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HOARDING UNWORKED FLINTS WITHIN HUMID MICROENVIRONMENTS. NEW EVIDENCE FROM THE MESOLITHIC OF THE SOUTHERN ALPS

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A hoard composed of six blocks of flint has recently been discovered inside a peat bog on the Cansiglio Plateau (Venetian Pre-Alps). The blocks were collected in sources situated 25 km far from the plateau and in almost all cases they were tested before being carried onto the site. Owing to the preliminary state of the fieldwork, only a few hypotheses regarding the significance of the hoard can be proposed here, above all in relation to an adjacent Epigravettian open-air site. Comparisons with other hoards in Europe highlight the peculiarity of this kind of structure.

Evidence of hoarding unexploited flint or other raw materials in the Paleolithic and Mesolithic European settlements are very rare, if not exceptional, as the few cases in France, Southern Germany, Central-Southern Poland and Southern Alps demonstrate. Nevertheless, the presence of raw or tested flints among lithic assemblages at Middle Paleolithic sites is common and becomes more and more frequent within Upper Paleolithic and Mesolithic sites, due to the development of the raw material procurement strategies.

At the Cave of Montgaudier (Charente, France), the discovery of five great pre-cores gathered in a group constitutes the sole Magdalenian evidence of hoarding (Bouvier and Duport, 1968). The pre-cores were made out of local and exogenous flint and destined to the production of long blades.

The sole evidence of hoarding in Southern Germany consists of four pre-cores found in the Upper Palaeolithic layers of the Sesselfelsgrotte (Naber F., 1981). The pre-cores have one crest and were made out of local flint plaquette (5 km).

In Central-Southern Poland several unprocessed flints were discovered inside holes or in other man-made structures at some Swiderian sites such as Swidry Wielke I (Sawicki, 1963), Grzybowa Gora (Krukowski, 1939; Sawicki L., 1963) and Swidry Mate (Krukowski, 1976). At Swidry Wielke I the hoard probably lay in a plano-convex pit filled with 41 artifacts, among which there were partially corticated nodules, thick flakes and pre-cores made of flint collected some 150 km away. At Grzybowa Gora the artifacts discovered in two hoards only consisted of pre-cores for production of blades. The hoard from Swidry Mate consisted of one crested pre-core, 14 incompletely exploited prismatic cores used for laminar production, and several thick blades.

In Southern Alps one hoard was brought to light at the Epigravettian site of Val Lastari in the Asiago Plateau (Venetian Pre-alps) (Broglio et al., 1992). At the site, the nearby natural sources of raw material were determinant for the supply of flint destined to the production of bladelets (Peresani, 1992). The hoard is composed of one prismatic core and 56 blocks of flint, among plaquettes or nodules, placed in a 35 cm deep pit. This was dug in a silty-clayey colluvium, along a rundkarren of the limestone substrate. The blocks differ slightly in weight (from 100 up to 200 gr) and size (from 55 up to 90 mm in length); 40 of them show evidence of intentional breakage and 37 were tested by the removal of one, two or sometimes three flakes).

Again in the Venetian Pre-Alps, another hoard has recently been found inside the peat bog of an infra-moraine basin, at Palughetto on the northern edge of the Cansiglio Plateau. This discovery forms the

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subject of the following note. It occurred in the ambit of a research project on the Paleo-Mesolithic human occupations on the plateau, during which surveys and excavations of Epigravettian and Early Mesolithic settlements (DI ANASTASIO *et al.*, 1995) were carried out.

THE CANSIGLIO PLATEAU AND THE FLINT SOURCES OF THE EASTERN VENETIAN PREALPS

The Cansiglio Plateau lies at the eastern extremity of the Venetian Pre-Alps (Fig. 1). It rises up above the Venetian-Friulian plain and borders on the Lapisina valley westwards and the Alpago Basin northwards, and it connects with the Cavallo Mountain (2251 m altitude) to the NE. The plateau has a subrectangular shape, is more extended towards the NE-SW direction, and consists of a wide central depression of around 1000 m altitude surrounded by smooth ridges which rise to some 1300-1400 m a.s.l. Like the other prealpine plateaux, the morphology of the Cansiglio is strongly influenced by tectonics and karst, because the rocks forming the plateau are limestones and biocalcarenites of the Cretaceous Cavallo Mountain Reef and marly limestones of the adjoining fore-basin (CANCIAN *et al.*, 1985). The main Quaternary deposits are (Di Anastasio, 1995): loess and loess-like sediments, that are silty-loam, brownish, uncarbonatic sheets which mainly lying on the south-facing slopes or at the bottom of the dolines; silt-loamy soil colluvium originated from the reworking of paleosoils; ablation tills of the Piave and the Cavallo Mountain glaciers, both of which date back to the Last Glacial Maximum; deeply weathered ablation tills of the Middle Pleistocene.

The flint sources

Macro- and mesoscopic surface analyses of different flints were undertaken in an attempt to determine the provenance of the flint implements from the Paleo-Mesolithic sites of the plateau.

Like the north-eastern Italian PreAlps, the Venetian PreAlps were a vast flint source area for the prehistoric humans which settled in the regions from the inner Alps to the central Po Plain. For instance, in the Southern Bellunese region flint is available in a large variety of lithotypes differing in colour, texture and homogeneity and is mainly found in Cretaceous formations. In this section only the primary flint sources are taken into account, as the secondary sources such as glacial tills, fluvial gravels, slope waste deposits, soils and other residual deposits, are widespread in the whole region.

Under a paleogeographic perspective, during Jurassic and Cretaceous, the Venetian Alps were characterized, from East to West, by the Friulian shelf, the Carnic-Bellunese basin and the Trento shelf (FERRARI, 1982). During the upper Cretaceous (Campanian-Maastrichtian) the last pelagic sedimentation also affected the collapsed Friulian shelf (GHETTI, 1987). This palaeoenvironmental variability was determinant for the composition and the sedimentation rate of the submarine muds and also affected the flint geochemistry.

The flint source area here considered ranges from the northern ridge of the Friulian shelf, that is the Cansiglio-Cavallo Mountains, to the Carnic-Bellunese basin, towards the transitional zones of the plateau-basin, where siliceous micrites with pelagic fauna accumulated. As regards the suitable flint sources, from East to West, there are four main sub-areas which differ in sedimentary formations and flint: the Cansiglio-Cavallo Mountains, the Alpago Basin, the Gallina Valley and the lower Piave Valley (Fig. 1).

The Cansiglio-Cavallo Mountains.

Flint is found in the Rosso di Col Indes (Upper Santonian-Maastrichtian) and the Scaglia Grigia (Maastrichtian) Formations.

The Rosso di Col Indes are reddish thick layered marly limestones which outcrop in the northern part of the Cansiglio Plateau. Nodules and lenses of dusky-red (10R 3/3)[3] flint are abundant in the middle-lower part, whilst lightly variegated yellowish brown (10YR 5/6) flint abunds in the upper part. Flint suitability is low as a consequence of the compositional heterogeneity, the medium texture and the density of fractures.

The layered marly limestones of the Scaglia Grigia widely outcrop in the western part of the plateau. Owing to the abundance of

3 Flint colours refer to the Munsell Soil Color chart.

dark grey (2.5Y 4/0) and green-shaded grey (5Y 4/1) flint nodules and beds, the outcrops and the residual deposits were a good source. However, in spite of its fine texture and homogeneity, the flint results unsuitable for the production of blades, because a dense system of fractures makes it impossible to preserve large blocks. Only small blocks 5 cm long seem to have been suitable only for the production of bladelets during the Mesolithic.

The Alpago Basin

The formations containing flint are the Soccher Limestone (Lower-Upper Cretaceous), the Rosso di Col Indes, the Scaglia Grigia and the Scaglia Rossa (Maastrichtian-Upper Paleocene).

The Soccher Limestone is an alternation between white and light brown micritic limestones and biocalcarenites. Beds and nodules of suitable flint differing in colour (dark reddish grey - 5YR 4/2 - to reddish grey - 5YR 5/2) and in texture (coarse to fine) are frequent.

The Rosso di Col Indes exhibits very similar features to the ones observed on the Cansiglio Plateau.

The Scaglia Grigia outcrops on the whole area. The flint is similar to that in the Cansiglio, but westwards to the Piave Valley nodules of fine grey-blue homogenous flint are abundant, whilst in the upper part of the succession, near the boundary with the Scaglia Rossa, the grey flint assumes brown shades. Here the lower part of the Scaglia Rossa contains reddish-brown flint.

The Gallina Valley

Several formations contain flint: Soverzene Formation (Lower-Middle Lias), Igne Formation (Middle-Upper Lias), Fonzaso Formation (Callovian-Oxfordian), Ammonitico Rosso (Kimmeridgian-Tithonian), Soccher Limestone (Lower-Upper Cretaceous) and Scaglia Rossa (Turonian-Lower Eocene) (RIVA *et al.*, 1990). Flints of the Soverzene, Igne and Rosso Ammonitico Formations are unsuitable because of the density of fractures.

The Fonzaso Formation is composed of thin biocalcarenites and micritic limestones which embody many fractured beds of flint differing in colour (from very dark grey - 5Y 3/1 - to dark reddish brown - 5YR 2.5/2) and texture (fine to medium).

More suitable flints are available from the Soccher limestone and exhibit features like those observed in the Alpago Basin.
Within the Scaglia Rossa the lower part of the formation includes frequent nodules and beds of flint; suitability is good as the texture is fine and fractures are absent.

The lower Piave Valley

The formations including flint are: Fonzaso and Ammonitico Rosso, whose characters are similar to those observed in the Gallina Valley; Biancone (Lower-Upper Cretaceous) and Scaglia Rossa.

Striking differences in suitability have been pointed out between the flint which outcrop on the right and the left valley slopes. On the right slopes, the suitability of flint from the Biancone and Scaglia Rossa is low because of a dense system of fractures. Instead, on the eastern left slopes the Biancone (which are densely layered micritic limestones with several 20-30 cm thick layers of coarser limestones) enclose abundant nodules and beds of different coloured flint (dark grey, 2.5Y 4/0 or 5Y 4/1, or brown - 10YR 3/3 - towards the top of the sequence) with a fine texture and scarce fractures.

Further westwards on the left slope, the lower part of the Biancone shows a 10 cm thick plane-parallel stratification made of white micrites which alternate with calcarenitic horizons very similar to the Soccher limestone. Flint is plentiful in nodules and beds; within the calcarenites it has a medium texture, rough surface and light yellowish brown colour (2.5Y 6/3); inside the micrites it has a dark (2.5Y 4/0) or light (2.5Y 6/0) grey colour and finer texture. In the upper part of the Biancone the calcarenites disappear and the stratification becomes more dense; dark grey and fine textured suitable flints are abundant. Upwards there are 100-200 m thick marly limestones and green-grey marls; limestones embody abundant nodules and beds of suitable flint differing in colour (black - 2.5 Y 2/0, olive brown - 2.5Y 4/3 or dark brown - 10YR 3/3) and rich in Globigerinacea foraminifera.

The Scaglia Rossa encloses nodules and beds of fine suitable compact flint

differing in reddish-brown (5YR 4/3) colour sometimes with grey shades; at the top the colour varies from light brown (10YR 6/3) to very light brown (10YR 7/2), almost white.

THE ARCHAEOLOGICAL EVIDENCE AT PALUGHETTO

Palughetto is a basin bounded by the smooth ridges of the Piave glacier ablation tills (Fig. 2). Its place-name is due to the presence of a 80x30 m large peat bog at the bottom of the basin, resulting from the very damp climate and the waterproofing caused by the glacial diamicton which covers the limestone substratum. Within this area, an Epigravettian site has been excavated on the moraine ridge, whilst the hoard was discovered inside the adjoining peat bog.

The epigravettian site

It lies on the northernmost moraine ridge, at an altitude of 1040 m a.s.l. The excavation involved an area 80 m2 large, where several building remains were found. They relate to a long term human occupation which began in the Modern age and determined a strong reduction of the archaeological record. Postglacial pedogenesis affected the glacial diamicton (which is composed of quartzites, sandstones and voulcanic sandstones, quartzitic phyllites, various limestones, siltites, mica schists, igneous rocks and rare, deeply fractured flint nodules) as well as the archaeological record and enhanced the evolution of an alfisol profile. Owing to these postdepositional processes no bones were preserved and flint artifacts were scattered within the truncated soil profile.

The lithic assemblage is composed of some 1200 artifacts, among which end-products, tools, microliths, cores and other by-products indicate the local working of flint nodules. The lithic variability of pre-cores (3 in total) and cores (44 in total) highlights the exogenous raw material supply: 20 from the Scaglia Rossa of the lower Piave or Vaiont valley; 8 from the Scaglia Grigia of the Alpago Basin or of the Cansiglio Plateau; 5 Rosso di Col Indes, from the same subareas; 1 Fonzaso Formation, from the lower Piave or Vaiont valley; 1 Biancone, from the lower Piave Valley; 11 Biancone or Scaglia Grigia, whose indetermination is due to the paucity of pelagic foraminifera.

The pre-cores have prismatic shape and partial crest useful to the production of blades and bladelets. Among the cores, most of them were used to remove bladelets; they are single platform prismatic cores and double opposed platform prismatic cores. Flakes or laminar flake cores are prismatic, discoidal or subpyramidal types (Fig. 3). The core reduction was intense, as is testified both by their sizes and the average of the flaking surface length values (=33 mm).

The retouched tools are: dihedral and truncation burins; end-scrapers, mainly with semicircular edge among which the short thumb-nail type prevails, and fewer with ogival, nosed or carinated edges; truncations; simple retouched blades, denticulates, points and notches. Microliths are represented by backed points, point-truncations, backed bladelets, backed bladelets with truncations, isosceles or scalene triangles, segments. The microlithic waste products are numerous; the most common are the microburins, the Krukowski microburin, and the unfinished backed pieces (Fig. 3).

From the point of view of the techno-typological features, this lithic assemblage can be correlated with the terminal phase of the recent Epigravettian technocomplex. The dominance of short endscrapers among the tools, the absence of Microgravettes among the backed points as well as the typology of the single and double backed points, the presence of point-truncations, segments and triangles, provides a good correlation with the lithic assemblages of other mountain open sites of the Southern Alps, such as Piancavallo (GUERRESCHI, 1975), which lies 8.6 km away from Palughetto and the Andalo site, near the Trento basin (GUERRESCHI, 1984). Neverthless, the absence of a preserved pedosedimentary context and the impossibility of obtaining absolute datings does not allow us to resolve the chronology of these industries. A.Broglio (1992) recently proposed a post-glacial age, supporting his hypothesis on the different techno-typological features of the artifacts (e.g. the strong adoption of the microburin technique and the appearance of Mesolithic type artifacts), after comparing them to both the Recent Epigravettian and Early Mesolithic assemblages. Finally, sites such as Palughetto may date back to the time

span ranging from the end of the Younger Dryas to the onset of the Preboreal. In any case, problems related to the discrimination of these palimpsests in terms of the cultural context and the human activities remain notable.

The hoard and the pedo-sedimentary context

A trench 16 m long was excavated to expose and to sample the lake deposits and the botanical remains from the south-eastern slope of the moraine towards the border of the peat bog (Fig. 2). It allowed the glacial diamicton and the change in the pedosedimentary facies from the moraine towards the basin to be studied. As previously discussed, the diamicton was affected by the evolution of a silty dark yellowish brown alfisol, which is characterised by platy and angular blocky structure well developed, strong bioturbation, carbonate depletion and evident clay coatings on the biogallery walls.

Within the peat bog the lower complex of the lake deposit (units from T11 to T6) covers the glacial till. From the bottom the units are (Fig. 2): inorganic varved clays (unit T11); organic deposits 0.60 m thick, very rich in macrobotanical remains (units from T10 to T8); peat (unit T7); organic hydromorfic clayey-silts with macrobotanical remains, wood and charred wood fragments, flint artifacts and the hoard (unit T6); grey clayey-silts lightly pedogenised (unit T5); recent man-made deposits affected by a shallow hydromorfic soil (units from T4 to T1). Unit T5 may be correlated with the alfisol developed on the till.

The archeological unit T6 has been sounded over a 6 sq m area. It is devoid of faunal remains and carbonates because of the low pH values. Artifacts consist of several microflakes and bladelets, one fragmented bladelet core, one denticulate, one point-truncation and one segment; refittings have been possible among small flakes. Especially in the case of the point-truncation and the segment, these microliths can be attributed to the terminal phase of the recent Epigravettian or to the Early Sauveterrian, since they exist in both the technocomplexes. In spite of this undeterminatess certainly due to the scarcity of the lithic assemblage, one AMS C14 data on charred wood (GX-21231: 9,495±150 BP; calib. age interval= 8,954-8,355 BC[4]) fits with the chronology of the Southern Alps Early Mesolithic, such as documented in the Romagnano rockshelter and some mountain sites in the Dolomites (ALESSIO *et al.*, 1984; 1994; BAGOLINI *et al.*, 1984; BROGLIO, 1992).

The hoard was found 2.5 m far from the peat bog boundary, inside a 20 cm deep hole dug in the peat of the underlying unit T7. Postdepositional deformations of the whole deposit may have affected the hole boundaries and depth. Within the surrounding area no remarkable artifact concentrations were found. In total, six blocks of flint and one flake naturally removed from one of them were preserved inside the hole (Figs. 2 and 4). The finds are described as follow; table I resumes their main features.

Block n. 1 - The block originated from a bed flint. It has rhomboidal section and conchoidal fracture surfaces and seems to be compact, except for an incipient fracture in a lateral zone and a few voids near the cortical zone. The flinty-chalk and chalk cortex thickness ranges between 35 and 8 mm; its surface is porous because of the strong carbonate depletion and has small, rare and lightly evident Fe-Mn oxides stains. The flint has reddish brown colour (2.5 YR 4/3) with grey shades, frequent inclusions, several Globotruncanidae foraminifera. The real colour is masked by a light patina which is less developed on the test scar. The block was tested for suitability with hard hammer on the side of one inclined face, where the flint appears purer. This flake removal might also suggest the preparation of a striking platform. The exploitable flint volume approaches 40% of the whole block.

Block n.2 - This is also derived from a bed flint. Its shape approaces to a plaquette with an irregular sub-rhomboidal section. The block has natural and conchoidal fracture surfaces and is compact, except for a few randomly oriented and spaced fractures which divide it into large angular fragments. The cortex is 2 mm thick, exhibits porous surfaces and devoids of impregnations other than the organic ones. The flint is reddish brown coloured (5YR 4/4) and has a white patina and rare Fe-Mn oxide stains; a test was probably made in correspondence with a ridge. The

4 Calibration of the data was made with calib3.0 program. Reference: M.STUIVER and P.J.REIMER, *Radiocarbon*, vol. 35, no.1, 215-230.

exploitable flint volume corresponds to the whole block.

Block n.3 - The block originated from a nodule. It has a rhomboidal section and rough natural fracture surfaces on 90% of the whole surface. The flint seems to be compact except for rare incipient fractures, one of which divides the block. The flinty cortex thickness ranges between 27 and 12 mm; it is porous and devoids of impregnations other than the organic ones. Flint colour is olive brown (2.5Y 4/3) partially masked by a whitish patina and rare Fe-Mn stains; concentric laminations (silicification bands) are visible. The block was tested for suitability with a hard hammer on one ridge by the removal of a cortical flake. The exploitable flint volume approaches 60% of the whole block.

Block n.4 - It derived from a bed flint. Its shape is a regular parallelepiped with rectangular section. The block surfaces exhibit natural fractures on 70% of the whole area. Flint is compact and devoids of fractures and voids. It is dark yellowish brown (10YR 4/4) coloured and has a thin porous cortex which exhibits organic impregnations. Almost all the block ridges are subrounded, except those with a large face where the whitish patina is absent. Presence of this angular ridges may indicate that the block was broken by means of the removal of a thin and large cortical fragment. The exploitable flint volume equals the whole block.

Block n.5 - The block derived from a nodule. It has an asymmetric lense-like shape and natural fracture surfaces over 20% of the whole surface. The flint integrity is low, due to some large voids and several subparallel incipient fractures which isolate large plaquettes. Its thin cortex is porous and has organic impregnations. A whitish patina with rare Fe-Mn stains masks the grey colour (7.5YR 6/0) of the flint; whitish irregular inclusions, sometimes wider and associated with the voids are also present; rare Globotruncanidae foraminifera. The exploitable volume is 90% of the whole block.

Block n.6 - It originated from a bed flint. The shape approaches a cube with a trapezoidal section and lightly rounded ridges. Natural fractures constitute almost the whole surface of the block. The flint is compact and its thin cortex (4+1,5 mm) is porous with small, rare and low evident Fe-Mn inpregnations. The colour, lightly masked by the patina, is reddish brown (2.5 YR 4/3) with grey shades near the flinty cortex and frequent whitish inclusions; Globotruncanidae foraminifera is frequent. The block was tested with a hard hammer by removing a cortical flake. The ridges of the preparation flake scar are lightly rounded. The whole block results exploitable.

The provenance of the blocks

The block features, angular ridges and whitish patina especially, indicate that the flint procurement occurred very close to the limestone exposures or within "clay-with flint deposits", rather than in other geological sources, excluding fluvial gravels or glacial till deposits.

As regards the provenance of the different flints, it is possible to broadly delimit the exploitation area, which ranges from the lower Piave Valley to the Alpago Basin. For the specific case of the farthest sources, almost all the blocks (nn. 1, 2, 3, 4, and 6) were probably collected on the left slope of the lower Piave Valley, where there are vast exposures of Biancone and Scaglia Rossa Formations. The sole block having the nearest provenance is n. 5, whose size markedly differs from the others. Such a type of block can only be extracted on the present-day exposures of the Scaglia Grigia Formation within the Alpago Basin, where the integrity of the flint beds and nodules is better than on the Cansiglio Plateau. Notwithstanding its incipient fracture density, this manuport may have equally supplied raw material needs.

Blocks	Length	Width	Thickness	Weight	Shape	Form.	Micr.	Test
1	120	69	59	706	rhombohedral	ScR	Globotr.	y
2	103	71	45	350	plaquette	ScR	ind.	?
3	101	69	73	702	parallelepipede	Bi	ind.	y
4	102	84	50	668	parallelepipede	ScR	ind.	b
5	132	114	89	1,698	lense	ScG	Globotr.	n
6	65	42	53	216	cubic	ScR	Globotr.	y

Notes: measurements are given in mm, weight in gr, flint is described just by means of a macro-mesoscopic and micropaleontological approach. Formations: Bi=Biancone; ScR=Scaglia Rossa; ScG=Scaglia Grigia. Data of block n. 3 also comprise the flake detached from it after its discard. As regards the traces of testing flint suitability, different test ways and certainty grades of testing evidence are proposed: y=fully certainty; ?=uncertainty; b=breaking; n=absence.

CONCLUDING REMARKS

Because of the preliminary state of the fieldwork and of the studies on the reduction strategies, the hoard at Palughetto has yet to be considered within the whole system of laminar production at the camp-site. However, some considerations can be proposed.

Firstly, as explained above, the raw material sources of the Cansiglio Plateau (e.g. the small flint blocks of the Scaglia Grigia mainly) does not allow the production of blades but only bladelets, as proved by the lithic assemblages of the Early Mesolithic sites of the plateau. On the contrary, flints of other carbonate formations, such as Biancone and Scaglia Rossa which outcrop in the Piave Valley, allow the production of blades as a result of the larger size of blocks and nodules. Under this perspective, importation of such a raw material is indicative of a precise flint supply strategy for the humans who camped on the plateau.

The presence of a hoard within such a very humid context like at Palughetto does not find any comparison at present in Europe. The humid context could have important significance for the better preservation of the flint stocked, because of the improvement of the mechanical properties of the flint (that is its reaction when struck) when it is submitted to high humidity. It must not be excluded that such a similar goal may have regarded the preservation of the hoard in the Epigravettian camp of Val Lastari and in some Polish sites.
At Palughetto two hypotheses can be made on the cultural context of the hoard on the basis of its relationship with the Epigravettian site on the adjoining moraine.

A) The Epigravettian site and T6 unit differ in age and cultural context, as proved by the typological features of the artifacts found at Palughetto and, above all, by the C14 data. Under this perspective the hoard could be directly related to a Mesolithic camp, the whole area of which is at present not yet defined. Therefore, Mesolithic human groups settled on the boundary of the peat bog and left the hoard for future exploitations. The identification of different functional zones or specialised workshops within this site will be possible after future excavations.

B) The Epigravettian site and unit T6 share the same cultural context. In fact, the scarce lithic assemblage of unit T6 is insufficient to prove the presence of a Sauveterrian industry; point-truncations and segments such as those found during the drilling also exist in slightly older cultural contexts. At the onset of the paper we illustrated the issues which regard the absolute dating of the terminal phase of the recent Epigravettian sites in Southern Alps, stressing their correlation with the time span

comprised between the end of the Younger Dryas and the Early Preboreal, as A.Broglio proposed (Broglio, 1992). Therefore if unit T6 results culturally referable to the Epigravettian site on the moraine, we can suppose a different use of the whole area of the Palughetto, that is the moraine hosted the camp-site and the peat bog could have been used as a refuse deposit. Such a functional differentiation has to be proved by the different composition between the lithic assemblages of the two contexts.

To conclude, if the practice of hoarding finished products is well known for the more recent Prehistoric European contexts (increasing from the Neolithic to the Bronze Age), in which the hoards are related with artisan and trade activities, for the older contexts such as the Upper Palaeolithic and Mesolithic settlements, the presence of a stock must be considered within the whole economic system of the societies of hunter-gatherers. In the case of the Southern Alps, the settlement system seems to indicate a re-occupation of the same site or of vast areas in the mountains and in the valley bottoms in accordance with seasonal frequentations. As proved by the exogenous flint used and by the typo-technological similarities of the lithic assemblages, humans from the valley went up the mountain to perform the differentiation of the natural sources, but with the clear knowledge of the availability of the local flint sources.

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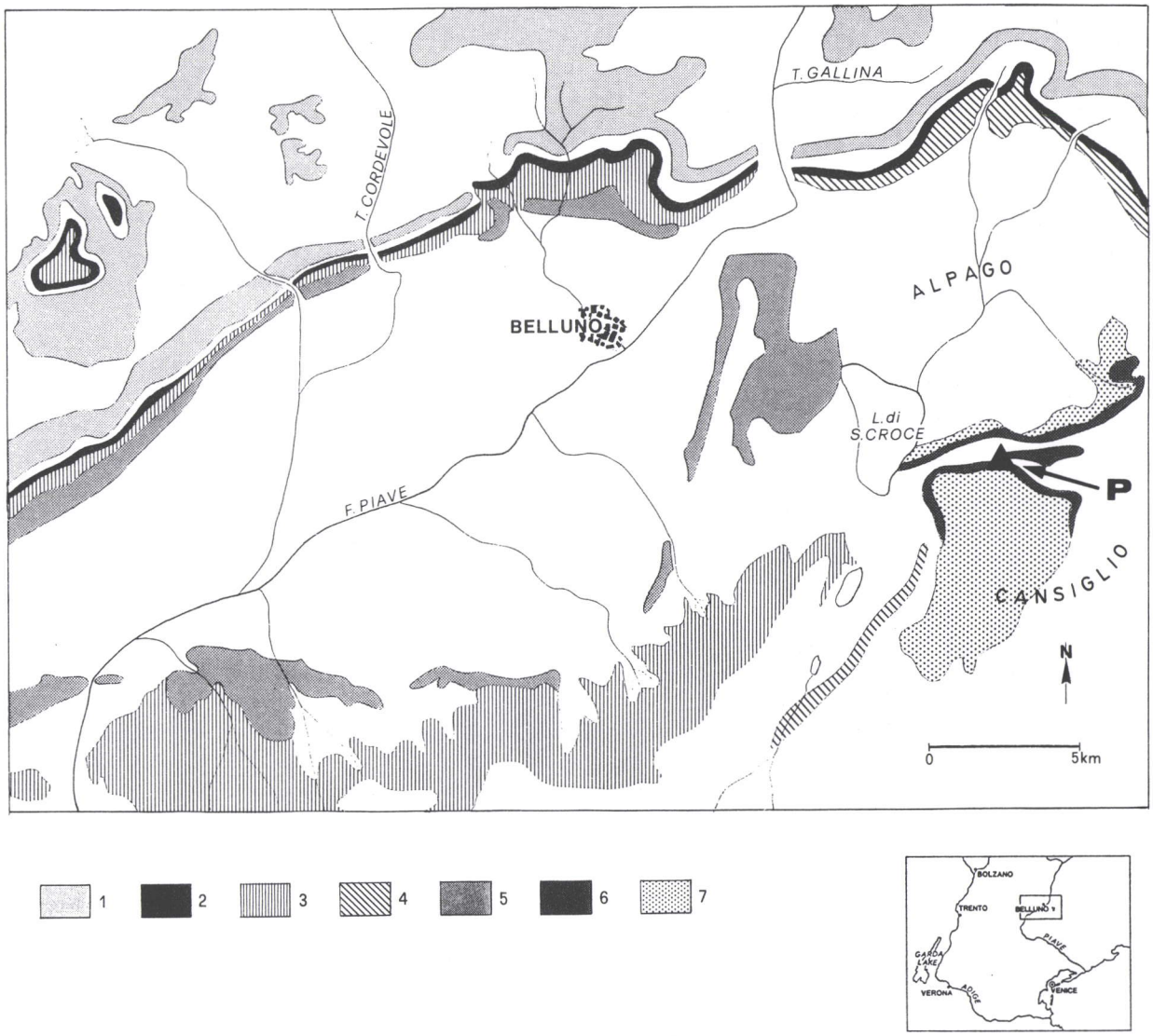
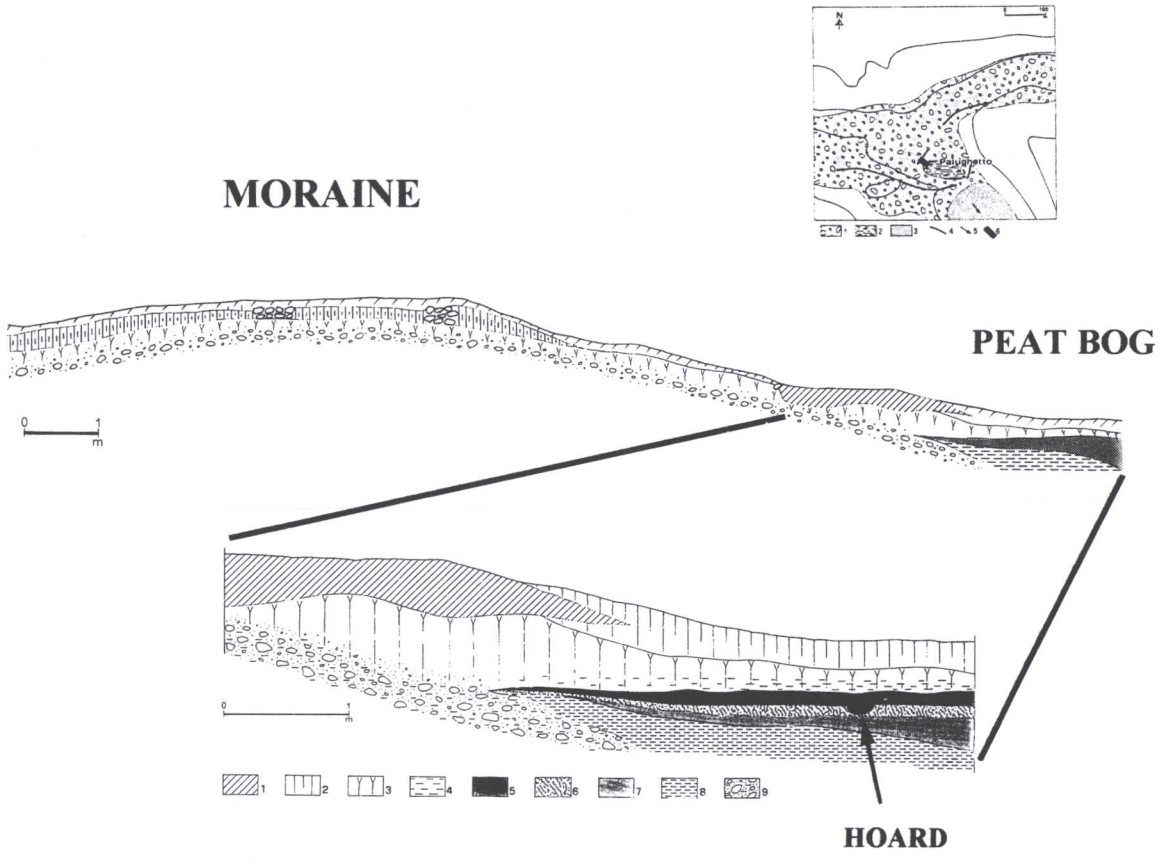


Fig. 1. Geological map of the formations with flint in the eastern Venetian Prealps (below right, location of the study area). KEY: 1 - Soverzene and Igne Formations; 2 - Fonzaso Formation and Ammonitico Rosso; 3 - Biancone; 4 - Soccher Limestone; 5 - Scaglia Rossa; 6 - Rosso di Col Indes; 7 - Scaglia Grigia. (P=Palughetto site).



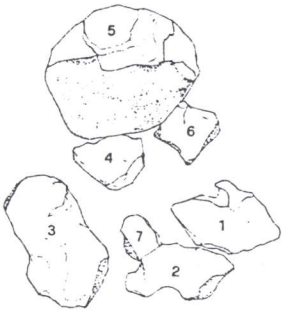


Fig. 2. Above right, map of the Palughetto site. KEY: 1 - glacial till of the Würmian Piave glacier; 2 - peat bog; 3 - fluvioglacial plain; 4 - morainic ridges; 5 - slope direction; 6 - position of the trench.
Middle, section of the trench at Palughetto with a detail of the stratigraphy at the transition from the morainic slope to the lake basin. The position of the hoard is indicated. KEY: 1 - gravel road; 2 - topsoil; 3 - truncated paleosoil; 4 - grey clayey-silts slighlty pedogenised (T5 unit); 5 - organic anthropogenic clayey silts (T6 unit); 6 - peat (T7 unit); 7 - organic layers with macrobotanical remains (T8-T10 units); 8 - inorganic varved silty-clays (T11 unit); 9 - glacial till.
Below, the hoard at the bottom of the unit T6 (scale length=20 cm) .

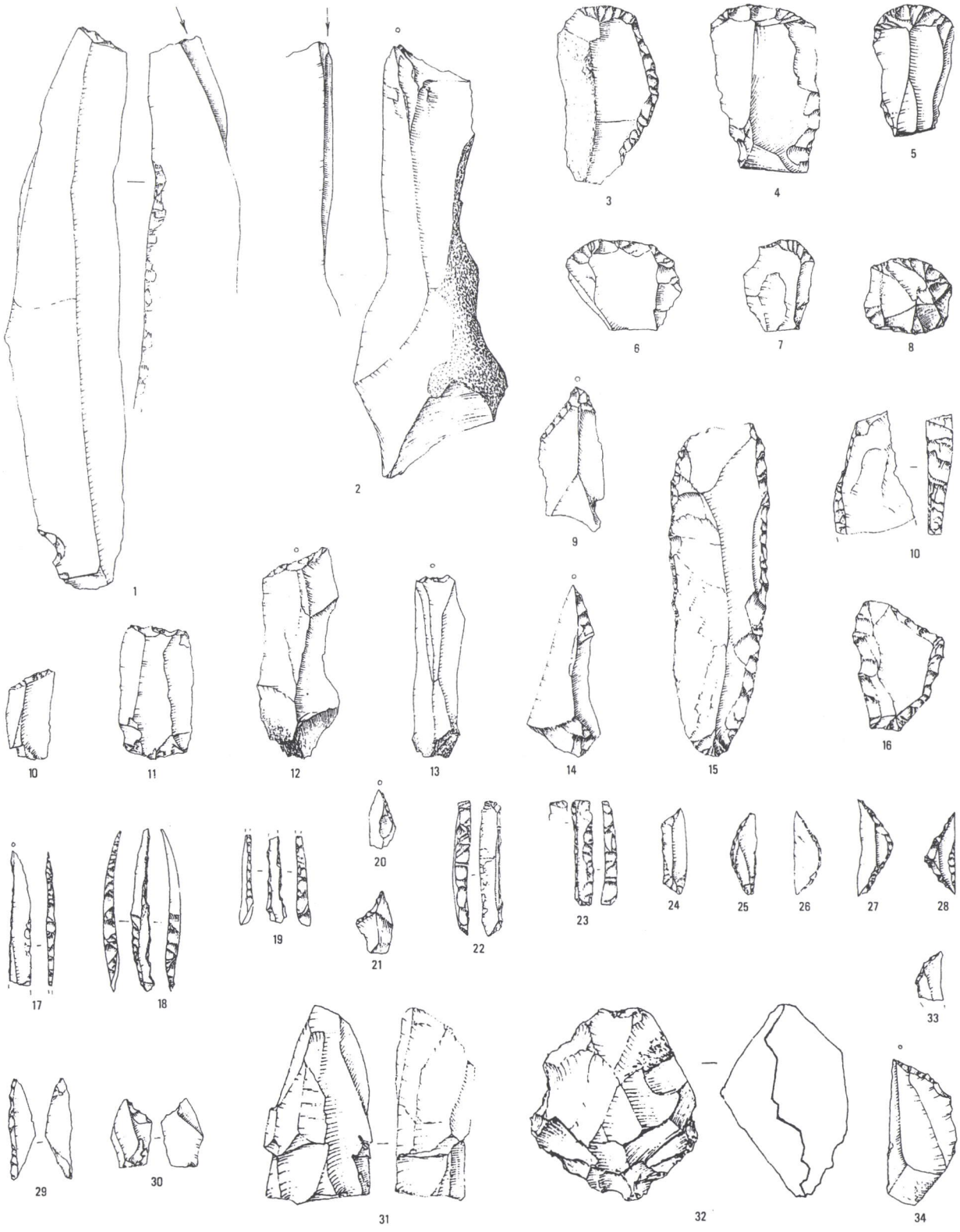


Fig. 3. The lithic assemblage of the Palughetto Epigravettian site: burins (1, 2), end-scrapers (3-8), truncations (10-13), points (9, 14), simple retouched blade (15), fragmented backed blade (10), denticulate (16), backed points (17-19), point-truncation (20, 21), backed bladelets with truncations (22-24), segments (25, 26), triangles (27, 28), microburins (29, 30), bladelets and flakes cores (31-32). Artifacts from unit T6: fragmented segment (33), point-truncation (34) (natural size).

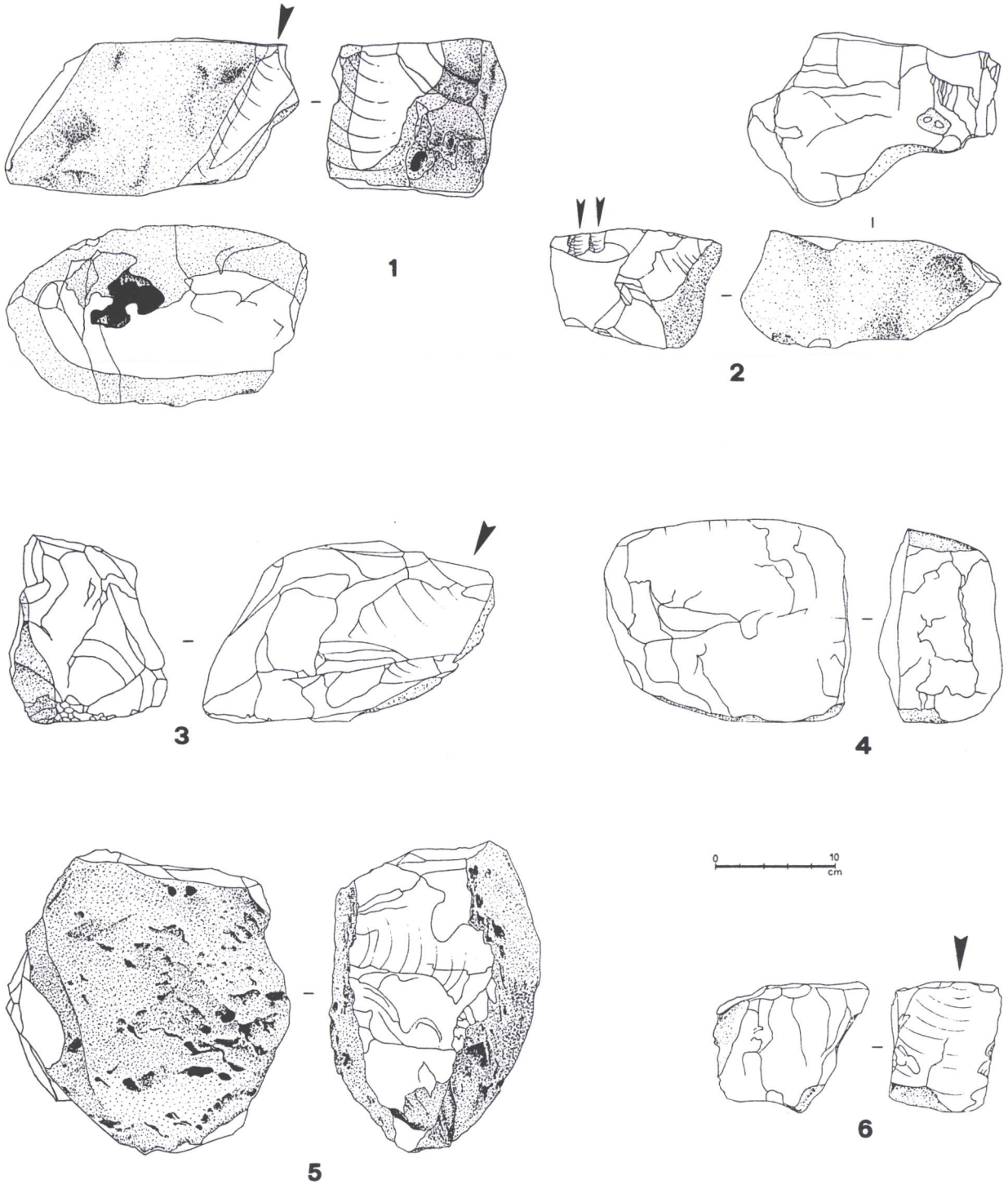


Fig. 4. The blocks of the hoard of Palughetto. The direction of the test is indicated (1/2 natural size).