

## The unpolished lithic industry of Isera La Torretta (TN)

MICHELE BASSETTI & SILVANO ZAMBONI

**ABSTRACT** - The unpolished lithic industry found at Isera "La Torretta" (Trento) has been analysed basically on a stereomicroscopic-aided macroscopic test in reflected light. Authors present preliminary results.

*Key words:* Trentino, Adige Valley, Neolithic, stones artifacts

*Parole chiave:* Trentino, Valle dell'Adige, Neolitico, manufatti in pietra

*Michele Bassetti* - CORA Ricerche Archeologiche S.n.c., C.so Buonarroti 35, I-38100 Trento.

*Silvano Zamboni* - Ufficio Beni Archeologici Provincia Autonoma di Trento.

During the archaeological project at Isera "La Torretta" (1990-91 excavations-Ufficio Beni Archeologici P.A.T.) all the stones of the classes of materials under consideration, that were extraneous to the site, located on a basalt outcrop, interpretable as being manufactured on the basis of macroscopic analysis, were collected. The first phase of the task was to count, recognize and classify the lithotypes, taking into consideration the stratigraphic units (totalling 31 USS) that can be ascribed to three important chronological phases: the Eneolithic (Isera 5), Tardoneolithic (Isera 3 and 4), Late Neolithic SMVC III style and incisions and impressions (Isera 1 and 2). The more recent stratigraphic units have not been considered for the moment along with the large amount of material recovered during the fieldwork and in the remixed levels or those that are not easily identified.

There are levels that surely refer to an occupation cycle (pounding levels, dwellings, filling material etc.) of the Eneolithic and the Late Neolithic, whereas with reference to the Tardoneolithic period, there are levels that can be ascribed to a period of abandonment/rearrangement of the slope. Obviously all these different aspects affect the number and the interpretation of the findings. On the basis of preliminary spatial analysis of the findings referring to an area of 104 square metres, there are neither evident concentration nor significant

distributions. 189 samples were analysed of which 35% were intact and 68% were retouched. Eighteen lithological categories were identified, the majority of which were spherical or disc shaped, some of which were flaky (FOLK, 1968). The analysis of the artifacts was based on a stereomicroscopic-aided macroscopic test in reflected light.

The quartziferous porphyry group was the most common, representing 52.2% of the total (rhyolites, alkaline feldspathic rhyolites, dacites, lacites, andesites), easily found in areas with morainic and fluvio-glacial deposits, followed by green stones (omphacites, eclogites, jadeites). 19.7% of the total, were of autochthon provenance and by the basalts recovered on the spot, 8.5% of the total amount, only 2.1% of which clearly show they have been worked. As for their use, 6 main categories were identified: 1 - querns (n° 13); 2 - pigment grinding stone (n° 15); 3 - percussors (n° 13); 4 - grinding/polishing stones (n° 66); 5 - whetstones (n° 2); 6 - multifunctional or re-used artifacts (n° 13); 6 - artifacts with cup-holes (n° 5); 7) preparation artifacts (n° 2), included among the undetermined objects. Analysis is still being carried out on the micro marks of use-wear that, along with the relative data of the sources of supply and of the experimentation, will give a more precise definition of the technique-use of this particular class of artifacts.

REFERENCES

FOLK R.L., 1968 - *Petrology of sedimentary rock*. Hemphill's, Austin, Texas.  
RICCI-LUCCHI F., 1980 - *Sedimentologia I: materiali e tessiture dei sedimenti*. CLUEB, Bologna

Classes of artifacts	Types	Lithologies and prevailing Textures <sup>1</sup>	Typical functional characteristics
Querns	With flat quern (in sandstone: Drawing 1)	- Quartziferous-porphry, gneiss, mica-schist, quartziferous sandstones, biocalcareniti; - medium-grained macro-crystalline texture, with abundant quartz	Horizontal or concave surface, variable depth, more or less pronounced depending on wear-use. Polished in the middle and on the edges with evenly diffused pock marks.
	With saddle quern (in mica-schist and gneiss, Drawings 2-3)		
Pigment grinders	With flat face		Mainly pebbles with polishing surfaces and flat cross-section. Rough and preparation outlines are often evident. The weight varies from approx. 400 to 3000 gr.
Percussors	With isolated percussion marks	- "green stones", Quartziferous porphyry;	Pock marks distributed on the surfaces, mainly on the edges, at the distal end of the major axis.
	With percussion surfaces (in rhyolite Drawing 5).	- variable texture	Generations of surfaces on the edge, on the opposite end of the major axis, partially overlapping, flat or slightly convex cross-section, with opposite inclinations (possibly used to renew the grinding planes or for hammering adzes).
	With cup-holes (in tuffite Drawing 4)	- Quartziferous porphyry; tuffites; - variable textures	Artifacts with two cup holes on the major opposite surfaces, with hammered surfaces.
Grinding/ polishing stones	With linear micro-marks (in omfacitite Drawing 6).	- Quartz-bearing Porphyry; "green stones", quartzites, basalts; - variable textures	Linear marks from use-wear on the surfaces, scattered mainly along the major axis.
	With micro-marks in various directions		Wavy marks from use-wear distributed on the surface.
Whetstones		- sandstone; - mesocrystalline texture	Grooves with linear use-wear marks, often X-shaped, with evidence of <i>sciage</i> and minor marks.
Multi-functional or re-used	Percussors/ polishers (in omfacitite draw. 7)	- "greenstones", Quartziferous porphyry; - variable textures	Feature general characteristic of the respective classes.
	Various (eg: pigment, quern/ anvil, grinder/ percussor)	- lithologies and variable textures	
With cup-holes		- quartziferous porphyry; - quartz-rich macro-crystalline texture.	- Slight concave depression, circular with a diameter of 2-3 cm, on a surface (a-b axes.).
Being prepared		- lithologies and variable textures	Roughly hewed stones with the systematic removal of preparation flakes for artifacts.

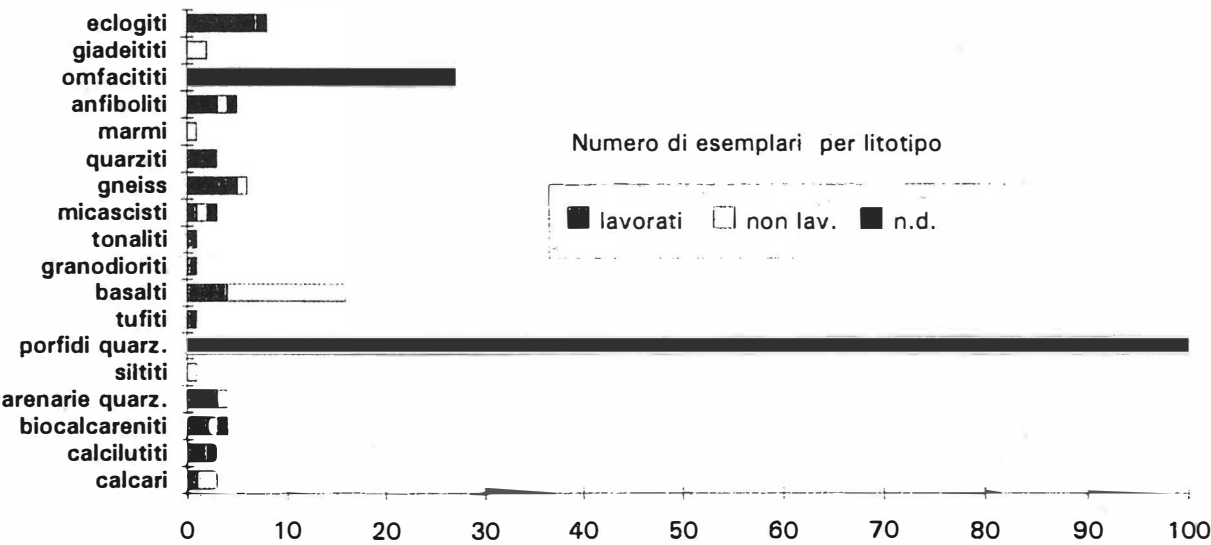


Fig. 1 - Numerical histogram of the total number of retouched and non-retouched findings per lithotype.

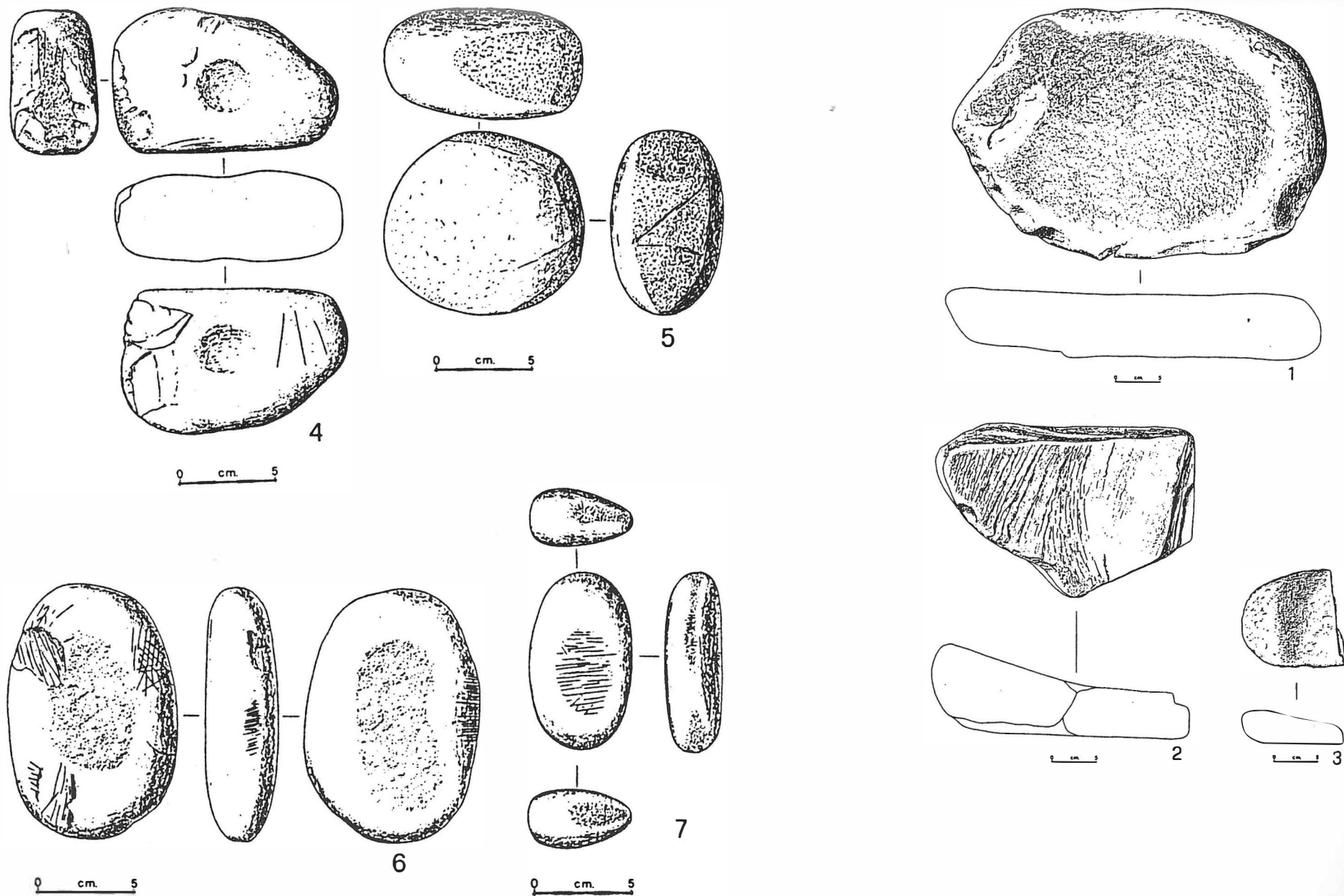


Fig. 2 - Preliminary classification of the types of artifacts (for diagrams see explanation in the table)