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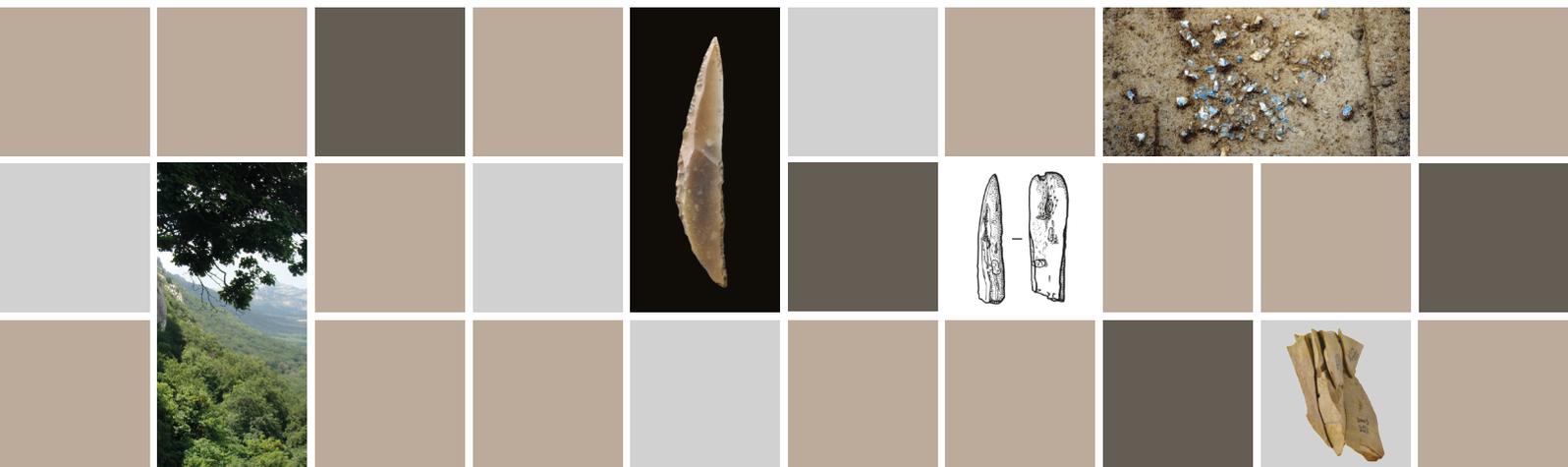
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AN ATYPICAL EARLY MESOLITHIC OCCUPATION IN THE SOUTHERN PO PLAIN:

Evidence from the Site of Collecchio (Parma, Italy)

Davide VISENTIN, Federica FONTANA, Stefano BERTOLA

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AN ATYPICAL EARLY MESOLITHIC OCCUPATION IN THE SOUTHERN PO PLAIN:

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Abstract

Dating back to the ancient phase of the Sauveterrian the site of Collecchio represents the oldest known evidence of human occupation in the southern Po plain area after the LGM as confirmed by a radiocarbon date. Techno-economical analysis carried out on the lithic assemblage has focused on the reconstruction of raw materials provisioning systems and reduction sequences. Results highlight that the site was characterised by a complex and intense occupation mostly addressed to domestic activities. One of the most peculiar aspects of the lithic assemblage is represented by the high number of burins, which could imply a certain degree of economical specialisation of the site as it will be further investigated by ongoing analyses.

Keywords

Sauveterrian, southern Po plain, raw materials, lithic technology, burins.

Introduction

The site of Collecchio (Parma, Northern Italy) is located in the southern part of the Po plain, on the top of the Taro river alluvial fan (106 m a.s.l.), close to the Apennine foothill (figure 1). Excavations at the site, conducted under the supervision of the Soprintendenza Archeologica of Emilia Romagna¹, have yielded several Neolithic structures and a Mesolithic layer. The latter contained more than 7 500 lithic artefacts, clustered on an area of about 65 m², together with several charcoals, land snails, burnt hazel nuts, bone fragments and clay chips (Visentin, 2011, Visentin *et al.*, in press).

1 - Techno-economic analysis

The lithic assemblage is formed by a great variety of raw materials – including both silicified and non silicified rocks – with different technical properties and knapping suitability. In particular rocks belonging to different stratigraphic sequences of the northern Apennines have been exploited: radiolarites, cherts and limestones of the Ligurid Ophiolitic units (Jurassic-Cretaceous), cherts of the Ligurid Flysch units (Paleocene-Eocene), silicified marls and siltstones of the Epiligurid units

1. We would like to thank M. Bernabò Brea for allowing access to the archaeological material.



Figure 1 - Location of the Sauveterrian site of Collecchio at the southern margin of the Po plain.

(Oligocene-Miocene) and cherts of the Umbro-Tuscan units (Triassic-Cretaceous). Raw materials provisioning took place mostly within the alluvial and slope deposits of the main northern Apennine valleys (Taro, Baganza, Enza) (Fontana *et al.*, in press). The adoption of both fine crystalline cherts and radiolarites along with coarser cherts, marly siltstones and non silicified limestones represents a peculiar character of Collecchio and the other Mesolithic sites of the southern Po plain, which has never been observed so far in the Alpine context (Fontana *et al.*, 2009a-b).

The reduction processes documented at Collecchio are strictly connected to the different raw materials exploited and two separated sequences have been identified respectively applied to fine quality cherts, radiolarites, spiculitic wakestone cherts (figure 2) and non silicified limestones and to the coarse siltstone. The first sequence aims at the production of different kinds of blanks – bladelets, elongated flakes and flakes – spanning between 15 and 40 mm in length. Although for the debitage of the different stone types included in this class (cherts, radiolarites, limestones) the same reduction schemes have been adopted, some differences have been observed: chert production appears more standardised and characterised by a higher frequency of lamellar modules; its cores are more exploited than those obtained from lower quality materials that have been generally abandoned at an earlier stage. At the beginning of the reduction sequence larger flakes were obtained, which were then systematically transformed into cores (figure 3). The second reduction sequence starts from the exploitation of large flat siltstone cobbles for the production of thick semi-cortical flakes. The dimensional range of products is wide spacing between 20 and 70 mm both in length and width. The reduction scheme is based on the recurrent reorientation of the core exploiting the cortical surfaces of the cobbles as striking platforms.

- 1 Bladelet
- 2 Bladelet
- 3 Laminar flake
- 4-5 Laminar flake (conjoining of two fragments)
- 6 Flake
- 7-9 Maintenance flake (conjoining of three fragments), one transformed into a scraper
- 10 Distal reorientation bladelet

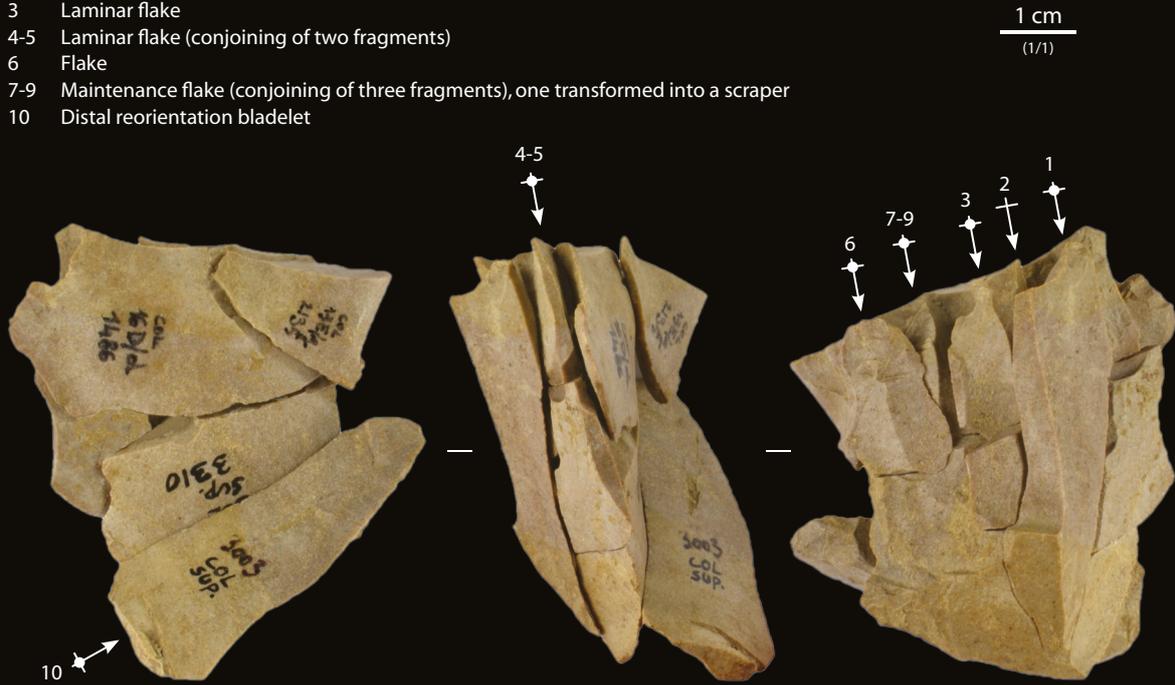


Figure 2 - Refitting assemblage showing the exploitation of a spiculitic chert block by the adoption of a reduction scheme involving orthogonal reorientation of the core (photo: D. Visentin).

- 1 Partially cortical bladelet
- 2 Debitage surface opening flake
- 3 Natural backed flake transformed into a truncated bladelet
- 4 Natural backed flake
- 5 Missing burin spall(s)
- 6 Hinged flake

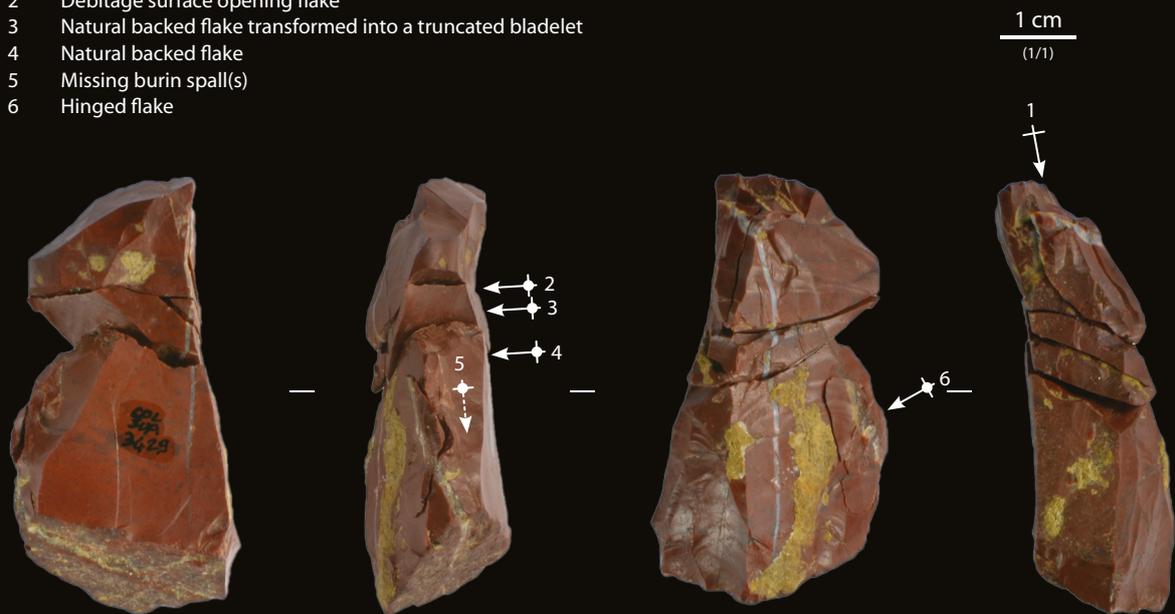


Figure 3 - Burin-like core reduction scheme. The original blank is a large radiolarite flake (photo: D. Visentin).

2 - Typological features of the assemblage

Among retouched blanks (n=230) tools dominate over armatures (table 1).

Tools	Total	%
Burins	55	23,0
End-scrapers	7	3,0
Truncated bladelets	19	8,3
Backed flakes	16	7,0
Scrapers	13	5,7
Blade scrapers	3	1,3
Denticulates	22	9,6
<i>Pièces écaillées</i>	2	0,9
Retouched fragments	11	4,8
Armatures		
Backed points	13	5,7
Backed bladelets	3	1,3
Backed and truncated bladelets	8	3,5
Crescents	11	4,8
Scalene triangles	1	0,4
Backed fragments	46	20,0
Total	230	100,0

Table 1 - Typological structure of the retouched assemblage.

This character appears rather unusual among Italian Sauveterrian sites and is usually associated to a residential function (Lanzinger, 1985). All retouched blanks belong to the first reduction sequence whilst siltstone flakes were probably produced only in order to obtain raw edges.

Armatures are represented by backed points (n=13) and bladelets (n=3), crescents (n=11), backed and truncated bladelets (n=8) and one triangle plus a few backed fragments (n=45).

Among tools burins are particularly numerous (n=55, 23.9% of all retouched blanks) in comparison to endscrapers (n=7) and other tools, an aspect that could reflect specialised activities taking place at the site.

Nonetheless, the definition of this aspect appears rather complex also due to the presence of a high number of burin-like cores (figure 3) with characteristics that appear very close to those of burins. These two categories have currently been sorted according to some specific morphological features but ongoing specialized studies involving functional analysis and geometric morphometric methods are expected to help solving the question.

In accordance with its Preboreal radiometric date (9 251-8 814 cal BC, 2 σ , 9 643 \pm 70 BP, LTL6147A, burnt hazelnut) the typological assemblage indicates an ancient chronology for the site which represents so far the earliest known occupation of the Apennines after the LGM (Visentin, 2011).

Concluding remarks

The site of Collecchio is one of the main reference sites for the reconstruction of Early Holocene settlement dynamics in the southern Po plain area (Fontana *et al.*, 2013). In particular available data indicate Collecchio as a site attesting a wide spectrum of activities. Some of the aspects highlighted by the techno-economic and typological analysis carried out, such as the presence of a high percentage of burins, the peculiar association of microliths characterised by the rarity of triangles and the exploitation of a great variety of raw materials with very different properties reflect the great diversification of features in the Italian ancient Sauveterrian.

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