



## Article

# New insight on the Romito shelter (Calabria, southern Italy): the lithic production of the Mesolithic levels

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### Key words

- Mesolithic
- Sauveterrian
- lithic industries
- Calabria
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### Parole chiave

- Mesolitico
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### Summary

Romito shelter (Papasidero, Cosenza), set forward the cave of the same name, has been explored in the 1960s by P. Graziosi. During his archaeological research, Graziosi opened a large trench parallel to the rocky wall, between the two well-known engraved boulders below the shelter. Graziosi brought to light a stratigraphic sequence containing several phases related to the Upper Paleolithic and the Neolithic. During the recent archaeological research carried out by the University of Florence, new excavations in the shelter were undertaken. The new excavations, performed close to the 1960s trench, revealed a pre-Neolithic sequence that testifies the human presence at Romito also during the Early Holocene. The stratigraphic sequence contains some Mesolithic paleosurfaces overlaying an Upper Paleolithic deposit. Mesolithic stone assemblages are placed within the context of the Sauveterrian-like armature complex of the low Tyrrhenian region.

### Riassunto

Il Riparo del Romito, antistante l'omonima grotta, è stato oggetto di ricerche archeologiche negli anni '960 da parte di P. Graziosi che aprì una grande trincea di scavo parallela alla parete rocciosa del riparo, in un'area compresa tra i due celebri massi incisi. Graziosi mise in luce una sequenza stratigrafica comprendente fasi di frequentazione riferibili al Paleolitico finale e al Neolitico. Nel corso delle recenti ricerche, a partire dalla campagna del 2011, sono state riprese le indagini nel riparo. I nuovi scavi a ridosso della trincea Graziosi hanno messo in luce una sequenza preneolitica, che amplia le conoscenze correlate alle ricerche di P. Graziosi. La serie stratigrafica, scandita da alcune paleosuperfici, talora con impianti strutturati di combustione, contiene alcuni livelli con industrie litiche ascrivibili al Mesolitico antico. L'attribuzione crono-culturale è al Sauveterriano e la produzione litica viene inserita nell'ambito dei contesti ad armature del basso versante tirrenico.

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Fig. 1 - Riparo del Romito. Site location. / Localizzazione del sito.

## Introduction

Grotta del Romito is located in the Lao Valley, Northern Calabria (275 m asl) ca. 12 km from the Tyrrhenian Sea (Fig. 1). The area is fairly mountainous, with nearby peaks overpassing 2000 m. The site

is at the foot of a rock cliff and is composed by a rock shelter and a cave. The western part of the cave and the rock shelter were connected during the Palaeolithic and Mesolithic to form a large living space.

During the latest archaeological researches at Grotta del Romito (since 2000), as part of a new research and valorisation project linked to Paolo Graziosi's first excavations in the 1960's (Martini *et al.* 2004; Martini & Lo Vetro 2011), excavations in the external deposit of the rockshelter (Fig. 2) have brought to light, beneath the Neolithic layers, a Sauveterrian sequence which lies above Final Epigravettian layers (Fig. 3) (Lopez Garcia *et al.* 2014). This Early Holocene phase was not detected during Graziosi's researches and the lithic assemblages from the rockshelter are almost unpublished (Boscato *et al.* 1996).

## The Mesolithic industries

The study of lithic assemblages from some layers of the Mesolithic deposit (levels 3, 3A, 3B, 3C, 3D, 4-spits 1 and 2) allowed obtaining some preliminary results. The lithic industries are grouped as follows:

- upper level 3 (3, 3A, 3B): 108 retouched tools
- lower level 3 (3C, 3D): 99 retouched tools 9.747±65 uncal. BP
- upper level 4 (4-spits 1 e 2): 176 retouched tools

Underneath, the stratigraphic sequence includes Sauveterrian layers that follow the Epigravettian presence (level 5:  $^{14}\text{C}$  uncal. between 10.547±65 BP and 11.574±65 BP).



Fig. 2 - Riparo del Romito. View of the rock shelter (Archive of Paleontology - Università di Firenze). / Veduta (Archivio fotografico di Paleontologia - Università di Firenze).

*Raw material, technology*

Petrographic analysis (Romagnoli *et al.* 2016) on both geological and archaeological samples indicates the use of three main lithological groups:

1. red and green radiolarites coming from Monte Sirino that were collected in form of pebbles at the Noce river deposits (15-20 km as the crow flies from the cave);
2. black flint, that were collected in the Lao river deposits, near the cave;
3. grey chert, some of which probably originating in the Monte Sirino area and mainly collected in detritus and in riverbeds.

Preliminary data from the technological study show no substantial differences in raw material procurement and exploitation along the Mesolithic sequence. Radiolarites are always predominant even if in the earliest phase a greater variability of raw material is attested (level 4).

All along the Sauveterrian sequence the main *chaîne opératoire* is almost the same. The lithic production is based on intense exploitation of small pebbles and blocks and, sometimes, large flakes, mainly aimed at producing micro- and hypermicrobladelets, lamellar flakes and wide micro- and hypermicroflakes, all suitable for geometric microliths (crescents and triangles) and backed tools production.

Standardized core reduction methods are performed in order to obtain the greatest possible number of products from each core: unidirectional methods, both frontal and on-edge (Fig. 4, n. 3; Fig. 5 nn. 1-2), are often replaced at the end of the reduction sequence by bidirectional schemes to completely exploit the cores (most of the cores are abandoned at about 15-25 mm in size) (Fig. 4, n. 1). Few very small centripetal cores for hypermicro and microflakes production seem to belong to this final stage of exploitation (Fig. 4, n. 2; Fig. 5, n. 3).

*Structural features and typology*

Typological analysis of retouched tools was made according to G. Laplace's Analytical Typology (Laplace 1964). For each phase the

main typological and structural features are as follows:

- upper level 4 (spit 1 and 2) (Fig. 6, C): strong predominance of armatures (87% ca.), common tools category is scarce (12% ca.). The armatures are represented by crescents (23% ca.), total-backed points (15% ca.) and triangles (scalene and isosceles: 8% ca.); backed blades (6% ca.) and truncated backed tools (4% ca.) are scarcer. The backed tools fragments amount to 21% ca. The common tools mostly consist of truncations, especially oblique; each of the other typological groups does not surpass 2%.
- lower level 3 (3C-3D) (Fig. 6, B): decrease of armatures (68% ca.). The most characteristic types are: crescents (17% ca.), total-backed points (10% ca.) and triangles (6% ca.). All groups of the common tools category (30% ca.) increase slightly, except the truncations.
- upper level 3 (3, 3A, 3B) (Fig. 6, A): structural stability of the armatures (67% ca.). The crescents (13% ca.) continue to characterize the assemblage, associated with total-backed points (7% ca.), both types decrease as the triangles increase (8% ca.). The common tools category (33% ca.) maintain a structure homogeneous with that of the previous phase.

The three Sauveterrian phases identified at Romito show a quite standardized structural and stylistic physiognomy characterized by:

- very strong indexes of armatures, slightly decreasing along the sequence (from 87,5% to 67%);
- increase of common tools (from 12,5% to 33%);
- armatures mainly composed of crescents and triangles;
- scarce backed points and blades, truncated backed blades, all decrease along the sequence;
- presence of bilateral backed points (Sauveterre-like), never numerous and in decrease;
- presence of total-backed points often with convex edge, similar to crescents;
- scalene triangles decrease (from 6,8% to 3,7%) while isosceles increase (from 1,1% to 4,6%);

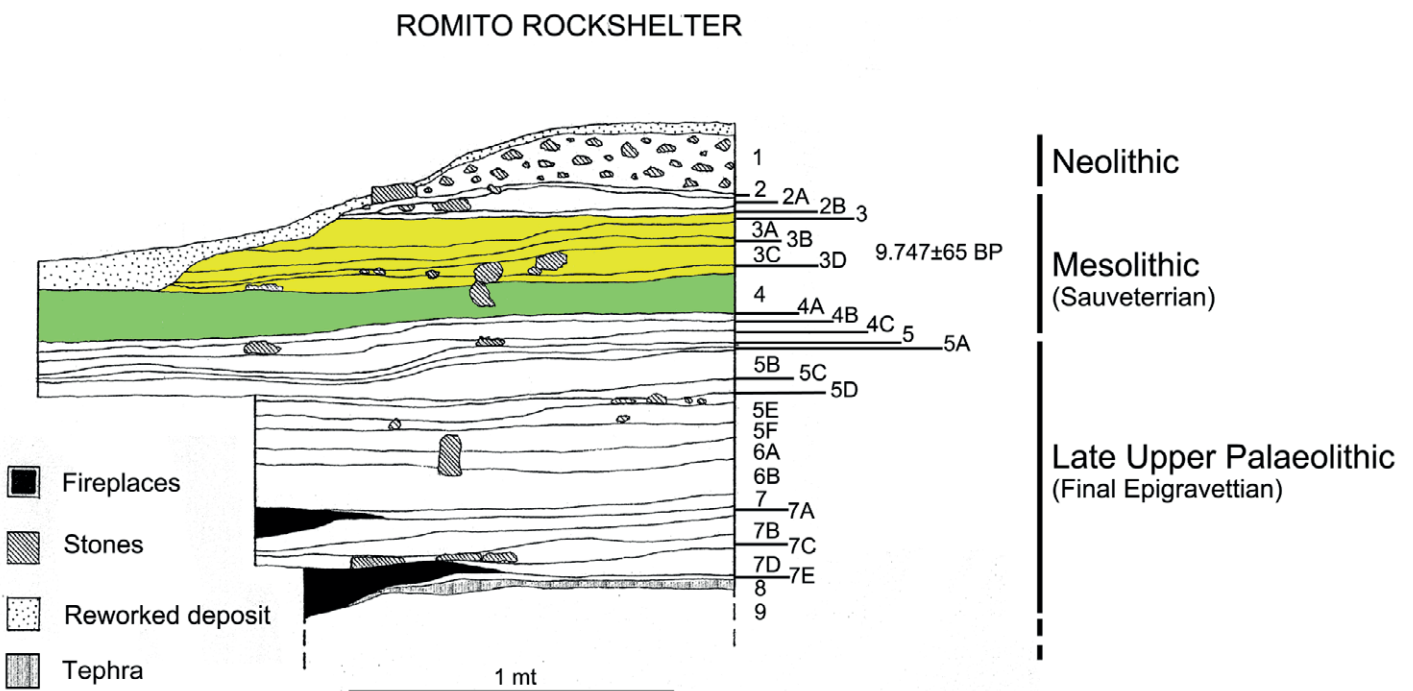


Fig. 3 - Riparo del Romito. Stratigraphic sequence. / Sequenza stratigrafica.

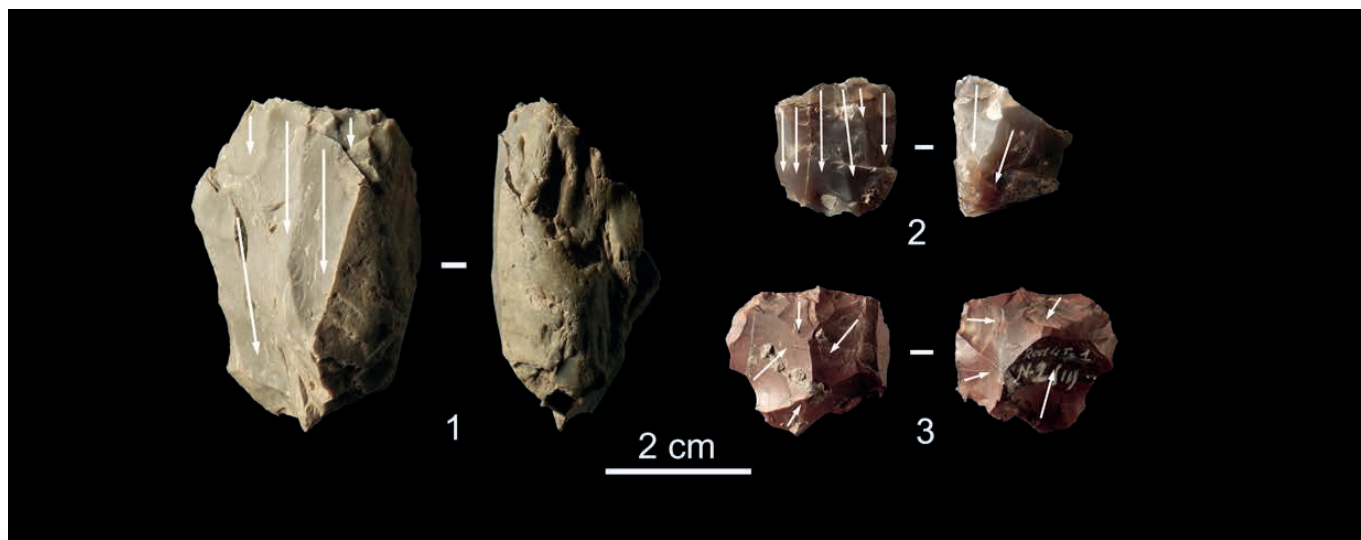


Fig. 4 - Riparo del Romito. Cores from layer 3 (Photo D. Lo Vetro). / Nuclei dallo strato 3 (Foto D. Lo Vetro).

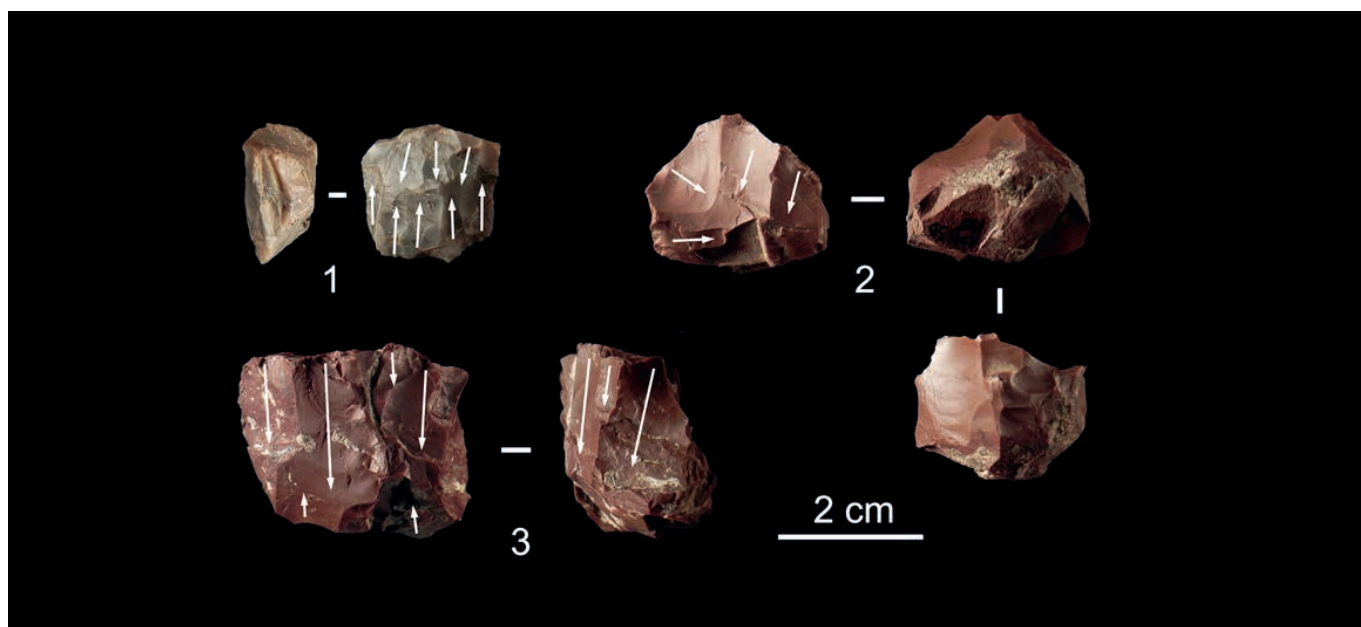


Fig. 5 - Riparo del Romito. Cores from layer 4 (Photo D. Lo Vetro). / Nuclei dallo strato 4 (Foto D. Lo Vetro).

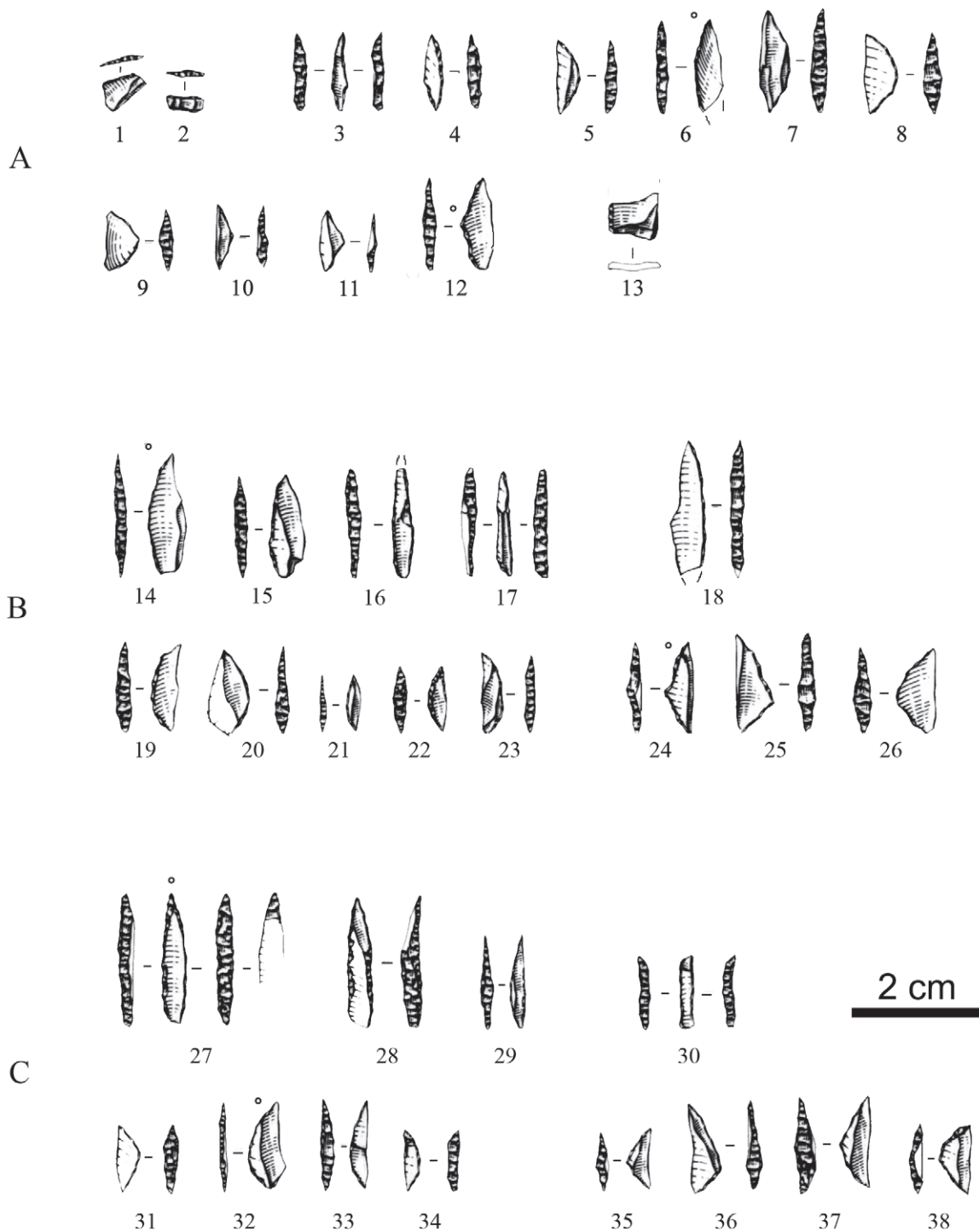
- size of the armatures is mostly hypermicrolithic (up to 15mm);
- only in level 4 few armatures, stylistically similar to the Epigravettian types in morphology and typometry, are present (9.1% of the armatures: total backed points, backed blades, double truncated backed blades, crescents and a few fragments of indeterminate backed tools).

#### *Relationship with the local Final Epigravettian lithic production*

At the current state of research on the Late Upper Palaeolithic-Mesolithic Romito sequence, the problem remains open as to the possible phyletic link between the Sauveterrian of layers 4-3 and the local Epigravettian tradition (Martini *et al.* 2003 and 2007; Lo Vetro & Martini 2016). Between the two macro-phases both similarities, suggesting a direct derivation, and differences that have yet to be evaluated, can be observed.

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**Fig. 6** - Riparo del Romito. Sauveterrian lithic industry. A (Level 3 Top): 1 e 2-truncations; 3-4 total backed points; 5-8 crescents; 9-12 triangles; 13 abrupte. B (Level 3 Bottom): 14-17 total backed points; 18-total backed blade; 19-23 crescents; 24-26 triangles. C (Level 4 Top): 27-29 total backed points; 30-total backed blade; 31-34 crescents; 35-38 triangles (drawings by L. Baglioni). / Industria litica sauveterriana. A (Livello 3 Superiore): 1 e 2-troncature; 3-4 punte a dorso totale; 5-8 segmenti di cerchio; 9-12 triangoli; 13 scheggia a ritocco erto. B (Livello 3 Inferiore): 14-17 punte a dorso totale; 18-lama a dorso totale; 19-23 segmenti di cerchio; 24-26 triangoli. C (Livello 4 Sup.): 27-29 punte a dorso totale; 30-lama a dorso totale; 31-34 segmenti di cerchio; 35-38 triangoli (disegni L. Baglioni).

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