldo-Lessini group (Fig. 5). They show similar and exceptional standardised dimensions (around 100 mm length, 15–30 mm width and 5–7 mm thickness) suggesting – although no refitting could be carried out between them – that they were removed from the same core. The blade located under the head can be technologically classified as a backed cortical blade coming from a frontal crest (*sous-crête*) while the two blades over the shoulders can be considered *plein débitage* products. Their morphological features (regularly curved profiles, twisted and plunging at their distal ends, faceted butts with orthogonal angles to the *débitage* surfaces presenting a half-moon shape, thin ventral, high and marked bulbs) indicate removal by means of the punch technique (*débitage* by indirect percussion; Fig. 6). The blade under the head appears very well preserved. It displays strong evidence of use, particularly a

Fig. 4 Plan of the burial of Mondeval de Sora, with location of the covering stones and the burial goods.



marginal denticulated abrupt retouch along its left lateral distal extremity and a micro-polish with features typical of scraping hard animal materials (antler). The two blades

located above the shoulders do not display any evidence of use. Although they show a light alteration of the surfaces, their edges are well preserved and appear still very sharp.



Fig. 5 a Blade located under the head; b-c blades located above the shoulders.

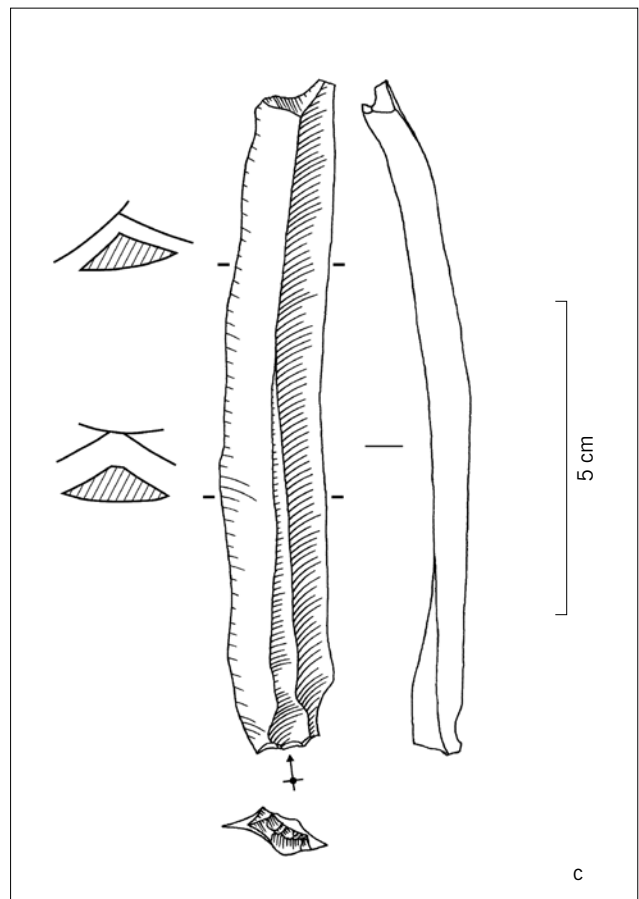
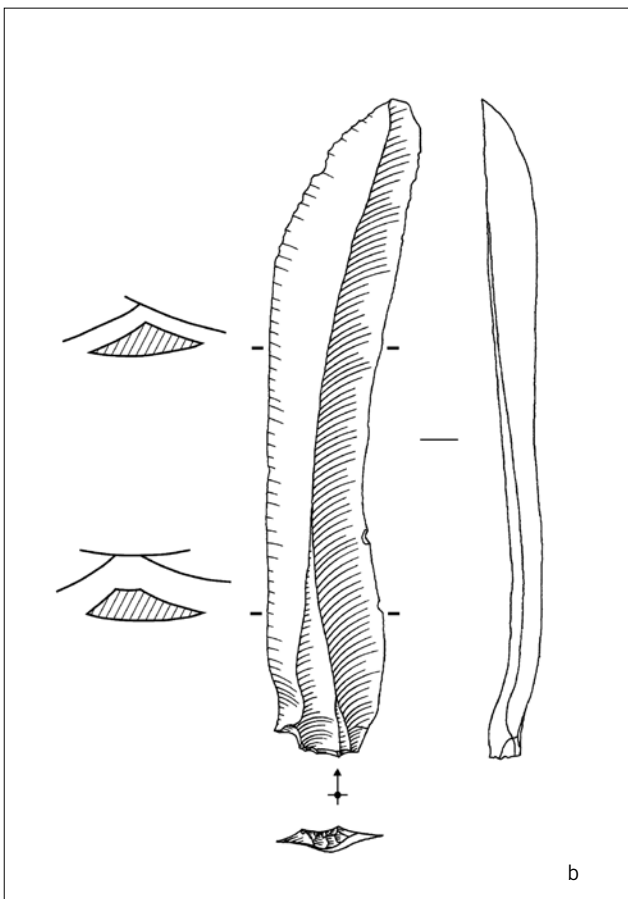
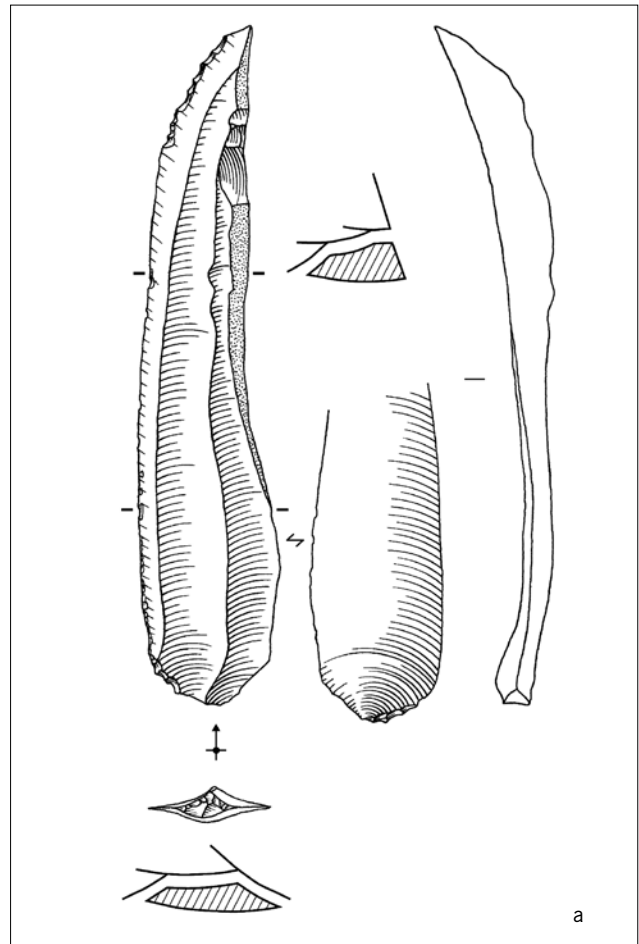


Fig. 6 a Blade located under the head; b-c blades located above the shoulders.

5.3 The first grave good assemblage

The lithic artefacts from the first assemblage of grave goods are represented by nine cores, six blades, two bladelets, a small endscraper and five flakes.

Of the nine cores which are part of the first assemblage, one is obtained from a small, flat slab of chert of an intense dark red colour from the Scaglia Rossa of the Non valley, four from the Scaglia Variegata Alpina Formation of the same area (three of an olive greenish chert and one of a light red-brown colour) while the last four come from pebbles of the local Buchenstein Formation of an unusually excellent quality (Fig. 7). The first item is a bladelet core characterised by a semi-*tournant* narrow exploited surface (Fig. 7a; 8a). The following four are represented by a pre-core on which an opening flake has been refitted (Fig. 7b; 9d – Guerreschi 1992), a small exploited core with two reduction phases (Fig. 7c; 8b), a bladelet core exploited from its narrower side with a frontal reduction (Fig. 7d; 8c) and a bladelet core with two bladelet series extracted from two orthogonal adjacent lamellar surfaces (Fig. 7e). Two flakes have been refitted on it, along with a bladelet/partial neo-crest extracted from the last lamellar surface (Fig. 9a–c). The use of a pressure technique for bladelet extraction is strongly suggested for the last two cores. The last four items present rather different technological features: one is a lamellar core with a few removals, another one a lamellar core deeply exploited with unidirectional removals, a further one is a flake core and the last one a pre-core with the morphology of a chopper (Fig. 7g–i; 8d–g).

Of the six blades belonging to the first grave goods assemblage only one is complete while two lack their distal ends and three their proximal parts. The first one is a partial crested-blade refitted to a *sous-crête* from the third assemblage of grave goods (Fig. 10a). It is obtained from a grey chert from the Buchenstein Formation and shows a lateral retouch along with a functional area on its left edge indicating that it was used for scraping hard material, possibly soft/green wood (Fig. 11a–b). The two blades missing their distal ends are respectively obtained from a chert of the Maiolica Formation (light grey colour, Piave valley?) and the Scaglia Variegata Alpina (yellow colour) of the Lessini-Baldo area. Both blades have been removed by the punch technique and show a discontinuous irregular denticulated retouch (cf. Montbani) either along one lateral margin or both respectively (Fig. 10b–c). The first one has a functional area used for scraping hard animal materials while the second one displays two different functional zones, one on the right and the other one on its transversal edge. A use for scraping hard materials is proposed for the latter although the lack of micro-polish has not allowed us to identify the processed material.

The three distal fragments are represented by two blades on a yellow chert of the Scaglia Variegata Alpina (Baldo-Lessini area) and a *sous-crête* blade on a chert of the Buchenstein Formation (Dolomite area; Fig. 10d–f). One of the first two blades is deeply modified by a continuous denticulated retouch along both margins (cf. Montbani). It shows some functional scars and a micro-polish on its left side indicating that it was used for working hard animal materials, particularly antlers (Fig. 11c–d – Keeley 1980, 56;

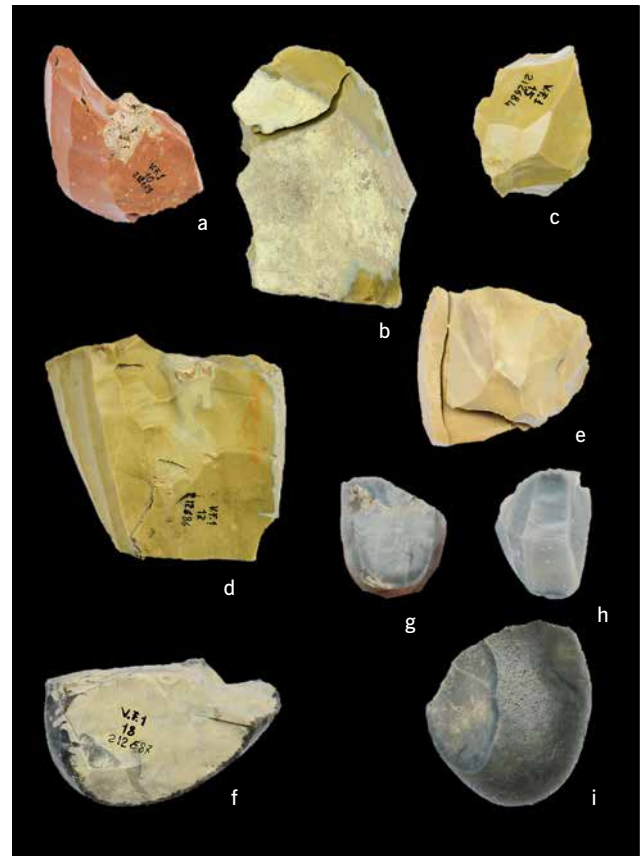


Fig. 7 First burial assemblage. a Bladelet core, Scaglia Rossa (Non valley); b pre-core, Scaglia Variegata Alpina (Non valley) with refitted opening flake; c exhausted bladelet core, Scaglia Variegata Alpina (Non valley); d bladelet core, Scaglia Variegata Alpina (Non valley); e bladelet core, Scaglia Variegata Alpina (Non valley) with one refitted *néo-crête* and two maintenance flakes; f flake core, Buchenstein Formation (Dolomites); g–h bladelet cores, Buchenstein Formation (Dolomites); i pre-core, Buchenstein Formation (Dolomites). – Scale 1 : 2.

Plisson 1985, 54–55). The second one has some edge-scars on its left side along with a rounding and a weak polish indicating its use for scraping soft material while the third one (*sous-crête*) did not reveal any use-wear.

The two bladelets are respectively represented by a partial neo-crest (light red Scaglia Variegata Alpina) extracted from the lateral side of a small lamellar core on which it was refitted [cf. *supra*] (Fig. 9a) and a *plein débitage* bladelet (yellow Scaglia Variegata Alpina from the Baldo-Lessini area; Fig. 10g). Both items are characterised by plunging ends, curved profiles, marked and high bulbs and open flaking angles which are close to 90°. The small frontal endscraper (light red Scaglia Variegata Alpina from the Non valley) keeps an oblique continuous retouch at its distal end and a more marginal discontinuous one along its right lateral margin (Fig. 10h). No traces of wear were identified on it. The last five items are flakes and can be considered as elements extracted for the management of the core's morphology. Two of them (light red Scaglia Variegata Alpina) were refitted on one of the cores and another one (opening flake, green Scaglia Variegata Alpina) on a pre-core from the same assemblage [cf. *supra*] (Fig. 7b, e; 9b–d).

To sum up, five artefacts from this assemblage of grave goods display traces of wear, all related to transversal motions, i.e. scraping mostly carried out on hard materials.

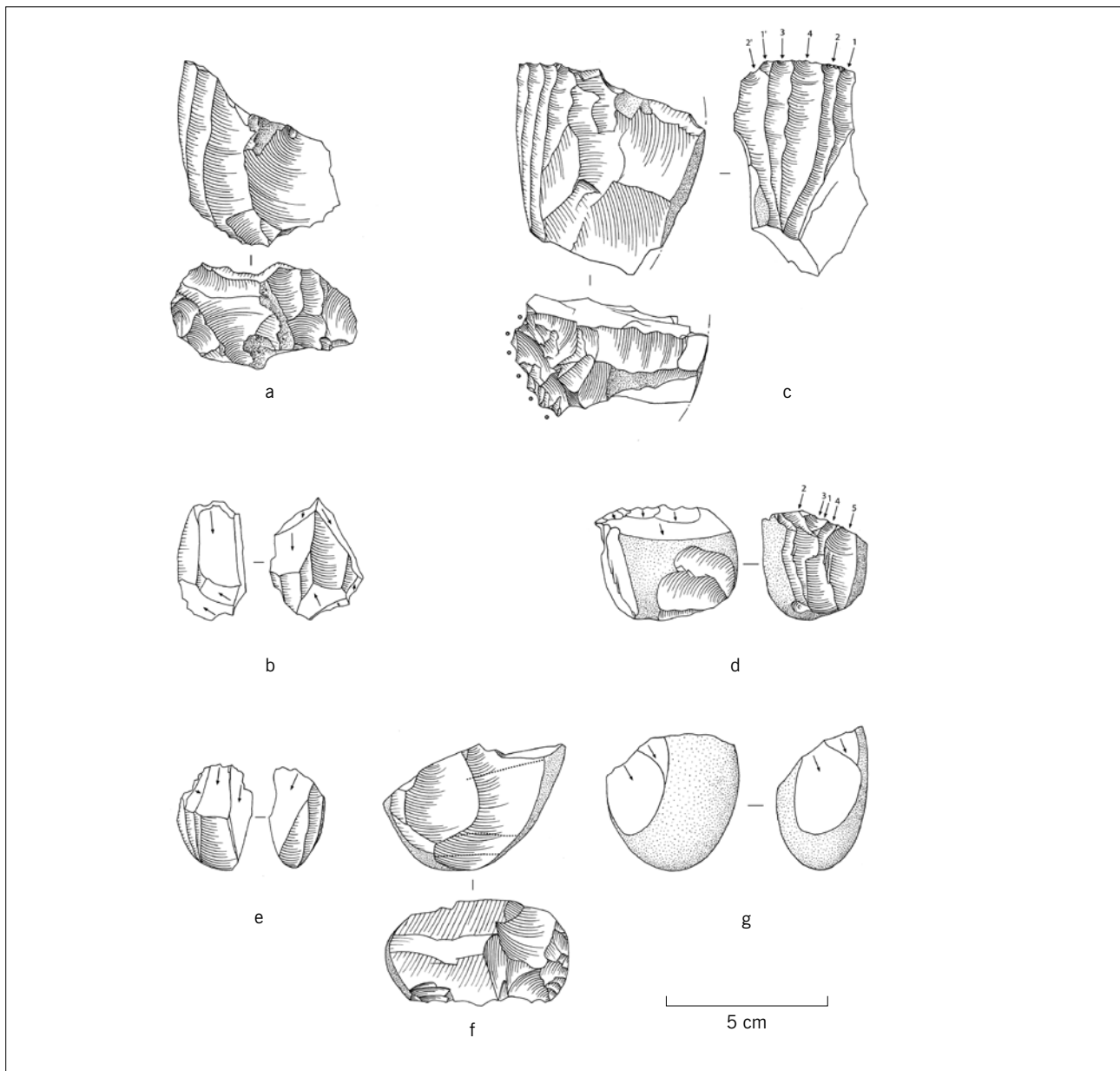


Fig. 8 First burial assemblage. a Bladelet core, Scaglia Rossa (Non valley); b exhausted bladelet core, Scaglia Variegata Alpina (Non valley); c bladelet core, Scaglia Variegata Alpina (Non valley); d–e bladelet cores, Buchenstein Formation (Dolomites); f flake core, Buchenstein Formation (Dolomites); g pre-core, Buchenstein Formation (Dolomites).

5.4 The second grave good assemblage

The second assemblage is represented by two items, both with surfaces partially altered by contact with the organic lump accompanying them. The only blade, obtained on a red chert of the Scaglia Rossa Formation (Non Valley), is characterised by parallel margins, a convex profile plunging at its distal end and a marked bulb with a thin ventral lip (*débitage* by indirect percussion; Fig. 12a). It does not display any evidence of use. The second element is a thick flake (residual core?) made on a chert of a light brown colour from the Scaglia Variegata Alpina (Non valley; Fig. 12b). It has a trihedral shape with negatives of removals on the three faces and a bifacial coarse retouch at one of the extremities creating a rounded »nose« to which traces of wear that might be due to striking hard materials (such as

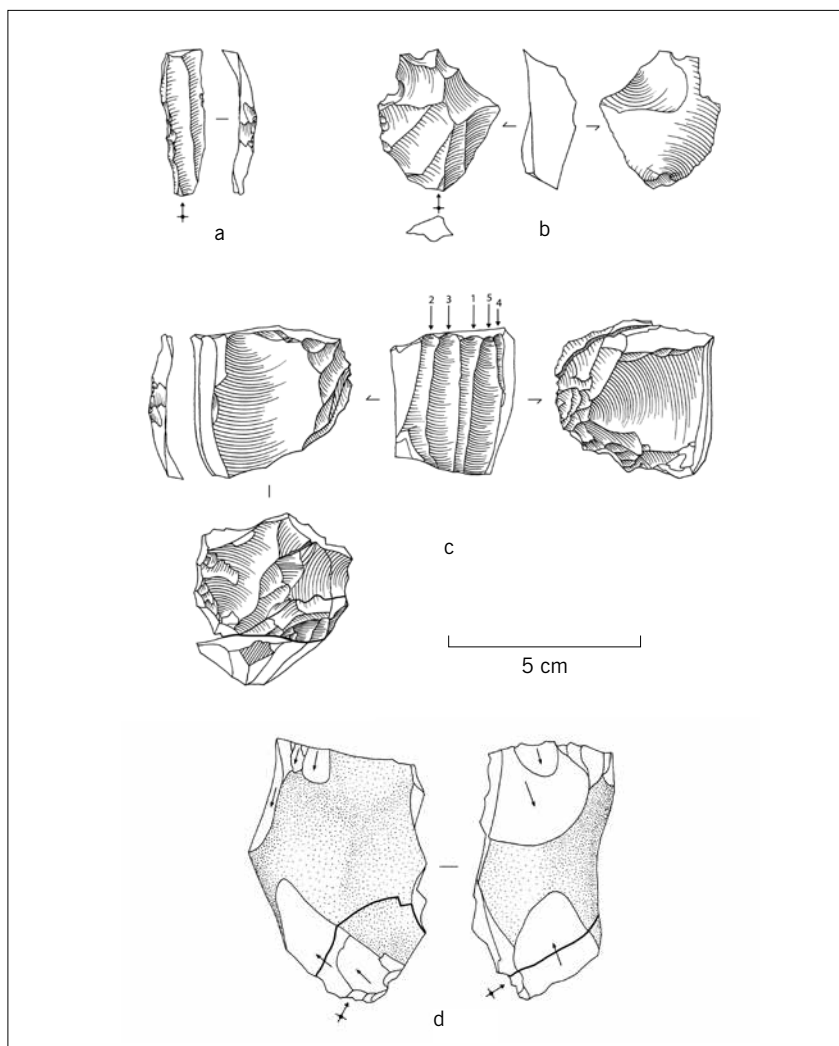
a briquet or a retoucher) are superimposed. A very similar tool was found at Laghetti del Crestoso (Baroni/Biagi 1997, 48–57).

5.5 The third grave good assemblage

All the lithic items that compose the third assemblage of goods are variously covered and altered by contact with the agglomerate of organic substances accompanying them. They comprise one modified blade (burin on a truncation), four blades, two broken bladelets, a retouched flake (scraper) and a small flake.

Among the five blades, three are complete while one misses a small part of its distal end and one is a mesial fragment. The three complete items are all made on cherts from

Fig. 9 First burial assemblage. a *Néo-crête*; b maintenance flake; c bladelet core, Scaglia Variegata Alpina (Non valley) with one refitted *néo-crête* and two maintenance flakes; d pre-core, Scaglia Variegata Alpina (Non valley) with refitted opening flake.



the Baldo-Lessini area and have features consistent with extraction by indirect percussion. The first one (grey chert from the Maiolica Formation) is a double truncation with a double transversal steep retouch, rectilinear at the proximal end and oblique at its distal one where the negative of a burin spall is visible starting from the truncated surface, on the left margin of the blade (Fig. 13a). It presents a functional area used to cut/engrave an undetermined material along with some micro-scars (small and half-moon shaped) and a micro-polish on its right edge which can be interpreted as the result of cutting semi-dry skin (Fig. 14a–b). The second blade (grey chert of the Maiolica Formation; Fig. 13b), plunging at its distal end, presents a functional area on the left edge, due to longitudinal motion on a soft animal tissue such as meat/tendons. The last complete blade (yellow Scaglia Variegata Alpina; Fig. 13c), shows some irregular micro-scarring on its left side and a well developed micro-polish which can be attributed to a transversal motion on a soft plant (Fig. 14c–d). The (fourth) incomplete blade (green chert of the Scaglia Variegata Alpina) is characterised by a sinuous straight profile (Fig. 13d). It presents some scars on the left edge due to use in cutting soft material. The mesial fragment (n. 43) is that of the *sous-crête* made on a chert of the Buchenstein Formation and refitting to the crested blade of assemblage I [cf. *supra*] (Fig. 10a).

Two broken bladelets were also included in this assemblage: one is a mesial fragment (yellow chert of the Scaglia Variegata from the Baldo-Lessini area) while the other one is the proximal part of a bladelet almost completely covered by resins. The assemblage is completed by a flake on a red chert of the Scaglia Rossa (Non valley) with a bifacial transversal retouch (scraper) and a flake almost completely covered by resins. The first of these two elements has a badly preserved surface and a polished area whose origin is probably functional and possibly related to leather processing.

Among the artefacts from the third assemblage, four blades have shown traces of wear, all of them indicating the processing of soft materials (soft animal tissue, soft plant, semi-dry skin, leather).

6 The Mesolithic burials of the Italian peninsula

Only a few Mesolithic burial contexts are known in the Italian peninsula and they are all dated to the most ancient phase, with the exception of Mondeval's grave, the only one attributed to the Castelnovian (Second or Late Mesolithic). Most known sites are found in the southern-central area of the country with the highest concentration in north-western Sicily within two deposits, Grotta dell'Uzzo and Grotta

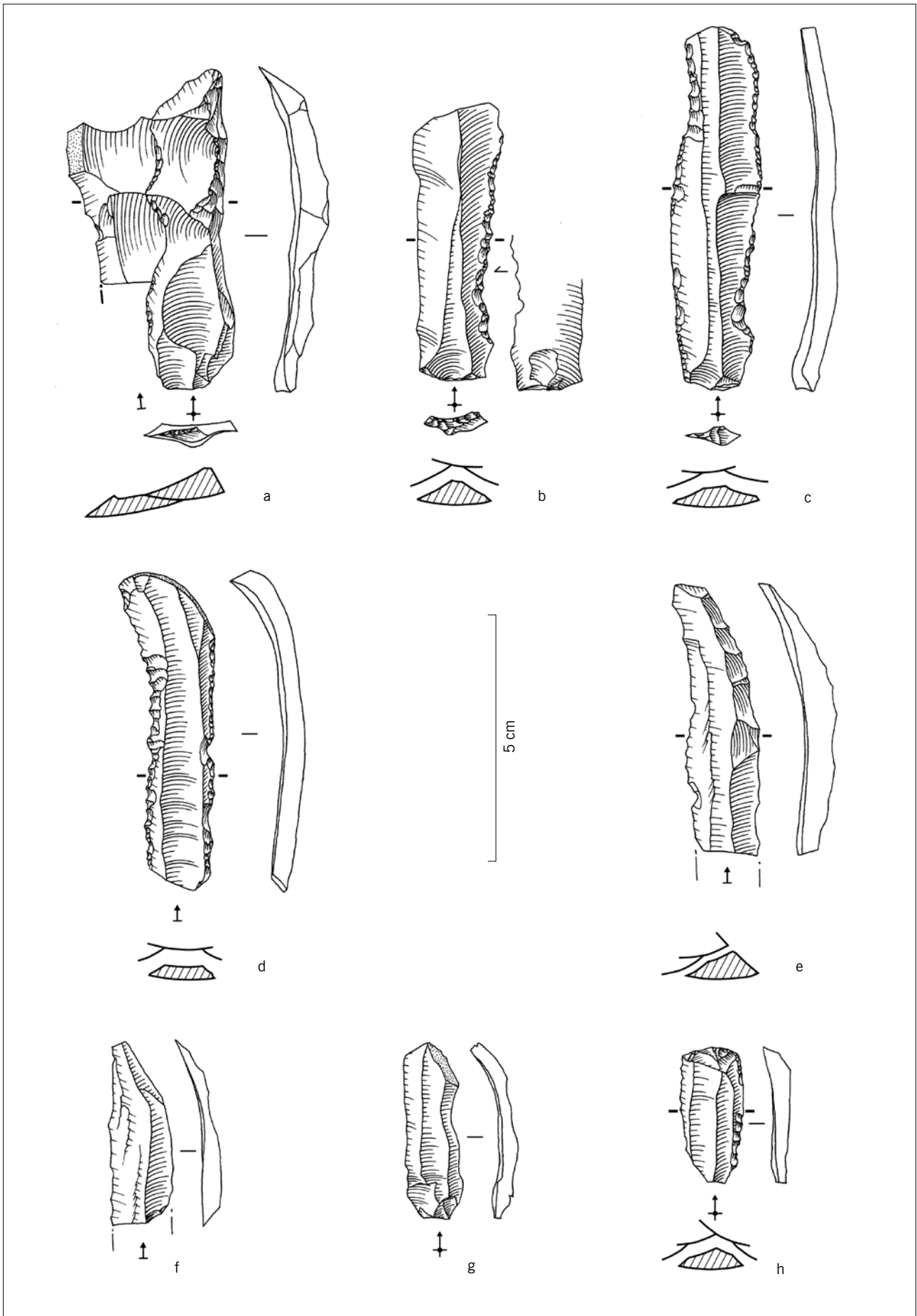


Fig. 10 First burial assemblage. a Partial crested-blade refitted to a *sous-crête* from the third grave good assemblage; b–d Montbani blades; e *sous-crête* blade (distal part); f blade (distal part); g *plein débitage* bladelet; h endscraper.

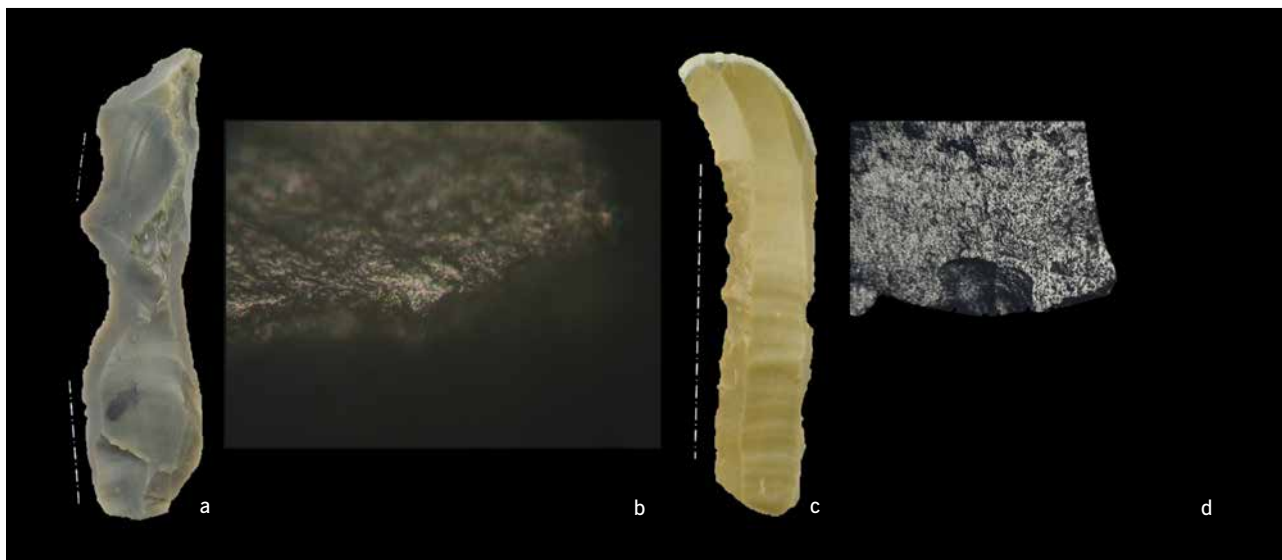


Fig. 11 First burial assemblage. a–b Partial crested-blade (Buchenstein Formation, Dolomites) and micro-polish from scraping wood (magnification 100X); c–d Montbani blade (Scaglia Variegata Alpina, Baldo-Lessini area) and micro-polish from scraping hard animal materials [antler?] (magnification 100X).

Molara, while the attribution to the Mesolithic of one of the three burials of Grotta d'Oriente (Oriente B) remains uncertain (Lo Vetro/Martini 2006). The most important of these sites is Grotta dell'Uzzo which has yielded ten burials, among which are two double ones respectively containing two adults, with an overall count of 12 individuals (Borgognini Tarli et al. 1993). The cave seems to have been used for funerary purposes for around one millennium spanning from the second part of the Preboreal to the first part of the Boreal (Belluomini/Delitalia 1983; Mannino et al. 2006). The single burials are represented by two newborn individuals, a child and nine adults among which are four females and five males. The burial ritual is characterised by the presence of burial pits, while the skeletons show a certain variety in their positions (supine with flexed lower limbs and lateral). In some cases the skeletons are covered with limestone blocks while in others the presence of symbolic hearths has been suggested. The burial goods are poor and sometimes hard to interpret. These are composed of a few lithic artefacts, some ornamental shells and some bone elements. Three of the latter (a point on the extremity of a red deer rib found between the left humerus and the thorax and the rib of a *Bos* cut longitudinally located between the two femurs of Uzzo V; a bone point from a red deer metapodial from Uzzo VII) have been interpreted as elements of dress (Collina 2006). The association of ornamental objects with some of the burials remains uncertain (one *Patella ferruginea* at Uzzo V, one pierced *Donax trunculus* found between the ribs of Uzzo VI). For its part, Grotta Molara has yielded three burials, two of which are adult males (Molara 1 and 2) and one an indeterminate adult (Molara 3). The skeleton of Molara 2 was deposited in supine position with flexed lower limbs and was not accompanied by any grave goods (Canci et al. 1995). Two more burials come from Grotta Praia Mare (Calabria) represented by a newborn and a 12-month-old individual (Alciati et al. 2005) and two from Sardinia (cf. Melis/Mussi in the present volume). Only two burials were found in north-eastern Italy, namely in the Adige valley (Vatte di Zambana and Borgo-



Fig. 12 Second burial assemblage. a Blade, Scaglia Rossa (Non valley); b trihedral shaped tool, Scaglia Variegata Alpina (Non valley). – Scale 1 : 1.

nuovo di Mezzocorona), and they are both attributed to adult females. Deposited in a supine position they were covered with stones on the uppermost part of the body. The presence of some pieces of ochre located near different parts of the body is reported, while no grave goods accompanied them (Corrain et al. 1976; Dalmeri et al. 1998; 2002).

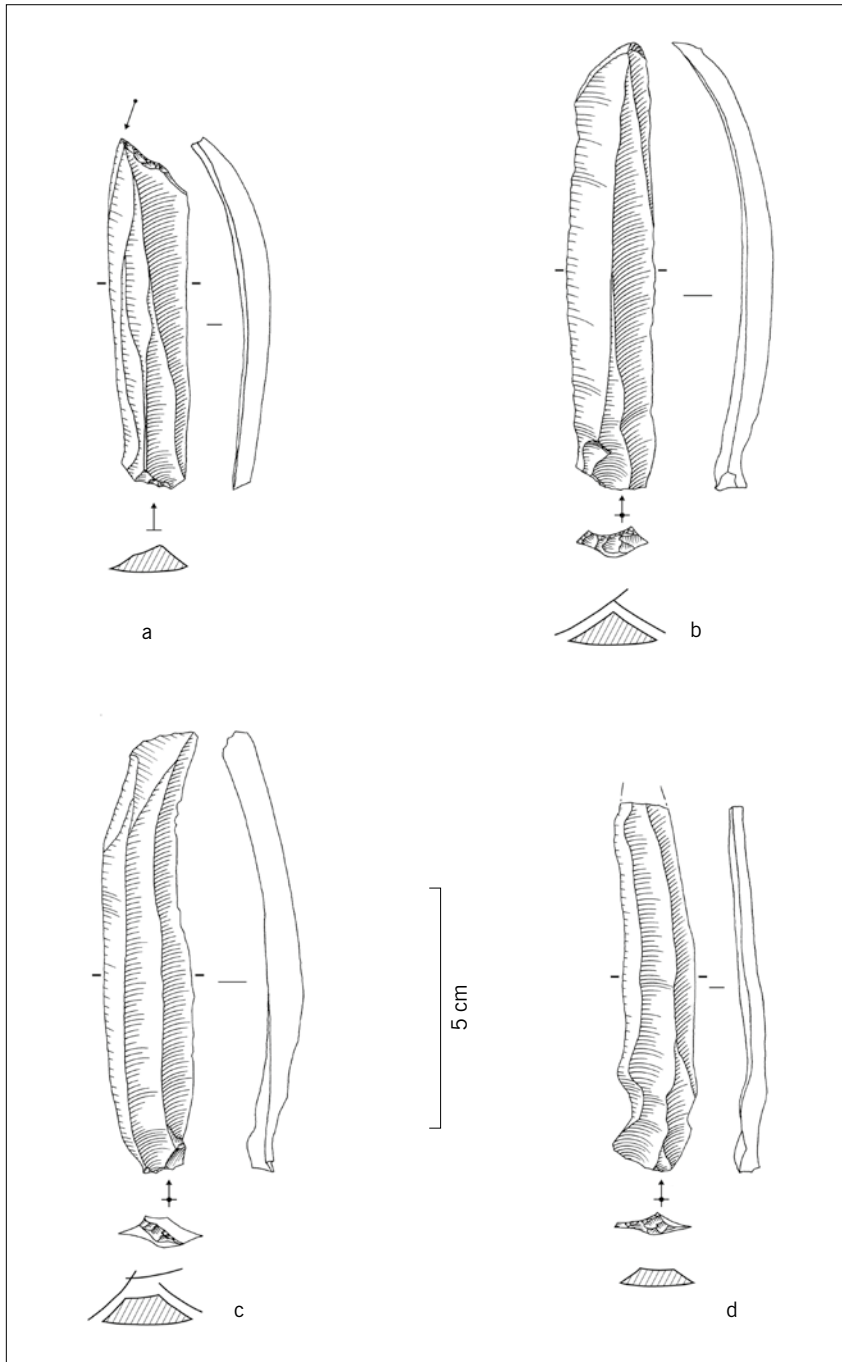


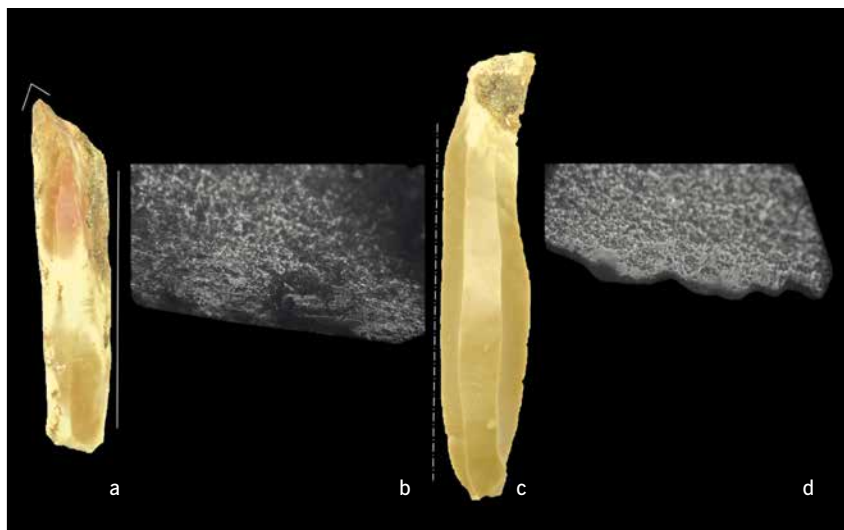
Fig. 13 Third burial assemblage. a Blade with double truncation and negative of a burin spall at the distal end; b–d *plein débitage* blades.

7 Diachronical and synchronical variability of hunter-gatherers' burial rituals in Italy

When examining prehistoric hunter-gatherers' burials in Italy two main factors are recognised: the first concerns diachronical changes which are particularly evident from the first (Gravettian and Early Epigravettian) to the second part of the Palaeolithic (Late Epigravettian) while the Early Mesolithic evidence appears in strict continuity to the latter; the second one refers to the identification of regional traditions, sometimes persisting a long time (Palma di Cesnola 2006; Gazzoni 2010). As far as the first factor is concerned, one of the most relevant aspects is represented by a general trend in the reduction of the relevance of burial goods in the Late Epigravettian, a phenomenon which is also recognised during

the Early Mesolithic (Palma di Cesnola 2006; Fontana/Gazzoni 2011; Martini 2006). In particular, large size lithic and osseous tools located in meaningful positions disappear almost totally. Lithic tools are represented by more »ordinary« items and more frequently they are absent (Fontana/Gazzoni 2011). According to Palma di Cesnola (2006) other »categories« of items replace them: fragments of deer antler, *Bos* horns and pebbles which are sometimes covered with ochre. Also the presence of ochre appears less emphasised. At the same time personal ornaments are only confirmed in the Ligurian area (Fanciulli and Arene Candide) while in all other other contexts their association to burials remains uncertain [the over-mentioned shell ornaments from Uzzo, four pierced *Columbella* at Continenza 1 and a pierced *Cardium* at Praia a Mare 1] (Fontana/Gazzoni 2011). By contrast the tradition of covering

Fig. 14 Third burial assemblage. a–b Blade with double truncation and negative of a burin spall at the distal end (Maiolica Formation, Baldo-Lessini) and micro-polish from cutting semi-dry skin (magnification 200X); c–d *plein débitage* blade (Scaglia Variegata Alpina, Baldo-Lessini) and micro-polish from scraping soft plant (magnification 200X).



bodies with large stones represents a constant feature all along the peninsula throughout the time span concerned.

The presence of regional traditions seems to be an evident phenomenon especially in those areas which present clusters of burials distributed along a certain time span, as is the case in north-eastern Italy, Liguria and Sicily. Particularly in north-eastern Italy a certain connection seems to exist, on one side, between the two female Early Mesolithic burials of Vatte di Zambana and Borgonuovo and, on the other, the two male burials of Villabruna rock shelter [Late Epigravettian, KIA-27004: 12 140 ± 70 BP, 14 187–13 780 cal BP] (Broglia 1992; Vercellotti et al. 2008) and Mondeval de Sora. All the graves are characterised by stone coverings and the supine position of the bodies with outstretched limbs. By the way, females do not present any grave goods while males are accompanied by grave goods with a similar composition which in both cases are thought to have been contained within one or more bags located along the body of the buried individuals. Nonetheless it should be stressed that Villabruna's burial is characterised by a much less rich set of items (a flint core, a pebble used as a retoucher, a backed knife, a blade, a decorated bone point and a lump made of propolis and ochre) and that it lacks ornamental elements as well as any item with a symbolic value, such as the blades located above the shoulders and under the head of Mondeval's individual.

8 Conclusions

The burial of Mondeval de Sora represents a really exceptional case being so far the only Late Mesolithic funerary context known throughout the Italian peninsula as well as one the richest of southern and central Europe for this period. The analysis of the lithic items that compose its assemblage of grave goods offers the possibility of gaining new insights into daily life and ritual practices of the last Mesolithic hunter-gatherers of north-eastern Italy. In particular they suggest that we are encountering a society that has undergone important changes deeply affecting its techno-economic and symbolic/ritual systems. As far as the first is concerned three main aspects are involved:

1. The dominating presence of extra-regional cherts (coming from distances between 70 km – Non valley – and 100 km – Lessini-Baldo chain – as the crow flies from Mondeval) reflects the establishment of renovated pathways during the Castelnovian with respect to the Sauveterrian when only regional cherts are documented.
2. The selection of good quality varieties of raw materials (among which is an exceptional type from the Dolomites) seems to be strictly connected to the technology entailed in the manufacture of artefacts, particularly the new techniques of *débitage* which are introduced in this phase, i.e. pression and indirect percussion that appear respectively associated to the extraction of bladelets and blades in Mondeval's burial.
3. Results of functional analysis indicate an intensification in the use of blades in connection to specific activities – processing hard animal and vegetal materials – with respect to the Early Mesolithic phase, thus highlighting the establishment of a new balance between the technical effort invested in tool manufacturing, tool efficiency and performance.

Concerning ritual systems, although several aspects of continuity have been observed with the Late Palaeolithic and Early Mesolithic funerary tradition, particularly with the burial at Villabruna rock shelter [cf. *supra*] the richness and variety of Mondeval's burial goods appear uncommon, as well as the uniqueness of some elements that are part of it. In particular, three of the 36 lithic items occupy a peculiar role in the burial ritual. These are the large blades respectively located under the head and over the shoulders of the individual, as is reflected by their exceptional manufacture, the absence of use-wear on two of them and – most of all – their position. We suggest that the symbolic significance given to these objects could represent an element of innovation for the Castelnovian groups settled in the area. In fact, looking back at data available from the burial contexts of the previous phases in the peninsula, evidence for the use of large blades with a similar ritual role dates back several thousand years earlier (Gravettian, Early Epigravettian) while it totally disappears in the following phases (Late Epigravet-

tian, Early Mesolithic). Therefore the hypothesis of the permanence of a Palaeolithic tradition is difficult to support. It rather seems to anticipate a practice which will be typical of Later Neolithic societies (Bernabò Brea et al. 2010) – although not necessarily related to them – and more specifically of male individuals' burials. This practice appears connected to the new symbolic role assumed by these items in a close relationship to the new (possibly highly specialised?) techniques introduced in the Late Mesolithic (and later shared by Neolithic societies) allowing the production of large size and regular blanks. We believe that this aspect of the burial ritual may represent one of the key elements reflecting the relevant social transformations possibly towards higher complexity that have affected Late Mesolithic societies of north-eastern Italy.

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Bibliography

- Alciati et al. 1994**
G. Alciati/L. Cattani/F. Fontana/E. Gerhardinger/A. Guerreschi/S. Milliken/P. Mozzi/P. Rowley-Conwy, Mondeval de Sora: a high altitude Mesolithic camp-site in the Italian Dolomites. *Preistoria Alpina* 28,1, 1992 (1994), 351–366.
- Alciati et al. 1995**
G. Alciati/A. Coppa/R. Macchiarelli, La dentizione del cacciatore mesolitico di Mondeval de Sora (San Vito di Cadore, Belluno). *Bullettino di Paleontologia italiana* 86,4, 1995, 153–196.
- Alciati et al. 1997**
G. Alciati/V. Pesce Delfino/E. Vacca, Evidenze patologiche rilevate sullo scheletro di Mondeval de Sora. *Atti del XII Congresso dell'Associazione Antropologica Italiana »Storia del popolamento del Mediterraneo: aspetti antropologici, archeologici e demografici«*, Palermo-Alia, 16–20 settembre 1997. *Antropologia Contemporanea* 20,4 (Torino 1997).
- Alciati et al. 2005**
G. Alciati/V. Pesce Delfino/E. Vacca (eds.), Catalogue of Italian fossil human remains from the Palaeolithic to the Mesolithic. *Journal of Anthropological Sciences, Rivista di Antropologia, Suppl. to vol. 83* (Roma 2005).
- Baroni/Biagi 1997**
C. Baroni/P. Biagi (eds.), Excavations at the high altitude Mesolithic site of Laghetti del Crestoso (Bovegno, Brescia – Northern Italy). *Ateneo di Brescia, Accademia di Scienze Lettere ed Arti* (Brescia 1997).
- Belluomini/Delitalia 1983**
G. Belluomini/L. Delitalia, Datazione di resti ossei e denti del Pleistocene superiore e dell'Olocene dell'area mediterranea con il metodo della racemizzazione degli aminoacidi. *Geografia Fisica e Dinamica Quaternaria* 6,1, 1983, 21–30.
- Bernabò Brea et al. 2010**
M. Bernabò Brea/M. Maffi/P. Mazzi/L. Salvatei, Testimonianze funerarie della gente di Vasi a Bocca Quadrata in Emilia occidentale. *Archeologia e antropologia. Rivista di Scienze Preistoriche* 60, 2010, 63–126.
- Bietti et al. 2004**
A. Bietti/G. Boschian/G. Mirocle Crisci/E. Danese/A.M. De Francesco/M. Dini/F. Fontana/A. Giampietri/R. Grifoni/A. Guerreschi/J. Liagre/F. Negrino/G. Radi/C. Tozzi/R. Tykot, Inorganic raw materials economy and provenance of chipped industry in some stone age sites of Northern and Central Italy. *Collegium Anthropologicum* 28,1, 2004, 41–54.
- Binford 1971**
L.R. Binford, Mortuary practices: their study and their potential. In: J.A. Brown (ed.), *Approaches to the social dimension of mortuary practice. Memories of the Society for American Archaeology* 25, 1971, 6–29.
- Borgognini Tarli et al. 1993**
S.M. Borgognini Tarli/A. Canci/M. Piperno/E. Repetto, Dati archeologici e antropologici sulle sepolture mesolitiche della Grotta dell'Uzzo (Trapani). *Bullettino di Paleontologia Italiana* 84,2, 1993, 85–179.
- Broglia 1992**
A. Broglia, La sepoltura epigravettiana del Riparo Villabruna. In: A. Angelini/E. Cason (eds.), *Atti del Convegno »Sepolture preistoriche nelle Dolomiti e primi insediamenti storici«*, 19 settembre 1992, Fondazione Giovanni Angelini. *Centro Studi sulla Montagna* (Belluno 1992) 59–88.
- Canci et al. 1995**
A. Canci/S. Minozzi/E. Repetto/S.M. Borgognini Tarli, Mesolithic skeletal remains from Grotta della Molara (Palermo, Sicily). *Rivista di Antropologia* 73, 1995, 237–254.
- Cattani 1993**
L. Cattani, Contenuto pollinico di materiali resinosi come elemento di corredo funebre. *Antropologia contemporanea* 16, 1993, 55–60.
- Cilli et al. 2001**
C. Cilli/G. Giacobini/A. Guerreschi, Bone artifacts from the Mesolithic burial of Mondeval de Sora (Belluno, Italy): preliminary technological and functional observations. In: A. Guarino (ed.), *Proceedings of the 3rd international congress on »Science and technology for the safeguard of cultural heritage in the Mediterranean basin«*, 9–14 July 2001, Alcalá de Henares (Spain), CNR-Progetto Finalizzato Beni Culturali, 2 (Roma 2001) 895–899.
- Collina 2006**
C. Collina, Gli oggetti di corredo nelle sepolture mesolitiche della Grotta dell'Uzzo (Trapani): studio tecnologico e analisi delle tracce. In: F. Martini (ed.), *La cultura del morire nelle società preistoriche e protostoriche. Studio interdisciplinare dei dati e loro trattamento informatico. Dal Paleolitico all'età del Rame. Origines* 3 (Firenze 2006) 239–268.
- Corrain et al. 1976**
C. Corrain/G. Graziati/P. Leonardi, La sepoltura epipaleolitica nel riparo di Vatte di Zambana (Trento). *Preistoria Alpina* 12, 1976, 175–212.
- Dalmeri et al. 1998**
G. Dalmeri/E. Mottes/F. Nicolis, The Mesolithic burial of Mezzocorona-Borgonuovo (Trento): some preliminary comments. *Preistoria Alpina* 34, 1998, 129–138.
- Dalmeri et al. 2002**
G. Dalmeri/E. Mottes/F. Nicolis, La sepoltura mesolitica di Mezzocorona-Borgonuovo (Trento). Prime considerazioni. *Atti della XXXIII Riunione Scientifica dell'Istituto Italiano di Preistoria e Protostoria »Preistoria e Protostoria del Trentino – Alto Adige/Südtirol in ricordo di Bernardino Bagolini«*, Trento, 21–24 ottobre 1997, 1 (Firenze 2002) 189–203.
- Fontana 2006**
F. Fontana, La sepoltura di Mondeval de Sora (Belluno). Differenziazione sociale e modalità insediative degli ultimi popoli cacciatori e raccoglitori dell'Italia nord-orientale. In: F. Martini (ed.), *La cultura del morire nelle società preistoriche e protostoriche. Studio interdisciplinare dei dati e loro trattamento informatico. Dal Paleolitico all'età del Rame. Origines* 3 (Firenze 2006) 269–292.
- Fontana/Gazzoni 2011**
F. Fontana/V. Gazzoni, Quelle mort? Quelle vie? Pratiques funéraires et organisation sociale des chasseurs-cueilleurs de la péninsule italienne. *Bulletins et Mémoires de la Société d'Anthropologie de Paris* 23,1–2, 2011, 52–69.
- Fontana/Guerreschi 2003**
F. Fontana/A. Guerreschi, Highland occupation in the southern Alps during the Early Holocene. In: L. Larsson/H. Kindgren/K. Knutsson/D. Loeffler/A. Åkerlund (eds.), *Mesolithic on the move. Papers presented at the sixth international conference on the Mesolithic in Europe, Stockholm 2000* (Oxford 2003) 96–102.
- Fontana/Vullo 2000**
F. Fontana/N. Vullo, Organisation et fonction d'un camp de base saisonnier au coeur des Dolomites: le gisement mésolithique de Mon-

- deval de Sora (Belluno, Italie). In: Les derniers chasseurs-cueilleurs d'Europe occidentale (13000 – 5500 av. J.-C.). Actes du colloque international de Besançon (Doubs, France), 23–25 octobre 1998. Annales littéraires de l'Université de Franche-Comté, [Série »Environnement, sociétés et archéologie«] 699 (Besançon 2000) 197–208.
- Fontana et al. 2009**
F. Fontana/L. Govoni/A. Guerreschi/S. Padoanella/A. Siviero/U. Thun Hohenstein/S. Ziggotti, L'occupazione sauveterriana di Mondeval de Sora 1, settore I (San Vito di Cadore, Belluno) in bilico tra accampamento residenziale e campo da caccia. *Preistoria Alpina* 44, 2009, 207–226.
- Gazzoni 2010**
V. Gazzoni, Contributo alla ricostruzione delle identità regionali e della differenziazione sociale presso i gruppi di cacciatori-raccoglitori paleo-mesolitici. Studio della ritualità funeraria in Italia e Francia e analisi degli isotopi stabili sul campione umano del versante alpino sud-orientale [unpubl. PhD thesis, Università degli Studi di Ferrara] (Ferrara 2010).
- Gerhardinger/Guerreschi 1989**
E. Gerhardinger/A. Guerreschi, La découverte d'une sépulture mésolithique à Mondeval de Sora (Belluno, Italie). In: G. Giacobini (ed.), *Hominidae. Proceedings of the 2nd international congress of human palaeontology* (Milano 1989) 511–513.
- Guerreschi 1992**
A. Guerreschi, Il sito di Mondeval de Sora: la sepoltura. In: A. Angelini/E. Cason (eds.), *Atti del Convegno »Sepolture preistoriche nelle Dolomiti e primi insediamenti storici«*, 19 settembre 1992, Fondazione Giovanni Angelini. Centro Studi sulla Montagna (Belluno 1992) 89–102.
- Hodder 1982**
I. Hodder, *Symbols in action: ethnoarchaeological studies of material culture* (Cambridge 1982).
- Keeley 1980**
L.H. Keeley, *Experimental determination of stone tool uses. A microwear analysis* (Chicago 1980).
- Lo Vetro/Martini 2006**
D. Lo Vetro/F. Martini, La nuova sepoltura epigravettiana di Grotta d'Oriente (Favignana, Trapani). In: F. Martini (ed.), *La cultura del morire nelle società preistoriche e protostoriche. Studio interdisciplinare dei dati e loro trattamento informatico. Dal Paleolitico all'età del Rame. Origines 3* (Firenze 2006) 58–66.
- Lull 2000**
V. Lull, *Death and society: a Marxist approach. Antiquity* 74, 285, 2000, 576–580.
- Mannino et al. 2006**
M.A. Mannino/K.D. Thomas/M. Piperno/S. Tusa/A. Tagliacozzo, Fine-tuning the radiocarbon chronology of the Grotta dell'Uzzo (Trapani). *Atti della Società per la Preistoria e la Protostoria della Regione Friuli-Venezia Giulia* 15, 2006, 17–31.
- Martini 2006**
F. Martini, *Sepolture e rituali funerari del Mesolitico in Italia*. In: F. Martini (ed.), *La cultura del morire nelle società preistoriche e protostoriche. Studio interdisciplinare dei dati e loro trattamento informatico. Dal Paleolitico all'età del Rame. Origines 3* (Firenze 2006) 67–86.
- Neeley/Clark 1990**
M.P. Neeley/G.A. Clark, *Measuring social complexity in the European Mesolithic*. In: P.M. Vermeersch/P. Van Peer (eds.), *Contributions to the Mesolithic in Europe. Papers presented at the fourth international symposium »The Mesolithic in Europe«*, Leuven 1990 (Leuven 1990) 127–137.
- Palma di Cesnola 2006**
A. Palma di Cesnola, *Sepolture e rituali funerari del Paleolitico superiore in Italia*. In: F. Martini (ed.), *La cultura del morire nelle società preistoriche e protostoriche. Studio interdisciplinare dei dati e loro trattamento informatico. Dal Paleolitico all'età del Rame. Origines 3* (Firenze 2006) 29–45.
- Peretto et al. 2004**
C. Peretto/P. Biagi/G. Boschian/A. Broglio/M. De Stefani/L. Fasani/F. Fontana/R. Grifoni/A. Guerreschi/A. Iacopini/A. Minelli/R. Pala/M. Peresani/G. Radi/A. Ronchitelli/L. Sarti/U. Thun Hohenstein/C. Tozzi, *Living floors and structures from the Lower Palaeolithic to the Bronze Age in Italy. Collegium Anthropologicum* 28, 1, 2004, 63–88.
- Plisson 1985**
H. Plisson, *Étude fonctionnelle d'outillages lithiques préhistorique par l'analyse des micro-usures: recherche méthodologique et archéologique* [unpubl. PhD thesis, Université de Paris I] (Paris 1985).
- Price/Brown 1985**
T.D. Price/J.A. Brown, *Aspects of hunter-gatherer complexity*. In: T.D. Price/J.A. Brown (eds.), *Prehistoric hunter-gatherers: the emergence of cultural complexity. Studies in archaeology* (Orlando, London 1985) 3–20.
- Saxe 1970**
A. Saxe, *Social dimensions of mortuary practices* [unpubl. PhD thesis, Department of Anthropology, University of Michigan, University Microfilms] (Ann Arbor 1970).
- Semenov 1964**
S.A. Semenov, *Prehistoric technology: an experimental study of the oldest tools and artefacts from traces of manufacture and wear* (London 1964).
- Tainter 1978**
J. Tainter, *Mortuary practices and the study of prehistoric social systems*. In: M. Schiffer (ed.), *Advances in archaeological method and theory* 1 (New York 1978) 105–141.
- Tixier et al. 1980**
J. Tixier/M.L. Inizan/H. Roche, *Préhistoire de la pierre taillée. Terminologie et technologie* 1 (Paris 1980).
- Vercellotti et al. 2008**
G. Vercellotti/G. Alciati/M.P. Richards/V. Formicola, *The Late Upper Paleolithic skeleton Villabruna 1 (Italy): a source of data on biology and behaviour of a 14.000-year-old hunter. Journal of Anthropological Science* 86, 2008, 143–163.

Source of figures

- 1 elaboration D. Visentin
- 2 F. Fontana
- 3–4 A. Guerreschi
- 5 D. Visentin
- 6 F. Briois
- 7 D. Visentin
- 8–10 F. Briois
- 11 D. Visentin/S. Ziggotti
- 12 D. Visentin
- 13 F. Briois
- 14 D. Visentin/S. Ziggotti

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Programme of the international conference on »Mesolithic burials – Rites, symbols and social organisation of early postglacial communities«, Halle (Saale), 18th–21st September 2013

Wednesday, 18 September 2013

8:00–14:00

Registration/Poster installation/Coffee

10:00 Opening session

Welcome words from Harald Meller,
State Archaeologist and Director of the State Office
for Heritage Management and Archaeology
Saxony-Anhalt, Director of the State Museum of
Prehistory Halle (Saale)

Session Chair: Berit V. Eriksen, Schleswig (DE)

10:10 Judith M. Grünberg, Halle/Saale (DE):
Introduction to the conference topic

10:30 Christopher Meiklejohn & Jeff Babb,
Winnipeg (CA):
A chrono-geographic look at Mesolithic
burials: an initial study

11:00 Glen H. Doran, Tallahassee (US):
Florida's window on the past – bog burials

11:30 Ruth Struwe, Bernau (DE) & Birgit Scheps-
Bretschneider, Leipzig (DE):
Ethnological records on the treatment of corpses
preceding disposal of Australia's sub-recent
indigenes

12:00 Discussion

12:10 Lunch Break

Session Chair: Pablo Arias, Santander (ES)

13:30 Bernhard Gramsch, Potsdam (DE):
The Mesolithic burials of northeastern Germany –
synopsis and new aspects

14:00 Maha Ismail-Weber, Wünsdorf (DE):
A burial at the edge of the Oderbruch (state of
Brandenburg) – description and discussion of a
possible Mesolithic grave

14:30 Ruth Bollongino, Mainz (DE), Jan Heinemeier, Aarhus
(DK), Bettina Jungklaus, Berlin (DE), Andreas Kotula,
Greifswald (DE) & Thomas Terberger, Hannover (DE):
New information on the multiple burial site of Groß
Fredenwalde, Brandenburg

15:00 Marcus Stecher, Mainz (DE), Judith M. Grünberg,
Halle/Saale (DE) & Kurt W. Alt, Mainz (DE):
The Mesolithic burials of the Middle Elbe-Saale
region

15:30 Leendert P. Louwe Kooijmans, Eerbeek (NL):
Human bones amidst refuse in the Late Mesolithic –
the Hardinxveld case, the Netherlands

16:00 Discussion

16:10 Group photograph of the participants in front of the
main entrance of the »State Museum of Prehistory«

16:30 Poster session

17:30 Special tour through the permanent exhibition of the
State Museum of Prehistory guided by Bernd Zich,
head of the department »State Museum«, and
Judith M. Grünberg

19:00 »Icebreaker Party« at the State Museum of Prehistory
(lecture room) with small buffet. Film by E. Brinch
Petersen, København (DK):
»Digging Mesolithic Burials: Henriksholm-Bøgebak-
ken 1975 – Strøby Egede 1986 – Gøngehusvej 7, 1990«

Thursday, 19 September 2013

Session Chair: Christopher Meiklejohn, Winnipeg (CA)

8:30 Rick Schulting, Oxford (GB):
Holes in the world: the use of caves for burial in the
Mesolithic

9:00 Erik Brinch Petersen, København (DK):
Afterlife in the Mesolithic – from inhumation,
cremation and exhumation to discard into oblivion

9:30 Berit V. Eriksen, Schleswig (DE):
Grave matters in Southern Scandinavia. Mortuary practice and ritual behaviour of the Maglemose people

10:00 Discussion

10:10 Coffee Break

Session Chair: Erik Brinch Petersen, København (DK)

10:30 Ole Lass Jensen, Hørsholm (DK):
Inhumations and cremations from the Late Mesolithic site of Nivå 10, Eastern Denmark

11:00 Esben Kannegaard, Randers (DK):
The early Ertebølle ochre graves from the location Nederst in eastern Jutland

11:30 Christian Bender Koch, København (DK), Erik Brinch Petersen, København (DK) & Esben Kannegaard, Randers (DK):
A material science perspective on ochre from Mesolithic graves

12:00 Discussion

12:10 Lunch Break

Session Chair: Zofia Sulgostowska, Warszawa (PL)

13:30 Lars Larsson, Lund (SE):
Perspectives on the Skateholm burial grounds

14:00 Torbjörn Ahlström, Lund (SE) & Karl-Göran Sjögren, Göteborg (SE):
Early Mesolithic burials from Bohuslän, Western Sweden

14:30 Fredrik Hallgren & Elin Fornander, Västerås (SE):
Skulls on stakes and skulls in water. Mesolithic mortuary rituals at Kanaljorden, Motala, Sweden, 7000 BP

15:00 Fredrik Molin, Linköping (SE) & Sara Gummesson, Stockholm (SE):
How to settle the dead – burials on the Mesolithic settlement Motala, Sweden

15:30 Discussion

15:40 Coffee Break

Session Chair: Leendert P. Louwe Kooijmans, Eerbeek (NL)

16:00 Zofia Sulgostowska, Warszawa (PL):
New data concerning Mesolithic burials from Polish territory

16:30 Witold Gumiński & Karolina Bugajska, Warszawa (PL):
Exception as a rule. Diversified burial rite at Dudka and Szczepanki (Masuria, NE-Poland)

17:00 Karolina Bugajska & Witold Gumiński, Warszawa (PL):
How many steps to heaven? Loose human bones and secondary burials at Dudka and Szczepanki, Masuria (NE-Poland)

17:30 Adomas Butrimas & Marius Iršėnas, Vilnius (LT):
New data on the Donkalnis and Spiginas (West Lithuania) Mesolithic cemeteries

18:00 Discussion

19:30 Public evening talk
Bernhard Gramsch, Potsdam (DE):
Hunters 10,000 years ago – excavations near Friesack in the Marchia of Brandenburg
Jäger vor 10.000 Jahren – Ausgrabungen bei Friesack in der Mark Brandenburg

(afterwards social evening in a restaurant)

Friday, 20 September 2013

Session Chair: Margherita Mussi, Roma (IT)

8:30 Ilga Zagorska, Rīga (LV):
Mesolithic burials traditions in Latvia, Eastern Baltic

9:00 Gunita Zariņa, Rīga (LV) & Kathleen Faccia, London (GB):
Some aspects of Mesolithic population of Latvia

9:30 Valdis Berziņš, Rīga (LV), Ute Brinker, Schwerin (DE), Harald Lübke, Schleswig (DE), John Meadows, Kiel (DE) & Ilga Zagorska, Rīga (LV):
The human burials of Riņņukalns, Latvia – new investigations to clarify an old research dispute

10:00 Discussion

10:10 Coffee Break

Session Chair: Ilga Zagorska, Rīga (LV)

- 10:30 Rimantas Jankauskas, Vilnius (LT):
Skeletal markers of activities and social status in Lithuanian and Latvian Mesolithic-Neolithic population
- 11:00 Mari Tõrv, Tartu (EE)/Schleswig (DE):
Body as evidence: tracing hunter-gatherer (c. 5200–3000 cal BC) burial practices in present-day Estonia
- 11:30 Kristiina Mannermaa, Helsinki (FI):
Interpretation of meanings of animals in prehistoric hunter-gatherer burials in the North – multiple lines of evidence approach
- 12:00 Discussion
- 12:10 Lunch Break

Session Chair: Jörg Orschiedt, Berlin (DE)

- 13:30 Éva David, Nanterre (FR):
Late Mesolithic social organisation from Téviec (Morbihan, France) burials grounds
- 14:00 Patrice Courtaud, Talence (FR), Hans C. Petersen, Odense (DK), Aurélie Zémour, Nice (FR), Franck Leandri, Ajaccio (FR) & Joseph Cesari, Ajaccio (FR):
The Mesolithic burial of Campu Stefanu (Corsica, France)
- 14:30 Pablo Arias, Santander (ES):
Grave goods in the Mesolithic of southern Europe
- 15:00 Discussion
- 15:10 Coffee Break

Session Chair: Lars Larsson, Lund (SE)

- 15:30 Juan F. Gibaja, Barcelona (ES), Javier Fernandez, Tarragona (ES), Maria Eulalia Subira, Barcelona (ES), Eva Fernandez, Liverpool (GB), Xavier Terradas, Barcelona (ES), Cristina Gamba, Dublin (IE) & Jose Aparicio, Valencia (ES):
Lecture around the Mesolithic necropolis of El Collado (Alicant, Spain)
- 16:00 Mary Jackes & David Lubell, Waterloo (CA):
Muge Mesolithic burials, a synthesis on mortuary archaeology
- 16:30 Rita Peyroteo Stjerna, Uppsala (SE):
Roots of death: funerary rituals and the shell middens of SW Atlantic Europe (Tagus and Sado valleys, Portugal)

- 17:00 Nuno Bicho, Faro (PT), Cláudia Umbelino, Coimbra (PT), Célia Gonçalves, Faro (PT), Olívia Figueiredo, Faro (PT), Telmo Pereira, Faro (PT), João Cascalheira, Faro (PT), João Marreiros, Faro (PT) & T. Douglas Price, Madison (US):
Human burials in the Mesolithic of Muge and the origins of social differentiation: the case of Cabeço da Amoreira, Portugal
- 17:30 Olívia Figueiredo, Faro (PT), Cláudia Umbelino, Coimbra (PT) & Nuno Bicho, Faro (PT):
Mortuary variability at Moita do Sebastião & Cabeço da Amoreira (Muge, central Portugal)
- 18:00 Discussion
- 19:30 Social evening in a restaurant with buffet

Saturday, 21 September 2013**Session Chair: Patrice Courtaud, Talence (FR)**

- 8:30 Federica Fontana, Ferrara (IT), Antonio Guerreschi, Ferrara (IT), Stefano Bertola, Innsbruck (AT), François Briois, Toulouse (FR), Cristina Cilli, Torino (IT), Emanuela Cristiani, Cambridge (GB), Valentina Gazzoni, Mantova (IT), Giacomo Giacobini, Torino (IT), Gwenaëlle Goude, Aix-en-Provence (FR), Estelle Herrscher, Aix-en-Provence (FR) & Sara Ziggioni, Villafranca Padovana (IT):
The Castelnovian burial of Mondeval de Sora (San Vito di Cadore, BL, Italy): evidence for changes in the social organisation of Late Mesolithic hunter-gatherers in north-eastern Italy
- 9:00 Margherita Mussi, Roma (IT), Rita T. Melis, Cagliari (IT) & Roberto Macchiarelli, Paris/Poitiers (FR):
Mesolithic burials at S'Ormu e S'Orku (SOMK) on the south-western coast of Sardinia
- 9:30 Adina Boroneanţ, Bucharest (RO) & Clive Bonsall, Edinburgh (GB):
Icoana revisited
- 10:00 Discussion
- 10:10 Coffee Break
- Session Chair: Mary Jackes, Waterloo (CA)**
- 10:30 Jörg Orschiedt, Berlin (DE):
Bodies, bits and pieces: Late Palaeolithic and Early Mesolithic burials in Europe
- 11:00 Søren A. Sørensen, Køge (DK):
Loose human bones from Late Mesolithic sites in Denmark

11:30 Amy Gray Jones, Chester (GB):
»Loose« human bone in the Mesolithic – isolated
or integrated?

12:00 Discussion

12:10 Lunch Break

Session Chair: Clive Bonsall, Edinburgh (GB)

13:30 Emily Hellewell & Nicky Milner, York (GB):
Analyses of the placement of disarticulated human
remains in stone age shell middens in Europe

14:00 Johan Jelsma, Zuidhorn (NL):
Social and spatial differences at Port au Choix:
the mortuary analysis of a Maritime Archaic
Indian cemetery at Newfoundland, Canada

14:30 Liv Nilsson Stutz, Atlanta (US):
Testing the tribal hypothesis. An attempt to use
anthropological theory to reconstruct Mesolithic
cosmology and social organization from treatment
of the dead

15:00 Discussion

15:10 Coffee Break

Session Chair: Liv Nilsson Stutz, Atlanta (US)

15:30 Peter Vang Petersen, København (DK):
Papooses in the Mesolithic? – A reinterpretation of
tooth and snail shell pendants from Bøgebakken,
burial 8 and other Mesolithic burials

16:00 Judith M. Grünberg, Halle/Saale (DE):
Remains of the Mesolithic mortuary rituals of upright
seated individuals in Central Germany

16:30 Mary Jackes & David Lubell, Waterloo (CA):
Capsian mortuary practices at Site 12
(Aïn Berriche), Aïn Beïda region, eastern Algeria

17:00 Final Discussion

17:30 Lars Larsson, Lund (SE):
Summary of the conference and conclusions

18:00 End of the meeting

Poster Presentations

1 Marja Ahola & Kristiina Mannermaa, Helsinki (FI):
Vantaa Jönsas – a Mesolithic burial ground?

2 Birgit Gehlen, Köln (DE):
Mesolithic heritage in Neolithic burials

3 Mario Küßner, Weimar (DE):
A child's grave from the rock shelter Fuchskirche I
near Allendorf (Thuringia, Germany)

4 Jörg Orschiedt, Berlin (DE) & Claus-Joachim Kind,
Esslingen (DE):
Mesolithic human remains from Southern Germany

5 Svetlana V. Oshibkina, Moscow (RU):
Mesolithic cemeteries in the north of Eastern Europe

6 Torsten Schunke, Halle/Saale (DE) &
Mario Küßner, Weimar (DE):
Mesolithic cremation burial and camp in Coswig,
Wittenberg District, Central Germany

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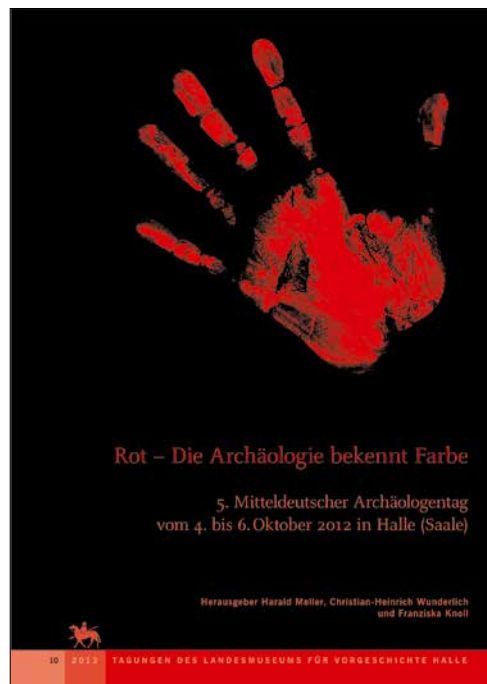
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