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RECOVER THE PAST TO DISCOVER THE PRESENT

Sommario

Il Centro Camuno di Studi Preistorici verso il futuro Programma delle attività per l'anno 2016

Tiziana Cittadini *

Il rinnovamento del Centro Camuno attualmente in atto è in continuità con la lunga stagione di ricerca inaugurata da Emmanuel Anati nel 1964 e proseguita fino a oggi, pur fra innegabili difficoltà economiche e gestionali.

I dati di bilancio del CCSP degli ultimi 40 anni sottolineano come si sia modificato il ruolo che la cultura e la ricerca sono state chiamate a svolgere nel nostro Paese negli ultimi decenni.

Dall'analisi dei bilanci consuntivi del 1982 e del 2013 emergono alcune considerazioni che ci hanno guidato nel piano di riordino dell'Istituto.

Le Entrate finanziarie nel 1982 provenivano essenzialmente da tre capitoli:

a) contributi pubblici non finalizzati (41%)
b) sottoscrizioni dei soci (11%)
c) vendita delle pubblicazioni (32%)

In sintesi le entrate da attività svolte dall'ente (b+c) coprivano il 43% del totale, il resto erano contributi pubblici non finalizzati che in buona parte sostenevano l'attività di ricerca.

Nel 2013 il quadro generale era già completamente cambiato:

a) contributi pubblici internazionali legati a progetti di divulgazione o promozione (34%)
b) contributi privati finalizzati (spesso compartecipazioni al punto precedente) (15%)
c) contributi regionali finalizzati (14%)

In forte calo troviamo sia il settore editoriale (proventi da vendita delle pubblicazioni) (1%) che i proventi da sottoscrizione della quota associativa (1%), compressione leggibile in una progressiva perdita di fidelizzazione verso l'Istituto, sia per quanto riguarda le iscrizioni (le attività proposte non erano più attrattive?) che per le edizioni del CCSP (catalogo editoriale poco appetibile?). Su tutto una promozione carente e non adeguata ai tempi.

Risultano altresì drasticamente diminuiti i contributi pubblici, sia regionali che statali e i contributi non finalizzati che nei decenni precedenti avevano sostenuto l'attività di ricerca.

Al contrario, si nota una forte ripresa dell'attività progettuale in partenariato con l'UE e riferibile a progetti di promozione e divulgazione.

Alla luce di queste evidenze, nel corso del 2015, il Consiglio Direttivo si è impegnato nella stesura di un progetto di rilancio definendo nuove linee guida per una riorganizzazione complessiva dell'ente, basata su un modello di sostenibilità della ricerca, attuabile attraverso l'individuazione di attività che possano portare fondi all'Ente e che fossero propedeutiche e di sostegno economico alla ricerca, in alternativa ai contributi pubblici non più disponibili.

* Centro Camuno di Studi Preistorici

	1983	2013
Quote soci	€ 12.310	€ 1.500
Quote iscrizione attività	€ 1.033	€ -
Vendita pubblicazioni	€ 35.122	€ 2.200
Attività professionali	€ -	€ 23.000
Altre minori	€ 2.196	€ 7.000
Contributi non finalizzati internazionali	€ -	€ -
Contributi non finalizzati statali	€ 46.106	€ 25.000
Contributi non finalizzati regionali	€ -	€ -
Contributi non finalizzati privati	€ 12.500	€ -
Contributi finalizzati internazionali	€ 3.223	€ 101.000
Contributi finalizzati statali	€ -	€ 23.000
Contributi finalizzati regionali	€ -	€ 40.000
Contributi finalizzati privati (specifici progetti)	€ -	€ 43.500
Contributi finalizzati enti locali	€ -	€ 28.000
Totale	€ 112.490	€ 294.200

Le prime tappe di questo percorso sono state l'individuazione di un Comitato Scientifico Internazionale, la ripresa di antiche e nuove collaborazioni scientifiche internazionali e locali, la riunificazione logistica del Dipartimento Valcamonica e Lombardia nella sede di Capo di Ponte, il rilancio del settore editoriale con una nuova direzione editoriale del Bollettino.

Nei prossimi tre anni l'obbiettivo sarà la riorganizzazione dell'istituto sotto l'aspetto economico rendendo la ricerca sempre più sostenibile grazie a attività che, in sintonia con la *mission* istituzionale, possano darci anche un introito economico.

Questo percorso è stato apprezzato dalla Fondazione CARIPLO, una delle realtà filantropiche più importanti del mondo con oltre 1000 progetti sostenuti ogni anno per 144 milioni di euro e grandi sfide per il futuro, che ha approvato il nostro progetto sostenendolo per i prossimi tre anni[1].

In questo stesso spirito, nei prossimi mesi saranno organizzati il primo seminario archeo-ambientale incentrato sul territorio della Riserva naturale Incisioni rupestri di Ceto, Cimbergo e Paspardo, faranno seguito durante l'anno, un corso di perfezionamento in rilevamento dell'arte rupestre, l'annuale recording rock art fieldwork, convegni internazionali ed eventi culturali. A breve saranno rese note le nostre proposte di turismo archeologico e saranno disponibili nuovi servizi per la cessione di diritti di riproduzione degli archivi del Centro. Contemporaneamente proseguiranno i progetti di ricerca sul patrimonio rupestre camuno.

Il modello a cui tendiamo è quello di un centro di ricerca specializzato nell'arte rupestre ma fortemente connesso alle numerose discipline che danno contributi originali a quest'ultima; un centro aperto sul mondo didattico e scientifico dell'archeologia ma con i piedi saldamente ancorati nel territorio.

1 Bando "Cultura Sostenibile" 2015-2018.

Horse and bull petroglyphs of Europe

Robert G. Bednarik *

Summary

This paper summarises a large number of cases in which late Holocene rock art in Europe, often of the historical period, has been pronounced to be of the Pleistocene, generally on the basis of perceived style. Since a large component of what is widely regarded as 'Palaeolithic' rock art is in fact not of that period, it follows that the concepts currently held of Palaeolithic style must be severely flawed. The reasons for the importance given to Palaeolithicity in Europe are explored, leading to the hypothesis that it is seen as underpinning the neo-colonialist notion that art, symbolism and human cognitive modernity originated in Europe in the Upper Palaeolithic. This is demonstrably a fallacy that has dominated nearly all discourse on the 'origins of art', suggesting that those who hold this view are inadequately informed. The causes of the persistence of this myth are explored from a global perspective.

Riassunto

L'articolo desamina un ampio numero di casi nei quali arte rupestre Europea del Tardo Olocene, spesso di periodo storico, è stata attribuita al Pleistocene, solitamente sulla base di considerazioni stilistiche. Visto che un'ampia parte di ciò che viene largamente considerata come arte rupestre 'Paleolitica' non appartiene di fatto a quel periodo, ne consegue che i *concepts* correntemente contenuti nello stile Paleolitico devono essere errati. In Europa di attribuiscono grande importanza e attenzione alle forme d'arte attribuite al Paleolitico, in ragione dell'idea neocoloniale che l'arte, il simbolismo e la capacità congitiva umana moderna si siano originate nell'Europa del Tardo Paleolitico. Questa è chiaramente una falsa credenza che ha dominato pressoché ogni discorso sull'orgine dell'arte. Nel testo l'autore esamina le cause della persistenza di questo mito in una prospettiva globale.

Introduction

This paper was prompted by the recent report of a group of presumed horse petroglyphs at a site near Gondershausen, in the Hunsrück mountains of Germany, and the contention that they are of the Pleistocene. Similar claims about Pleistocene petroglyphs on schist exposed to precipitation have been appearing for thirty-five years, ignoring the geological reality that schistose facies erode much too rapidly to preserve rock art for tens of millennia. For instance in the case of Gondershausen (Welker 2015), the small assemblage of petroglyphs was proposed to be of Aurignacian style, which would make it in excess of 30,000 years old. When exposed to rain, schist, like phyllites, siltstone and slate, hydrates and gradually reverts to mud, the surface retreating at a rate ranging from 1 to 10 mm per millennium (Schwegler 1996; Bednarik 2007, p. 61). Therefore petroglyphs on schist exposed to the rain can generally have survived only from late Holocene times. Disregard for basic principles of rock art deterioration rates is

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Fig. 1 – Fortification wall of Castro, near Yecla de Yeltes; note zoomorphs on large block.

the main factor in the numerous erroneous age estimates of both petroglyphs and pictograms that mar a great deal of literature on rock art.

The most fundamental tenet in this field is the principle that the relative susceptibility of any petroglyph to erasure by natural means (be it aeolian, fluvial, marine or any other agent) is roughly proportional to the time it takes to create it (Bednarik 2012a, p. 79). The time required to fashion a petroglyph on a given rock type is a known variable (or can become so through replication); therefore the relative longevity of a given petroglyph is also predictable. Far too many archaeologists have ignored this simple rule in their desire to declare rock art to be of the Pleistocene, when it is in fact much more recent. To illustrate by example: it takes about 400 times as long to create a cupule on unweathered quartzite than to produce a cupule of identical depth on weathered sandstone (Bednarik 1998, p. 30, Fig. 5; Kumar 2007; Kumar, Krishna 2014). It will then also take about 400 times as long to naturally erase it by natural processes, rock of hardness 7 on Mohs scale being roughly 26 times more resistant to abrasion than hardness-3 rock. This reasoning helps appreciate the greatly varying propensity of petroglyphs to survive, depending on the weathering resistance and hardness of the rock and on such factors as its groove depth and exposure (Bednarik in press a). Therefore, in commenting on the potential antiquity of a petroglyph, researchers need to fully appreciate its taphonomy (Bednarik 1994a).

Numbering in their many hundreds, the instances of grossly incorrect age estimates for rock art motifs are in all cases attributable to lack of regard for taphonomic tenets. Examples can be cited from all continents except Antarctica, but they are especially numerous in Europe, where in the majority of cases they concern

Fig. 2 – Zoomorphs on the Castro walls, showing the amount of weathering experienced by granite in one or two millennia

'Palaeolithic' attribution to Holocene motifs. In reviewing the vast number of instances it can be generalised that the great majority of these mis-datings were applied to presumed equine and bovine images. Over recent decades, a trend has developed of regarding all so-called naturalistic zoomorphs in Europe as having to have been made in the Pleistocene. In this two aspects are ignored: that no rock art motifs are truly naturalistic (i.e. they are generally abstractions), and that 'naturalistic' animal depictions were made in all historical periods of the continent (i.e. there is no a priori reason why such depictions should necessarily have been made in a Palaeolithic period). Bearing in mind that there are thousands of presumed horse and bull rock art images of recent centuries and millennia across much of Eurasia, this paper will commence by examining a major assemblage of such historical rock art imagery which, by definition, cannot be of the Pleistocene. It occurs on the outer walls of a historical structure of approximately known age, and because it occurs on granite, a relatively weathering-resistant rock, it is of particular value in understanding the issue better.

The 'horses' of the Castro at Yecla de Yeltes

The fortifications of the Castro, about 1 km south of Yecla de Yeltes in far-western Spain (Salamanca) were founded by the Iron Age Vettones in the 5th century BCE. However, most of the surviving structures are more recent, of the 3rd century BCE and dating from Roman reconstruction in the 3rd century CE and later (fig. 1). The fortification contained a village of 5 ha area which was only abandoned in the 12th century CE (probably shortly after 1184 CE). Thus most walls surviving today date from Roman and medieval times. The walls of the

fortress, overlooking the Varlaña stream, range in height from about 3 m to 5 m, being mostly 4 m high, and they extend over approximately 1050 m length. It is on these expansive structures that most of the petroglyphs are found, of which at least 200 have survived. About half of these are so severely weathered that they can barely be recognised. Those that survived best are said to represent mainly horses, although there are also some anthropomorphs, 'wild boars', 'donkeys' and bovid figures.

The dry-laid walls of the Castro are made exclusively of the local granite, and numerous locations of quarrying activities are apparent at the site. In the construction of the walls, advantage was taken of local terrain, incorporating steep rock escarpments in the defensive design. Like any other rock, the surface of granite retreats with time, but the rate at which this occurs varies widely, from 0.05 mm to 2 mm per millennium, depending on the lithology and environmental conditions. The Castro granite has a high component of mica and is low in feldspar. The surprisingly high average annual rainfall at the site, 706.0 mm, has contributed to the weathering of the granite, which appears to be mostly in the upper range, i.e 1–2 mm/ka. Although the exact age of any of the Castro petroglyphs remains unknown, the entire corpus postdates the construction of the walls and must therefore be expected to be between 700 and 2000 years old. This provides a reliable point of reference of the amount of weathering experienced by historical petroglyphs on granite (fig. 2).

In considering the 'style' of the Castro petroglyphs the technology of production must be allowed for, as it is determined by the nature of the rock. Shallow engraving or incising, which is often used on soft rocks such as slate and schist, is ineffective on essentially unpatinated granite. Figures were presumably deeply chiselled by indirect percussion with metal tools. Due to the extensive weathering, production traces have not been retained even in the best preserved motifs. Although the Gondershausen petroglyphs were made on schist, they are stylistically very similar to those at Castro, because the German figures occur not on smooth foliation surfaces, but on a panel truncating the rock's wafered composition at right angle. Therefore the makers of the Gondershausen motifs had to contend with similar technological issues, and the 'stylistic' similarity of the 'horses' of the two sites is at least to some degree attributable to the fabric of the respective rock facies. It is a fundamental error to assume that such petroglyphs provide much 'stylistic' information, and that such information should have much bearing on their age.

The horse and bull petroglyphs of Siega Verde

About 32 km southwest of Yecla de Yeltes and near the Portuguese border is the World Heritage petroglyph site of Siega Verde, located at Castillejo de Martin Viejo. It also comprises several hundred zoomorphs, mostly of equine plus some bovine and cervid images. All of these animals exist in the region today, and there are none of the typically Palaeolithic motifs, the so-called signs. The site occurs on both sides of a towering masonry bridge over the Agueda river, coinciding with hundreds of rock inscriptions. Both the petroglyphs and the inscriptions are entirely limited to a zone of 6 m above the thalweg, i.e. within the

flood zone. The river floods frequently, rafting vast quantities of coarse angular quartz sand and quartz debris up to boulder size through the valley. As a result the soft bedrock schist has been extensively sculpted, including cavitation by pothole formation. Of greater importance than plucking or bedload abrasion is the impact of suspended-load abrasion (Alexander 1932; Foley 1980; Sklar, Dietrich 1998; Snyder *et al.* 2000). The abrasion coefficient for schist (16) is significantly higher than that of, for example, granite (0.4) or quartzite (0.15) (Attal, Lavé 2005, pp. 156, 159), and abrasion by saltating or suspended particles is therefore much in evidence at the site (fig. 3). It has affected petroglyphs and inscriptions equally, and since many of the latter were furnished with engraved dates, it has been possible to plot Degree of Erasure as a function of time (Bednarik 2009a). This has demonstrated beyond reasonable doubt that the Siega Verde petroglyphs are mostly under 200 years old, and that after 400 years, any anthropogenic rock marking would have been erased fluvially within the flood zone. Indeed, it was found that the majority of the petroglyphs dates from the construction period of the bridge, which was completed in 1924. This is indicated not only by the measured Degree of Erasure, but also confirmed by the occurrence of two zoomorphs that were executed on the recess carved from the bedrock to provide the base for one of the bridge piers. The pier itself partially conceals the two motifs, demonstrating that they must have been executed between the time of initial preparations for the bridge (apparently early in the 20th century) and the commencement of the construction of the pier in question (fig. 4).

There is one exception to the very young ages of the petroglyphs: high on one of the rocks north of the bridge, at an elevation of about 6 m above the normal level of the river (i.e. just outside the zone of fluvial erosion), occur filiform designs, over which much more recently a horse head has been pounded. The subparallel fili-

Fig. 3 - Siega Verde schist surface showing the heavy impact by suspended particles, and below the quartz sand causing this fluvial wear.

Fig. 4 – The petroglyph grooves of an equine neck hammered into the rock surface exposed to create the base for the bridge pier (on left) that has since concealed it; the grooves therefore date from the time between the creation of the recess and the establishment of the pier

form incisions resemble Iron Age rock art in the nearby Douro valley and are fully patinated (matching background patination), whereas the superimposed horse head image is almost unpatinated and significantly younger (Fig. 5). Another factor delimiting the potential age of the Siega Verde rock art is the evidence, found in crevices and recesses at the site, of the former presence of an extensive alluvial terrace of very coarse-grained composition (mostly granite cobbles to boulder clasts), in the form of many firmly lodged, small remnants at elevations of up to 7–8 m above the river. It would be impossible for any petroglyph or inscription to survive first the deposition and then the eventual degradation of this terrace. Therefore the terrace must predate all of the lower rock markings, and its own post-Roman antiquity is demonstrated by water-worn Roman pottery (Bednarik 2009a). This terrace deposit therefore provides a secure *terminus post quem* for the Siega Verde petroglyphs. Finally, the villagers from Castillejo de Martin Viejo have long known the origin of the rock art (Hansen 1997). They 'had a good laugh when archaeologists told them the art was Palaeolithic', after archaeologists 'discovered' in 1988 what had always been known to the villagers.

Despite the overwhelming evidence demonstrating that the Siega Verde petroglyphs are of the most recent history, some archaeologists continue to insist that they are of the Pleistocene and around 20,000 years old (Balbín *et al.* 1991; Balbín, Alcolea 1994; Bahn, Vertut 1997, p. 130). Indeed, in 2010 they succeeded in having the property inscribed on the UNESCO World Heritage List on the basis of the rock art's 'Palaeolithic' age. The only evidence tendered for this antiquity is the purported 'Palaeolithic' style of the animal figures, when in fact none of them resemble authentic Pleistocene rock art in Iberia (fig. 6). Apart from the dominant equine figures and some Spanish fighting bulls, there are some 'deer', a dog-like quadruped and one image resembling a ferret or weasel. This implies a modern fauna, while both extinct animal depictions and Palaeolithic 'signs' are numerous in Spanish cave sites (Casado Lopez 1977). Moreover, the dominant percussion method was generally not used in these caves; the geometric 'signs' are completely lacking at Siega Verde; the site features no Pleistocene occupation evidence whatsoever; and all scientific data ever offered in relation to this corpus of rock art indicates that it is generally under 200 years old.

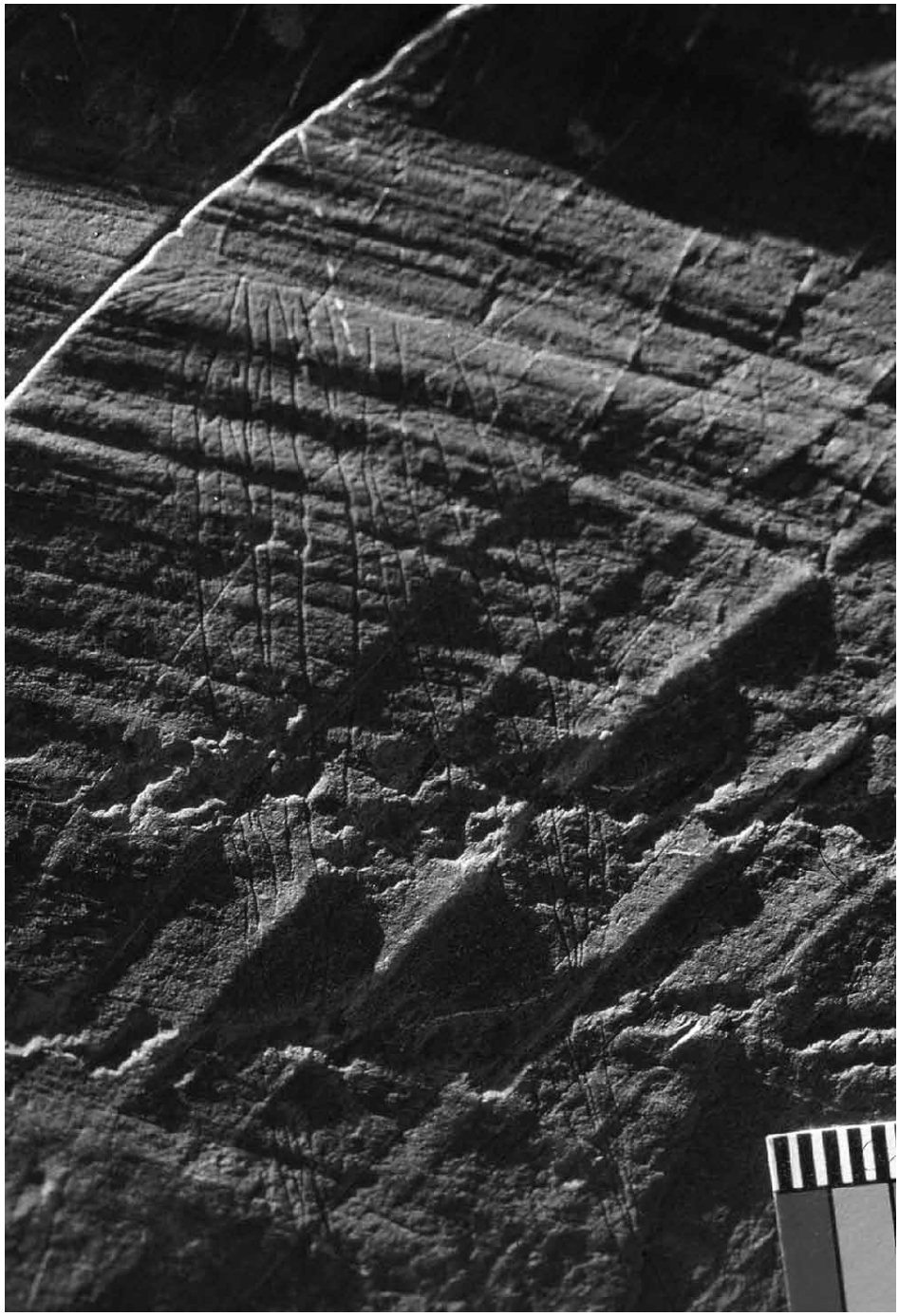

Fig. 5 – Siega Verde, part of a pounded equine zoomorph, weakly patinated, superimposed over earlier, completely patinated single-incision markings; scale in mm

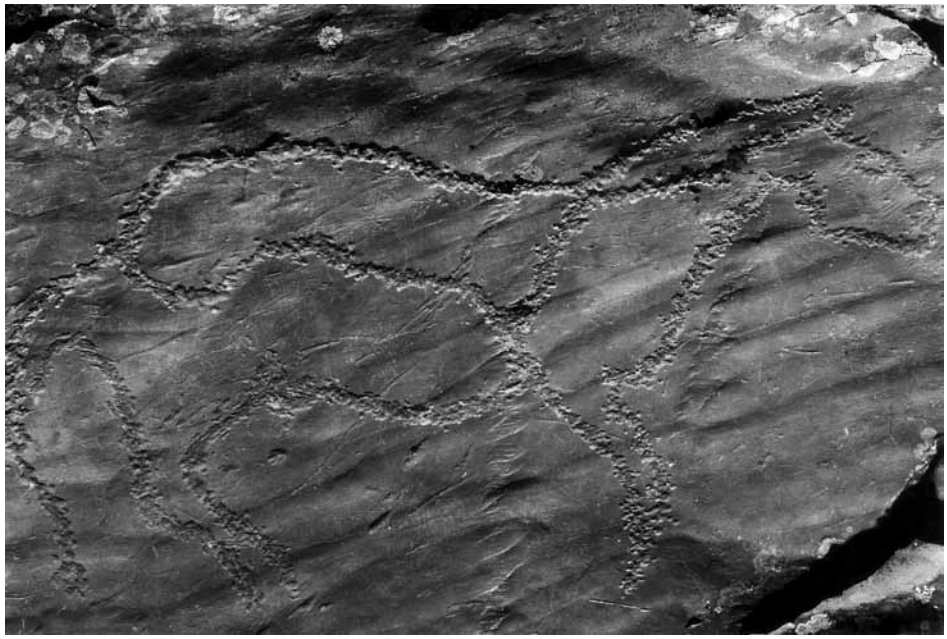

Fig. 6 – Siega Verde, the 'rat-horse', a percussion petroglyph lacking any Palaeolithic features but resembling equines at nearby Castro

The Côa soap opera

The inscription of the body of essentially modern rock art at Siega Verde on the World Heritage List as 'Palaeolithic art' may be an absurdity, but it is not a unique aberration. It was preceded by the inclusion on that List of a whole series of nearby sites, again under the pretence of a Pleistocene antiquity. Just as in the case of Siega Verde, local residents had always known about the rock art for as long as it existed, but in the early 1990s archaeologists 'discovered' the Côa petroglyphs (about 60 km from both Siega Verde and Yecla de Yeltes) and promptly declared their 'Palaeolithic' age. Because the Portuguese government had a special interest in the claim (it planned to inundate the sites by a reservoir) it arranged a 'blind test' involving four rock art dating scientists. They had to agree not to communicate with their colleagues for the duration of the experiment and submit their findings to the government, which would then compare them. In July 1995 it was announced that the four separate findings were all in agreement: none of the rock art was of the Pleistocene, all was of late Holocene age, and most of it was only a few centuries old (Bednarik 1995; Watchman 1995, 1996).

This prompted an intensive excavation campaign in the lower Côa valley, churning up the sediments around dozens of decorated rocks, all without finding any trace of Palaeolithic occupation. Wherever archaeological remains were recovered, Neolithic microliths and ceramics extended down to bedrock. The problem, very simply, is that the lower Côa valley is geologically very young and near its present floor contains virtually no sediments predating the second half of the Ho-

Fig. 7 – Completely unpatinated equine petroglyphs at Fariseu, Côa valley, at least one of which is wearing a bridle

locene. Some pockets of Palaeolithic-bearing sediments were found in remains of ancient terraces high on the slope, from a time when the river was at an elevation 40 m higher than at present (Zilhão *et al*. 1997, Fig. 3; Aubry *et al*. 2002). After several years of fruitless searching for petroglyphs covered by sediment, the site of Fariseu eventually presented a dense tangle of petroglyphs that had been concealed by sediment. Unfortunately, that sediment consisted of colluvial and fluvial deposits, i.e. materials that had been deposited either by gravity (slope descent) or by water deposition (Anon 2000). Any archaeological objects occurring in such sediments are of no relevance to dating these, because their deposition is fortuitous (all components of fluvial and colluvial sediments are older than the time of depositions). In the case of Fariseu, the sediments were deposited through erosion of the banks of the reservoir, postdating the construction of the Douro dam. Moreover, the Fariseu petroglyphs are completely unpatinated and look very fresh (Fig. 7).

Neither the Fariseu site, nor any other of the excavated sites in the lower Côa valley, has produced any of the archaeological data expected from a Pleistocene occupation site. There have been no Palaeolithic stone tools reported, nor any radiocarbon or OSL dates from occupation deposits; no human remains, no food remains, no pollen spectra, no sedimentary data or any other scientific data supportive of Pleistocene antiquity. Some TL dates obtained from supposedly heated rocks were reported from one level but these vary greatly from each other and the corresponding charcoal dates were withheld. Many of the Côa zoomorphs were

engraved with metal tools, although others were made with stone points. As in Siega Verde, not a single animal depiction has been claimed to be of a Pleistocene species, although there was a claim (Zilhão *et al.* 1997) that ibex were extinct in the region in the Holocene. That claim has been squarely refuted by Wyrwoll (2000) who demonstrated that the depicted ibex most closely resembled a Holocene subspecies, *Capra ibex victoriae* (Fig. 8). At least one of the many equine petroglyphs at Fariseu is shown wearing a bridle, and yet there are no credible claims that Pleistocene horses were domesticated (only Bahn has proposed this). Most importantly, the sub-naturalistic animal images of the valley are much less weathered and patinated than the inscriptions of the 18th century within a few metres of them (Bednarik 1995). Other zoomorphs are clearly much older, but they were executed in highly schematised forms that differ significantly from the naturalism of authentic Palaeolithic rock art. Another defining feature of the Côa petroglyphs is that they invariably occur in the close vicinity of ruins of former water mills. Many of them are located within the flood zone of the river, yet none show any appreciable fluvial erosion wear. Another factor that shows the absurdity of the Palaeolithic claims is that many engraved grooves clearly dissect lichen thalli that can be estimated to be up to a few centuries old, while the grooves themselves are covered by only very recent thalli. This confirms that the petroglyphs are of recent centuries. Finally, as on the Siega Verde schist, the gradual surface retreat of the similar schist renders it impossible for petroglyphs to survive for tens of millennia.

Siega Verde and the Côa series of sites are certainly not the only open schist localities on the Iberian Peninsula that have been stylistically attributed to the Pleistocene in the last few decades. The first of these many sites, which are do-

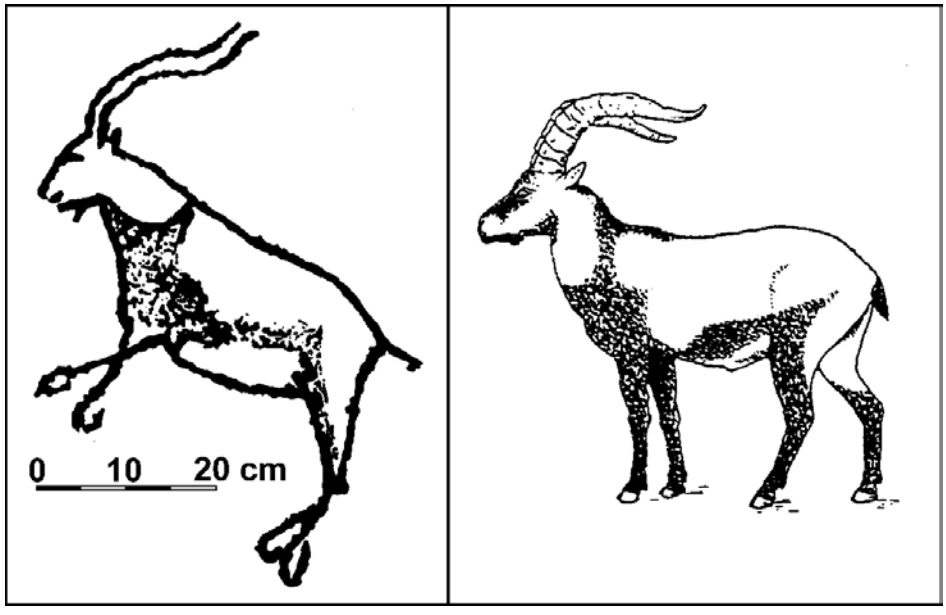

Fig. 8 – On left zoomorph from Rego da Vale, Côa valley; on right a Holocene subspecies of the region

minated by equine petroglyphs, were Domingo García in central Spain (Martín Santamaría, Moure Romanillo 1981) and Mazouco in the Portuguese Douro valley (Jorge *et al.* 1981). It is notable that the Palaeolithicity of the 'horse' petroglyph at the second site was already refuted by Baptista (1983), and yet it continues to be proclaimed by the believers. These early reports were followed by engravings of animal heads at Fornols-Haut, Campôme, in the French Pyrenees (Bahn 1985; Sacchi *et al.* 1987). Next, a 'horse' petroglyph at Piedras Blancas near Escullar, Almería, was presented as Palaeolithic (Martinez 1986/87). The sites Carbonero Mayor, Bernardos and Ortigosa near Domingo García were reported by Ripoll Lopez and Muncio Ganzalez (1994); and finally, a headless zoomorph lacking any diagnostic features was pronounced as a horse at Ocreza, Portugal, and since it was assumed to be a horse it was believed it must also be of the Palaeolithic.

Despite the complete lack of evidence in favour of a Pleistocene age, the Côa rock art was successfully nominated for World Heritage listing *because* 'it is of Palaeolithic age'. Bearing in mind that only a tiny fraction of the world's surviving Ice Age rock art is actually in Europe, and that not a single such site in the other continents has ever been nominated for listing, it does need to be asked why European sites, massively over-represented on UNESCO's list, need to be added even when they are manifestly younger. But from an epistemological perspective, the more important question to ask is, how do these false chronological attributions become established in the first place? The following examples can help illustrate this.

The Pleistocene rock art of Germany

The claim of having discovered the 'first Palaeolithic rock art' in Germany has a long history, in which the Gondershausen contention merely represents the most recent manifestation. The previous such assertion concerned a rock spall from Hohle Fels near Schelklingen (Conard, Uerpman 2000) and preceding examples extend back to the early 20th century (see Bednarik 2002 for review). To review each and every one of them in detail would occupy considerable space, so it will have to suffice to briefly mention those that have garnered some attention. But it can be said from the outset that all these claims have been very effectively refuted and at present, Germany lacks any known rock art that can be credibly attributed to the Pleistocene. In view of the country's rich assemblage of portable palaeoart of the final Pleistocene and the frequent occurrence of limestone caves this lack of early rock art is surprising, and the same applies to much of the rest of Europe (see following chapter). In the case of Germany, it cannot be said that it has not been tried very hard to eliminate this hiatus.

Among the earliest propositions of German 'Palaeolithic' rock art to have been falsified are those concerning the image of a 'stag' in the Kleines Schulerloch, Bavaria (Birkner 1938, Pl. 13; Maringer, Bandi 1953, p. 23) and the engraving of an 'undetermined' animal figure in the Kastlhänghöhle (Bohmers 1939, p. 40). The refutations can be found in Bosinski (1982, p. 6) and Freund (1957, p. 55). The 'stag' in the Kleines Schulerloch, which does not resemble the style of credible Palaeolithic imagery, is accompanied by a runic inscription that has been described as flawed, and suggested to date from Germany's fascist period. Most re-

cently Zuechner (2015) reopened the issue by reporting that a date of 800 BP is said to have been obtained from a bead of reprecipitated calcite formed on the inscription, but that the claimant does not respond to requests and Zuechner is unable to tell what method was applied. In all probability it could have been either radiocarbon or U/Th analysis, both of which provide only controversial results from such samples, or alternatively the report was simply a hoax; certainly information of this calibre needs to be ignored.

The black-brown 'pigmented' limestone fragment from Geißenklösterle was defined as part of a black painted rock art motif (HAHN 1988a, 1988b, 1988c, 1991; RICHTER *et al.* 2000) but, upon microscopic examination was pronounced to be a fire-spalled rock fragment bearing an accretion of partly combusted plant resin (BEDNARIK 2002). The 'black, yellow and red coloured' piece from the same site (HAHN 1986; MÜLLER-BECK, ALBRECHT 1987) consists of a rock fragment stained yellow by goethite that has been in contact with the reducing flame of a hearth, converting the iron salt to the haematite phase towards the edges of the flake. A more recent accretionary deposit is of carbonate, containing tiny charcoal flakes. Then there is the limestone fragment from Hohle Fels, which Conard and Uerpman (2000) interpreted as rock art, which became spalled from the cave wall. The object bears two arrangements of red dot marks applied by finger tips, probably of a child (fig. 9). However, the dorsal surface of the stone, i.e. the spalling plane, bears hundreds of microscopic traces of the same red pigment, arranged in such a fashion that it reflects the paint-covered fingers holding the plaque as the fingertip patterns were produced (BEDNARIK 2002). Therefore the object is a piece of portable palaeoart of the Pleistocene and not rock art.

A different error occurred in the determination of a series of exfoliated wall fragments of *Bärenschliffe* (cave bear polishes) bearing linear incised grooves, widely interpreted as anthropogenic rock engravings (HAHN 1991, 1994; SCHEER 1994; CONARD, UERPMANN 2000; HOLDERMANN *et al.* 2001). Detailed microscopy demon-

Fig. 9 – Limestone plaque from Hohle Fels with rows of paint marks applied by finger tips

strated beyond doubt the fully natural origin of these random incisions (Bednarik 2002). They were caused by quartz grains embedded in the shaggy fur of the cave bears, as they rubbed their bodies against the polished surfaces of the cave walls. Such cave markings are well known from many other European caves that served as hibernation lairs of these powerful ursine visitors (Bednarik 1994b).

A small number of engraved markings in an unnamed cave in the Rothaargebirge, Germany, has been suggested to be of the Pleistocene in the late 1990s, but it has never been published or analysed. The Rothaargebirge is effectively a northeastern extension of the Hunsrück mountains where the Gondershausen site is located (Welker 2015). As the latter site has prompted the present paper it deserves to be considered in more detail. The site consists of a wall-like schist tower, the flatness and angular shape of its panel appearing to have been shaped anthropically. However, this feature is of natural origin, having been caused by the erosion of angular blocks. The panel bearing the six zoomorphic percussion petroglyphs and two inscriptions cuts across the laminar grain of the schist and is deeply and extensively weathered: natural foliation lines have eroded up to a depth of 14.8 mm. The edges of the panel are well rounded and are significantly older than the petroglyphs and inscriptions on the panel, which are typically eroded less than 1 mm (Fig. 10). What renders them appearing old is mostly the dense lichen cover of the panel, while the rock art grooves remain almost unweathered where they are free of lichen. These grooves differ significantly according to their orientation: the horizontal ones tending to follow the foliation of the rock and are up to 13 mm deep, while those of predominantly vertical orientation tend to be less than 6 mm deep. Their respective sections also differ significantly: horizontal grooves are essentially symmetrical in section, i.e. the cross-sections on either side of the deepest point are of similar areas. Vertical grooves display a very pronounced asymmetry: the slopes on their left are very steep, even vertical to the panel or undercut; the right slopes are typically inclined at only 20° to 22°, and at a significantly consistent angle. These characteristics suggest that a flat chisel was used by a right-handed person. The shape of the working edge of this chisel can be gleaned from the 'muzzle' region of zoomorph II (Welker 2015, Fig. 3), where the groove is deepest but quite rounded, indicating that the chisel was rather

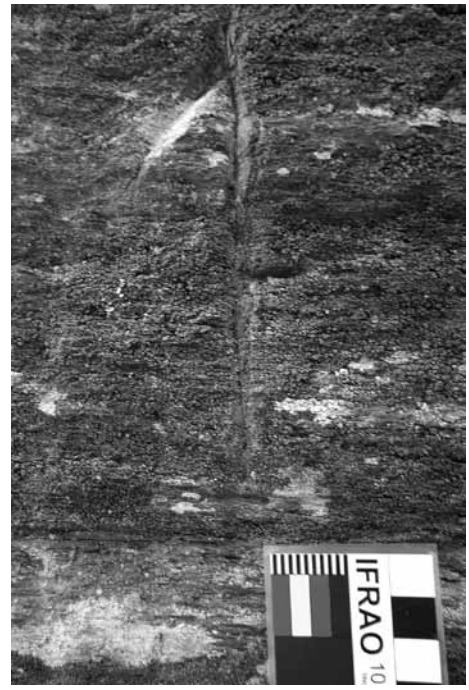

Fig. 10 – The inscriptions on the Gondershausen petroglyph panel are no less weathered than the petroglyphs

Fig. 11 - Microphotograph showing the deepest portion of a vertical groove in 'horse II', Gondershausen petroglyph panel; note the steep wall on the left, the c. 20° angle of the right slope, the chisel's striations and the almost unweathered condition of the floor where it is not covered by lichen

blunt. A vertical groove even provides a negative impression of the metal chisel edge: it was straight, only 8-9 mm long, and its rounded edge seems to have had a diameter of about 2-2.5 mm. These marks are in mint condition, showing the striations caused by the chisel's impact (fig. 11).

Welker's (2015) argument in favour of Pleistocene antiquity of these petroglyphs was entirely based on a stylistic proposition. Apart from the geological and forensic evidence that these motifs can only be of recent, historical antiquity, the stylistic argument is also flawed. Petroglyphs of similar stylistic parameters are clearly much more common across Eurasia in historical periods than in authentic Pleistocene assemblages. For instance, the many equid petroglyphs on the walls of the Spanish site Castro described above match those of Gondershausen; they occur on much more weathering-resistant granite and yet they are significantly more eroded than those at the German site. Since the Castro figures are under 2000 years old, it can safely be predicted that those at Gondershausen are somewhere in the order of 300 to 1000 years old (Bednarik in press b). Moreover, the proposal of their being of Palaeolithic style evaporates through the evidence that equine figures of this type are far more common from historical periods than from the Pleistocene. The assessments of the site by Antonio Martinho Baptista, Dominique Sacchi and Paul Bahn, who pronounced the Gondershausen rock art as Palaeolithic because they consider all equine images on schist sites in Europe to be so, are mistaken.

In the Mäanderhöhle at Veilbronn, northern Bavaria, which consists of 40 to 50 m of narrow winding passages, rock markings were discovered on 21 March 1991. Bosinski considered the line markings on rounded moonmilk formations to be Palaeolithic cave art, comparing them to female figures at Gönnersdorf (Blumenröther *et al.* 2015). However, 3D scanning and detailed analysis showed that the grooves are natural features, possessing very flat floors and lacking any striation marks. The lines are erratic and appear to be 'stretch marks' formed as the bulging moonmilk ceiling features expanded. Similarly, the linear wall markings in another Bavarian cave, the Schönsteinhöhle, are clearly animal claw marks and are probably attributable to chiroptera. Bat markings are extremely common in limestone caves (Bednarik 1991). A very modern-looking bovid image at Reinhausen near Göttingen is regarded as a recent feature. Another possibility of 'Palaeolithic art' presence concerns the Teufelsfelsen near Bad Griesbach, Bavaria, but such a proposal has not been formally published. This shelter is formed by a huge conglomerate block leaning against another rock and contains red and black rock paintings. The main figure, an anthropomorph with ibex-like horns surrounded by six smaller versions is not, however, likely to be of great age. There is also a well-made cupule at the site, but its possible antiquity has not yet been appraised.

The usual suspects

Germany is not unique, however, in the failed endeavours to attribute Pleistocene age to rock art; for instance in the United Kingdom several such proposals have been made. The earliest on record is the 1912 claim by H. Breuil and W. J. Sollas that they had found Palaeolithic cave paintings in Bacon's Hole, Wales. Although the red stripes were indeed of ochre, they had been made by a workman only eighteen years previously (see similar finding concerning Mladeč Cave below). The 'Palaeolithic cave art' found in the Wye valley (Rogers 1981) was found to consist of natural grooves and the 'malachite inlay' reported from it was in fact green algae (Sieveking 1982). Church Hole in the Creswell Crags of Derbyshire was the next site claimed to contain 'Palaeolithic art', when three engravings were reported from it in April 2003 (Bahn *et al.* 2003). A few months later the authors found another nine 'Palaeolithic' motifs, and a year after the first find, they reported the discovery of yet another thirty images (Ripoll *et al.* 2004). At that stage, the first objections were voiced, suggesting that the three versions now published of the main figure were significantly different, even depicting different species (Fig. 12), and that the three reports were severely lacking in scientific detail and presented contradictory interpretations. Moreover, many of the ceiling figures appeared to be natural markings in the published photographs (Bednarik 2005). But this did not deter the discoverers from increasing the number of images first to ninety, then to well over one hundred, and proclaiming that they had discovered 'the most richly carved and engraved ceiling in the whole of cave art' (Ripoll *et al.* 2005). Next, an irrelevant uranium/thorium date was presented (it was not collected from any rock art) but two years later the number of motifs was reduced to ten, of which only three were 'recognisable images' (Bahn, Pettitt 2007). The continuing lack of testable scientific information means, however, that the 'murky landscape of unsupported and untestable a priori, premature claims' (Montelle

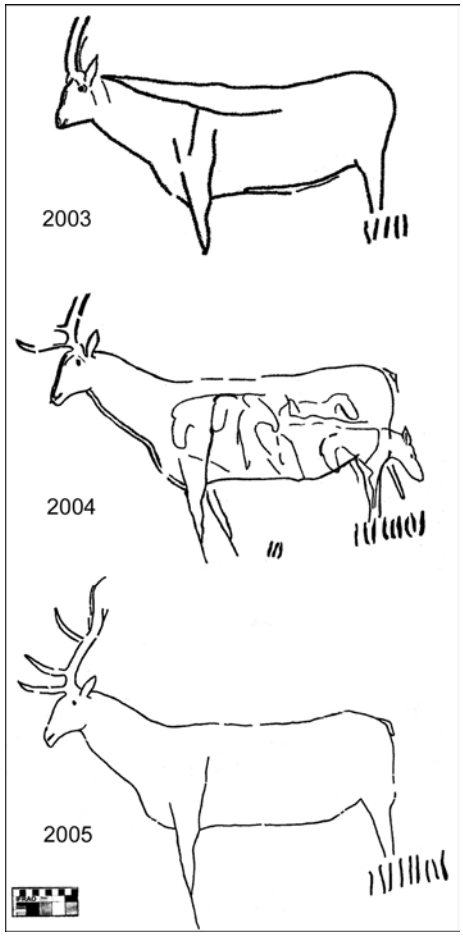

Fig. 12 - Three different published recordings of the principal motif in Church Hole, all having been produced by Bahn, Pettitt and Ripoll: the intitial ibex became a stag

2008) concerning this site still cannot be assessed, and access by sceptical researchers has been discouraged. Nor has any explanation ever been offered why nearly all the claimed rock art motifs in Church Hole have been abandoned.

However, this controversial and poorly presented proposal has prompted two other claims of possible Pleistocene rock art in Britain. The first derives from Gough's Cave, a site previously examined by the Church Hole team without finding it. Mullan (*et al.* 2006) presented a much better documented marking, which they concede is largely a natural feature. They interpret part of a line resembling the back of the pareidolic 'mammoth' as anthropic, but the groove in question does not resemble the flow of an engraved line and seems also natural. Mullan and Wilson (2004) have previously documented a set of certainly engraved, crisscrossing lines from another English cave, which they have suggested might be of Mesolithic age. Finally, Nash (2012, 2015) reported finding an engraved motif he interprets as the image of a reindeer (it does not resemble authentic Ice Age images of reindeer). A uranium series date of c. 12,500 years BP from flowstone covering the image needs to be considered in the light of the evidence that such deposits have been found to yield dates that are too old. Nevertheless, the motif from Cathole Cave, Gower Peninsula, Swansea, can be regarded as the only possible final Pleistocene engraving currently known in Britain. The remaining claims have little or no credibility.

But to return to wider central Europe, the Pleistocene age of many other rock art sites Bahn & Vertut (1997) list as such has been either refuted or at least challenged. For instance Bahn lists Mladečských jeskyní near Olomouc, Czech Republic, because Oliva (1989) has attributed a series of red pigment markings to the Palaeolithic period. But a study of the sixteen markings in question has shown that some of them are inscriptions and others are simple lines or crosses made with the same pigment, apparently occurring where human remains or other significant finds were made during the excavations of the cave in 1882 (BEDNARIK

2006). Bycí Skála is another cave in the Moravian karst listed by Bahn, containing black pictograms of a 'Palaeolithic' zoomorph and a geometric pattern, both of charcoal. Radiocarbon dates showed that the cervid figure is in the order of 680 year old, the second motif is c. 4420 years BP and might date from the Eneolithic (Chalcolithic) (SVOBODA *et al*. 2005). Similarly, the black paintings and torch smears in Domica Cave in Slovakia probably belong to the Neolithic Bükk culture, despite the presence of claimed Palaeolithic occupation evidence. A ceramic vessel of the Bükk type has been found encased in flowstone. The extensive system of Ardovska Cave also features charcoal marks on its walls, accompanied by occupation remains dating from Neolithic, Bronze Age and Iron Age times. A radiocarbon date of about 42,800 years BP is regarded as questionable and demands further investigation (SEFCAKOVA, SVOBODA 2015). In Austria, petroglyphs at two sites have been attributed to the Pleistocene: at Stubwieswipfel in the Warschenegg mountains, and in the Kienbachklamm near Bad Ischl (KOHL, BURGSTALLER 1991). Investigation of these claims has categorically excluded such great age for the rock art, and at the latter site complex natural markings occurring among late historical motifs and inscriptions had been interpreted as rock art (BEDNARIK 2009b). In addition to Hohle Fels and Geißenklösterle, Bahn also lists the cave art sites Cuciulat, Kapova and Ignatiev Caves as Palaeolithic, although evidence to that effect is lacking from them. The Holocene radiocarbon dates extracted from three charcoal motifs in Ignatievskaya suggest a more recent age. A supposed mammoth image yielded a date of 7370±50 bp, while two geometric markings seem to be 7920±60 and 6030±110 years old respectively (STEELMAN *et al*. 2002).

Indeed, the only securely Palaeolithic rock art from eastern Europe is the recently discovered assemblage of peştera Coliboaia in Romania which is probably of the early part of the Upper Palaeolithic period (>30,000 years old). This presents a dismal impression of the purported ability of some rock art scholars to determine the Pleistocene age of a rock art motif from simple eyeballing. Leaving aside the focal Franco-Cantabrian region and its numerous cave art sites, there is precious little authentic Ice Age rock art known in all of Europe, yet so many sites have been pronounced as such, by scholars who believe in their ability to recognise such images by perceived style. It is interesting to note that a team currently investigating the more than 400 caves of southern Burgundy in France, close to the great concentrations of cave art, has so far yielded no evidence of Pleistocene rock art (FLOSS *et al*. 2015). Looking further afield, to the Asian section of Eurasia, the number of false claims about Ice Age rock art is considerably smaller than in Europe, but there are still a few examples. The claims concerning some 'horse and bull' pictograms at the open site Shishkino on the upper Lena river in central Siberia (OKLADNIKOV 1959) have been refuted (BEDNARIK, DEVLET 1993). The purported image of a woolly rhinoceros at Tal'ma does not remotely resemble that species, nor does Okladnikov's own recording. Some thirty rock art sites on the Kalguty river in Siberian Altai were attributed, again on stylistic grounds, to the 'Stone Age', possibly the Palaeolithic (MOLODIN, CHEREMISIN 1993, 1994), while others at Delger-Muren and Tes were placed in the Mesolithic (NOVGORODOVA 1983). Both claims were refuted by Kubarev (1997), who declared categorically that all known rock art of central Asia, west of China, was of the Bronze Age or

Fig. 13 – 'Horse and bull' paintings in Dunde Bulake Site 1, Altai, China, pronounced Palaeolithic in following the European model; they are in fact of the late Holocene

younger. Another example are the pictograms of the Zaraut-Kamar Rockshelter in southern Uzbekistan, purportedly the 'earliest known rock art of central Asia', which are in fact of the late 19th century (Jasiewicz, Rozwadowski 2001), reminiscent of the many instances of European rock art of recent centuries having been assigned to the Pleistocene by 'Pleistocene art experts'. Mongolian petroglyphs have been ascribed to the Ice Age on the basis of style, when in fact they are manifestly superimposed on striae of the final glacial incursion and are significantly more recent than these. Recently three rock art dating specialists examined the pictograms of Dunde Bulake Site 1 in the Altai area of Xinjiang Uygur Autonomous Region, China, which had been attributed to the Pleistocene on the basis of their 'horse and bull' images (fig. 13). They were found to be of the late Holocene, and the purported 'earliest depiction of skiing' at the same site was refuted similarly (Bednarik 2015a). But it should be noted that when fairly naturalistic zoomorphs were found in caves near Hutiaoxia, Huayi, and Yinbiruo, Lijian, no attempt was made to present them as 'Palaeolithic'; they were proposed to be in the order of 2000 to 3000 years old, showing considerably more restraint than many European 'experts' have shown (Peng 1996).

The Palaeolithic obsession

The last observation leads to the obvious question to be asked: what is it that has led to such a large number of false attributions of European rock art to the Ice Age? After all, there are hardly any examples of rock art being mistakenly placed

in the Iron Age, before the age is revised to Palaeolithic. Since Pleistocene rock art is far more common in other continents than it is in Europe, why is there such an obsession evident in that one continent? And why is it that most fakes of Pleistocene palaeoart have occurred in Europe, when such ancient finds are in fact of worldwide distribution? Another question to ask, and one that seems to aim directly at the heart of the issue: why is it that when the stylistic attributions of rock art to the 'Palaeolithic' are challenged by refuting evidence, their advocates tend to be personally offended and greatly concerned, whereas if the correction went the other way — from a designation to a recent period to one of the Palaeolithic — no such expressions of animosity are experienced? Clearly, then, this is not about being wrong; it is about some other issue. Could it be that the significant over-representation of European Pleistocene rock art sites on the World Heritage List, when not a single such site from much richer endowed other continents is on that register, has a connection with the other defined factors?

These issues seem to be interdependent in some fashion, and their close examination is worthwhile. One way to approach such analysis is to note that there are thousands, if not tens of thousands, of 'Palaeolithic' fakes from Europe, as well as a good number from North America (Bednarik 2009b). Not a single one is known from Africa, Asia, Australia or South America. European Russia and Siberia have yielded numbers of Pleistocene portable palaeoart similar to western European countries, and yet there is not a single fake object of this kind known from all of Russia. Yet in the United States, which lacks a Palaeolithic altogether, Palaeolithic fakes (such as female figurines) do occur. These differences are far too pronounced to be mere coincidences; they must form part of a rational explanation.

It is generally accepted, at least outside Europe, that the World Heritage List is a Eurocentric convention, but the complete absence of any extra-European Pleistocene rock art site on a register featuring dozens of European such sites (even many that are not remotely of the Pleistocene) is again far too conspicuous to be attributable to a statistical fluke. A productive mode of reasoning is promised by the observation that many Europeans are comfortable with the idea that Europe, on the whole, has given humanity 'civilisation' or 'advanced culture', and that this is well expressed by the magnificent cave art of France and Spain. Indeed, this misleading and decidedly neo-colonialist disposition is manifested in the widespread belief that 'modern' culture begins with these 'great artworks'. This absurd idea ignores more data than can possibly be discussed here, ranging from the puerile fantasies of archaeology about human modernity (Bednarik 2012b) to the very much earlier rock art traditions of Asia and Africa. Therefore it seems a useful working hypothesis that the Palaeolithic obsession of Europeans has a pragmatic basis: early in the 20th century the colonialist notion that humans first evolved in England was defeated by Dart's find in South Africa (although it took four decades to accept that the discipline had been fooled by the Piltdown hoax). Palaeoanthropology then took a very different road, but in 'art' origins the colonialist model, according to which Europe was the hub of 'semiotic', 'cognitive' and artistic evolution, still reigns. So the purpose, deliberate or not, of this emphasis on Palaeolithicity is to preserve the imagined role of Europe in raising humanity to its present level. In other words, the distorted view facilitated by the

World Heritage List, by Pleistocene archaeology and by the captive mass media has a practical political purpose.

This hypothesis seems to derive support from the evidence presented in this paper, of an obsession with Palaeolithicity in rock art. No such obsession exists in Australia, where the largest amount of Pleistocene rock art probably resides — but has attracted very limited interest. Much the same can be said about the two continents that have so far furnished the earliest known rock art occurrences, Asia and Africa. In fact all publications considering the Ice Age palaeoarts of both continents — as well as Australia — on a pan-continental basis were written by just one author (Bednarik 2013a, 2013b, 2014). By comparison, there are many thousands of publications on the Pleistocene palaeoarts of Europe.

Conclusion

Specialists of Pleistocene rock art need to ask themselves, what would they think of a discipline — let us say, for instance, plate tectonics — that focuses entirely on one rather small continent, from which it has produced a list of misidentifications such as the one presented here of 'Pleistocene' rock art that is in fact not of the Pleistocene. Is it unreasonable to raise this question? No science could expect to escape criticism if it demonstrated such an excessive failure rate, and yet Pleistocene rock art students in Europe demand the authority of deciding, often without empirical evidence, which rock markings are or are not of the Pleistocene. Since very large numbers of Holocene rock art motifs are seen by them as being Pleistocene it should be obvious that these experts can only possess a distorted view of the diagnostics of Ice Age rock art: their visualisation of it includes thousands of motifs that are not remotely of the Pleistocene. If their tendency of inventing interpretations of zoomorphs as extinct animals (such as the rhinos at Siega Verde, Minateda or Tal'ma) is added to this disadvantage, the full extent of the self-delusion becomes evident. (There have even been several examples of this aberration in the US and one in Australia; see e.g. Malotki, Wallace 2011, corrected in Bednarik 2013c, 2015b; and Gunn *et al.* 2013, corrected in Bednarik 2013d; Chalmin *et al.* in press.) It is then reasonable to regard this self-appointed status as the arbiters of Palaeolithicity in rock art motifs as illusory and fallacious and without a credible basis.

Freeman (1994) has carefully examined this process of validation of 'Palaeolithic' rock art and has noted the parallels with the way religious shrines are authenticated by ecclestial authority. His conclusions need to be cited here:

Those special beliefs and feelings [about Palaeolithic art] are held by the professional prehistorian as well as the average citizen. Neither is particularly good at self analysis. ... There are reasons to believe that the behavior associated with the Palaeolithic sites is not directly modeled on that surrounding Christian shrines, but that these two manifestations of belief, reverence, and validation of experience have the same origin at a deeper structural level. I still can not pretend to understand that origin; I believe it to be promising material for further serious investigation (Freeman 1994, p. 341).

Thus the validation of European rock art as Palaeolithic is in the hands of those who have been anointed by the 'high priesthood' of the 'Palaeolithic lobby'

(Thompson 2014) to act as arbiters, much in the same way the Roman Catholic church would validate its saints, holy relics or sacred sites. Such 'authentication' of rock art sites is generally conducted without the use of scientific or forensic data, such as testable dating evidence, but on the basis of some mysterious, undefined ability of the cognitive systems of the experts on Palaeolithic style. That style is a vague, Humpty-Dumpty-type concept (meaning whatever is intended; *sensu* Lewis Carroll), and since thousands of non-Palaeolithic motifs have contributed to its definition it can only be a flawed construct. Yet when the findings of these experts are contradicted by scientific evidence, the scientists can find themselves severely attacked and defamed. This is, in a sense, understandable, because the experts derive their status from the ability that is under scrutiny, and naturally they are inclined to defend that status. This also explains why many Pleistocene archaeologists are opposed to blind tests, which they define as 'disrespectful'.

But the self-delusion of the experts can only exist if its object, the 'Palaeolithic art' (which, conversely, is probably not an art at all) is afforded great importance. That importance, it seems, derives from its potential to underpin the grand delusion of European cultural and cognitive priority. And that, in turn, seems to explain the incredible neglect of extra-European Pleistocene palaeoart, and the persistence well into the 21st century of the neo-colonialist myth that art, symbolling and modernity all derive from Upper Palaeolithic Europe.

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Making Sense of Pictures

Livio Dobrez *

Summary

This article poses the basic question: how to make sense of the entire field of pictures, i.e. how to make order of the vast, apparently chaotic, range of depictions of all kinds? A taxonomy that might do this would have to be of a universalist sort, one not reliant on culture-specific premises currently in use in Art History and rock art studies. I suggest one way might be to base the taxonomy on (phenomenological/descriptive) analysis of visual perception which is at the same time aware of evolutionary imperatives. Accordingly I give the example of three perceptual situations with evolutionary import and with, in each case, their pictorial equivalents. Finally I refer to data supporting the argument from the disciplines of cognitive psychology and neurophysiology.

Riassunto

L'articolo pone un interrogativo di fondo: come dare un senso all'intero campo delle immagini, ovvero come fare ordine nella vasta, e a quanto pare caotica, serie di raffigurazioni di ogni genere? Una tassonomia che potrebbe fare questo dovrebbe essere di tipo universalista, e non quella con legame specifico culturale attualmente in uso negli studi dell'arte storica e di arte rupestre. Un modo potrebbe essere quello di basare la tassonomia su analisi (fenomenologico-descrittiva) della percezione visiva, analisi che allo stesso tempo sia consapevole degli imperativi evolutivi. Qui si fornisce l'esempio di tre situazioni percettive con contesto evolutivo e con i loro equivalenti pittorici. A sostegno della tesi, infine, ci si avvale dei dati forniti dalle discipline della psicologia cognitiva e della neurofisiologia.

The Field of Depiction

Over a number of years a certain question has taken shape for me, viz how to find a way of making ordered sense of the entire field of depiction. This would be a way of talking about pictures ("art" understood neutrally, without recent-historical baggage) that is universal, in short, applicable to pictures independently of time/place constraints. Order requires categories, in this case a universally valid taxonomy. Since such a taxonomy would make no distinction between diverse forms of art, it would be as well to ground it in the earliest and most long-lasting art tradition known to us, with the requirement that it should have equal relevance to contemporary depictions. It is surely very strange that as things stand rock art scholars for the most part remain totally ignorant of art studied by art historians and critics, while art historians and critics for the most part remain totally ignorant of the vast field of rock art, whose time-depth alone must give it considerable theoretical priority in any art discourse. There are of course those who have tried to bridge the art/rock art divide: rock art scholars, such as Schaafsma (1980), who make notable use of stylistic analysis, or Clegg (1977), who sought to isolate elements in rock art motifs which might be tied to individual expression.

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With respect to Art History there is the inevitable token reference to Lascaux or, these days, Chauvet (one thinks of Gombrich (1972), with his wonderfully alienated early-chapter title "Strange Beginnings").

At the same time it must be said that Gombrich, while unable to fit rock art into his scheme, certainly had a broad thesis which might hope to offer some sort of structure for the field of art. This less in his view of art's history as a progress to mimesis, as in his use of empiricist psychology in the service of art criticism, and particularly the appeal, derived from the neuropsychologist Gregory, to a supposedly universally applicable idea of perceptual mis-perception which in turn translates into the notion of depiction as the making of illusions (Gombrich 1960). Another art theorist with a universalist thesis, this time reliant on Gestalt psychology, was Gombrich's major rival, Arnheim (1974). Neither Gombrich nor Arnheim made an effort to fit rock art into their respective schemes. Some rock art experts have also produced large syntheses with more or less universalist implications. Leroi-Gourhan took up the structuralist premise of meaning as emerging from the relations between things rather than from things themselves and applied it to European Palaeolithic art. The phosphene thesis, in the writing of Lewis-Williams, served a parallel universal function, not only as an elucidation of rock art but as an explanation for the origin of art–in the phenomenon of trance. I (and not I alone) am sceptical of key aspects of all the above attempts to order the field of depiction. I do not accept Gombrich's view of art as essentially illusion-making, or Arnheim's Gestalt view of art as tension-releasing. I doubt any Franco-Cantabrian cave actually follows the Leroi-Gourhan schema. Likewise, however sympathetic to Eliade-inspired research into worldwide hunter-gatherer spirituality, I do not believe in a trance origin for art.

A Divided Field

But most work in art, and in rock art, does not aim at a grasp of the totality of the whole field of picture-making. Rock art scholarship is mostly practised as a branch of archaeology or, if the archaeologists are inclined to be generous, archaeology and anthropology (henceforth A&A). Now A&A-driven rock art work has given us one important basis for understanding the art. At the same time so long as we apply A&A principles to rock art study we will have difficulty in deriving universalist conclusions from them. This simply because A&A is primarily a historical discipline, i.e. it has the primary aim of historical reconstruction. Thus it documents motifs, styles, traditions as the product of cultures – material elaborated by particular groups at particular times. In the course of which key issues are decided by dating, if possible. It is hardly necessary to give examples of this widespread procedure, and I shall simply refer to Anati's virtual recreation of the otherwise lost society of the Camuni. Naturally I have no intention of criticizing historical studies, since they have been central to most academic disciplines for some two centuries and much of my own work has been of the historicist kind. Nonetheless historically-oriented approaches to rock art by their nature lay no claim to the wider sphere of art.

In fact, and with good intentions, rock art research, under the influence of empiricism, albeit of a more or less soft variety, tends towards theoretical minima-

lism. This has its admirable side, though unwillingness to theorize greatly limits analysis. I give the example of in my view insufficiently acknowledged cultural specificity. This matters in the present argument, since the aim of any universalist thesis must be precisely to avoid the modern-cultural assumptions which shape rock art classifications, i.e. current conceptual ordering of the field of rock art. When the A&A scholar records a site she is faced with the taxonomic imperative. Anxious to escape "subjective" judgements, i.e. to engage as much as possible the methodology of hard science, she will, for example, refuse precise identification of motifs in favour of a division like "zoomorph/anthropomorph/abstract". In this simplest case she may also distinguish between images as either "naturalistic" or "schematic", or "simple" or "complex". Now it is unlikely that the hunter-gatherer or perhaps pastoral/agricultural people responsible for the art would have made distinctions of this sort. They may, for a start, have felt much closer affinity with non-human animals than does the present-day researcher. And of course the researcher knows this perfectly well, just as she knows the rock artists may not have been inclined to generalize either themselves as human or animals as animals. Would they have prioritized or even advanced such binaries as "naturalistic/schematic" or "simple/complex", or notions of "abstraction"? Doubtless not. So self-evidently rock art taxonomies use concepts that are entirely modern. Does it matter, if the taxonomies do the job required of them? It does not, though this judgement cannot sit comfortably with the reconstruction paradigm premise that valid identification of motifs should be in line with the original intention of the rock artists–this being the broad ambition of all historicist studies (to know the past as far as possible in the way it knew itself: SCHLEIERMACHER 1977).

And what precisely might be the assumptions, obvious or not so obvious, which shape, for example, those binary divisions listed above? We divide ourselves off from other animals because, over a historical period, and against Darwinian evidence, we have come to think of ourselves as so superior as to form an altogether sui generis species. The notion of some motifs as "abstract" (when "abstract" implies something more than non-iconic/"don't know what") probably relates partly to a modern bias in favour of "abstract" thought—some seeking to dignify this as an actual evolutionary breakthrough in the form of a "Theoretic" modern mind following from a "Mythic" phase (Donald 1991). But it may also be that the idea of "abstract" images derives from nothing more than the early-twentieth-century art binary of "figurative/abstract". "Naturalistic" purports to relate to an idea of "looking like things as they really are". Leaving aside the fact that this statement generates philosophical minefields, there is the worrying sense that it also brings art-history baggage with it, coloured as it appears to be by the European post-Renaissance "realist" art which peaked in the nineteenth century and which provided suitable context for the invention of the camera. Gombrich was the great spokesperson for this elevation of mimesis as the goal of art in the twentieth century and his culturally limited views continue to have sway, not least in the discipline of rock art studies whose matter he cheerfully dismissed as "strange beginnings". Finally, there is the "simple/complex" binary, which I would source to the post-Enlightenment thesis of historical progress. Contra Lévi-Strauss' thoughtfully anthropological view that *la pensée sauvage* is the same as

modern thinking (but directed at the tackling of entirely different problems), we like to assume that the modern mind is complex and its predecessors simple–with value judgement inevitably included.

Clearly it would be naïve to demand radical revisions of rock art classifications as long as these do the practical job required of them and are accompanied by an awareness of cultural relativities. My point is simply that classifying rock art as we usually do has no logical connection with the avowed paradigm of reconstruction as recuperating the original intention of the makers of the art. Instead the obvious link is with what Gadamer (1993) called the horizon of the present. It makes no sense to advocate abandoning this contemporary standpoint, something which, on good Gadamerian grounds, must in any case be judged impossible. But it helps to see our discursive cultural specificity for what it is, even when, on reflection, no one is going to be surprised at this conclusion. At the same time, and returning to my own argument, it needs to be understood that, however productive, the historical paradigm cannot help with any universalist enterprise. Where the discipline of Art History generates period-bound categories ("Renaissance/Mannerist/Baroque") or more or less period-bound ones ("landscape", "portrait", "still life"), the minimalist A&A approach to rock art generates working categories which aim at (timeless) objectivity but on small reflection turn out to be as period-bound as those in Art History, only less consciously so.

What art criticism might be better qualified to do than A&A–in the context of a universally applicable theory of depiction–relates to the area of formal analysis. It goes without saying that A&A, as much as art criticism, makes use of formal categories when dealing with rock art. Hence the use of Art-Historical terminology in rock art discourse ("motif", "style"). Art History at the same time has at its disposal highly sophisticated formal categories of the sort listed by Arnheim (1974): "balance", "shape", "form", "space", "light", "colour", "movement", "dynamism", "expression". And some at least of these may be applicable to all depiction and may therefore provide a basis for understanding the entire field of pictures. Be that as it may, I do not intend to pursue this potentially useful line of enquiry here. At this point let us assume, in preliminary fashion, that (a) there might be value in attempting to delineate ordering principles for the whole field of depiction, and that (b) there is in any case something awkward and unsatisfactory about the disciplinary and conceptual division of art studies and rock art studies.

Visual Perception and Evolution

And might not this division be just one aspect of the problem? After all, the foregoing discussion has limited itself to pictures, pictures on rocks and pictures on any other support. But whether in the making or the observing, pictures generate situations within larger situational contexts. Putting it another way: an attempt to focus on the entire depictive field requires not merely the bringing together of art and rock art studies but also the placing of depiction in the context of life-situations. But precisely which life-situations? I suggest that a starting point might be life-situations structured, not by historical considerations, which necessarily rule themselves out here, but by evolution. In saying this, I do not envisage yet another investigation into the "origin of art". Rather I have in mind something

different and which has not been done before, either by rock art scholars or art critics–or anyone else. It would be a taxonomy for pictures, one universally valid because based on evolutionary thinking.

Of course I am far from being the first to want to set art in the context of evolution. Others have done so, though not in terms of the kind I propose. In the area of aesthetics, something I am not concerned with here, Dissanayake (1988, 1992), Dutton (2009) and Thornhill (2010) come to mind. With regard to the phosphene hypothesis and with specific reference to rock art, there are Bednarik (1984) and Hodgson (2000), among others. Solso (1994), writing about art, has appealed in a general way to the survival value of sight. And Onians (2007), in what should have been an informative history of biological commentary on art, came up with a rather simplistic interpretation of personal experience as shaping the biology of commentators from A to Z (Aristotle to Zeki!). I shall return to some of these, focussing here on my particular appeal to evolution, which takes the standpoint of visual perception operating in specifically survival situations, then depictive contexts. What I have to say does not bear on the evolution of perception, however, given that neither rock art nor any other kind can have a time depth sufficient for evolutionary processes. That is to say, the human visual system has remained relatively stable for a period much longer than any possible genealogy of art.

Here, however, we may expect to hear a common objection from rock art scholars: how do we know that we, in the present, see in the same way as ancient artists? This is an objection rich in confusion. For a start it is evident that if by "seeing" we mean understanding the meaning of an image, then it goes without saying that we do not, in all likelihood, see art from times remote from ours in the same way as did the makers. This applies equally to place, i.e. cultures remote from our own. Culture-specific meaning, say of the symbolic kind, is probably largely or wholly unavailable to the modern observer–unless she has relevant anthropological/ethnographic information. And even then it may be said that the modern observer can at best roughly approximate original meaning–or the original intention of the artists, i.e. what was on their minds when they made the art. But my concern is not with this; it is with the biology of vision. Still, it may be objected: has not biology altered in the course of time? The first reply to this argument must be to point out its absurdity in the present discussion: if we postulate that vision itself has changed in the time span of the phenomenon of rock art, then nothing at all can be said about rock art and, as a class, rock art researchers are out of business. You cannot say that ancient artists may have seen a square where we see a circle without making nonsense of the entire enterprise of studying rock art.

There is, though, a further point which settles the matter once and for all. Neuroscientists working on the structures of the visual system for a time depended on monkeys, which were sacrificed in the course of experiment. When fMRI scans permitted non-invasive examination of the brain, experiment shifted to human subjects. Critically, it was found that the human visual system is homologously similar to that of the monkey and that the neural mapping carried out on monkeys applied to humans too. We have been separate from Old World monkeys for c. 20 million years. It follows that the human visual system has remained more or

Fig. 1 - Mt. Borradaile, Arnhem Land, Australia.

less constant in that time. This means that the objection that ancient artists may not have seen–literally seen–the world and their art as we do has no foundation.

Perceptual Situations

In summary so far: I would like to suggest one possible way of making sense of the range of depictions by the analysis of perceptual situations with evident evolutionary import—and this in situations independent of art and in situations involving art. The aim being to find depictive equivalents of more evidently survival situations, so as to order the field of depictions on the phenomenologically and scientifically sound basis of visual perception. "Phenomenologically" because, whatever else we do with art, we start by looking at it, and it is the serious task of commentators to scrutinize the character of that looking. "Scientifically" because nothing prevents me from marshalling other forces, in the form of scientific experiment, to assist me, as I shall argue below. I intend to examine three examples of the kind of situation I have in mind. First, however, it should be noted that perception of an object or objects in the world is not an additive, piece-by-piece process. If it were, it would be too cumbersome for survival. Instead the visual system, building on millions of years of adaptation, takes short cuts, referring to already as it were pre-packaged combinations, i.e. complex pre-existing hardwiring. Thus, and especially where the question of survival is acute, we may expect the most complicated perceptual outcomes to have been pre-set so as to come into automatic operation.

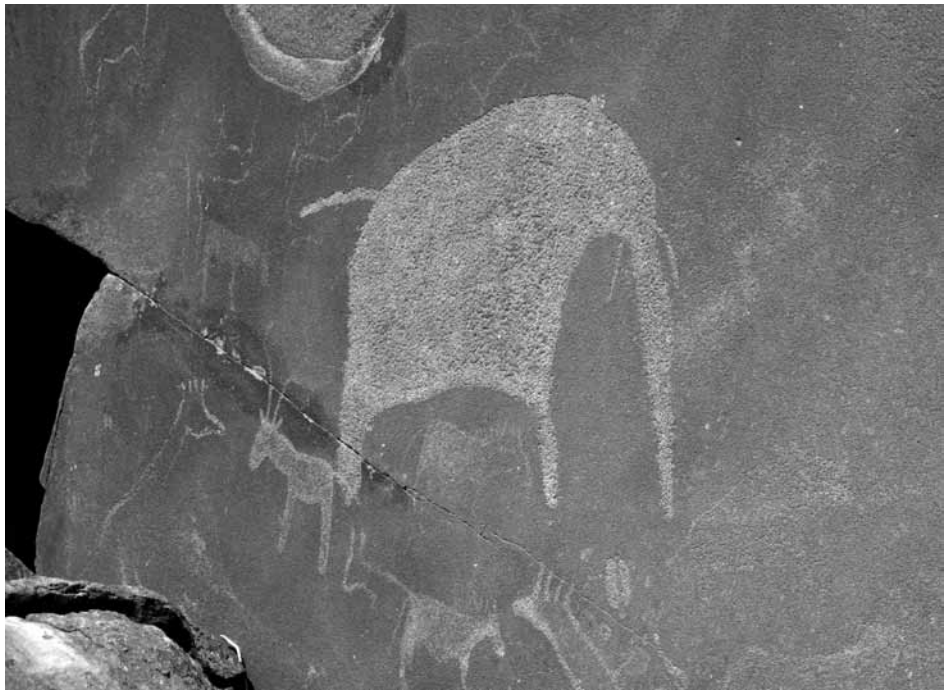

Fig. 2 - Twyfelfontein, Namibia.

Canonical Form

With this in mind I turn to the three perceptual situations, each of which may plausibly be said to have worldwide depictive equivalents. Surprisingly these have not been identified as such. The first is that of "recognition" (Figg. 1 and 2). In collaboration with Patricia Dobrez (Dobrez, Dobrez 2012, 2013a, 2013b) I have given an account of it with particular reference to non-human animals, pointing out the necessity for easy and rapid identification of something the observer may wish to hunt or, alternatively, which might hunt the observer. The easiest and quickest recognition will (generally) take place when the animal is viewed in profile, at which point its salient feature, often though not always the cervico-dorsal line, is most in evidence. Patricia Dobrez and I termed this best-view "canonical form", connecting it to studies in cognitive psychology and to the issue of seeing part-for-whole via the phenomenon of salience, as well as to neural substrates for the operation. This with both real and depicted animals, because it was not difficult to find immense data from rock art representations, where the profile animal is ubiquitous, and illustrations of all kinds, to demonstrate our point: that recognition of a depicted animal calls for the same perceptual operation as recognition of an animal in real life. Accordingly we isolated one plausible perceptual universal, valid across the art/rock art divide, as well as across the divide between a real-life situation with significant evolutionary implications and its pictured equivalent.

Fig. 3 - Barnes' Shelter, Giant's Castle, South Africa.

Fig. 4 - Toca do Perna IV, Serra da Capivara, Brazil.

The Scene

A second perceptual situation is the one loosely alluded to when rock art scholars talk about a "scene" (Figg. 3 and 4), a term equally familiar in art criticism, not to mention theatre and film–but in each case left unanalysed. I have sought to give more rigorous definitions of scenes, with primary though not sole referen-

ce to rock art, particularly in a longish online article on depicted motion (Dobrez 2007, 2008, 2010a, 2010b, 2010-11, 2011a, 2011b, 2013, 2015a, 2015b). My simple starting point for the definition of a scene was that it told a story, hence my term for it: a Narrative. So it was a depicted event, an action, "something going on". I was not interested in the content of the scene, what was "going on", that being a matter for culture-specific or historical investigation. What a universal category required was merely that the observer should register "something happening". Clearly this registering would have survival value in real situations, since an event can never be just a neutral thing. Indeed the perception of an event may well be at least as critical for survival as, or more critical than, perceptual identification of a given animal. Unsurprisingly, as with the first perceptual situation, this one is ubiquitous in art. Depicted Narratives are as common in all forms of art, ancient and modern, as depicted Canonicals.

In the past I have tended to characterize markers of an event in a picture, i.e. those formal properties which prompt the observer to read "that something is happening" in the picture, primarily as markers of movement. And this remains valid, with the understanding that depicted movement may be minimal as well as maximal–and sometimes, necessarily, ambiguous or borderline, this being often the case with rock art. In all cases, though, and in line with my phenomenological preference for the analysis of observation rather than historical investigation (the investigation of original intention), I could focus on a plausible, evolution-driven universal, both in life and art. Some of the formal markers outlined in various articles were (a) imbalance or asymmetry in a given figure (e.g. angled limbs indicative of movement), as well as larger compositional asymmetries (e.g. diagonal compositions suggestive of dynamic activity, like those of southern Africa and the Spanish Levant) (b) figural orientation (especially relevant with interactive scenes) (c) optimal distance between figures involved in actions (neither too great nor too small for interaction) (d) size of figures (smaller figures being the norm for scenes) (e) profile depiction (also relevant for interaction). It seemed to me that perhaps the key perceptual factor for the determination of a scene was the generation of imagined, dynamic space, such spatial generation being essential for the registering of depicted motion. Thus space contraction in front of a running figure and space expansion behind the figure would be required for us to see the runner as running. Interestingly the eye, or rather the brain, can make attentional "switches" which, for example, "freeze" depicted motion. I can stop the runner, if I wish. But given the kinds of markers listed above, it will be *easier* to allow the figure to be seen as moving. So formal markers influence but cannot force perception–and in this depiction differs from life. A still more important aspect of the generation of imagined space, however, relates to the basic fact that it *excludes* the observer. It is essential to a scene that, observing it *as* a scene, I cannot enter its space, i.e. join the action. If I do–and one thinks here of the breaking of the so-called "fourth wall" in a play or film when an actor directly addresses the audience–the scene collapses. It ceases to be a scene and becomes a quite different situation, which I shall outline below. In terms of the hypothesized evolutionary situation, the scene obtains when I am "looking on" but not engaging the object of perception.

Some final comments on the nature of a narrative depiction. With respect to its depiction of motion I have made considerable use of cognitive psychology (JOHANSSON 1973; FREYD 1983, 1987) and, most particularly in connection with interactive scenes, i.e. scenes involving more than one figure, I have appealed to the experiments of Michotte (1963), which established that we not only see (i.e. actually see, rather than infer) depicted motion, as convincingly argued by Freyd: we actually see *causality*. In the end this has seemed to me the final element constitutive of scenes involving interactive figures, i.e. figures "doing something" either together or in some other relation to each other. At the same time there is a role for what we may term contextual (as well as textual or formal) markers for scenes: (a) approach and visibility (b) placing (on its support, e.g. high or low on a wall) (c) optimal viewpoint. In most cases, from rock art to Italian Renaissance frescoes to comics and graphic novels, a narrative will be perceived more or less at eye level and in closeup. With rock art this is because the figures are likely to be small, in marked contrast to "canonical" representations such as those of Palaeolithic Franco-Cantabria, as well as other representations yet to be discussed. Naturally this rule for narrative-figure size may be stretched. Goya's "El Tres de Mayo" scene of an execution at the hands of Napoleonic forces, and Picasso's "Guernica" (for a time strikingly exhibited face to face at the Reina Sofia museum, Madrid), still register as scenes, though they are large for paintings. The same is true for Michelangelo's panels in the Sistine Chapel, especially the very large Last Judgement behind the altar. At the same time most of Michelangelo's scenes in the Sistine Chapel are high above the viewer, like those Baroque ceilings featuring the ankles of angels and saints. In these last cases the rule for scenes is deliberately and outrageously broken, in line with Post-Reformation church propaganda. But it still works, as indeed propaganda must. Of course a scene in a film is also projected on a large screen. But there should be a visual perceptual limit in all this–and I return to the enormous body of world rock art as a touchstone for any discussion of pictures.

Two concluding remarks on scenes. The first is that a scene is not to be confused with a particular period rendering of it, e.g. post-Renaissance realism. While recent European art features a great many scenes (think of those blockbusters by Gros, Lejeune and Vernet produced to glorify Napoleon's battles), and while recent European art is at the same time "realist", a narrative scene may, and especially in rock art *does*, exist without post-Renaissance perspective, ¾ profile and foreshortening. The second remark answers the question: just what formal, and contextual, markers are required and in what proportion in order to constitute a depicted scene? The fact is that some markers are more important than others, and where some are absent, others will step in to do the job. It is of course a matter of perceptual judgement, regarding which there need not always be agreement, though there should be agreement in principle. In general markers work in complex combination, such that it may not be so easy to judge which might be dispensed with and which not. It may even be, for example, that a single strong marker suffices in the absence of all the rest. It may also be that a figure merely standing or sitting in a rock art composition is read as "doing something", say for reasons of context, e.g. that the figure seems to be part of a "ceremony" or

"dance". In more recent art, such figures are readily taken as participating in action because we understand the context of the picture (a woman reading a letter, a man and woman at the piano etc.). For the most part, however, some degree of depicted movement is essential to a scene, i.e. some compositional asymmetry, along with profile depiction (without which pictured figures cannot interact), and the consequent exclusion of the non-participant observer.

The Phenomenon of Looming

But what if the perceiver of the scene becomes a participant? This might happen if, observing two groups exchanging spears, I suddenly become the target of their spears. Or if the elephant I am observing turns on me and charges. Obviously in comparison with the two situations discussed above this one is by far the most critical for survival. So it might be expected to have a class of pictures corresponding to it which are perceived with special force. This is indeed the case, and it brings me to the third depictive situation, also common in art of all kinds from rock art to comics to 3D movies (Figg. 5 and 6). Perceptual psychologists refer to it as the phenomenon of "looming". I have elsewhere commented on this at length (Dobrez 2007, 2008, 2010a, 2010-11, 2012, 2013, 2015b), not least because, whereas the category of the scene is perfectly well known though poorly analysed, this depictive category has not been noticed at all. Once pointed out, it seems overwhelmingly evident. What is "looming"?

Gibson (1979) notes that if a form (it may simply be a shadowy blob projected on a screen), increases in size, subjects perceive it not as larger but as coming *closer*. In the sphere of art, images cannot grow in size (usually), but an equivalent of looming is nonetheless possible. Looming images do not generate imagined, i.e. representational space. They do not exclude the observer. Instead they are perceived as confronting the observer, in a way that may be threatening or at least dominating, i.e. as in a manner entering the observer's own space, in short, *real* rather than representational space. If there are a number of them they do not interact among themselves: in this sense they are not "doing" anything and may in some cases be read as static. In fact they are extremely active and this because they engage *us*, *outside* the picture. So they exhibit a type of depicted motion, but one that is of a very special kind. Freyd and Finke (1984), experimenting with perception of movement in still images, pinpointed what they termed "representational momentum" (RM), i.e. the actual motion of stills registered by the brain. But Kelly and Freyd (1987) also found RM effects in looming stills. So there is experimental as well as observational evidence that looming figures are perceived as being in motion. The looming figure exists in great profusion in every sort of picture from rock art to contemporary graphics, and is of course especially exploited in the 3D movie. Its markers are best understood as complementary opposites of those for a scene. Thus they are frontals, not profiles. They tend to symmetry rather than asymmetry. Details that matter in this type of figure are the face and especially the eyes which naturally are directed at you, the viewer. It follows that looming depictions and scenes are mutually incompatible. If there is an attempt to combine them, the brain is required to switch from seeing a scene to seeing a looming image, and back again. Other things being equal, the phenomenon of

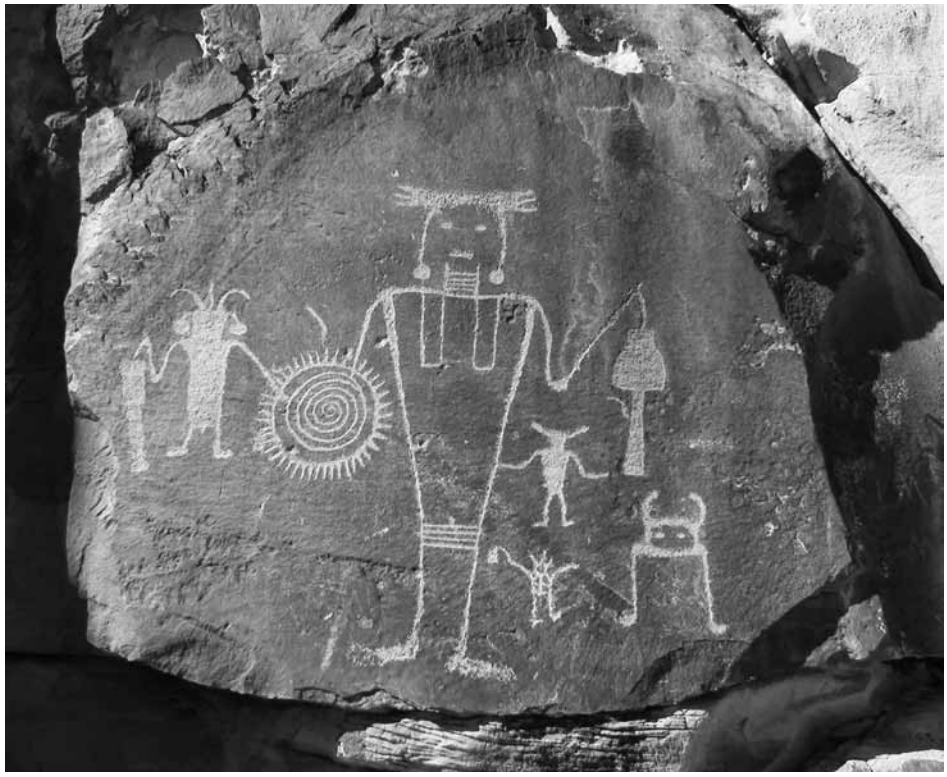

Fig. 5 - McKee Spring, Vernal, Utah, USA.

looming will be dominant, and for good evolutionary reasons. In the past I have illustrated this with pictures by Manet such as the "Déjeuner sur l'Herbe" and the "Olympia". In each case here we may see a scene: two men picnicking with a naked female; a naked prostitute being offered a bunch of flowers by her servant. However, also in each case, the nude fixes *us*, the viewers, with her gaze. At once the scene recedes and a confrontation ensues: the viewer has walked into the space of the picnic; the viewer has become disconcertingly identified with the customer who brought the prostitute flowers. Or, more correctly, the two nudes, through their gaze alone, have stepped out of the representational space of their scene to directly engage the viewer–in the viewer's space.

Following the idea of "performative statements" which *do* what they *say* (as when one says "I do" at the marriage ceremony) I have termed looming depictions Performatives and proposed them as a third perceptual/representational category which may be taken as universal, following Canonicals and scenes or Narratives. Performatives, unlike images in scenes, tend to be large. In rock art they may be visible at a distance and placed such that optimal viewpoint is from below, all of which enhances their dominance. In Australia they come as Wandjinas or frontals from Cape York or frontal petroglyphs from the Sydney area. In Europe they are found less evidently, but may be identified as "Thor" or "Odin" in Sweden, or "Cernunnos" at Valcamonica. In the Americas they are found in

Piauí, Brazil, and in the USA from the Pecos to Utah (Barrier and Vernal style) and Wyoming (Dinwoody style). So it is extremely odd that no one has thought of looming figures in art as an evident visual/representational category with equally evident evolutionary import. Performatives again and again feature in religious ikons, from Byzantine Pantocrators to Hindu deities to Buddha images (some very large indeed). But the category is not to be restricted to the religious and in the past I have illustrated it with Parmigianino's "Self-Portrait in a Convex Mirror" (at the Vienna Kunsthistorisches museum), Kitchener's "Your Country Needs You!" enlistment poster for WWI etc. Two further points regarding Performatives. In some cases a depicted full-frontal face will generate the looming effect on its own, and a rock art example would be Hueco Tanks, Texas. A full-frontal *headless* body, as sometimes seen on the Pecos, will do the job. Even a pair of eyes painted on the wall of a stupa tower, as at Svayambhu, Nepal, suffices. So the combination of markers will vary, usually with eyes, when present, as dominant. But frontality and size would seem important also. On the second point: a handprint or stencil in rock art or a hand image at traffic lights should also be included in the category of looming images. At the lights it may engage you as directly as a STOP! sign. For its use in rock art I refer the reader to detailed analysis carried out by Patricia Dobrez.

As it happens there are other likely candidates for inclusion in the above scheme. In addition to hand images, and also tracks, both discussed by Patricia Dobrez

Fig. 6 - Milbrodale, New South Wales , Australia

(2013, 2015), there is the category of rock art images loosely labelled "abstracts". However, space does not permit the inclusion of any of these in the present article. Three examples must suffice to make the point that there are types of pictures with (a) worldwide distribution and (b) the time-depth that accompanies rock art which plausibly claim universality, not least when considered in the light of evolution. So we have here a taxonomy for pictures which is not culture-specific but relies on the fact of perceptual constancy over evolutionary time. Accordingly this taxonomy applies to both the currently discrete fields of Art History and rock art studies and, more importantly still, it relates depicted situations to extra-pictorial or real-life situations. Because it is grounded in perception, it is not arbitrary, like the working hypotheses used in current rock art work, or the historically contingent categorizations which, over time, have emerged in Art History as ad hoc *bricolage*.

Scientific Evidence

I have noted above that experiments in cognitive (and other forms of) psychology are readily available to supplement the argument for depictive universals. What about the startling developments of the last few decades in neurophysiology? In this connection it is worth recalling that the perceptual responses of interest to me, i.e. responses to recognition situations, to scenes, and to looming situations, are all of them entirely automatic. You do not stop to *think* that what you see is a diagnostic cervico-dorsal line, or a scene, or something advancing towards you. Though memory has a role in the formation of the percept, inference does not. That suggests the hardwired, "pre-packaged' nature of the perceptual situation in question. And in fact investigation of the neurophysiology of the visual system on the whole gratifyingly confirms the thesis I have advanced above. For details I refer to previously published material cited above (especially Dobrez 2013), but a couple of relevant points should be made here. In terms of the present thesis a critical scientific finding is that there are very specific neural processing areas for aspects of the image-types I have defined. The inferior temporal lobe (at the side and back of the head) processes object-perception, terminally at an area known as TE. This would be the endpoint at which we register, for example, canonical animal profiles, possibly by feed-forward mechanisms that might explain the mechanics of the *pars pro toto* principle operative in the recognition of a mammoth by its characteristic cervico-dorsal (often sufficient for its depiction in Franco-Cantabrian art). With scenes, on the other hand, we must prioritize the processing of depicted motion, as well as the organization of spatial relations (predominantly in an area known as V5, in the superior temporal). With looming figures different neural pathways, involving V5 in the superior temporal and relevant areas–the Fusiform Face/Body Area–in the inferior, should work together to process both motion and those elements of Performatives which stand out as especially important: faces and eyes.

Now processing of visuals involves two separate neural paths, the "dorsal" and "ventral", adapted respectively to motion-processing and object-processing–these being the pathways which would come into operation in any situation (both scenes and looming situations) involving perception of objects-in-motion. Im-

portantly, the fact that the ventral stream is slower than the dorsal means that we see the movement of things before we see the things themselves, something anticipated by Gibson and illustrated in perceptual experiments by Johansson. In terms of my thesis it means that we may expect a canonical animal profile to be depicted as static, and figures in a scene as active, which is indeed the case. We may also expect a more generally dynamic depiction of a scene, which is also the case, as evidenced by the scene-markers listed above. Looming figures are a more difficult case, there being to my knowledge no specific neuroscientific investigation of frontal movement or movement towards the observer. At the same time there is evidence for a strong response generated by the face, especially the human face. So I would predict that looming images should generate the most urgent neural response of all.

A finding which emerges from neurophysiological research is of special significance for my argument. It seems that real *and* depicted objects, as well as real *and* represented movement, register in the *same* neural areas. Even more significant: there are individual neurons which will fire for *both* real and represented motion, i.e. some neurons make *no* distinction between a real movement and a picture of movement. That of course supports the contention that we see real and represented in the same way, though naturally we do not confuse the two (since the visual information supplied to the brain in each case is not quite the same). Still, all this lends credibility to the thesis that a real perceptual situation does indeed have very precise equivalents in art. The appeal to neurophysiology, which has more and more concerned me in recent research, has been immensely helpful because it has given weight to the initial premise, viz that if phenomenological analysis of perception is accurate we should expect neural substrates to corroborate observation. And this has been the case.

In saying this, however, I stress that I regard information about neural substrates for perception as complementing observation, not "explaining" it. Neurophysiology simply offers a "bottom-up" perspective to complement the "top-down" experiential perspective of everyday observation. There is naïveté on this issue, both in scientists who assume the superiority of their experimental conclusions over any other form of investigation, and in non-scientists who are dazzled by the brain-mapping of recent years. I am happy to be somewhat dazzled myself. But I remain sceptical of the notion, held by some in rock art studies, that brain processes are *sufficient* to account for, e.g. phosphene-type images. Of the scientists who have shown interest in art (unfortunately not rock art), such as Zeki (1999), Ramachandran (1999) and Livingstone (2002), all three of whom make highly informative reading, Zeki and Ramachandran at least take the easy option of assuming that what they have to say amounts to an "explanation" of whatever art phenomenon they are discussing. I do not say they do this without some attempt at reflexivity, in Zeki's case with a disarming admission of his limited knowledge of art, and in Ramachandran's with cavalier charm and enthusiasm for the art he appreciates most, viz the (admittedly wonderful) female sculptures of India. It is Onians (2007), not a scientist, who seems to me to put the idea of a final scientific explanation for art least analytically, with the strange argument that the brain "manipulates" the subject–strange because I take the brain to be

me, not an alien inhabiting me, even if its (for present purposes) visual structures were laid down long before I came on the scene. But I mention this example because the idea of neural structures as not merely "explaining" but as actually controlling human behaviour, including art-behaviour, is common enough–and could doubtless be extracted from the writings of many scientists and fellow-travellers keen to make use of science in their work. As it happens I might count myself as being in the fellow-traveller group, though with the intention of wherever possible reconciling diverse disciplines, rather than proposing the superiority of some over others. If I have been brief on science in this article it is because I have given it more space in others, and if I have I make no more than passing reference to scientists who have shown sustained interest in art, it is because my take on art is of a very particular kind.

However, a final point should return this argument to the beginning, viz the discussion of a still-dominant historicism, both in Art History and rock art research. Does the emphasis on universalist perspectives on depiction, whether through phenomenology, or evolutionary thinking, or perceptual psychology, or neurophysiology, translate into a case for *replacing* historicism as a guiding principle in the study of art? I do not think so. As with the equally pressing Humanities/science issue, we are not talking about competing studies, but studies which can, indeed, *had better* operate to complement each other.

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The Abbot of Baçal and rock-art studies in Portugal

Mila Simões de Abreu *

Summary

During his long life, Francisco Manuel Alves (Abbot of Baçal) published dozens of notes on rock-art that lay mainly in the district of Bragança. In this article, these references are organized in a table that shows that most of the rocks mentioned have cup-marks or "crosses". For Alves, in most cases, these crosses marked territorial divisions or borders. It is notable that even if he did not publish engravings known today as of Palaeolithic style, he was convinced that early art should exist in the area, as now proven by the complexes of the Côa and Douro valleys.

Riassunto

Nel corso della sua lunga vita, Francisco Manuel Alves (Abate di Baçal) ha pubblicato decine di note sull'arte rupestre del distretto di Bragança. L'articolo fornisce una schematica tabella che raccoglie le sue segnalazioni da cui si evince che molte delle rocce individuate erano incise con coppelle o 'croci'. Secondo l'interpretazione di Alves la maggior parte delle croci erano segni confinari. L'abate pur non avendo pubblicato incisioni di 'stile paleolitico' ne aveva ipotizzato la presenza nelle aree indagate, intuizione confermata dalle scoperti della valle del Côa e Douro nei decenni successivi.

The year 2015 commemorates a hundred and fifty years since the birth of Francisco Manuel Alves (1934–1938), one of the most important rock-art researchers in Portugal who was better known as the *Abade de Baçal* (Abbot of Baçal). He was a very charismatic figure, both from the human and scientific point of view. The amount of work and information he produced is still surprising and forms an invaluable legacy.

Alves was born in 1865 in the little village of Baçal, north of the city of Bragança in Portugal's northeast region of Trás-os-Montes. His family were modest farmers who must have been pleased when he went on to become one of the most important researchers of his generation in fields such as archaeology, history, ethnology, linguistics, anthropology and even Jewish studies.

The academic life of Alves started late because his home village used to be so remote that he only went to school when he was ten years old. His bright young mind was evidently noticed, because he was sent to seminary to become priest in Chaves (in the district of Vila Real).

After spending seven years in Mairos, a village near the seminary, Alves returned to his birthplace to serve as the parish priest. From this period comes his nickname, "Rosbpierre" or "Robs" as he was called by close friends and even he himself. He stayed in his home village until his death in 1947. Parishioners spoke of him as "o grande" (the big one) due his height or simply, "Sr. Padre" (Father). The title "Abade", by which he is now known, was his position in the church hierarchy.

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This paper was base on some work carried out for my in doctoral thesis in 2012.

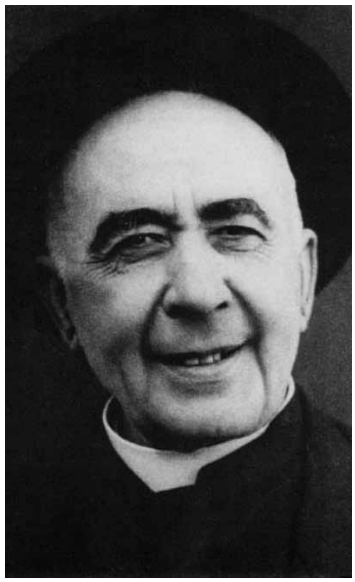

Fig. 1 - (A) The Abbot of Baçal (Photo archive Pastoral da Cultura, Secretariado Nacional). (B) Caricature of Francisco Manuel Alves (author unknwon c. 1965).

His passion for the past turns him into one of the outstanding researchers of Portugal during the twentieth-century. He never carried out any actual archaeological excavation because, as a priest in a very poor village, he lacked the means to do so, in strong contrast with researchers like wealthy Francisco Martins Sarmento in the nearby region of Minho.

Above all, he was interested in documentation, a work that took two completely different paths. On one hand, he searched for all kinds of information in texts and documents, in archives and libraries all over the country. On the other, he roamed across the countryside of the districts of Bragança and Vila Real, following up snippets of information he read or heard from colleagues and friends. The result of both approaches was an immense amount of information that was rendered as thousands of pages in print. In some cases, he took home artefacts, objects and even stones he found, especially if he felt they were at risk. His collection is now in the museum in Bragança that bears his name.

Materials Alves collected on history, ethnology, folklore, linguistics and archaeology were published in eleven volumes entitled, "*Memórias Arqueológico-Históricas do Distrito de Bragança*" (1934–1938). Volumes IX and X with the subtitle "*Arqueologia, Etnografia e Arte*" have several pages dedicated to rock-art. Information is in alphabetical order, but it is quite difficult to follow because there are so many supplementary details.

A section on "prehistory" appears in volume IX (Alves 1934, pp. 555–718) in a chapter entitled, "*Insculturas e arte rupestre. Novos elementos para a sua interpretação*"[1]. There is additional information about rock-art in volume X (Alves 1938, pp. 823-828). Further notes appear in other parts, mainly the geographical

1 These pages were published as a separate volume in 1977.

descriptions of towns and villages, as in "*por terras de Mirandesas*" (ALVES 1938, pp. 810–812). Other details are disseminated in works like "*Chaves – Apontamentos arqueólogicos*" (1931) and "*Vimioso, Notas Monográficas*" with Adrião Martins Amado, published posthumously (1968).

Except for sporadic references to localities in the nearby district of Vila Real, nearly all the sites published are in the district of Bragança. He visited most of the sites, so we have a direct account of his findings. Sometimes, he returns years later and fails to rediscover sites. This leads him to conclude that they were destroyed in the intervening period, which is not always the case. Alves occasionally reproduces information provided by other people, mainly his enormous network of colleagues. Knowing his interests, other priests in the area become an invaluable source of information and the vehicle for the transmission of legends, tales and stories.

Most of the information is about engravings or "*insculturas*", as Alves called them, a term he liked to use for cup-marks. Nevertheless, he also dedicated some pages to paintings, mainly those of Cachão da Rapa in Carrazeda de Ansiães (ALVES 1934, pp. 666–675). He recounts, in "*Chaves – Apontamentos arqueólogicos*" (ALVES 1931, p. 43), that he saw several paintings of animals in a cave while he was a young seminarist at Chaves. Years later, Santos Jr., following notes Alves gave him, looked for *Buraco de Jac-mi-Jorge* in the parish of Mairos, near the stream of Ribeira de Soutilha; however, he could not find anything and concluded they must have been flooded and destroyed (SANTOS 1942, p. 332).

Alves had no doubt that paintings or engravings like those in the Franco-cantabric zone might exist in the area of Trás-os-Montes. Strangely, he does not refer to several Palaeolithic-style figures known in the area today. So the horse and other zoomorphs of Mazouco (Freixo de Espada-à-Cinta), the aurochs and horses on the margins of river Sabor at Ribeira da Sardinha (Torre de Moncorvo), or Sampaio and Pousadoro (Bragança) are not mentioned in his texts. He

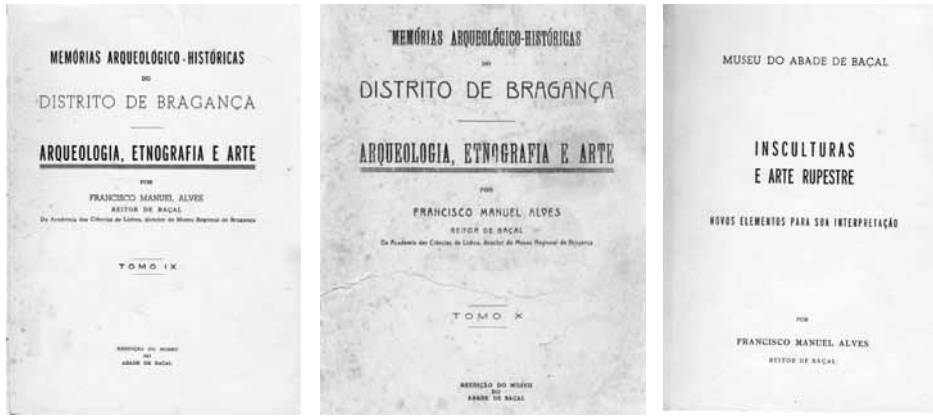

Fig. 2 - Covers of volumes IX, X, XI of "Memórias Arqueológico-Históricas do Distrito de Bragança" (ALVES 1934, 1938, and 1948).

Nº	Name	Where	What	Bibliography
1	Aguieiras Modorra Quinta do Casario	Mirandela	Cup-marks, grooves, "*Letras*"[2]	ALVES 1934, p. 611
2	Agrochão	Vinhais	Engravings?	ALVES 1938
3	Aldeia Nova	Miranda do Douro	Footprint "of a mule"[3]	ALVES 1934, pp. 611-612 CARDOSO 1747
4	Algosinho "Pedra Balouçada"	Mogadouro	Crosses	ALVES 1934, p. 613
5	Assares "Cova da Moura" or Poço	Vila Flor[4]	Star with ten radiating lines, P[5]	ALVES 1934, p. 613
6	Babe	Bragança	"*Ferradura*"[6]	ALVES 1934, p. 613
7	Baçal – Fonte do Pacio	Bragança	Cup-marks, X	ALVES 1934, p. 613
8	Belver "Fraga das Ferraduras"	Carrazeda de Ansiães	"*Ferraduras*", crosses, circles	ALVES 1934, pp. 613-614
9	Bousende – Berço Serro da Pena Mourisca	Macedo de Cavaleiros	Cup-marks, grooves[7] (?) G	ALVES 1934, p. 615 ALVES 1938, p. 823 LOPO 1903, p. 250
10	Bragança – Cabeço da Cidade	Bragança	"*Ferradura*"	ALVES 1934, p. 617 LOPO 1902, p. 15
11	Buraco de Jac-mi-Jorge	Chaves	Animals? P[8]	ALVES 1931, p. 43
12	Cabeça Boa	Bragança	Footprint with the toes	ALVES 1934, p. 617
13	Cachão da Rapa	Carrazeda de Ansiães	Squares, lines, points, ovals, "*Letras*"[9]. PT	ALVES 1934, pp. 666-675 ARGOTE 1734
14	Carocedo – Capela de Nossa Senhora da Assunção	Bragança	Footprints, cup-marks and others...	ALVES 1934, p. 615 LOPO 1903, p. 72
15	Carrazedo – Rio de Martim	Bragança	One "f*erradura*"	ALVES 1934, p. 619
16	Carviças – Cabeço do Sarilho	Torre de Moncorvo	Greek cross or 4 points star?[10]	ALVES 1934, p. 619
17	Carviças Cigadonha	Torre de Moncorvo	Inscriptions?	SANTOS jr. 1929 ALVES 1934, p. 147
18	Casares "Fraga da Falgueira Rúbia"	Vinhais, Montouto	Crosses, squares "*ferraduras*"	ALVES 1938, p. 823
19	Cedães	Mirandela	One "*ferradura*"	ALVES 1934, p. 619
20	Cércio, "Gravatos"	Miranda do Douro, Duas Igrejas	Engravings?	ALVES 1934, p. 619

2 "Letras", meaning inscriptions, letters or wri*ting.*
3 Entry"Al*deia nova"*
4 The rock belongs to the council of Alfândega da Fé (see ABREU 2005).
5 Letter of Santos Jr. 3.10.1932
6 "Ferraduras" "U" sh*ape sign.*
7 "Figurações anim*alescas" animal figures*
8 Never found again
9 Letters
10 These figures are called "sarilho" by *Baçal*

Nº	Name	Where	What	Bibliography
21	Cerdedo "Fraga das Ferraduras"	Vinhais Montouto	Several "*ferraduras*"	ALVES 1934, p. 620 ALVES 1938, pp. 824-825
22	Dine "Pena Escrita"	Vinhais	Engravings?	ALVES 1934, p. 577
23	Espinhosela – Fraga da Ramada	Bragança	Cup-marks and grooves	ALVES 1934, pp. 621-622
24	Estevais - Prado do Junco	Mogadouro	Serpentiform? Grooves	ALVES 1934, pp. 622-624
25	Freixel – Castelo- "Fraga dos Mouros"; "Patadas de Cavalo	Vila Flor	Hand and arm (?) Cup-marks, "*ferradura*", footprints, shoes, shields (?)	ALVES 1934, p. 626
26	Fornos – "Fraga do Gato"	Freixo de Espada à Cinta	Quadruped (large). Cat?[11] "*Ferradura*"	ALVES 1934, p. 627 SANTOS jr. 1929, p. 13
27	Fragas da "Boa-Vista"	Vinhais, Montouto	Crosses, cup-marks, spirals, flag (?)	ALVES 1938, p. 824
28	Ifanes – Rodelas	Miranda do Douro	3 footprints	ALVES 1934, pp. 627-628
29	Ifanes – Curvaceira	Miranda do Douro	"*Ferradura*"	ALVES 1934, p. 628
30	Gondesende "Lombeiro de Maquieiros"	Bragança Rio Baceiro	Cup-marks, "*ferraduras*" linhas, zig-zag, circles (?)	ALVES 1938, pp. 825-826
31	Labiados – Cabeço da Velha	Bragança	Crosses and cup-marks, "*Ferraduras*" Horse?[12] 4 rocks. X	ALVES 1934, pp. 628-630
32	Lagarelhos	Vinhais	Footprint of a cow	ALVES 1934, p. 633
33	Lamalonga, Lagar dos Mouros	Bragança Rio Baceiro	Footprint, square "Lagar"	ALVES 1938, p. 826
34	Lamas de Orelhão	Mirandela	"*Ferradura*" and sword[13]	ALVES 1934, p. 634
35	Lamoso	Mogadouro	Church and still others figures[14]	ALVES 1934, p. 634
36	Linhares	Carrazeda de Ansiães	Cup-marks "*Ferraduras*" & "letters"	ALVES 1910, p. 137 SANTOS jr. 1933 ALVES 1934, p. 634
37	Luzelos "Pedra do Sapato"	Carrazeda de Ansiães	Footporint? "Shoes"?[15]	ALVES 1934, p. 635
38	Macedinho do Mato	?	"*Ferradura*"?[16]	ALVES 1934, p. 636
39	Marcedo do Pêso - Zamborinho "Serra do Gato"	Mogadouro	"Cat"[17]?	ALVES 1934, p. 636

11 The cat is looking to a treasure.
12 "Letras". Not found a figure of the horse.
13 "of a Moor…"
14 Recent?
15 not rock-art .
16 Ear say.
17 "a cat looking to a treasury" (destroy).

Nº	Name	Where	What	Bibliography
40	Malhadas – Trás-da-Torre "Cortina do Poço"	Miranda do Douro	"*Ferraduras*"; cup-marks, geometric figures. G	ALVES 1934, pp. 636-637
41	Malhadas – Lameira do Mular	Miranda do Douro	Circle[18] G	ALVES 1934, p. 637
42	Malhadas, Penhalta – Pizo do Mouro	Miranda do Douro	Big triangular shape[19]	ALVES 1934, p. 637
43	Malhadas – Lombas	Miranda do Douro	Cup-marks[20] G	ALVES 1934, pp. 637-638
44	Moimenta – Ponte "Pegada do Mouro	Vinhais	Deep cup-marks, oval shape	ALVES 1934, pp. 639-640
45	Mofreira Pena Escrita	Vinhais	Engravings?	ALVES 1934, p. 640
46	Moncorvo – Aveleira	Torre de Moncorvo	Engravings?[21]	ALVES 1934, p. 640
47	Moncorvo – Castro[22] Baldoeiro, Penedo do Cobrão	Torre de Moncorvo	Several Serpentiforms	CABRAL 1910, p. 60 SANTOS jr. 1929 ALVES 1934, p. 640
48	Montesinho – Lama das Onzelhas "Fraga Medideira"[23]	Bragança, França	Crosses, cup-marks	ALVES 1934, p. 641
49	Montesinho – Onzelhas Castro Curisco[24]	Bragança, França	Crosses, cup-marks	ALVES 1934, p. 641
50	Montesinho – Fraga Bulideira	Bragança, França	Crosses, cup-marks	ALVES 1934, p. 641
51	Montesinho "Barreiras Branca"	Bragança, França	Circle, triangle	ALVES 1938, pp. 827-828
52	Murçós – Escrita	Macedo de Cavaleiros	Engravings?	ALVES 1934, pp. 641-642
53	Nozedo de Cima Quinta [Malgas]	Valpaços Nozedo de Cima	5 cup-marks or "*malguinhas*"[25]	ALVES 1938, p. 828
54	Oleirinhos "Patada do Mouro"	Bragança	Footprint[26]	ALVES 1934, p. 642
55	*Ousilhão – Fraga da Vela or da Ferradura*	Vinhais	"*Ferradura*"[27]	ALVES 1934, p. 643
56	Outeiro – "Vinha do Judeu"	Bragança	Engravings?[28]	ALVES 1934, p. 643

18 Ferraduras Donkey ot the Holy Mother
19 This is more a "Pia" than an engraving because of the dimensions and depth. Not an engraved
20 Remove from the original place and lost
21 Not found by SANTOS Jr (1932)
22 There is a bit of confusion on this description. In fact there is a rock with more than a 100 crosses - Fraga Medideira, Bulideira or da Porca and several gently sloping rocks with cup-marks (ABREU *et al.* 1993 and 1995a).
23 See note 8
24 See note 8
25 Little bowls
26 Footprint of a Moor. DESTROYED 1920
27 "*Abre-te fraga bemdita, que o mundo ficaras escrita*" (Open blessed boulder, that the world you will be written)
28 "*Letras e rabiscos*" (letters and scribbles)

Nº	Name	Where	What	Bibliography
57	Paço de Vinhais	Vinhais	Engravings?	ALVES 1934, p. 643
58	Paradinha Nova – Escrita ou Fraga Escrevida	Bragança	Crosses, "*cruzeiros*"[29] One auroch	ALVES 1934, pp. 643-644
59	Paradinha Nova Fraga das Ferraduras – Mata Mouros	Bragança	"*Ferraduras*", cup-marks, footprints	ALVES 1934, p. 645
60	Parambos "Fraga das Ferraduras"	Carrazeda de Ansiães	"*Ferraduras*"	ALVES 1934, p. 653
61	Picote	Mogadouro	Footprint, grooves	ALVES 1938, pp. 817-818
62	Pinhal do Douro	Carrazeda de Ansiães	"*Ferraduras*"	ALVES 1934, p. 653
63	Pinheiro Novo – Fraga do Sarilho	Vinhais	Star with 4 points or Greek cross	ALVES 1934, pp. 646-647
64	Pinheiro Novo – Capela de S. Rufina, Trás da Calçada	Vinhais	One "*ferradura*"	ALVES 1934, pp. 646-647
65	Póvoa – Teliques "Pé da Moura"	Miranda do Douro	Footprint (right)	ALVES 1934, pp. 646-647 ALVES 1938, p. 811
66	Póvoa – Teliques Poça do Galo	Miranda do Douro	Footprint (left)	ALVES 1938, p. 811
67	Póvoa – Pachicos "Fraga"	Miranda do Douro	Cup-marks	ALVES 1938, p. 811
68	Póvoa – "Fraga do Cavalo"	Miranda do Douro	Horse?	ALVES 1938, pp. 811-812
69	Rebordainhos "Fraga do Gato"	Bragança	Grooves (Cat?)	ALVES 1934, p. 647
70	Rebordões "Fonte da Senhora"	Bragança	3 "*Ferraduras*"	ALVES 1934, p. 648
71	Rebordelo "Fonte da Virgem" Fraga das Ferraduras	Vinhais	Several "*Ferraduras*" and grooves	ALVES 1934, pp. 648-649
72	Ribalonga "Ferraduras e Eira da Codeceira"	Carrazeda de Ansiães	"*Ferraduras*"	ALVES 1934, p. 653
73	Ride Vides "Pedra Escrita"	Alfândega da Fé	"*Ferraduras*", cup-marks, weapons, grooves	ALVES 1934, pp. 649-652
74	Rodelo	Miranda do Douro	"Glasses"[30]	ALVES 1938, p. 810
75	Saldanha "Fraga do Gato"	Mogadouro	Cat and "*Letras*"	ALVES 1934, p. 652

29 On this rock, overlapped by many crosses and cruz*eiros or calvaries, are two Palaeolithic style figures, most probably aurochs.*
30 Óculos = *in the original in Portuguese; in fact, the engraving represents two circles united by a curved line that resembles old-style glasses.*

Nº	Name	Where	What	Bibliography
76	Samil – Castrilhão "Salvage"	Bragança Samil	Footprint	LOPO 1900, p. 16 ALVES 1938, p. 828
77	Samorinho "Capela da Senhora da Graça	Carrazeda de Ansiães	"*Ferraduras*" (14)	ALVES 1934, p. 652
78	Sampaio – Fraga das Cruzes	Mogadouro	4/5 crosses	ALVES 1934, p. 652
79	Santa Combinha – Capela da Senhora da Graça	Macedo de Cavaleiros	Footprint	ALVES 1934, p. 652
80	Seixo de Anciães – Calça-da	Carrazeda de Ansiães	"*Ferraduras*", crosses	ALVES 1934, p. 653
81	Sendim – Edral "Fraga da Estrela"	Vinhais	Star (?) bovine (?) lizard (?)	ALVES 1934, pp. 653-654
82	Sendim - Edral "Fraga da Mula"	Vinhais	Animal (mule?)	ALVES 1934, p. 654
83	Serapicos Fonte dos Engenhos	Bragança	Letters, dates (1797)[31] X	ALVES 1934, pp. 655-655
84	Sobreiró "Pedras Brancas"	Vinhais	Cup-marks	ALVES 1934, p. 657
85	Sortes "Pena Escrita"	Bragança	Polissoir, weapons, lines	ALVES 1934, pp. 657-659
86	Tó "Fraga da Moura"	Mogadouro	Footprint, "*ferra-dura*"	ALVES 1934, p. 658
87	Travanca "Fraga das Ferraduras"	Vinhais	"*Ferraduras*", cup-marks X	ALVES 1910, p. 142 ALVES 1934, pp. 658-659 FERREIRA 1932, p. 74
88	Travanca "Fraga das Patinhas da Burrinha"	Vinhais	Crosses, cup-marks, footprints[32]	ALVES 1934, pp. 660-661
89	Travanca "Marcão" 1 & 2	Vinhais	Crosses, stars, squares, cup-marks	ALVES 1934, pp. 662-663
90	Travanca – Nozedo de Cima	Vinhais	5 cup-marks *Mal-guinhas*[33]	ALVES 1938, p. 828
91	Travanca – Nozedo de Cima "Malgas"	Vinhais	2 cup-marks 2 footprint	ALVES 1934, pp. 661-662
92	Travanca "Pegada do Burro"	Vinhais	"*Ferraduras*"	ALVES 1934, pp. 658-663
93	Travanca "Peredo do Galego"	Vinhais	"*Ferraduras*"?	ALVES 1934, p. 663
94	Tomelar Urrós	Modagouro	Footprint	ALVES 1934, p. 663
95	Vale Frechoso "Fragas da Pena do Corvo"	Vila Flor	"Fox" (?)	ALVES 1934, p. 663
96	Vale Frechoso	Vila Flor	One "*Ferradura*"	ALVES 1934, p. 663

31 Not rock-art.
32 "Fraga das Patinhas da Burrinha" - Boulder of the little dunk little paws.
33 Small bowl.

Nº	Name	Where	What	Bibliography
97	Vale de Lamas	Bragança	Footprints of "wolves", "cat" and high healsshoes(?)[34]	Alves 1934, p. 663
98	Varge	Bragança	"*Ferradura*"	Alves 1934, p. 664
99	Valverde	?	"*Ferradura*"?	Alves 1934, p. 664
100	Vila de Ala	Mogadouro	Circle	Alves 1934, p. 664
101	Vila Boa de Carçãosinho Crasto	Bragança	"*Ferradura*"	Alves 1934, p. 664
102	Vila Meão	Bragança	Footprint	Alves 1934, p. 664
103	Vila Verde Eira do Outeiro "Cara do Gato"	Vinhais	Footprint of a cow (?), cup-marks[35]	Alves 1934, p. 664
104	Vilar de Ossos "Lombo da Escrita"	Vinhais	"*Ferradura*"	Alves 1934, pp. 662, 666
105	Vilarinho da Castanheira Tavares	Mogadouro	Engravings?	Alves 1934, p. 666 Vasconcelos 1917, p. 197
106	Vilarinho de Galegos	Mogadouro	Animal (Cat?)	Alves 1934, p. 666

published the rock of *Fraga Escrevida* at Paradinha Nova, Bragança and drew many of its crosses; remarkably, he does not notice the large figure of an aurochs (Alves 1934, pp. 643-645; Alves 1977, pp. 65–67).

I compiled the information written by Francisco Manuel Alves in all his publications (Alves 1910, 1931, 1934, 1938, 1948 and Alves, Amado 1968) in an alphabetical list. Out of 106 published references to rock-art, not all can clearly be identified as rock-art sites. Some descriptions differ slightly from reality. I had an opportunity to survey the area of Montesinho (Alves 1934, p. 641) with Ludwig Jaffe and the "*Gravado no Tempo*" team and found his description of *Fraga Medideira* (n. 48) corresponded to a wobbling rock, *Fraga Bulideira* (n. 50); to avoid confusion, this appears in the "Corpus" under the name, "*Fraga da Porca*" (n. 133). Castro Curisco (Baçal n. 49) does not have figures of crosses, but does have more than 20 gently sloping rocks with dozens of cup-marks ("Corpus" n. 134) (Abreu, Jaffe 1995).

In several cases, Baçal reports cases where engravings were destroyed by local people looking for gold or hiding treasures. Such was the site of Pena Veladeira: tales spoke of an engraved raven that pointed towards a treasure, but the figure has vanished (Alves 1934, p. 633).

The cat is very much the most common animal associated with gold and treasure, which is the case at Fornos (n. 27), Marcedo do Pêso (n. 73), Saldonha (n. 79) and Vilarinho da Castanheira (n. 111). In Vale Frechoso, the "cat" is substituted by a fox (Alves 1934, p. 663). I looked for this during the 1990s, but could not find any engravings in the area and the inhabitants have no memory of it.

34 Footprints.
35 "Cara de um gato…" face of a cat.

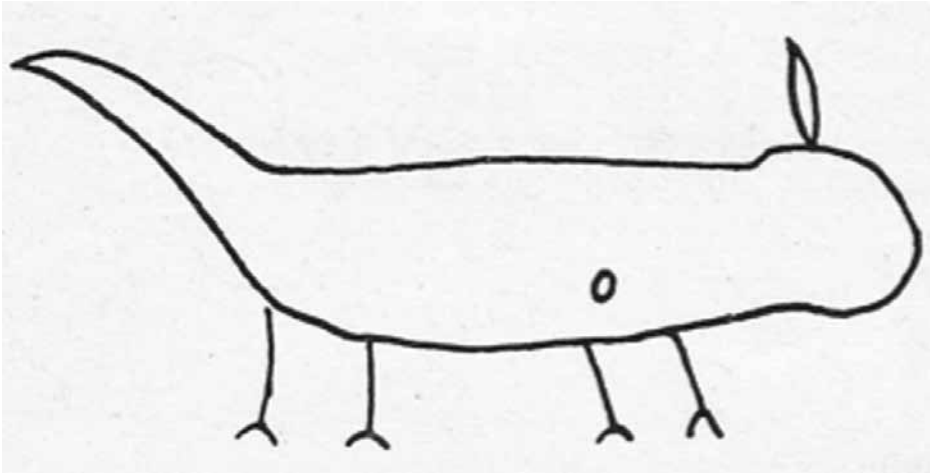

Fig. 3 - Drawing of a cat "looking at a treasure" at Fornos, Freixo de Espada-à-Cinta, according to Baçal, the figure is 44cm long, excluding its tail. (ALVES 1934, p. 627).

As for the meaning of the engravings, Francisco Manuel Alves likes to quote ancient documents. He presents a strong case that many of the crosses (*cruzes*) and cup-marks (*covinhas*) could be property marks, "*marras*", between different territories, and said the following:

> "Segundo temos observado, a maior parte das estações de arte rupestre estão em sítios marginais dos termos de povoações confinantes ou mui perto deles a servir de divisória aos mesmo ou a direitos de compáscuo entre vários povos, demarcando mesmo propriedade particulares ou bens adjacentes a igrejas e capelas nos povoados" (ALVES, AMADO 1968, p. 391)[36]

Alves is ambiguous in his distinction between rocks with crosses or cup-marks that are "*marras*" and those that are rock-art sites. Do all engraved rocks act as territorial divisions? Alves does not claim this, but that generally seems to be his view. Here, I consider "*marras*" to be rocks with marks that documents show as territorial divisions and made a separate list for them, which aims to stay close to indications in the different texts of Alves. A clear distinction between rocks with crosses or cup-marks only used in historical periods and rocks with similar prehistoric engravings is almost impossible. As Alves quite rightly thinks, engravings belong to a tradition that could have started in prehistoric times and continued until now.

In a text about the village of Vimioso written in last months of his life, Alves (ALVES, AMADO 1968) dedicates several pages to "*covinhas*", which is the Portuguese term for cup-marks. In his home village, he says people used to "*alfar*" or "*ir alfar*", meaning to make cup-marks or enhance existing ones. At Soutelo

36 "As we have observed, the majority of rock-art sites are in marginal places on nearby village boundaries, or very close by, serving as division of the rights of pasture between different people, demarcating private properties and goods close to churches and chapels in the villages" [my translation].

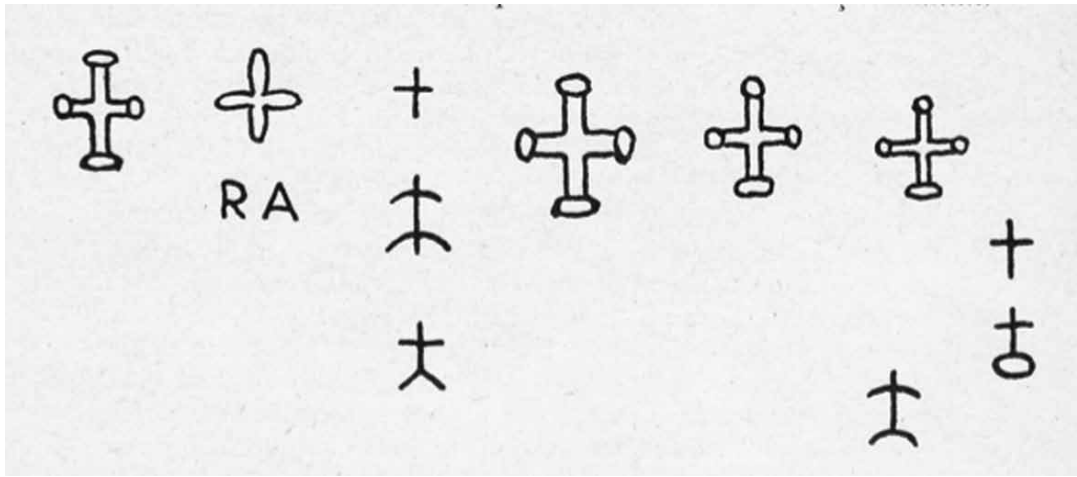

Fig. 4 - Drawing of the Marra do Alto da Barreiras marking the division between Caçarelhos and Vimioso, district of Bragança (Alves 1934, p. 584).

Mourioco in the council of Macedo de Cavaleiros, the term was "*alisar as covinhas*" (smooth the cup-marks) and in Bragança, "*limpar as pocinhas*" (to clean the little holes) (Alves, Amado 1968, p. 390). Redoing or cleaning could be the reason why some, like the *Fraga das Ferraduras* of Alfândega da Fé (Abreu 2005), seem so recent. Retouching gives engravings a lighter patina and look as if they have just been made.

These divisions may have had sacred aspects and Alves thought cup-marks could have been venerated as representations of *Termo* or *Terminous*[37], the Roman god. As such, Alves says the cup-marks had to be cared for, "*limpa*" (cleaned) and remade by hand:

> "o povo limpa, alisa aperfeiçoa à mão as pocinhas com todo o carinho do acto liturgico, mantendo-lhe a tradição de arca tratada com limpesa asseio, aliada à veneração de um deus tão prestigioso" (Alves, Amado 1968, p. 394)[38]

Alves notes that many of the engravings are very similar to traditional shapes used for branding cattle and other livestock (horses, goats, sheep). They are also resemble the mason marks one finds on the stones of Romanesque and Gothic churches and other buildings.

Concerning chronology, Alves was quite open-minded and thinks, due to similitude with material published by Obermaier (1925, p. 169), that the engravings of Freixel (Vila Flor) could even be Palaeolithic… (Alves 1934, p. 626). He also sees similitude between the petroglyphs of Bragança and the paintings of Mas d'Azil, in France (Alves, Amado 1968, p. 391).

37 *TERMINUS* was the protective god of boundaries of Rome and was represented by a large stone. This god could have an Indo-European origin (Dumézil 1996, pp. 200–203).

38 "people clean, perfect by hand, the cup-marks, with all the care of a liturgical act, retaining the tradition of the arc kept spotlessly clean, allied with the veneration of such a prestigious god".

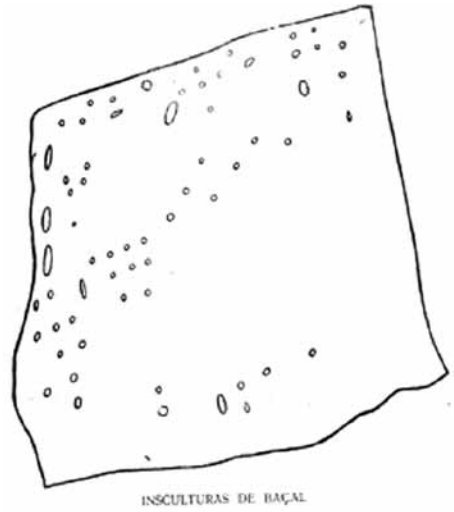

Fig. 5 - Fonte do Pacio, rock with engravings located near Alves's house in the little village of Baçal, Bragança (Photo Projecto "Gravado no Tempo"). (B) Alves's drawing of the cup-marks, or insculturas as he used to call them, engraved in the rock of Fonte do Pacio (ALVES 34, pp. 614).

In brief, in consonance with the idea that crosses, cup-marks and *ferraduras* could all be territorial marks, their chronology could range from the Palaeolithic period to the present-day a living tradition crossing millennia.

Alves was very well know in his epoch and today, more them seventy years after his death, his writings are still a very important source of information for anyone that wishes to study the rock-art of Trás-os-Montes or the north of Portugal.

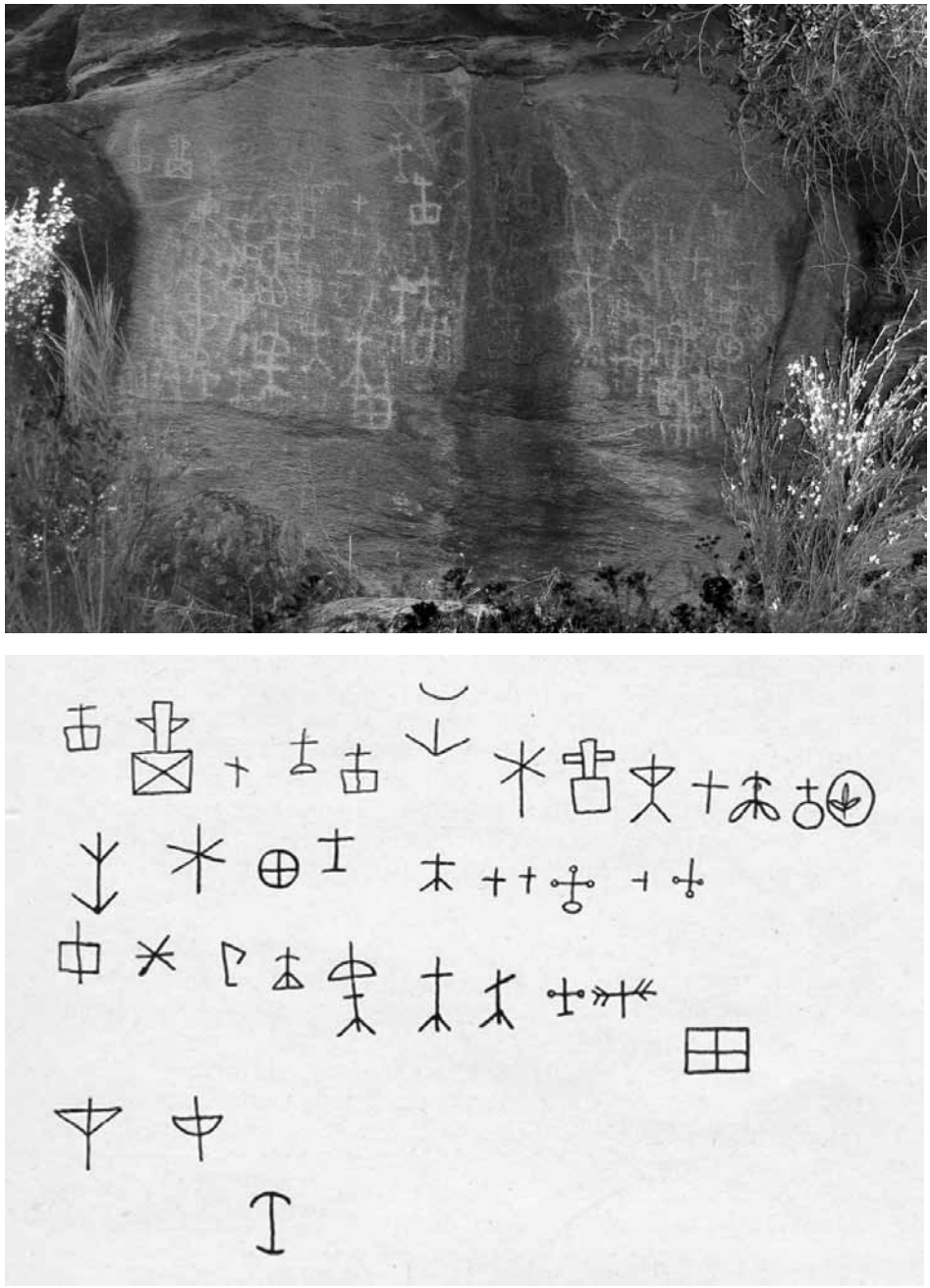

Fig. 6 - (A) Fraga Escrevida, Paradinha Nova, Bragança, under the many engravings of crosses and calvaries, one large deep engraved figure of an aurochs in Palaeolithic style (Photo Projecto "Gravado no Tempo"). (B) Drawing of crosses and calvaries of Fraga Escrevida published by Abbot Baçal, who did not see the large aurochs (ALVES 1977, p. 66).

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Carl Georg Brunius and a possible / non possible relation between Scandinavian rock art and hieroglyphs

Jarl Nordbladh *

Summary

In the beginning of the 19th century very little of rock art was discovered, documented and available in printed form. A pioneer in this research was Carl Georg Brunius, who hoped to find some deciphering inspiration in the hieroglyphs of Egypt. After some decades he gave up a possible connection and used the Scandinavian folklore and ethnographic parallels to reach an understanding of the petroglyphs.

Riassunto

All'inizio del XIX secolo l'arte rupestre era ancora poco nota, poco documentata e solo in minima parte edita. Carl Georg Brunius è stato un pioniere della ricerca tentando di confrontare l'arte rupestre con i geroglifici egiziani. Dopo alcuni decenni di studio, rinunciò al suo intento di trovare un possibile collegamento cercando nel folklore scandinavo e nei paralleli etnografici una nuova chiave di lettura al fenomeno.

Background

About two hundred years ago, there seem to have been close contacts and interdependence within the field of archaeology in Sweden, Europe, and North Africa. These include research, technological inventions, publications, and the contemporary political situation between scientific work, technological inventions, the production of publications and the contemporary political situations. However, communication among scholars was limited to academies, personal visits, publication exchange, and the developing publishing houses. At this time, a researcher was constantly looking for more information and more colleagues interested in the same fields of knowledge.

Carl Georg Brunius (1792-1869) was born in a parish in the west of Sweden called Tanum, which later on would be famous in archaeology for its magnificent rock art from the Nordic Bronze Age. In his early years, Brunius started his academic career at the Lund and Uppsala Academies, with a special focus on Greek and Latin. Eventually he was given a position in Lund. He also worked as an architect designing medieval-styled buildings. While spending the summer vacations at his childhood home, he searched for ancient monuments, mainly rock art sites (Fig.1). He showed his account to the chancellor in Lund, Lars von Engeström – an eager collector of old manuscripts and books – who became interested and arranged for the inventory to be translated into French. This report was presumably intended for an international public, but unfortunately the project was cancelled. This happened in the year 1818, a critical time in Sweden and in all of

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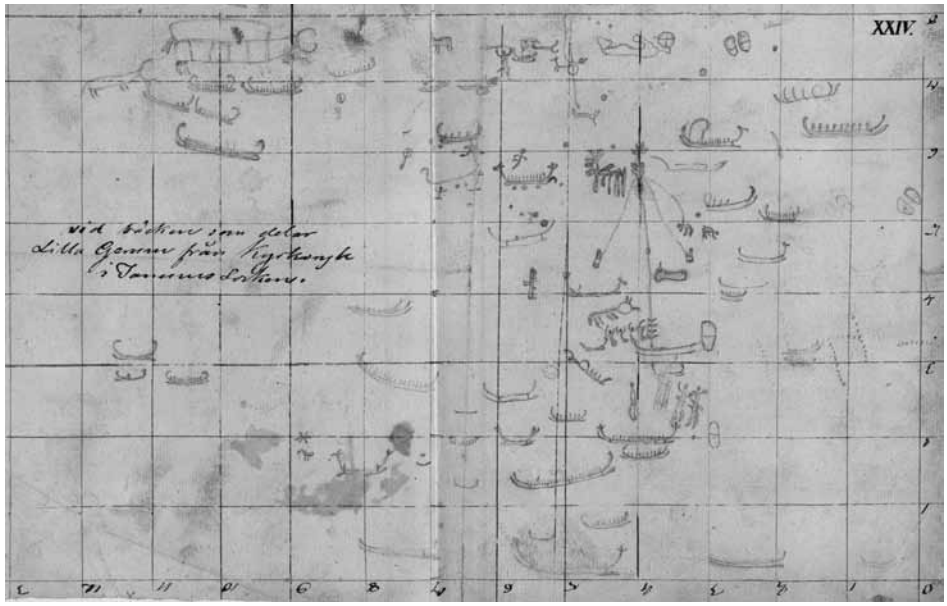

Fig. 1 - One of c. a hundred documents of Bohuslanean rock art panels, made by Carl Georg Brunius just before 1818. Note the measurement grid, which was used both on the panel and in a reduced scale on the bedrock. From the site of Lilla Gerum, Kyrkoryk in the parish of Tanum. The Antiquarian-Topographical Archives, The Royal Academy of Letters, History and Antiquities, Stockholm.

Europe. King Karl XIII, who replaced the dethroned and expatriated Gustav IV Adolf on the throne, died in this year and was succeeded by his adopted son, the former Napoleonic marshal Jean Baptiste Bernadotte. The political situation in Sweden was very unclear at the end of the Napoleon wars, and Chancellor von Engeström, who was also the foreign minister of Sweden and a former ambassador, was too engaged in Sweden's political situation to carry through the introduction of an amount of rock art documentation. What came into play was probably that at that time there was no suitable printing technique available for the large-scale documents. Lithography was introduced a decade later.

As Brunius was one of the executors of von Engeström's estate and looked through his vast manuscript and book collection in Stockholm after his death, I believe that Brunius took back his abandoned manuscript. At the end of his life Brunius rewrote and enlarged the work of his youth and published his view of Swedish rock art in Swedish (Brunius 1868, Hildebrand 1937a). After Brunius' death, in 1893, his son organized his father's manuscripts and sold them to the Antiquarian-Topographical Archives at the Royal Academy of Letters in Stockholm. Later research seems to have omitted Brunius' contribution (Nordbladh 2015).

Brunius at work

When Brunius carried out his field work the available reference works, such as inventories, were extremely limited. It is important to remember that this was before the French Palaeolithic caves were discovered. Neither had reliable chronologies been established.

However, the endeavour to connect early rock art to the Egyptian sphere is not unique for Brunius even if he must have been one of the earliest ones to do so. For example, in South America such a connection was proposed. (Ref. wanted in here)

Brunius' interest in rock art was not limited to the rock pictures. Instead, it was connected to the question of how humans used to communicate, and how writing systems were created and established, and how they may have been related to each other. The new term "hieroglyph" (sacred signs) might be helpful in this mission. Brunius was acquainted with some of the early publications on inscriptions cut into Egyptian obelisks, most of them moved during the Roman Empire to Italian soil. Several classical texts had also survived and been used in Renaissance work trying to explain but not to read Egyptian signs. For example, the Jesuit antiquarian Kircher (1602-1680) saw the hieroglyphs as a secret, mysterious information system, hidden to the masses (Kircher 1650).

Kircher's interpretations had no real foundation in the signs but were important in inspiring contemporary freemasons to see these holy figures as a possible link to God.

Many scholars had ideas about the hieroglyphs, some of them fantastic but totally wrong, some more reliable, but no attempts were made to really "read" the signs. However, the oval cartouches were said to contain royal names, something which was successfully experimented on later. The lack of progress in interpretation and reading the signs was probably due to the limited extent of visual records and the weak quality of the documentation.

Napoleon as a desert lion

At the end of the 18th century, there was a historical event, which totally changed the scene. The very young general Napoleon Bonaparte was rather suddenly ordered by the Directory to invade Egypt and Syria, as they provided English access to India. In the long run, this French invasion was a military failure, but at the same time the campaign had a tremendous impact on the political foundation of the Mediterranean and Near East regions but also on science and general research and knowledge (Meyerson 2004).

In 1798, Napoleon arrived in Egypt with almost 400 ships, 38,000 soldiers, horses, canons and a big group of scientists and other intellectuals in all over 150 individuals. New technologies were also introduced to Egypt such as printing machines for different languages, air balloons, and advanced artillery. The only technology that was missing was – with the cruel war and the resistance operations in mind – a guillotine. Napoleon wanted to appear as a liberator and to create a just regime, with clear rules and laws, in the aftermath of the French Revolution. In order to make the administration of this a new, rather unknown country possible, the main task for the scientists was to supply the campaign with maps and inventories of all natural resources. To these were also added, for example, ancient monuments, the history of the country, language, medicine, music, and theatre. This enterprise remains one of the largest ever investigations of a piece of an unknown continent.

Napoleon considered the completion of the French Revolution outside of France, with its political, cultural and social ideas – for all people, as his special task. This

was forced on the local societies with a combination of administrative changes and awful brutality. It is important to remember that France during this period had been at war for 29 years and had fought an incredible total of 713 battles all over Europe. The memory and effects of the Egyptian mission had a strong impact on trade, industry, politics, and military organization, not to mention territorial geographies. To the general public, Napoleon appeared to be a soldier of fortune. With classical historical figures, such as Alexander the Great, as strategic models, the coming emperor described and explained his mission. While in Egypt, the general even converted to Islam, in order to get support from the local inhabitants. This "religious- political" turn was probably soon forgotten. Napoleon saw himself as a scientist or rather as a savant. At this point, Napoleon had an appreciation of knowledge and scientific work which was fundamentally divergent from the predominant opinions during the French Revolution.

During the Jacobins' Reign of Terror, the chemist and nobleman de Lavoisier was accompanied on his way to the gallows with the comment that the Republic had no use for scientists.

The future emperor's initiative to also award medals to scientists and not only to successful military officers, became an everlasting splendid procedure in Academia.

A NEW ERA OF HIEROGLYPH STUDIES: DISCOVERY, DOCUMENTATION, INTERPRETATION AND COMPETITION

However, the French army suddenly lost its fleet, got stuck, and could only move by foot. In the meantime the scientists worked with their inventories, measurements and collections.

Later their experiences were compiled in France and published in twenty-four very large volumes, a masterpiece in the history of printing (*Description de l'Ègypte 1809-1828*).

In 1801, Napoleon's men had to surrender to the English and give up all of their equipment and collected antiquities. The brought balloon machinery was destroyed and never used. In the meantime, Bonaparte secretly left his army and brought back a few savants with him to France. Among the antiquities he had to give up, despite strong protests, was the remarkable find of a basalt stone slab a little higher than one meter, found in Rosetta in the building material of a defence wall, where the smooth slab surface had a text in three different scripts: Greek, Demotic and Hieroglyphic, with approximately the same contents (Fig. 2). The texts were a piece of propaganda, produced by the Greek authorities in 196 BC. This stone became a fixed point in the study of hieroglyphs, and it was soon exhibited at the British Museum.

Not until 1824 could Champollion himself visit the museum to view and trace the partly damaged inscriptions on the stone. After a number of years during which the stone caused a great sensation, the scholars discovered many more materials with more elaborate texts, and the academic interest in the Rosetta stone dwindled (ADKINS 2001).

The study of hieroglyphs grew and engaged many competing scholars and learned amateurs. After a while, this field was a cause for conflict among the scholarly communities in different countries, with above all Thomas Young in England and Jean-François Champollion in France as the main figures.

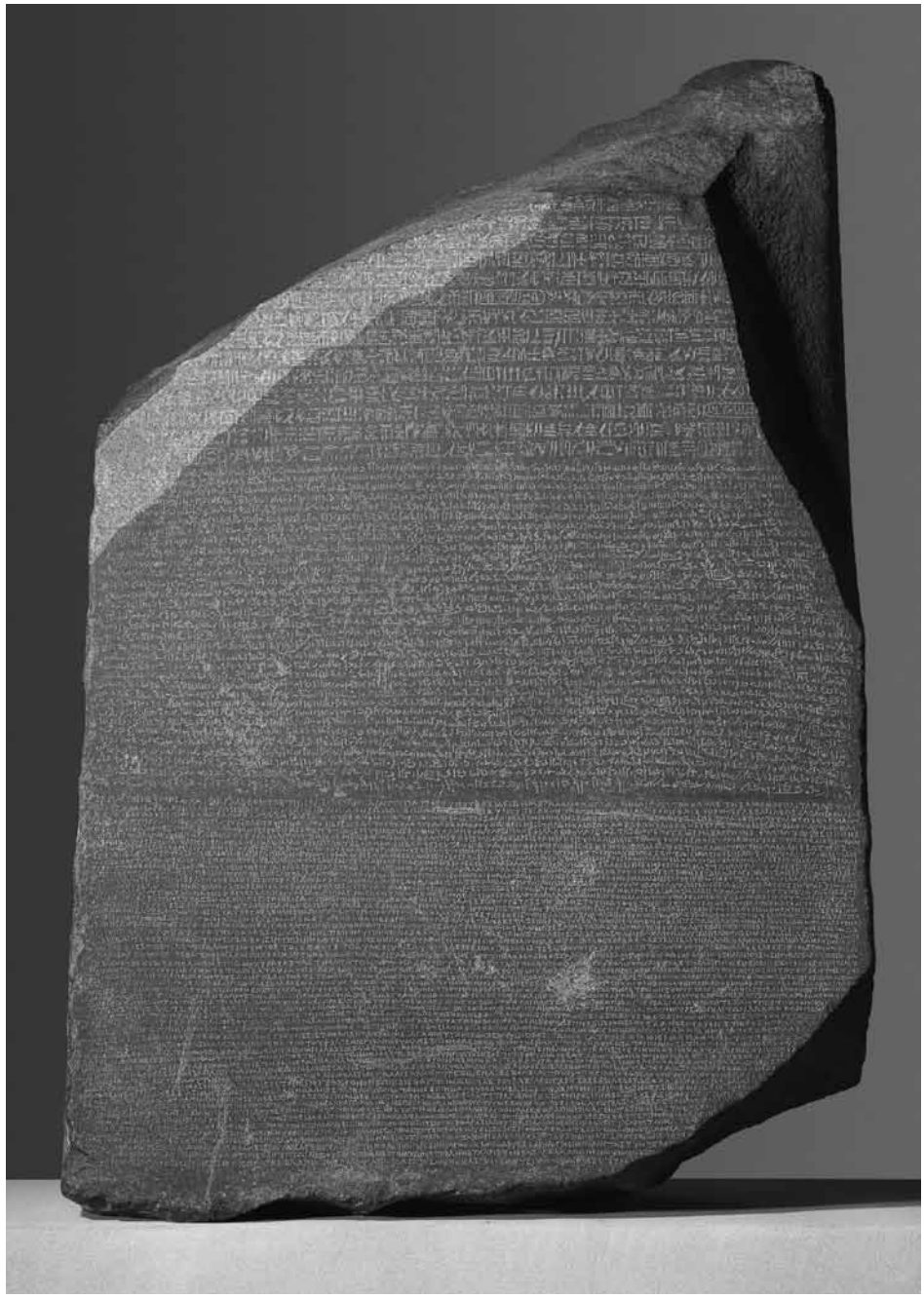

Fig. 2 - The Rosetta stone in British Museum. Photo: British Museum. Part of a bigger, partly damaged stele with three script languages, where –at the top – the hieroglyph rows are the most affected. A century after the donation, the stone slab was cleaned and some original layers of white and black were discovered in the depressions. These were remnants from the earliest copying procedures of the carvings, a method of contrast, reinvented and used in Valcamonica by Professor Emmanuel Anati.

The hieroglyphs were seen as a system of signs with figures of human beings, animals, plants, ships and wagons etcetera, but they also had additional signs to make the interpretation more precise. This script was organized within rows or columns and could be read from different directions. There were thousands of different signs, but only about five hundred were used regularly.

Spoken Egyptian and its scripts did not develop totally in parallel. The so-called Middle- Egyptian script was in use long after the spoken language had changed. Finally, the use and understanding of the hieroglyphs died out, sometime between 300 and 400 BC. Greek and Latin became the languages of the new rulers. The hieroglyphs existed over a period of about 4,000 years and of course changed in terms of their execution and grammar. However, the hieroglyphs were not adopted and accepted – unlike Greek and Latin – outside of the culture of the Nile. For a long time the Egyptian language survived in Coptic writing, which mainly used Greek letters.

What is important is that the demand for correct documentation was solved, and the stone slab of Rosetta became a sort of printing press, where the cut signs were made more visible in a black and white projection.

The inscription of the Rosetta stone was printed to scale 1/1 in many versions (too large for a printed book) and sent out to the learned world. Champollion, at that time a rather young man, was supported in his studies by the scientist Fournier, who had been a member of the Egyptian campaign. Champollion published his findings on a small scale, and his more final results were edited by his older brother (Adkins 2001, Meyerson 2004).

Champollion was an admirer of Napoleon, and in fact, they met socially in Grenoble in 1815 in a situation in which linguistic questions could be discussed. Napoleon was a man of extensive reading, especially history, and on board the ships to Alexandria he lectured to the crew on historically important men such as Julius Caesar and Alexander the Great.

Champollion was not present during the French campaign to Egypt but he was later made curator of the Egyptian collection in the Louvre. In this position he planned an expedition to Egypt, to travel and see the antiquities, especially the inscriptions. However, the local antiquarians, who were also diplomats and artefact dealers, did not help him much and he had difficulties in connecting the finds at the Louvre to the sites where they had once been found. His expedition departed in 1828 and was co-directed group of French-Tuscans which included many artists. After obtaining travel permits, the expedition moved in small boats up the river Nile, observing ancient remains on both sides. Many sites had been affected by robbers, whose destructive work could be compared with earlier documentation in *Description de l'Ègypte*. After having reached Wadi Halfa at the Second Cataract, the boats turned northwards, staying at sites for more documentation. The more than year-long expedition was a great success, with a lot of observations and documents, and with more items gathered for the collection in Paris. However, there had been many hardships and Champollion was both over-worked and in bad physical condition. In 1831, he was installed as a professor at Collège de France, but died soon after.

Thus, once again the hieroglyphs could be interpreted and even read, about 1,400 years after the last glyph was cut.

An important part included in this writing was the names of rulers, with their secondary names and titles. The custom to add Latin numbers to names was introduced by modern historians to create order in the dynastic lines.

The main reason that it was possible to understand and read hieroglyphs was the Coptic language, which was understood to be the old Egyptian language. Foreign names of historically known royalties were also important for the translations, which had been given new forms within the hieroglyphic system.

Egyptology for the people

The above describes the academic side of the events. At the same time, partly involving the same people, you can see the use of hieroglyphs and Egyptian artefacts within the Freemason organisation, where the signs and forms were given mystical interpretations. At least in Scandinavia, 90 % of all antiquarians, historians and priests belonged to the Freemasonry Society, and it must have had an effect on archaeology in the 19th century.

In academia Egyptology became a discipline of its own, stimulated by the plundering of Egyptian architecture and more easily movable artefacts for private collections or public museums' displays, often organized by consuls of European nations and adventurers.

Parallel, but in a different social situation, Egyptian architecture style and wrapped and un- wrapped mummies were used as entertainment in Western Europe. Learning and ridiculing walked hand- in- hand.

Brunius and Champollion

Turning back to Brunius, at the beginning of his rock art studies, he was influenced by the Egyptian script, as the philologist that he was. In addition, he was – as were his contemporaries – occupied with the events of the French Revolution and its continuation, and the actions of Napoleon as a general and emperor: a mighty and forceful person who could change the course of history. In the long run, Napoleon was seen as a much dangerous man, the terrible disturbances around the revolution in France were replaced by a new society, which in many ways was a remake of the old order.

Every European nation had scholars engaged in deciphering the hieroglyphs but none could present very much progress. At some point, a Swede, the orientalist Johan David Åkerblad (1763-1819), worked on the texts from the Rosetta stone on two copies, which he had obtained during his collaboration with the linguist Silvestre de Sacy. With his knowledge of Coptic Åkerblad could identify some of the names in Greek and Demotic and the signs and their corresponding sound. Åkerblad soon gave up his Egyptian studies but became famous for his discovery of a runic meandering inscription on the shoulder of the Pireus Lion, a gigantic marble sculpture, which had been moved to Venice.

Two other scholars, both Danes, one in Rome, the archaeologist Georg Zoega (1755-1809) and the bishop and church archaeologist Frederik Münter (1761-1830) were able to read Coptic texts. In Münter's case, he collected among other things, Egyptian artefacts, some of which he had built into his residence in Copenhagen. Brunius was influenced by their publications, but they probably made him scep-

tical that it would easy to understand both hieroglyphs and Scandinavian rock art as related sign systems.

At the Royal Swedish Academy of Letters, History and Antiquities, the secretary Johan Gustaf Liljegren (1791-1837), an antiquarian and old friend of Brunius from Lund, was his co-writer on a series of travel books of prehistoric places to visit. In 1827 there was correspondence between the secretary and Jean-François Champollion himself, the latter was a member of the Royal Swedish Academy of Letters, History and Antiquities from 1826, a time period when his results were ridiculed and rejected by many colleagues (Hildebrand 1937a). Having the opposite opinion was the same as being seen as an enemy on the battlefield of science and fame. The famous interpreter of the hieroglyphs was very positive to a possible relational study between the Egyptian script and the Nordic rock carvings of which he knew, as he was interested in the runes and the mythology of the ancient Nordic peoples. He even thought that the runes could be part of the development of the systems of writing. But nothing came out of this contact and both people passed away too early.

Brunius knew of this correspondence and the Academy made a decision to ask their member Professor Brunius to produce faithful documentation of the petroglyphs from his home province. The Academy does not seem to have been aware of Brunius' earlier very large and carefully made documents of the same kind (Nordbladh 2015). However, in 1838, there was a new, smaller field campaign to find more glyph sites (Hildebrand 1937a).

There are other possible connections to Brunius' interest, in particular Sven Hylander who was a protégé of Christian J. Thomsen in Copenhagen. He showed the Kivik grave to the famous Danish archaeological pioneer in 1820 and visited Paris and many colleagues there that same year, among them the Danish geographer Malte Brun and the orientalist Silvestre de Sacy, the supporter of the young Champollion. Hylander was also one of Brunius' fellow students, but died very early (Hildebrand 1937b, p. 421f).

At old age, Brunius stated that he, after undertaking a great amount of investigative work including into the legacy of Champollion, had found no close connection between Swedish rock art and the hieroglyphs. Instead, Brunius tried to force interpretation of the rock art using old Nordic mythologies, but without giving up his strong demands for correct documentation.

Does that mean that he denied the relationship between rock art and the hieroglyphs and that the claims of Egyptian connections diminished? Not really. During the following centuries, many signs of historical contact between Egypt and Scandinavia were discovered.

Some examples include:

In both areas, boats and ships were used as narrative vehicles of information; the use of wooden coffins in graves in the Scandinavian Bronze Age are faintly similarities to Egyptian burial cases;

some small miniatures in Bronze showing a sort of gymnastic dance or fight have been found in both areas;

Egyptian movable furniture in the form of wooden folding stools are also found in graves in South Scandinavia and North Germany;

the use of very light chariots of war can be seen in Scandinavian rock art panels and some metal details and in full scale from Egyptian graves and picture panels;

recently, a few blue glass beads have been discovered in Scandinavian graves, the analysis of some of them shows them to be Egyptian;

looking closer at rock art in the Nile valley and in the deserts there are panels which are quite different from the pharaonic style: simpler, "looser" compositions that more closely resemble Scandinavian depictions (Fig. 3) (Wilson 2003, p.5);

Fig. 3 - Egyptian rock art from site 26, Wadi Abu Wasil, Eastern Desert. Suggested dating c. 3.500 BC. (Photo: Francis Lankester, www.easterndesert.com)

in addition, there is, for example, the temple in Taffeh, now in the Rijksmuseum van Oudheden and The National Museum of Antiquities in Holland which on top of its pharaonic reliefs contains some very crude rock art figures including ships, of quite a different character than the foundation, which are totally ignored by the later carvers (Fig. 4).

Fig. 4 - Outside of the Temple of Taffeh, Egypt. Now in Dutch National Museum of Antiquities, Leiden. Dating of the temple is 27 BC to 14 AD.
On top of the original reliefs on the right shorter wall theer is another layer of rock art, more coarse and without considering the bottom decorations. Photo © Rijksmuseum van Oudheden, Leiden, NL.

The character of these documented, connected and contemporary finds in two very distant areas must be analysed further in order to understand the nature of their relationship.

Conclusions

Not only are the results of scientific work of interest. It is also vital for our understanding of these finds to find out what kind of reference work were available at what times. These works became manifold through the years and necessary choices had to be made. What did these choices represent? For the understanding of how and where writing began, the earliest civilizations, China and Egypt, were used. All writing systems were believed to have been interconnected, but of different ages.

How was the work done? Was it a combination of autopsy, documenting others and one's own production, and the use of published material? There is a tension between making your own documents and relying on those that already exist.

The questions and answers which are of current interest in the history of archaeology and rock art are far from definitely formulated and will henceforth surprise us and even scare us. At the same time we will learn more. Writing a history of research which only deals with strict archaeological matters is a self-deception both for the discipline and the people and society involved.

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Competition Expressed: Marking Places within Rural and Urban Landscapes

Ralph J. Hartley & Sharon L. Kennedy***

Summary

The extent to which marking places with images, symbols and/or script on a landscape reflect the dynamics of a socio-economic environment continues to be a subject of interest in social science. Places become socio-culturally meaningful often because of the content of the markings on non-portable surfaces. In some contexts the information content of the markings reveal a perception of propriety when competition for space or other resources between groups and non-kin related individuals characterizes a social environment. In other contexts the content of markings reflect competition between individuals for resources, status, or prestige. Urban environments, dense with diverse human activities, are laden with markings both socio-politically sanctioned and those often considered intrusive spatially and contextually, e.g. graffiti. Rural, less densely populated landscapes, are characterized by areas and places where markings produced in the recent past are signified socio-politically and often deemed worthy of maintenance and protection, e.g. indigenous rock-art. These places are, however, also subject to contemporary marking not socially sanctioned. We explore here the social context underlying variability in the marking of places in urban environments and in rural landscapes. The content, location and situational positioning of historic and contemporary intrusive markings in urban environments is compared to that of the juxtaposition of prehistoric and proto-historic rock-art as well as contemporary markings in the southern Black Hills of South Dakota (U.S.). Finally, we discuss the role of non-portable markings as a component of socially constructed space with the framing of questions and an approach to future research.

Riassunto

La demarcazione dei luoghi con immagini, simboli e/o scrittura riflette le dinamiche di un ambiente socio-economico; il fenomeno è di interesse per le scienze sociali. I luoghi si trasformano e sono percepiti come spazi socio-culturali in base a quanto è segnato sulle superfici fisse. In alcuni contesti lasciare un segno significa ribadire la proprietà, in particolare quando vi sono contrasti di ordine sociale ed economico per aggiudicarsi il possesso del luogo e delle risorse ivi contenute. In altri casi i segni possono indicare la marcatura a dimostrazione della concorrenza, tra singoli e gruppi, per aggiudicarsi risorse, un ruolo sociale o il prestigio. Per gli ambienti ad alta urbanizzazione si assiste a una presenza di molti segni, simboli e scritte, sui muri che in genere afferiscono alla sfera socio-politica; i graffiti, in particolare, sono percepiti come di disturbo e invadenti dello spazio pubblico e privato il che li porta ad essere sanzionati per il loro contenuto e per la modalità di esecuzione. Al contrario nei contesti rurali, con una ridotta densità abitativa, i segni lasciati da sconosciuti nel recente passato sono ritenuti degni di rispetto e di manutenzione per preservarne il contenuto socio-politico; ciò avviene, ad esempio, nell'arte rupestre indigena. Vicino ai segni del passato continuano a essere poste anche marcature contemporanee senza che vengano sanzionate dall'opinione pubblica. Nell'articolo è indagato il contesto socio culturale che sta alla base delle variabilità individuate sia per i segni nel contesto urbano, sia nel contesto rurale. Il contenuto, la posizione dei segni storici e contemporanei inseriti in un ambiente urbano sono confrontati con le manifestazioni di arte rupestre preistorica e protostorica, nonché con le marcature contemporanee nel sud della Black Hills del South Dakota (Stati Uniti). Sono presentati, infine, spunti di riflessione inerenti il tema affrontato e alcune domande per un futuro approccio alla ricerca.

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Introduction[1]

Humans cooperate and form coalitionary relationships in order to effectively compete at various scales ranging from that of kin-level to a broad non-kin social level that may, for example, enhance trading relationships, or enable dominance through lethal violence. The uniquely human ability to cooperate in huge groups of non-kin, i.e. ultra-sociality, is conditioned, to a great extent, on extensive social learning through imitation, symbolic and linguistic construction, and analogical reasoning to facilitate such relationships (Henrich, Henrich 2007; Smith 2010; MacKinnon, Fuentes 2012; Santos *et al.* 2012). Maintaining these relationships in varying domains requires mediums of communication that can, when necessary, minimize ambiguity. We are also, however, highly capable of creating non-vocal informational content that can be difficult to evaluate accurately (Cronk 2005). Our dependence on the visual mode for discriminating information does not discount the advantages of different communicative modalities (e.g. sound, smell) that we rely on, but visual and spatial expressions are most often used to attempt an understanding of abstract concepts (Kaplan, Kaplan 1982, pp. 192-193; Rowe 1999; Dunham 2011, pp. 238-244).

The communicative dynamics underlying the creation and display of visually retrieved markings on or at places, in what is often a noisy informational landscape, is most fruitfully explored, we believe, within the conceptual framework embodied in signaling theory and receiver psychology. The adaptionist view of communication in behavioral ecology is the grounding for the conceptual definition of a "signal" as an act or structure that has the potential to alter the behavior of, usually, a con-species and is effective because it transfers information to receivers (Maynard-Smith, Harper 2003; Scott-Phillips 2008; Carazo, Font 2010). Whereas "cues", although not necessarily geared toward influencing the behavior of others, can be characterized by animate or in-animate features that have the potential to inform or guide future actions. Cues are not, for the most part, considered to be communicative signals. While cues are permanently activated and fixed in an environment, signals can be turned on or off (e.g., vocalizing) eliciting an exchange of signals that characterizes communication. A behavioral or material display with particular characteristics produced as a signal serves as a conduit of communication.

The creation and placement of markings on non-portable surfaces in an environment is, we assert, a low cost signaling behavior that, similar to scent marking by other mammals, often occurs in the absence of a receiver. The information embedded in visual marking is assigned meaning by the receiver/viewer, or, as emphasized by Font and Carazo (2010), useful information is extracted from the markings. This information is often absorbed and processed after its initial retrieval and usually in the absence of the creator(s) of the marking.

Theory and models of signaling have been found useful in the discussion of marking on non-portable surfaces especially in reference to social interaction underlying the creation of prehistoric/proto-historic petroglyphs and pictographs

1 The ideas in this paper were initially presented at the XXV Valcamonica Symposium (2013) in Capo di Ponte, Italy. We would like to thank Dr. George Nash, chair of the sessionAncient Graffiti and Modern Graffiti for his encouragement in developing further the assertions presented here.

(e.g., Varella *et al*. 2011; Flaherty 2012; Lenssen-Erz 2012). The act of marking in some contexts is assumed to be that of individuals who expend time and energy in their own self-interest. The signaling of skill, prowess, prestige or other individual characteristics is hypothesized to underlie the creation of some rock-art (e.g., McGuire, Hildebrandt 2005). An observer encountering the information content of a marking is better positioned to make evaluations of the qualities and characteristics of the creator and their cooperators, influencing decision-making and future interaction.

In an environment where groups are in competition for resources, whether it be territory or an immediate source of subsistence production, we see signaling operating at multiple levels. Investment in conspicuous construction, performance or distributions at the group level is a means by which to signal power, wealth and collective support. The creative production by individuals, as members of groups that maintain multiple signals and receivers, contribute to social signaling that communicate the collective interest of the group or cohort of a population with that of another (e.g, Bouchet-Bert 1999; Tacon 2002, p. 132; Roscoe 2009).

We see the material manifestations of this individual-prosocial dynamic in public historic and contemporary settings. Speculating about underlying conditions for behavior observed in prehistoric creations is, however, often an exercise on the slippery slope of cross-cultural experience and analogical reasoning. Discussions of the behavioral grounding and contemporary interplay of graffiti and indigenous rock-art is, nevertheless, not without precedent (e.g., David, Wilson 2002; Watson 2008; Frederick 2009; Nash 2010; Stevens 2012; Lovata, Olton 2015).

The placement of the marking on a landscape lends insight, we believe, into the role of non-vocal communicative behavior within environments that are characterized by a complexity of competition and conflict, the dynamics of which are in evidence for individuals and groups in both urban and rural settings. The content, location and situational positioning of historic and contemporary markings in urban environments is compared to that of the juxtaposition of historic indigenous rock-art and contemporary markings in the southern black Hills of rural South Dakota (U.S.). Additional references to places with signified markings in various urban and rural socio-cultural settings are included for the purpose of illustrating the utility of comparing the behavioral dynamics that underlie some marking in environments of stress.

The Rural Black Hills

The heavily forested Black Hills of southwestern South Dakota and northeastern Wyoming are characterized by highly dissected ridges, broad tablelands, valleys and deep canyons. The material remains of prehistoric and historic Native American activities are found throughout this landscape. Indigenous occupation and activities for at least the last twelve thousand years are in evidence especially in rock-shelters and in canyons near waterways. In 1874 Euro-Americans discovered gold in the Black Hills, and consequently, in violation of an 1868 Treaty with the Lakota Sioux the U.S. took control of the region. Throughout the latter half of the 19th century mining, logging, and cattle ranching brought thousands of non-Native American people to the area. For well over a century various Na-

Fig. 1 - "Jesus Saves" – Stone Quarry Canyon

tive American groups have actively contested ownership of this landscape. The Lakota Sioux, Cheyenne, and Arapahoe continue to maintain the resource-rich Black Hills as a sacred landscape within which many places of petroglyphs and pictographs are signified and deemed worthy of protection from damage and desecration, most of which are stylistically dated from the Middle Archaic (5000-2500 BP) throughout the post-contact era. In 1980 the U.S. Supreme Court ruled that the Black Hills were appropriated by the U.S. Government in violation of the 1868 Treaty and a financial settlement was mandated. This overall land claim, however, has yet to be resolved. Within the southern portion of the Black Hills are two drainages, Craven Canyon and Stone Quarry Canyon, managed currently by the U.S. Forest Service. The area encompassing these canyons is open to cattle grazing, hunting, and Native American traditional activities. During the 1950's and 1970's uranium exploration and mining in this area was conducted under permit from the U.S. Government (Sundstrom 2003, 2004).

Craven and Stone Quarry Canyons are rural settings that have attracted human activities revealed in miscellaneous graffiti, inscription, and rock-art defacement. Our attention here is in markings that attempt to communicate, by way of low-cost signaling, information that is directed toward influencing the behavior of the viewer or their perception of the social dynamics in this environment such that short and/or long term decision-making is affected. This framework varies somewhat from that of non-human signaling, in that the markings communicate or have the potential to communicate information available for the assignment of meaning by the viewer(s). The informational value of the marking

Fig. 2 - "Jesus is King" – Craven Canyon

can be expected to vary with the viewer(s) as well as through time. Moreover, the communication, while active in its visibility, can be altered with intention to revise or influence meaning.

It is assumed here that the creator(s) or producer(s) of the images and text are imbued with self-interest and goals, both immediate and long-term, that are amendable to non-vocal signaling. Symbols or script incised into rock that reflects a degree of commitment to a belief system such as "Jesus Saves" or "Jesus is King" contain the potential to influence the viewer's perception of others in the social environment (Figg.1 and 2). The act of carving or incising, however minimally costly in terms of time and energy, serves as a measure of the investment and commitment that characterize the creator (Flaherty 2012). The receiver of the information in the "Jesus" inscriptions is in a position to remember the "message" as intentionally communicated. The goal of which, in social evolutionary terms, is the pursuit of cooperation and group solidarity by means of increasing a belief commitment among the greater social group (Henrich 2009).

Courtship signaling behavior is a topic intensely studied in most species and often is characterized by complex displays and multi-modes of signaling (Candolin 2003; Hebets, Papaj 2005, pp. 198-199). Human courtship behavior employs most effectively the visual, auditory and olfactory modes of signaling. In terms of sexual strategies theory, courtship behavior is conditioned by a highly competitive environment and many of the characteristics of our status display are centered on mating. In these canyons romantic relationships, presumed or anticipated, are the subject of markings. Stone Quarry canyon is narrow and highly

Fig. 3 - Incised heart with initials and date – Stone Quarry Canyon

Fig. 4 - "HENDRICK IS A WHORE" – Stone Quarry Canyon

permeated with small rock-shelters and overhangs. An informant highly familiar with this area notes that this canyon has been a setting for the activities of local young people for decades. In this canyon the creator of a marking can signal not only a commitment of intent directed to a selected or potential mate but also signal to active and potential competitors their intent and/or commitment. In a place where a male "John", for example, might carve, within the outline of a he-

Fig. 5 - Brands, initials and dates – Stone Quarry Canyon

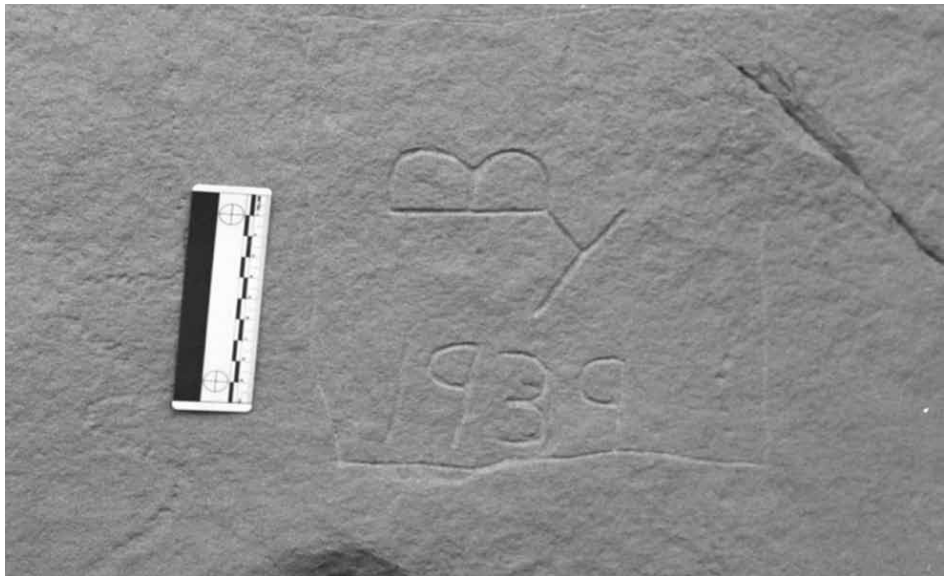

Fig. 6 - Brands and date – Craven Canyon

art, "John loves Mary" suggests that the intended receiver of the information be "Mary", her associates, as well as any competing suitors (Fig. 3). Other females may find the behavior underlying this marking informational in that it permits, by what is termed in cross-species behavior, "eavesdropping". The gender of the signaler (creator of the marking) may be reflected in the symbol or image. As Cross and Campbell (2014) make clear, sexual reputation often underlies conflict

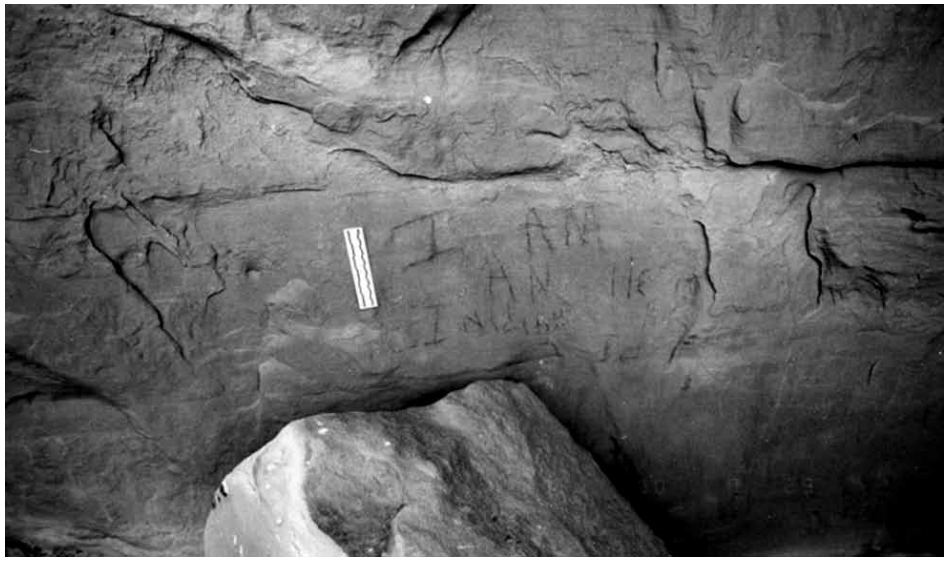

Fig. 7 - "I Am An Indian" – Stone Quarry Canyon

between females, especially those in their post-pubertal years. The "Henrick is a whore" inscription (Fig. 4) reveals, for example, an unambiguous, active, competitive social environment.

Euro-American use of the Black Hills in the late 19th century is characterized by intense resource extraction activities, e.g. mining gold and more recently uranium, timber harvesting, and grazing for cattle ranching – all of which resulted in the construction of railroads. Cattle were free to graze largely without the constraints of fencing. Ranching families, being holders of highly valuable, yet mobile, livestock branded cattle with a morphological designation easily identified to that of the kin-group. These symbols of ownership or propriety were useful as cattle co-mingled with those owned by other families or extended kin-groups competing for effective grazing land in remote areas. A common threat was theft, e.g. "rustling", by others coveting this resource. Carving or incising one's brand marking on rock surfaces at sites within the large expanse of area where their cattle grazed and/or herded is observed cross-culturally, the result being the distribution of markings of kin-based identification on non-portable, somewhat permanent surfaces, for encounter and interpretation by the viewer (Figg. 5 and 6) (Winkler 1947; Gramly 1975; Lynch, Robbins 1977; Lenssen-Erz 2012, pp.104, 108; Kalhoro 2013). Cooperating kin-groups in this social environment as well as those competing for quality grazing land and those with interest in theft of the cattle could, when encountering this place-based information, evaluate its significance such that decision-making about activities in this landscape was influenced.

The historic Euro-American domination of the resource-rich Black Hills environment, with its intense land-use, multiple resource extraction activities and demographic saturation has not diluted Native American claims of ownership rights to this region. Since the U.S. Government took proprietorship of the Black

Fig. 8 - Context of painted "white man go home" – Craven Canyon

Hills soon after gold was discovered in 1874, Native Americans, especially the Lakota Sioux, Cheyenne, and Arapahoe, have actively contested rights to ownership of much of the region. Of interest here is the extent to which these broad conflicting claims of ownership and land-use are represented in markings in this landscape, for example, "I am an Indian" (Fig. 7).

While graffiti permeates Craven and Stone Quarry canyons and has accumulated for decades, some markings reflect an interest in defining social borders (Ross 1975). Contemporary tension stems from the competing activities with which Craven Canyon, especially, is burdened, e.g. commercial horseback trail rides sponsored by ranching families, hunting, cattle grazing, uranium exploration, recreational rock climbing, and Native American traditional activities such as vision quests and cultural instruction of young tribal members. This conflict is unambiguously communicated and positioned in Craven Canyon with that of the painted "white man go home" (Fig. 8).

The Urban Setting

In dense, contemporary environments competition for limited space conditions behavior of both individuals and groups of varying sizes, often leading to social conflict expressed in various mediums of communication. Graffiti and street art that reveal the contesting of space is known cross-culturally to be a mechanism of behavior where social conflict and economic stress defines an environment (e.g., Ley, Cybriwsky 1974; Rolston 1987; Peteet 1996; Frederick 2000; Baker 2003; Chmielewska 2007, pp. 163, 166; Silva 2010; Stevens 2012; Nash 2013, pp. 443-444)[2].

2 The intense socio-political unrest in Oaxaca, Mexico for example, beginning in the spring of 2006 resulted in prolific graffiti used as a political weapon to make the streets more visible to a populace vulnerable to labor oppression and violence. What began as a routine teacher's strike evolved into violent retribution by the government against the mostly female teachers and their supporters (Nevaer 2009, p.59).

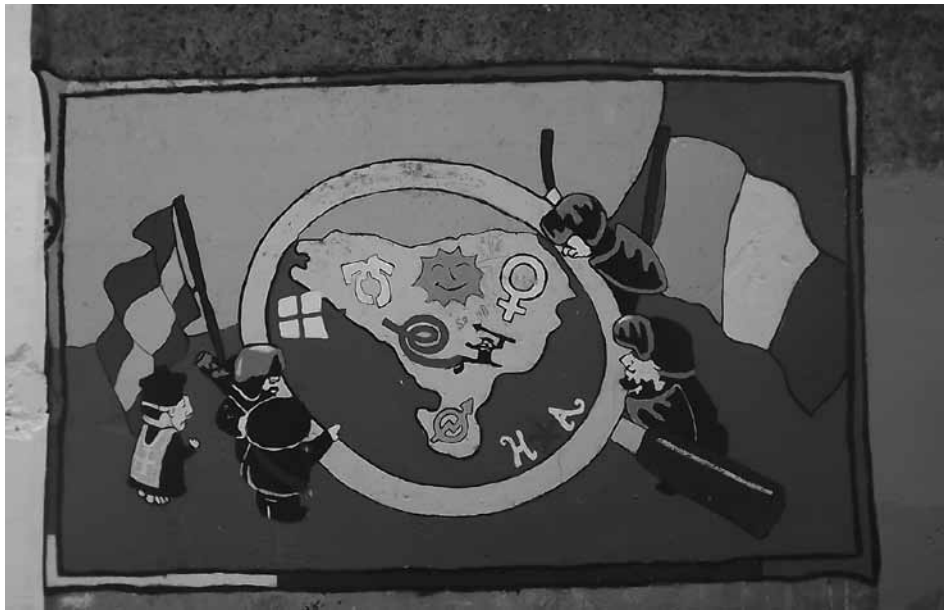

Fig. 9 - Mural of a French and Basque map, near Rue de Tonneliers, Bayonne, France

Some groups view markings such as graffiti a medium for communicating through non-vocal signaling how they believe a space is to be used and thereby exploit space to direct discontent toward their competitors. While the content of some markings express concern for global issues other expressions of discord are focused on the local environment and the complexity of social relationships characterizing an urban setting. Whether a space for such marking is sanctioned socio-politically is dependent oftentimes on factors such as the physical space, location within the built environment, and history of the place (e.g., Waldenburg 1990; Orengo, Robinson 2008; Haworth *et al*. 2013).

Expressions of overall consensual sentiment such as that on large murals positioned for public view on structural walls can serve as propaganda to further political messages that reflect competition within a socio-economically contested area (Fig. 9). Unambiguous messages expressed through this means can communicate resistance by a group or sub-group who maintain defiance under the rule of an adverse government. The variety of large paintings produced in the 1980's-1990's signaling socially the competitive positions between Protestant/Unionist/Loyalist groups and that of the Catholic/Nationalist/Republican allegiance in Northern Ireland are acknowledged as effective examples of combined images and text strategically positioned in a landscape where intense conflict was maintained for decades (Rolston 1987; Sluka 1992; Jarman 1997). The utility of large format murals to reflect socio-economic stress in Ireland continues as the government creates mechanisms to attempt financial recovery from near economic collapse. Where unemployment of the younger cohort of the population nears 28%, widespread resentment of government policies and financial institutions is exemplified in a large, colorful mural on a closed storefront in central Dublin (Alder-

Fig. 10 - Tagging or throw-ups in a busy shopping area of Venice, Italy

Fig. 11 - "The Sheepest" – New York City

MAN 2013A). And in Greece, where economic collapse has stressed the populace in recent years, leftist and far-right socio-political groups compete intensely for power. This competition is reflected in layers of graffiti where superimposition and over-marking is common, especially in the working class neighborhoods of Greek cities (ALDERMAN 2013B).

The producers of graffiti in contemporary affluent urban settings are known to actively compete with commercial advertisers in their reaction to the widespread commodification of space. In many cases there exists an attempt to subvert urban signage and incorporate anti-branding and anti-corporate logos. Through the use of "tagging", "throw-ups", or quickly rendered and repeated symbols or signatures, graffiti writers insert their own version of market saturation and repetitive imagery to claim or re-claim space (Fig. 10).

The elaborate and repetitive display of signals in non-human animal behavior is argued to be akin to that of mass media advertising in that rarely is new information conveyed during repeated and redundant commercial advertising within different forms of media. Rather, repetitive exposure to the message is oriented toward eventually convincing one to buy the product or service in an environment where the consumer is faced with the claims of competing entities (DUNHAM 2011).

The products of graffiti and street artists are oftentimes a means of advertising skill, talent, or daring. The ethnographic work of Halsey and Young (2006) and Taylor (2012) indicate "pride", reputational status, and "publicity" as self-identified incentives. To incur risk in the successful production of a marking is a means of accumulating prestige, especially when placement of the marking is perceived as inaccessible, i.e. "stay-ups". The striving for prestige is a competitive exercise that fuels "communication amongst the family on the street" (Halsey, Young 2006, p. 280). Interviews with primarily young male graffiti writers in London, New York, and Perth confirmed Macdonald's (2001, p. 84; TAYLOR 2012) generalization that "The greater the danger, the greater the respect." The "symbolic capital" for young males marking in dangerous and risky settings is invaluable in the social milieu of their age cohort. As they age socio-economic conditions may change, but their identity display has a potential to endure. Benefits to graffiti artists who produce repeated imagery include ensuring that those encountering the graphic in an otherwise visually noisy environment interpret the intended information with some accuracy as well as creating an identity that is not to be confused with the markings of others. In high density social environments the producers of the images are likely undergoing competition from others in their social group so in order to strive for or maintain the perks of influence and prestige must signal consistently to the community his or her status (KAPLAN 1987; BLEIGE-BIRD, SMITH 2005; PLOURDE 2010). The French graffiti artist who goes by the pseudonym "The Sheepest", for example, maintains his consistent sheep imagery and signs his work using dollar symbols in place of each letter 's', thereby signaling his protest of the human consumption of mass marketed goods (Fig. 11). His sheep are situated on walls so as to observe the world like a camera. In the artist's view, sheep are submissive and followers, not unlike mass consumers. This graphic imagery is found on structures and walls in major cities across the world and multiplied further through social media technology.

Fig 12 - "Fucking Tourist" – along walking trail leading to Park Guell, Barcelona, Spain.

Discussion

Some of the markings in Craven and Stone Quarry Canyons reveal similarity to those in dense urban settings where competition for the resources characteristic of a space is observed in images, script, and graphic symbolism on non-portable surfaces. Much of the graffiti, inscriptions, and petroglyph and pictograph defacement in these canyons reflect the conflicted ownership of space in the overall contested region of the Black Hills. The incised "white man go home" observed on a rock wall in Craven Canyon exemplifies an attempt to define social borders and group identity that reinforces a cultural topography in the midst of conflicting claims to this landscape (Hartley, Vawser 2002). Likewise, in laying claim to an urban tourist destination, for example, a graffiti writer spray-painted "Fucking tourist" in bold black letters on a wall along the heavily used walking trail that leads to the public Park Guell in the Gracia district of Barcelona, a city known for its long history of social unrest (Casellas 2009; Fig. 12). The targeted audience could hardly miss the strategic placement of the baiting message. These markings, as a medium of signaling, exemplify the assertions of McGlade (1999) that ideologies underlie the creation of socially constructed landscapes and are in effect an expression of socio-cultural identity.

In order for any signal to be effective it must be discriminated from other stimuli and signals in the environment of the receiver/viewer (Rowe 2013, p. 519). Controlling for ambiguity with place-marking may be in some contexts challenging, yet in some localities or contexts attempting to enforce ambiguity might be advantageous in the attempt to influence receiver/viewer behavior or decision-making. Graffiti in Montreal and Warsaw with names and letters as its primary

content was studied intensively by Chmielewska (2007). She notes the importance of these markings for "negotiating local identity" in their socio-cultural setting. These linguistic and signature markings are not dissimilar morphologically from that of the distorted numbers and letters forming the "Captcha" translation required to initiate a human-computer program connection. With place-based graffiti the viewer uses both his/her visual interpretative skills with the locality of the marking to extract information and assign meaning. With a "Captcha" the computer is attempting to induce limited visual ambiguity with the goal of making a determination as to whether it is communicating with a human or another computer algorithm. The physical environment of this informational transaction is irrelevant. Creating ambiguity in visual marking is, and likely has been for millennia, a human behavioral skill that facilitates attempts to filter interpretations made by receivers of a signal.

To mark on non-portable surfaces, whether it be a rock face or a human built structure, modifies a landscape. Where a marking is placed is a variable of importance when acknowledging the fluid dynamics of competition between individuals or groups. When markings on non-portable surfaces in both the built environment and in the topography of a rural landscape are encountered, information is extracted and meaning is assigned that result from both the content of the marking and its placement. When the marking has some permanence it contributes to the socio-cultural topography in which people live. These modified places become stimuli in the construction of an individual's cognitive representation of space that, being based on existing features of an environment, influence spatial behavior (Kitchin, Blades 2002; Amedeo, Golledge, Stimson 2009, pp. 299-301). Visually significant addition or change in an urban built environment as well as in a rural setting can become a spatial reference in the challenges and decision-making inherent to the mobility of people. Whether the marking reflecting a competitive social context be large painted murals signaling socio-political status and intent such as that in Northern Ireland, graffiti protest of violence in streets of Oaxaca, or the dynamics of flirting in courtship behavior as observed in Stone Quarry Canyon, each can function as anchor points in the cognitive map of those using or living in an environment. The life history of a place in settings of active competition can yield a landmark where particular activities or interaction occurred (e.g. Zedeno 2000; Whitridge 2004; Stewart, Keith, Scottie 2004; Moreau, Alderman 2012). These markings can also contribute to "place-attachment", recognition that the socio-cultural meanings associated with a place are often perceived as a binding agent between individuals and groups (Stokals, Shumaker 1981). The potential to influence social identity with place-based marking is high when meaning is assigned and expressed through narrative discourse and storytelling, reflecting the complexity of shared space (Rishbeth 2014).

Humans are not unique in that many species modify the landscape in which they live but the breadth and volume of information we, in contemporary social systems, convey through space and time by way of various social mechanisms is unparalleled. The kinds of place-based markings discussed here reflect social dynamics as well as influence social interactions. Those individuals encountering a marking do not, of course, interact with all others populating a setting. The po-

tential, however, for an indirect connection via the viewing of the marking creates links that enable social network theory and analyses to be used in investigating the influence of a marking on social and spatial behavior. That influence, for much of human evolution, was dependent primarily on physical encounter with a place. The communicative complexity characterizing our social dynamics over the last century has increased with technological innovation ranging from radio to networks of satellite systems that create a perception of space independent of time and physical encounter. Photographs of graffiti and murals placed on non-portable surfaces are often used to enhance the dynamics of a story or analysis in text (e.g., ALDERMAN 2013 A,B). The communicative media with which text-based information and images are transferred are now highly portable and broadly accessible, ranging from print to internet based mediums. Places photographically captured in the contemporary built environment that are or have been used to signal the status of socio-economic competition and conflict have the potential to communicate information that is not dependent on a physical visual encounter. The assignment of meaning to these photographs, being context dependent, is then vulnerable to greater variation and, we assert, manipulation. The significance of a marking in its setting, often of temporary duration, can change rapidly in concert with the social dynamics in a rural landscape and an urban environment.

CONCLUSION

To what extent then does contemporary social media technology influence the content, placement, and style of non-portable markings that reflect conflicting claims and competitive behavior in rural and urban environments? We would expect that the extensive information sharing characteristic of these technologies helps create feedback to the decision-making made at places. With the intensive proliferation of mobile communication devices place-based marking has the potential to be an immediate signaling medium with which group coordination can be enhanced or initiated (cfr., Kelley 2014). Contributing individuals are, through their actions and abilities, willing to bend their self-interests to larger scale, more organized efforts. Strength in numbers and power can be masked and difficult to evaluate by adversarial groups. In many social settings costs and benefits to the individual in the pursuit of prestige and status by way of place-based marking are intensified, such that competition is broadened and the potential payoff greater, with a concomitant challenge to maintaining status. Delineating the self- interest goals of the creator of markings in environments and contexts where vast quantities of signal receivers reside, who themselves have differential interests in evaluating the signal, makes amenable agent-based modeling that focuses on interaction and modes of communication among individuals according to an explicit set of rules of behavior. To establish measures of effect of such broad and intense signal dispersion requires the integration of social and evolutionary psychology and anthropology, the goal of which will be to generate new hypotheses about how markings on non-portable surfaces function in contemporary social dynamics characterized by communicative technologies that induce a perception of compressed time and space.

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Capo di Ponte, Corno di Seradina, roccia 12. Una breve storia delle ricerche e un'intervista

Angelo E. Fossati *

Summary

The paper summarizes the research history pertaining to the right side of the middle valley, with particular reference to rock 12 of Seradina I, one of the best known engraved rocks in Valcamonica. Research on the surface of this rock was published for the first time in 1932 by Raffaello Battaglia, but the comprehensive scientific investigations and fieldwork were conducted from 1962 to 1989, at which time the rock came to be further exposed as viewed in its present state. This exposure of the rock was evident after the excavations conducted by the Centro Camuno di Studi Preistorici, affecting the northern and eastern portions. For this paper the author interviewed prof. Mila Simões de Abreu who was the director of archaeological fieldworks between 1981 and 1989, and she provided a summary of the research phases covering those years. This research summary concludes with a literature review of the major publications that concern research on the images present on rock 12, marked by year of publication.

Riassunto

L'articolo sintetizza la storia delle ricerche nel versante destro della media valle, con particolare riferimento alla roccia 12 di Seradina I, una delle rocce incise più conosciute in Valcamonica. Questa superficie, pubblicata per la prima volta nel 1932 da Raffaello Battaglia, venne indagata in modo scientifico durante diverse campagne di studio condotte dal 1962 sino al 1989, quando la roccia giunse alla sua attuale conformazione, soprattutto dopo gli scavi condotti dal Centro Camuno di Studi Preistorici e che interessarono la parte verso Nord e verso Est. L'autore ha intervistato la prof. Mila Simões de Abreu, che fu la direttrice del cantiere archeologico tra il 1981 ed il 1989, la quale ha riassunto le fasi della ricerca di quegli anni. Conclude il contributo una serie bibliografica delle maggiori pubblicazioni che hanno discusso i temi presenti sulla roccia, segnata per anno di edizione.

Con questo articolo il BCSP intende dare l'avvio ad una serie di scritti che hanno come oggetto la roccia 12 di Seradina. Essi continueranno anche sul prossimo numero che verrà dedicato al sito di Seradina con le sue varie zone in modo monografico. A questa superficie di straordinario interesse archeologico, storico ed etnografico, per diversi motivi non era stato possibile dedicare uno studio completo che diffondesse e approfondisse il suo patrimonio iconografico. In ogni caso dopo il 1981, in numerose pubblicazioni in Italiano e in altre lingue, erano stati editi estratti dei rilievi e fotografie delle tematiche più importanti presenti sulla roccia quali: le arature, le cacce al cervo e al camoscio, i duelli e gli schieramenti dei guerrieri, gli uccelli acquatici ecc... Rilievi che erano stati estrapolati da quelli eseguiti tra gli anni '50 ed '80 del secolo scorso durante le campagne dirette dal Centro Camuno di Studi Preistorici con Emmanuel Anati prima (per i settori più piccoli e la porzione superiore del Sett. C della roccia) (Sluga 1967),

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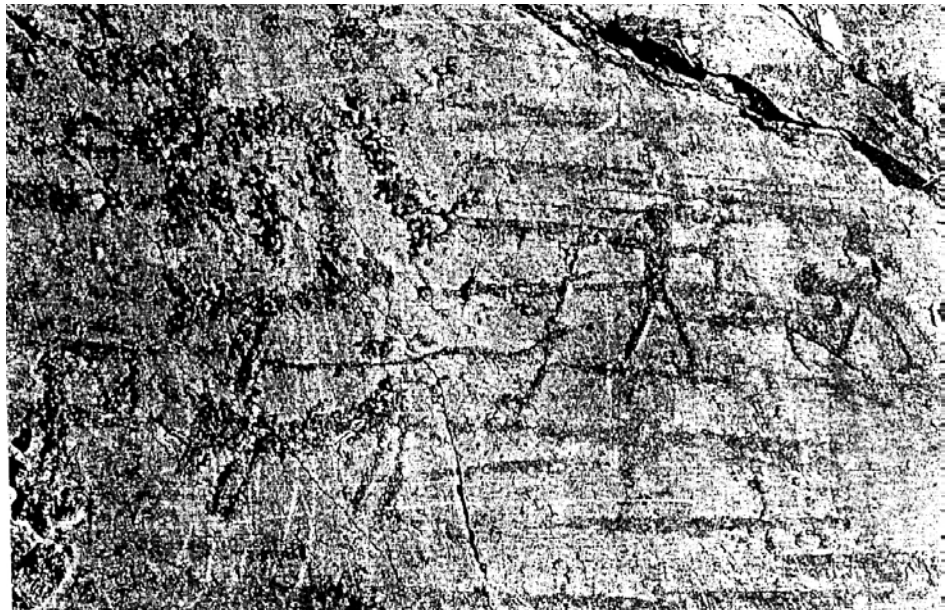


Fig. 1 - Seradina, roccia 12, settore C superiore. La scena di aratura pubblicata da R. Battaglia nel 1932.

e con Mila Simões de Abreu poi (per il rilievo totale di tutti i settori, compreso il grande settore inferiore, aperto dal 1981[1]). Negli anni 1988-1989 i lavori vennero ultimati, con una serie di controlli dei rilievi eseguiti negli anni precedenti, dal team della Cooperativa Archeologica Le Orme dell'Uomo di Cerveno (BS).

La roccia attualmente fa parte del Parco Archeologico Comunale di Seradina-Bedolina, una delle prime aree con arte rupestre ad essere scoperte ed indagate in Vallecamonica[2]. Poco tempo dopo lo studio dei Massi di Cemmo (Graziosi 1929; Marro 1930), infatti, i primi ricercatori si mossero verso il nord della media valle

1 Poco condivisibili, quindi, le osservazioni di Marretta in «Adoranten 2013», laddove si dice che la roccia 12 di Seradina I "*... one of the most important carved surface in Valcamonica [is] finally undergoing a full scientific investigation*". L'autore si riferisce al nuovo rilievo, da lui eseguito, del solo settore C della roccia, che però non è certo il primo né può dirsi completo, visto che alcuni settori della roccia giacciono oggi di nuovo sotto terra, dopo i rilievi eseguiti negli anni '80.

2 Per la storia delle ricerche che qui citiamo, ci rifacciamo al lavoro del 1989 «Bibliografia sulle incisioni rupestri della Valcamonica e storia delle ricerche» (Abreu, Fossati, Jaffe 1989). Quest'opera venne presentata al concorso indetto dalla famiglia Laeng nel 1989 attraverso l'Ateneo di Scienze e Lettere di Brescia, in memoria di Walther Laeng, lo scopritore dell'arte rupestre della Valcamonica. Nel Giugno dello stesso anno venne organizzato a Breno anche un Convegno "I Camunni tra Storia e Preistoria" nel quale venne presentata la mostra "Storia delle ricerche sull'arte rupestre della Valcamonica. 1909-1989", nell'occasione dell'ottantesimo anniversario delle scoperte, con numerose fotografie originali di Emanuele Süss, di Giovanni Marro (grazie alla cortesia di Giuseppe Brunod e Tiziana Doro che avevano ritrovato le lastre originali del Marro nel Museo di Antropologia di Torino, Brunod, Doro 1991 e Brunod 1995; sugli orientamenti degli studi in Valcamonica a cura dell'Istituto di Antropologia di Torino si veda anche Fedele 1969), di Battista Maffessoli, e con alcune lettere inedite di Walther Laeng. La storia delle ricerche fino al 1989, almeno, era stata tenuta in scarso conto, o citata speditivamente nei lavori sull'arte rupestre della Valcamonica, quando non addirittura nascosta od evitata. Malgrado questi nostri lavori non siano stati pubblicati, essi ebbero un'ampia diffusione essendo stati inviati a tutte le biblioteche comunali della Valcamonica, a quelle più importanti della Provincia di Brescia e a molte biblioteche universitarie e specialistiche in Italia, e persino qualcuna all'estero, nonché agli specialisti del settore. Detti lavori sono anche stati utilizzati, non solo come traccia, da altri per redigere contributi sulla storia delle ricerche e per la compilazione di repertori bibliografici; spiace osservare come i medesimi autori si siano peritati di sminuirne l'importanza, accusandone impropriamente una diffusione piuttosto limitata, o si siano addirittura ben guardati dal menzionarli, o, peggio, dal citarli in bibliografia.

e, proseguendo i vari sentieri acciottolati che conducono verso Sellero, rinvennero numerose rocce incise in molte località. Tra questi primi studiosi impegnati a indagare questa la vasta zona, vogliamo qui ricordare l'archeologo triestino Raffaello Battaglia. Quest'ultimo nel 1931 aveva condotto due sopralluoghi insieme a E. Ghislanzoni, per conto della Reale Soprintendenza alle Antichità del Veneto, della Venezia Tridentina e della Lombardia. I sopralluoghi avevano indotto la medesima Soprintendenza ad inviare A. Nicolussi, assistente di Battaglia, al fine di continuare le ricerche. Nicolussi, coadiuvato da Giuseppe Bonafini, nel dicembre del '31 rinvenne numerose rocce incise in località Giadighe. Marro e Battaglia lavorarono insieme sino al 1932, ma successivamente solo il Battaglia si dedicò allo studio del versante destro sopra Capo di Ponte (Battaglia 1932, 1934), cioè della zona che ci interessa, mentre Marro si portò, prevalentemente, su quello sinistro, prediligendo Cimbergo e Paspardo (Marro 1932). Battaglia e Nicolussi evidenziarono su questo versante otto zone con arte rupestre, oltre ai Massi di Cemmo. Alcune di queste località oggi non portano più lo stesso nome anche se si tratta delle stesse aree: Bedolina era chiamata *Genicai*, mentre Pià d'Ort era detta *Lit*. Non sappiamo bene il perché di queste differenze con l'odierna toponomastica: forse la cosa è dovuta alla sempre minore conoscenza dei nomi antichi dei luoghi che abbiamo noi oggi rispetto ai ricercatori degli anni Trenta, i quali avevano a disposizione fonti orali probabilmente più attendibili. Forse non tutti sanno che Battaglia, oltre alla roccia 12 di Seradina, pubblicò per primo anche la famosa "mappa" di Bedolina (Genicai), definendola, appunto, come la raffigurazione di una serie di campi coltivati; sempre a Battaglia è dovuta la prima descrizione del "cavallino greco-etrusco" della roccia 5 di Bedolina e anche della cosiddetta "casa del fabbro" (di Lit/Pià d'Ort, roccia 1) già allora definita come "rappresentazione di una fucina medievale" (Battaglia 1934).

Le pressioni del regime fascista a favore del Marro (senatore del Regno e appoggiato dall'*entourage* del partito, Gambari 2014), prima, e la seconda guerra mondiale poi, fecero interrompere al Battaglia le ricerche in Vallecamonica. Esse vennero riprese dal 1947 dal gruppo di ricercatori bresciani Emanuele Süss, allora direttore del Museo di Scienze Naturali di Brescia e da Gualtiero Laeng (lo scopritore dell'arte rupestre della Vallecamonica) con Italo Zaina, coadiuvati - dal 1955 - anche dall'esperta guida capontina G. Battista Maffessoli (Süss 1954). Essi scoprirono e pubblicarono numerose rocce, in particolare degne di nota sono quelle con iscrizioni in alfabeto camuno sia a Seradina che a Bedolina. Nel 1949 anche Piero Leonardi dell'Università di Ferrara si dedicò ad alcune ricerche nelle aree rupestri attorno a Capo di Ponte e Paspardo. Di particolare interesse la pubblicazione (Leonardi 1950) dove viene mostrata per la prima volta la roccia del Ponte di S. Rocco alla Stretta di Seradina, forse la superficie rocciosa più vicina al fiume Oglio e nota per la presenza di meandriformi, rappresentazioni topografiche e guerrieri di vario stile: incisioni molto consunte anche per la presenza di uno scivolo. Leonardi mostrò in questa pubblicazione anche dei disegni realizzati (per la prima volta) a diretto contatto con la roccia, come si usa oggi. Con l'arrivo di Emmanuel Anati in Vallecamonica (la cosiddetta Missione Anati) anche le ricerche nell'area di Seradina-Bedolina assunsero contorni più scientifici: nella sola zona di Seradina vennero inventariate un centinaio di rocce (tra

Fig. 2 - Seradina, roccia 12, settore C superiore. Cavalieri schematici evidenziati con il gesso (Foto Mission Anati 1957).

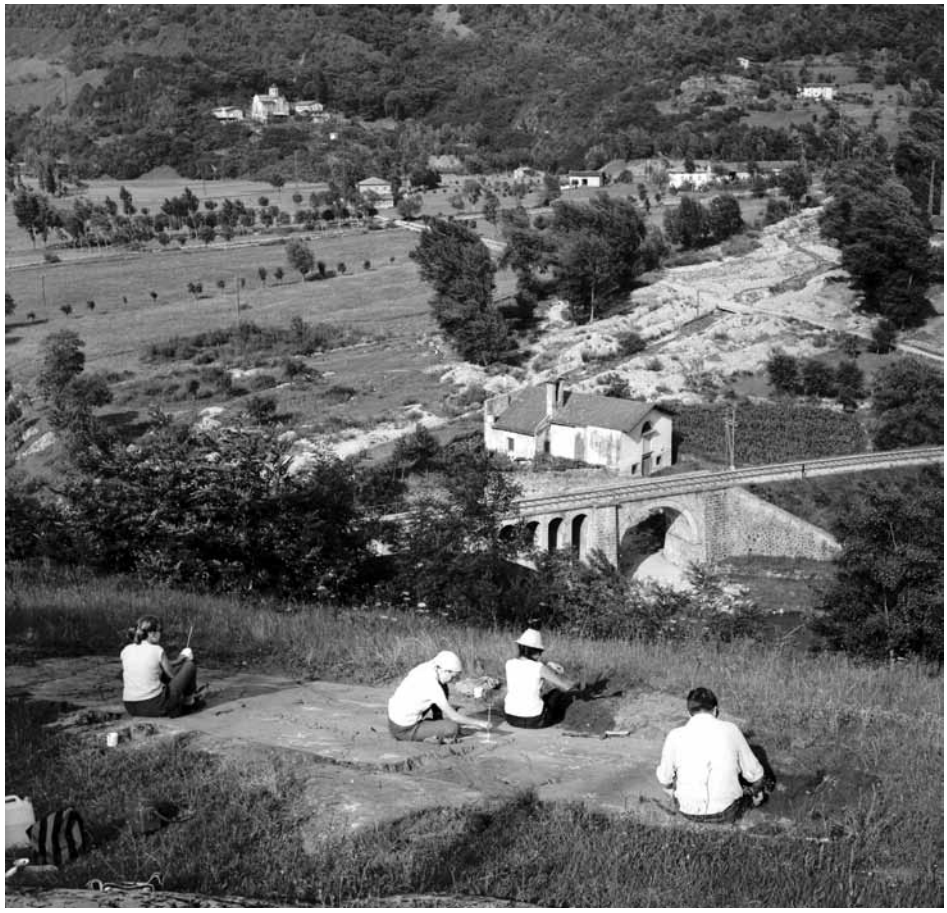
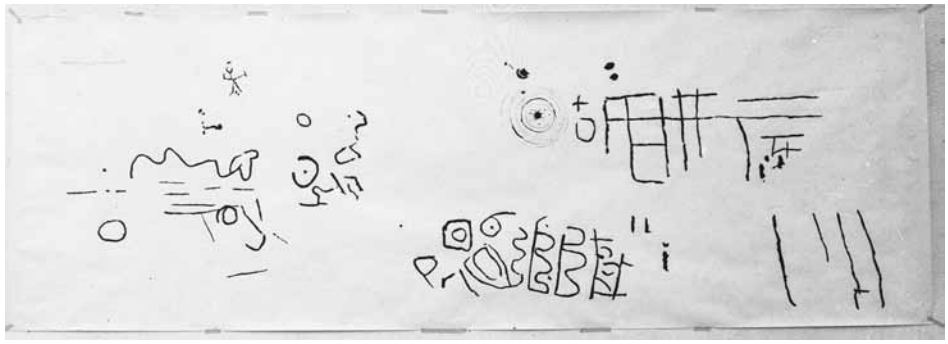


Fig. 3 - Momenti di lavoro sulla roccia. Mentre due persone scavano la roccia verso Est e verso Sud, altre due procedono alla evidenziazione delle figure colorandole di bianco (Foto Mission Anati 1963).

Fig. 4 - Seradina, roccia 12, settore C superiore. Emmanuel Anati e Giuliana Sluga Messina durante il rilievo eseguito nel 1963 (Foto Mission Anati 1963).

Fig. 5 e 6 - Seradina, roccia 12, settore I. Il prof. Anati controlla il rilievo eseguito da un collaboratore, a fianco la restituzione del rilievo del pannello (Foto Mission Anati 1963).



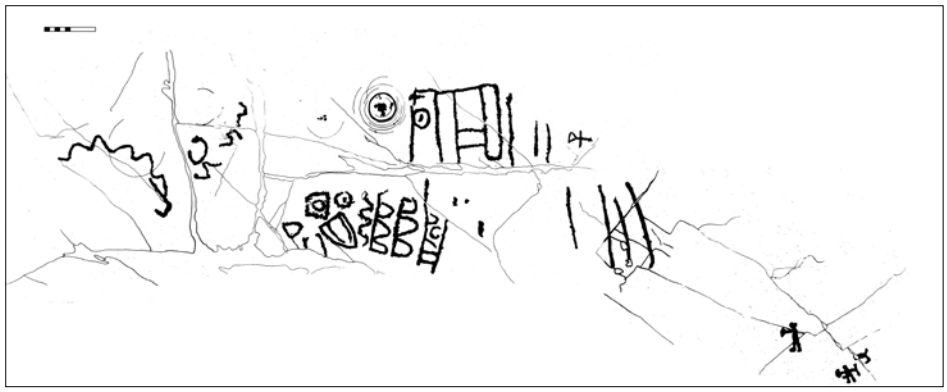


Fig. 7 e 8 - Seradina, roccia 12, il settore D nei rilievi del 1963 (rilievo CCSP) e del 1982 (rilievo CCSP).

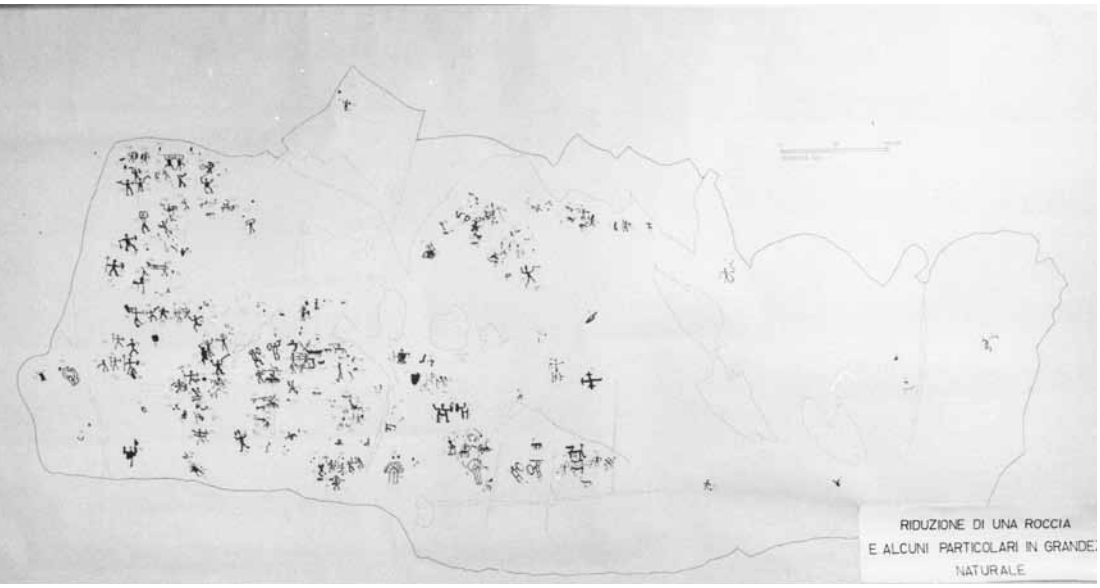


Fig. 9 - Seradina, roccia 12, il settore C superiore nel rilievo delle parti aperte della roccia nel 1965 (rilievo CCSP).

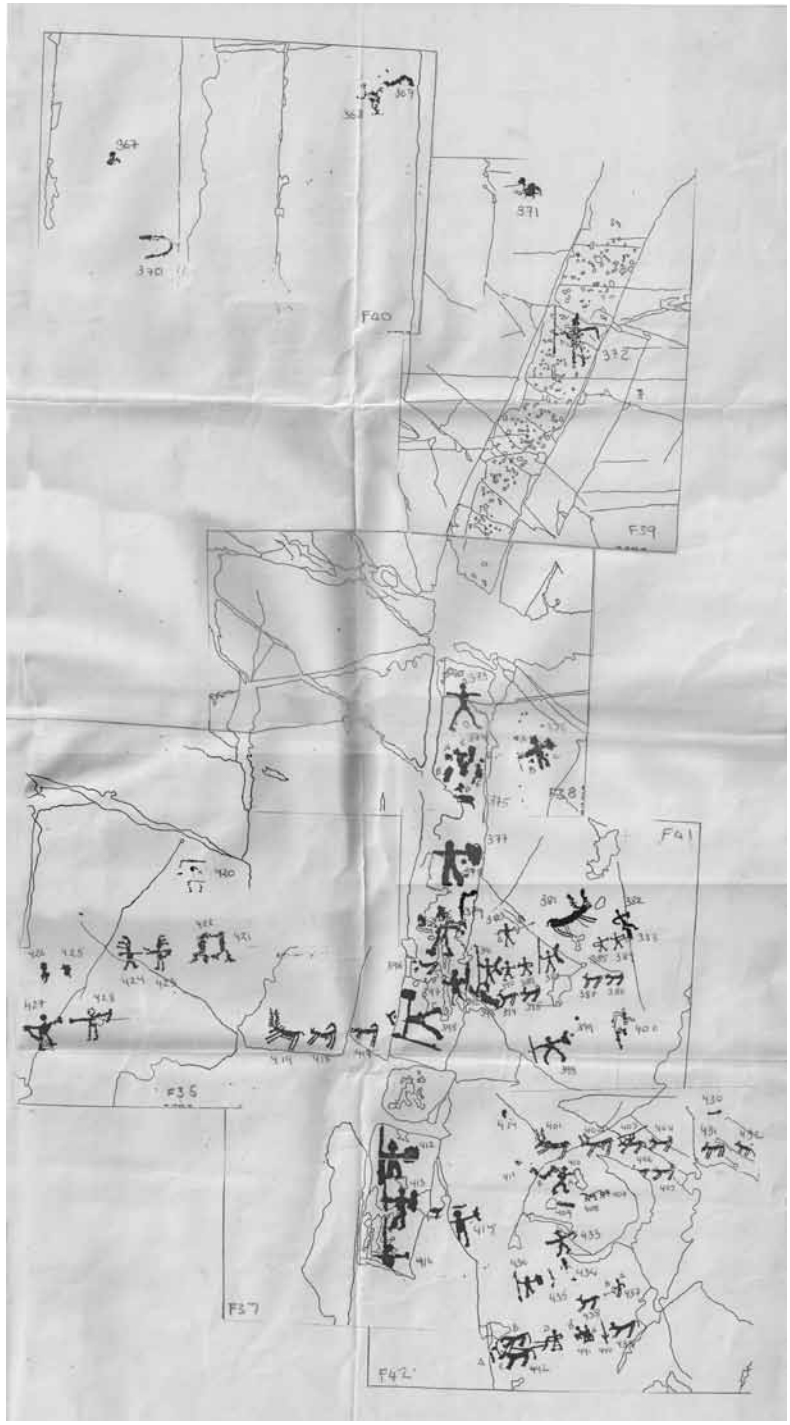


Fig. 10 - Seradina, roccia 12, il settore C superiore, porzione Nord aperta nel 1981, con l'indicazione dei numeri di catalogo (rilievo CCSP).

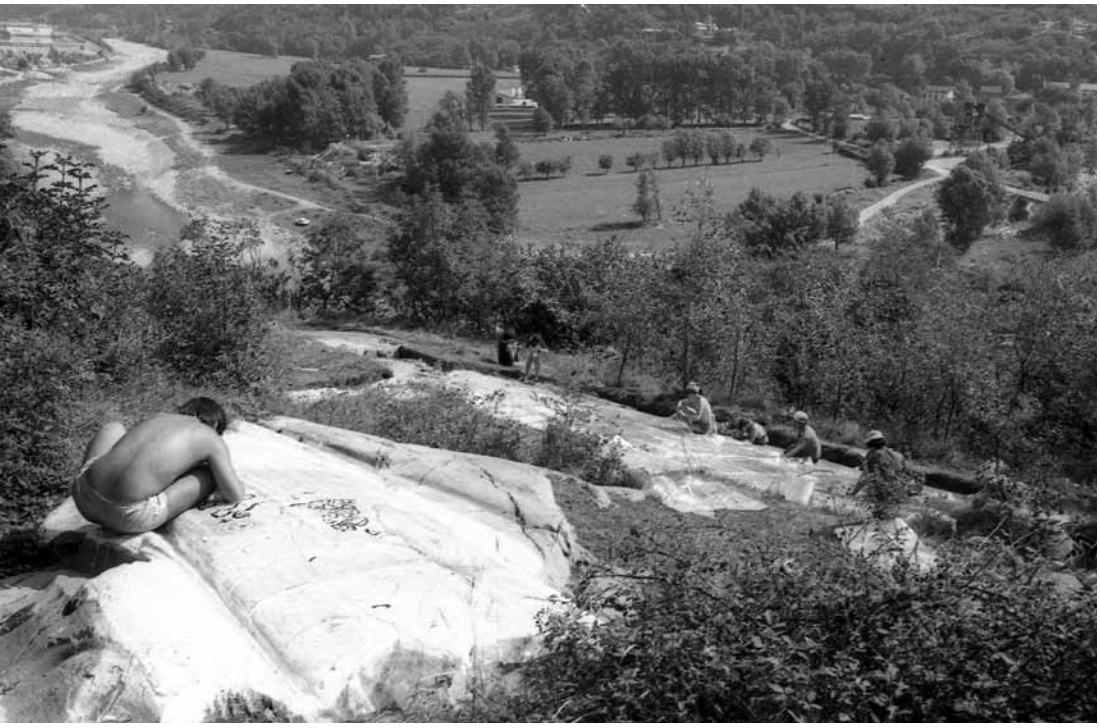


Fig. 11 - Seradina, roccia 12, lavori nel settore C superiore. Si notano le parti aperte e trattate verso Nord ed è evidente che il settore verso Est non è ancora stato scavato (foto CCSP 1982).

Fig. 12 e 13 - Trincea di scavo e momenti di rilievo nel 1983 sulla fascia centro-inferiore della roccia 12 di Seradina. Si intuisce l'apertura e la morfologia della roccia verso Nord-Est (foto CCSP 1983).

Fig. 14 - Particolare della scena di caccia al cervo con cacciatore a cavallo. Il rilievo di questa scena venne usato come simbolo della mostra "Immagini di una aristocrazia dell'età del Ferro nell'arte rupestre camuna" tenuta a Milano nel 1991-1992. Seradina, roccia 12, il settore C superiore, porzione Est (foto CCSP 1985).

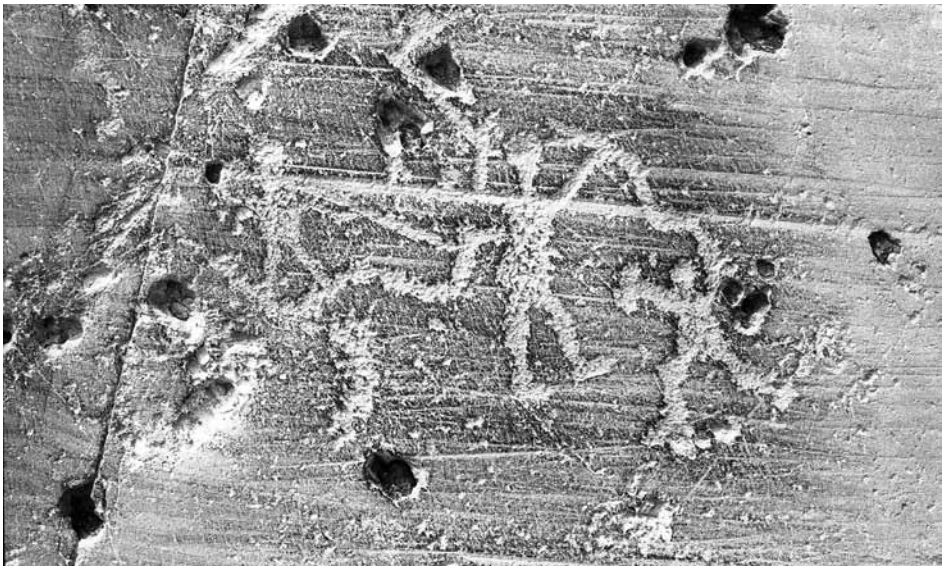


Fig. 15 - La strana scena con antropomorfi che combattono contro dei serpenti. Queste figure vennero scoperte nelle parti scavate nel 1983 (foto CCSP 1985).

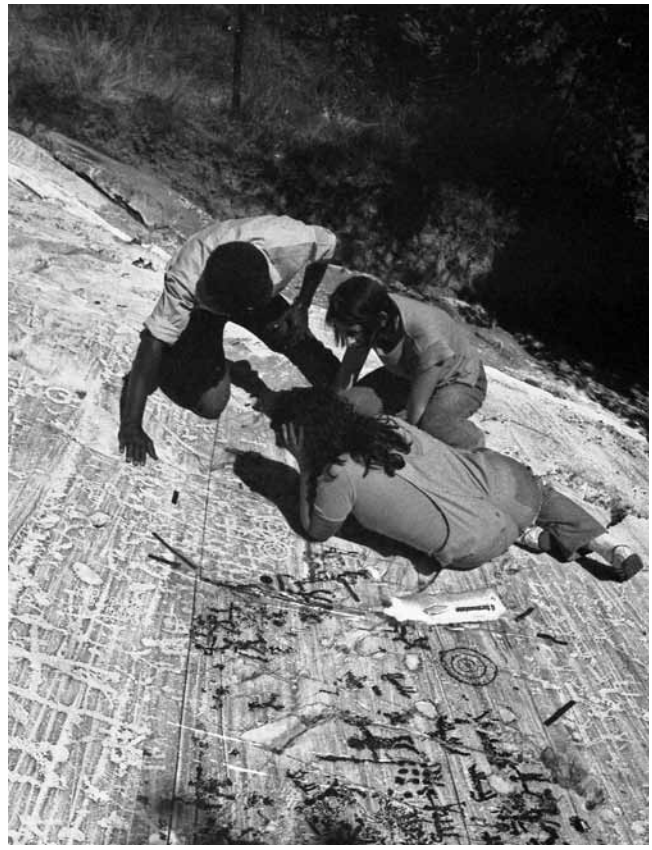


Fig. 16 - Mila Simões de Abreu discute le sovrapposizioni del settore centrale con Emmanuel Esteves (foto CCSP 1985).

Fig. 17 - Un foglio di rilievo con complicate sovrapposizioni nella fascia centro-inferiore della roccia Seradina 12 (foto CCSP 1985).

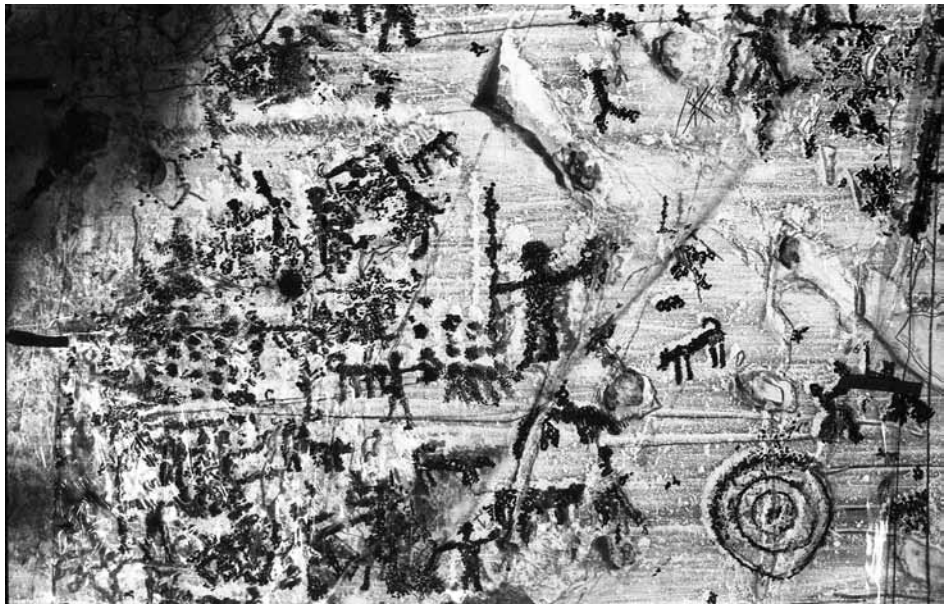


Fig. 18 - Le scene di aratura del settore 12 C nell'ordine di scoperta (foto CCSP).

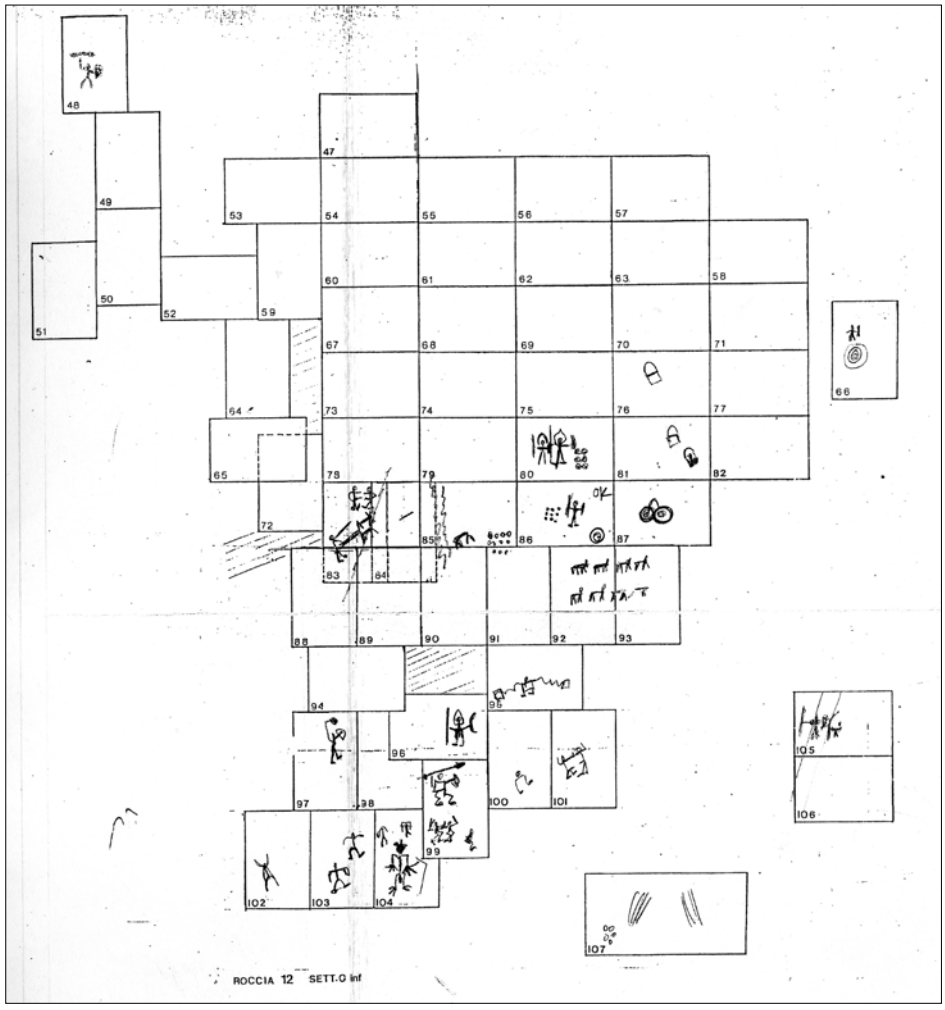


Fig. 19 - Foglio di lavoro con il posizionamento dei fogli di rilievo sulla roccia in connessione tra loro e disegni schematici delle incisioni che vi si trovano.

Fig. 20 - Rilievo della sezione finale della roccia 12 con figure antropomorfe a grandi mani e braccia rivolte verso il basso (rilievo CCSP).

quelle già conosciute e quelle di nuova scoperta) e tutta la località venne divisa in tre differenti aree definite: zona I (la più lontana dall'ingresso del Parco e quella a quota inferiore, include anche l'area detta "Corno di Seradina"[3]), zona II (la più vicina all'ingresso del Parco) e zona III (ad ovest del sentiero, salendo verso Bedolina; ANATI 1962). Venne indagata anche l'area di Bedolina, lavoro che nel 1969 condusse al primo rilievo integrale della roccia 1 (BELTRÀN LLORIS 1972). Negli anni '80 l'équipe di ricercatori del Centro Camuno di Studi Preistorici riprese il lavoro nell'area di Seradina, effettuando il rilievo integrale del Corno di Seradina (ABREU 1984; SANSONI 1984a): come già detto in particolare si deve a Mila Simões de Abreu e al suo team lo scavo e il rilievo della gran parte della roccia 12 (allora aperta solo nella parte superiore verso Sud Ovest), lavoro che portò alla scoperta e allo studio di quella che è oggi la più importante superficie istoriata del Parco. Il gruppo di lavoro del CCSP e Umberto Sansoni si occuparono dello studio delle altre numerose e interessanti rocce dell'area del Corno (SANSONI 1984b). Con la fondazione della Cooperativa Archeologica Le Orme dell'Uomo furono in seguito ultimati i lavori di rilievo della roccia 12 di Seradina I e avviati gli studi (tramite tesi di laurea con l'Università degli Studi di Milano) di alcune importanti superfici istoriate del versante che vennero rilevate integralmente, quali la Roccia degli armati del Dos del Mirichì (TANZI 1993), la roccia 20 di Redondo (MARCHI 1994, 1997), la roccia della mappa (r.1) di Bedolina (TURCONI 1997a, 1997b) e, infine, la roccia 5 di Bedolina, quella del cavallino greco-etrusco del Battaglia (ALCHIERI 1997, 2011). La documentazione completa delle aree istoriate di Sellero (SANSONI 1987) e di Pià d'Ort (SANSONI, GAVALDO 1995) si deve al meticoloso lavoro di Umberto Sansoni e Silvana Gavaldo e il loro team che lavorarono, per conto del CCSP, nell'area tra gli anni '80 e '90. In occasione dell'apertura del Parco Archeologico di Seradina-Bedolina tra il 2004 ed il 2005, lavori coordinati da Tiziana Cittadini (CITTADINI GUALENI 2005) vennero eseguiti sia una nuova inventariazione delle rocce del Parco sia alcuni rilievi di singole scene per presentarle nei pannelli del sito. Durante le ultime fasi dei lavori del CCSP, con supervisione dell'arch. Cittadini, fu rinvenuta a Bedolina una roccia con una nuova grande mappa molto simile a quella della roccia 1. Una delle ultime aree del versante ad essere indagate è Coren di Redondo, indagate da Alberto Marretta (MARRETTA 2011) in cui è di notevole interesse la rara figura di carro a due ruote.

Tornando allo scopo di questo articolo, e cioè la storia delle ricerche sulla roccia 12 di Seradina, dobbiamo ancora menzionare che nelle sue pubblicazioni Battaglia chiama *Dos de la Greppa* l'area più bassa di Seradina, compresa l'attuale roccia 12, mentre l'area più alta è definita col toponimo *Dos de Seradina*. Abbiamo già detto che suo è il merito di aver edito per primo una delle scene di aratura nella porzione superiore della roccia, l'unica aperta in quell'epoca (BATTAGLIA 1932, tav. 2). Per le altre cinque scene, infatti, bisognerà attendere gli scavi del team del CCSP diretto da Mila Simões de Abreu (ABREU 1984; ABREU, FOSSATI

3 Il toponimo *Corno di Seradina*, che non appare mai in bibliografia prima del 1984, è in realtà di origine recente e venne introdotto da U. Sansoni per distinguere l'area più rilevata di Seradina dalle altre zone circostanti della stessa Seradina I.

1987) che, intuendo la possibile estensione della parte incisa della roccia a nord prima (1981, quando si rinvenne la seconda scena di aratura con scena sessuale) e ad est poi (dal 1982), sotto la zona della scena di aratura che distava pochi centimetri dalla zona erbosa, decideva di effettuare lo scavo di tutta quest'area (1983) mettendo poi in luce anche i restanti 100 metri quadri[4] con il completamento dei lavori nel 1987 (Abreu, Fossati 1988). Qualche zolla erbosa, con la messa in luce di parti incise verso sud ed est, per la verità venne rimossa anche nei lavori di Anati del 1963, come si evince dalle fotografie che alleghiamo a questo articolo. Abbiamo pensato, però, che sarebbe stato più interessante per i lettori ascoltare la storia delle ricerche riguardanti la roccia 12 di Seradina durante gli anni '80, direttamente dalla viva voce della prof.ssa Mila Simões de Abreu (oggi docente dell'Università di Trás-os-Montes e Alto Douro in Portogallo, oltre che membro della Coop. Le orme dell'Uomo e del Consiglio Scientifico del CCSP). L'abbiamo perciò intervistata durante l'ultimo Symposium del Centro Camuno di Studi Preistorici nel Settembre 2015.

AEF[5]: Mila per molti di noi non hai certo bisogno di presentazioni, ma per i lettori più giovani o i neofiti, credo di sì. Puoi dirci come e quando sei arrivata in Valcamonica?

MSA[6]: Ma certo! Sono arrivata in Valcamonica al Centro Camuno nel Settembre 1977 a seguito di un programma di studi chiamato AFS-American Field Service / Intercultura. Il Prof. Anati poi nel 1979 mi propose una borsa di studio erogata dal Ministero Affari Esteri, borsa che venne rinnovata fino al 1988.

4 Mentre licenziamo alle stampe il presente contributo, alcuni giornali locali del 13 Ottobre 2015 hanno pubblicato un'intervista al direttore del Parco Comunale di Seradina-Bedolina. Egli sostiene che la roccia 12 di Seradina sarebbe stata recentemente scoperta. Riportiamo i virgolettati: «Stupefacenti rinvenimenti - ha spiegato Marretta -. Scene corali di caccia a grandi cervi solari da parte di schiere di cavalieri e cacciatori e mute di cani con le fauci spalancate, nell'elevatissimo numero di arcieri a caccia di capridi e cervidi e nella maggiore concentrazione di scene d'aratura di tutta la Valle» e ... «le raffigurazioni di uccello acquatico fra le più alte della Valle Camonica e le figure in duello, presenti in numero elevato e che in assoluto rappresentano la maggior concentrazione dell'intera arte rupestre camuna...» (L. Ranzanici, *Bresciaoggi*, 13 Ottobre 2015). A queste "rivelazioni", che hanno suscitato sconcerto e forte stupore nell'ambiente di chi si occupa dell'arte rupestre della Valcamonica in modo scientifico, ha risposto Giancarlo Maculotti, a pag. 7 del numero di Novembre 2015 di *Graffiti*, ricordando a Marretta che: «...Noi eravamo a scavare su quelle rocce all'inizio degli anni ottanta del secolo scorso e abbiamo le prove documentali che tutte quelle figure erano già conosciute e in parte pubblicate». Marretta sempre su *Graffiti* nel numero di Dicembre 2015, pag. 11, ha replicato a Maculotti attribuendo ai giornalisti la colpa dell'esagerazione delle rivelazioni, ma sostenendo che i giornali, comunque «...comunicano il completamento e la prossima pubblicazione del rilievo integrale della R. 12 del Parco Archeologico Comunale di Seradina-Bedolina (Capo di Ponte), un traguardo epocale». Marretta parla ovviamente del rilievo eseguito da lui stesso e non di quello realizzato e terminato negli anni '80. Il direttore del Parco conclude infine con: «Ricordo quindi soltanto che la "scoperta" riguarda quel che emerge dall'analisi di una documentazione completa, e non certo l'individuazione o la messa in luce della R. 12, che semmai va attribuita alle ricerche della Soprintendenza e di Raffaello Battaglia fin dagli anni 1931-32». Questo nostro articolo non è stato scritto, ovviamente, per rispondere a tali affermazioni sensazionalistiche: lasciamo ai lettori e ai conoscitori dell'arte rupestre della Valcamonica il compito di giudicare. Il resoconto puntuale delle ricerche affrontate in quegli anni, le fotografie storiche e l'intervista a Mila Simões de Abreu, mostrano, in ogni caso, che la scoperta della grande porzione inferiore della roccia, di una parte di quella superiore ed il completamento dei lavori di rilievo risalgono al periodo tra il 1981 ed il 1989, realtà che era già ben nota al mondo scientifico (basterebbe leggere i rapporti pubblicati e disponibili online). Nessuno può stravolgere questa realtà: chi fa mostra di ignorarla rischia di perdere qualsiasi credibilità, non solo dal punto di vista scientifico. Vorremmo comunque capire cosa ci sarebbe mai di nuovo da scoprire sulla roccia: sono già stati studiati e pubblicati praticamente tutti i temi che caratterizzano la roccia 12. Ne citiamo alcuni: le scene di aratura, anche quelle con scene sessuali; i duelli e gli schieramenti di guerrieri; le scene di caccia al cervo e al camoscio a cavallo e con l'arco; le lunghe file di uccelli acquatici; le scene con i serpenti; i guerrieri con stendardo; le figure filiformi; i pendagli a doppia spirale; gli antropomorfi grandi mani a braccia abbassate. Tutte scene e figure già pubblicate negli articoli che abbiamo inserito nella lista delle pubblicazioni che trattano questi temi e che editano fotografie e rilievi della roccia 12, una delle superfici istoriate della Valcamonica che più è citata in bibliografia.

5 Angelo Eugenio Fossati.

6 Mila Simões de Abreu.

AEF: E cosa hai fatto al Centro in tutti quegli anni?
MSA: Beh ho fatto un po' di tutto: mi sono occupata soprattutto delle ricerche archeologiche con i campi estivi, l'aspetto che prediligevo, anche perché avevo l'occasione di interagire con gli studenti e gli studiosi che l'UNESCO inviava con le borse di studio, perché imparassero i metodi di studio. Inoltre scrivevo articoli scientifici, davo una mano in biblioteca, seguivo un po' le traduzioni, l'archivio fotografico, l'editoria e anche alcuni campi speciali, come quello del WARA, l'inventario mondiale. Inoltre ho iniziato anche la didattica con le scuole, portando le classi che volevano qualcosa di più della semplice visita al Centro dove tenevamo delle lezioni. Mi occupavo anche di un aspetto che mi ha sempre interessato, cioè la catalogazione della posta, soprattutto le lettere dei tanti studiosi che scrivevano al Centro in quegli anni.

AEF: Quando hai cominciato ad occuparti di Seradina 12?
MSA: Nel 1981, mentre il collega Umberto Sansoni rilevava con il suo team le altre rocce del Corno di Seradina, io col mio gruppo iniziai a studiare la parte allora aperta della roccia, cioè quella superiore verso Sud Ovest, già nota ai tempi di Battaglia che per primo pubblicò l'aratura con la scena sessuale. Poiché mi sembrava che la roccia avesse una superficie piuttosto liscia in quella porzione aperta, ma mi pareva che potesse proseguire altrettanto regolarmente anche nella parte verso Nord ed Est, decisi di provare ad allargarla. Inoltre, a quei tempi, si seguiva la regola del "metro di distanza".

AEF: Mila per favore spiega questa regola ai non addetti ai lavori.
MSA: Semplicissimo. Se tra l'ultima incisione trovata e il limite della terra che circondava la roccia non vi era lo spazio di un metro lineare di distanza, normalmente si continuava a scavare poiché, con ogni probabilità, si sarebbero rinvenute altre figure incise. Bisognava proseguire lo scavo e cercare le incisioni togliendo la parte erbosa che ricopriva la roccia, finché non ci sarebbe stato il famoso metro di distanza senza incisioni. Allora ci si poteva fermare.

AEF: E quindi...
MSA: E quindi feci così: prima rilevammo tutta la parte già nota e che, a suo tempo, era già stata disegnata sia da Anati che da altri suoi collaboratori, come Giuliana Sluga Messina. Poi finita quella parte, sempre nel 1981 decisi di scavare prima verso Nord e lì incocciammo il famoso intruso di "tufo" posto verticalmente/obliquamente rispetto al resto della roccia, una specie di intrusione di faglia di materiale che sembrava diverso dall'arenaria grigio-giallastra della roccia circostante, ma che era stato inciso come fosse un quadro con una lunghissima cornice che proseguiva per tutta la superficie della roccia verso Est, cioè in discesa verso la parte a strapiombo.

AEF: Strapiombo? Non ci sono strapiombi sulla 12.
MSA: Oggi non c'è nessuno strapiombo perché con l'aiuto di Vittorio Occhi, che faceva parte del team, tagliammo alcune piante che crescevano attorno alla roccia e mettemmo i tronchi distesi alla fine della superficie, per intenderci sotto il settore con i grandi mani, coprendo il tutto con la terra che proveniva dallo scavo. Ma a quei tempi lo strapiombo c'era eccome e si guardava giù nell'Oglio. Nella campagna 1982 aprimmo un metro quadro verso Est. Tutto il resto nel 1983.

AEF: Ma la roccia era già comunale? Potevi metterti a fare tutte queste operazioni di scavo e taglio piante?
MSA: No, a quei tempi la superficie e i terreni erano ancora di proprietà privata. Appartenevano alla signora Zonta, nipote del Sindaco Belotti, che era stato il primo presidente del Centro negli anni 60. Tutte le volte che volevi studiare qualcosa dovevi chiedere a lei. Io avevo un ottimo rapporto con la signora Luigina, che era sempre gentilissima e che mi accordava tutti i permessi, beninteso oltre a quelli necessari per i lavori archeologici che erano concessi dal Ministero proprio come oggi. Spesso andavo da lei con Gaudenzio Ragazzi e mi ricordo che le portavamo sempre dei pasticcini per ringraziarla della sua collaborazione.

AEF: Che tipo di scavo conducesti?
MSA: Sembrerà strano ma io non feci uno sterro degli strati superficiali attorno alla roccia, come invece si usava a quei tempi, dato che non si trovava mai nulla di antropico nella terra sulle rocce, a parte a Dos dell'Arca e in poche altre zone. Io feci un vero e proprio scavo che tenesse conto del contesto archeologico, visto che la superficie era piuttosto ampia e il terreno che ricopriva la roccia sembrava di un certo spessore, per lo meno verso Sud Ovest. Devo dire che nello scavare i settori superiori (tra il A e B) della roccia 12 avevo già trovato del materiale colorante e questo mi dava ben sperare anche per il settore C.

AEF: E quindi di quanto ampliasti la roccia?
MSA: Nel rapporto del direttore nel BC Notizie 1 del 1984 Anati cita oltre 100 metri quadri di superficie portata alla luce. Nel 1983 mi aiutarono 13 persone. Nel BC Notizie 2 il mio resoconto degli scavi parla di strati che avevano una profondità dai 60 ai 90 cm.

AEF: Scavaste solo durante il campo estivo?
MSA: No, come ho detto prima lo scavo estensivo verso Est in realtà iniziò nel 1982, ma continuai dal Marzo 1983. E proseguì poi tutto l'anno fin oltre la campagna estiva. Spesso scavavo da sola. Comunque i rilievi della parte nuova invece vennero effettuati nel 1983, nel 1985, nel 1987. Poi terminammo di fare i controlli nell'88 e nel 1989, ma già come Cooperativa Le Orme dell'Uomo.

AEF: Non lavorasti nel 1984 e nell'1986?
MSA: Solo occasionalmente, visto che avevamo cominciato a studiare le rocce di Paspardo nelle località di Dos Sottolaiolo e di In Valle.

AEF: Cosa trovaste durante gli scavi?
MSA: Beh a parte tutte le incisioni che oggi si vedono sulla roccia e che vennero rilevate integralmente, in realtà la terra sembrava un deposito fatto dai contadini durante gli ultimi secoli, probabilmente per poter coltivare ad erba un appezzamento abbastanza grande altrimenti sterile. Non si trovarono, infatti, strati archeologici riconoscibili sotto la zolla erbosa: gli unici rinvenimenti riguardarono alcuni frammenti di ceramica recente, invetriata, hai presente quelle delle olle marroni scuro o dei piatti o dei boccali color senape. E poi alcuni chiodi forgiati a mano, di tipologie molto comuni che potevano essere postmedievali. Nelle fessure della roccia, invece, come è spesso normale, ritrovai materiali coloranti.

AEF: Ci descrivi un po' la tipologia delle persone che facevano parte del tuo team di studio?
MSA: Erano persone per lo più con formazione archeologica, studenti di università italiane e straniere o anche studiosi già del campo, ma desiderosi di aggiornamento o di imparare le tecniche di rilievo. Molte di queste persone che hanno fatto parte del gruppo che ha scavato e rilevato la 12, dopo l'esperienza della Valcamonica e tornando ai loro paesi di origine, sono diventati ricercatori di riconosciuta esperienza. Ad esempio Majeed Khan, consulente della Commissione di Turismo e Antichità dell'Arabia Saudita, o Laurence Smith, oggi del gruppo di African Studies del McDonald Institute for Archaeological Research, della Università di Cambridge (UK), Emmanuel Esteves, purtroppo già scomparso, che fu a capo del Patrimonio dell'Angola, senza dimenticare i camuni come Antonella Berta, regista indipendente in Germania.

AEF: Mila parliamo un po' del rilievo. Per evidenziare le figure gessavate le figure come Marro e Süss e altri?
MSA: Ma no il gesso non si usava più da tempo a quell'epoca. Si praticava, invece, il cosiddetto "metodo neutro" che consisteva nel colorare tutta la superficie della roccia con una tempera bianca a base di caseina e poi, quando questo bianco era asciutto, si passava sulla roccia con un tampone imbevuto di tempera di colore nero ma quasi asciutto, in modo da creare un contrasto molto efficace. Un po' come l'effetto di una pellicola negativa in bianco e nero. Le figure, infatti, restavano bianche mentre le parti non incise erano colorate di nero. Questa colorazione restava per diversi mesi sulla roccia permettendo di lavorare in qualunque condizione di tempo. Il sole non era così fondamentale come oggi che lavoriamo con gli specchi per creare la luce radente. Il metodo era detto "neutro" perché non era interpretativo, come invece lo era il gessare le figure. Quello che si vedeva era davvero quello che era inciso sulla roccia, non un'interpretazione. L'abilità del rilevatore invece, va beh, quella è un'altra questione...

AEF: Ora dacci un po' di numeri sulle incisioni. Quanti fogli rilevati e quante sezioni della roccia avete evidenziato?
MSA: Dunque, i fogli della porzione superiore, quella rilevata nel 1981 e nel 1982, erano 61. Quelli della porzione inferiore, scavata nel 1983 e rilevata fino al 1987 erano invece 46, per un totale di 107 fogli e sette sezioni integralmente rilevate, cioè disegnate a contatto. Ti ricordo che le dimensioni dei fogli allora erano diverse da quelle che usiamo oggi. Erano molto più grandi: circa 120 cm per 90 cm, ritagliati e squadrati nel polietilene trasparente.

AEF: Eh sì mi ricordo, era difficile gestirli dovendo portarli qua e là, ecco perché poi alla fine degli anni '80 abbiamo cambiato le dimensioni fino a giungere a quelle attuali, circa 50 per 70 cm. Ma dimmi se le figure di quei fogli sono state catalogate.
MSA: Prima del catalogo si effettuava un passaggio ulteriore. In pratica si ricopiava il tutto "in bella" con la china e i pennini su fogli di lucido, e poi si fotografavano i lucidi e si univano così le varie sezioni. Un lavoro molto meticoloso e lungo, per fortuna Valentino Squaratti e quello che poi sarebbe diventato mio marito, cioè Ludwig Jaffe, si occuparono di questo aspetto. Oggi ci sono altri sistemi, ma ti assicuro che la pulizia dei

fogli di lucido resta del tutto invidiabile anche con le nostre nuove tecnologie digitali. Comunque sì, le figure sono state catalogate. Sono oltre il migliaio su tutta la roccia. Quelle del settore superiore sono già sopra le 450... Insomma una delle rocce più istoriate della Valcamonica!

AEF: Quali sono i temi che sono stati osservati?
MSA: I temi sono abbastanza numerosi, anche se spesso riguardano il mondo dei guerrieri. Scene di caccia al cervo e al camoscio, a volte anche con i cacciatori a cavallo e in lunghe file con molti cani e cervi maschi, con corna spesso semilunate. Notevoli le scene di aratura, a volte accompagnate da scene sessuali. Numerose figure di armati in schieramento o in duello: si vedono spesso i particolari dell'armamento, come l'elmo crestato simile a quello villanoviano o gli scudi sub rettangolari/ovoidali. Qualche tema è invece raro sulla roccia: pochissime le capanne e le impronte di piedi, figurazioni molto più comuni sull'altro versante. Un raro pendaglio a doppia spirale e figure meandriformi ci riportano ad ambienti cronologici più antichi. Le figure sono quasi tutte a percussione, ma abbiamo anche qualche raro e bell'esempio di graffito filiforme della fine del VI secolo a.C. e anche qualche frustolo di iscrizione in alfabeto camuno. Si trovano anche gruppi geometrici di coppelline, forse segni di tipo topografico, come quelle presenti sulla roccia 1 di Bedolina.

AEF: E quali i temi che più ti hanno colpito ed interessato?
MSA: Beh direi le scene sessuali, il gruppo dei grandi mani al limite del bordo inferiore e le figure di serpente, che sembra un tema particolarmente presente sulla roccia. Ci sono quei due personaggi che combattono contro i serpenti e l'uomo con le braccia desinenti a serpente, più un paio di raffigurazioni di serpenti isolati.

AEF: Che ci dici della cronologia delle figure sulla roccia?
MSA: Innanzitutto dal punto di vista cronologico il grosso delle figure appartiene alle prime fasi di quello che Anati definì IV stile di Valcamonica, con la seriazione che usiamo oggi soprattutto gli stili IV 1 e 2, cioè tra VIII ed il VI secolo a.C.. Vi sono anche figure, più rare, degli stili successivi, cioè dello stile IV 3 (V-IV sec. a.C.). Molto rare anche le figure delle fasi del naturalismo decadente, cioè di stile IV 4 (IV-II sec. a.C.), al contrario delle rocce di Paspardo, come ad In Valle, dove invece è uno stile molto ben presente. Infine sembra esserci una certa ripresa nell'ultimo stile dell'arte rupestre di tradizione protostorica, cioè lo stile IV 5, quello che Anati chiamava Finale (I sec. a.C. -I sec. d.C.). Per intenderci lo stile degli armati a corpo vuoto e spesso con grandi scudi rettangolari.

AEF: Quali temi hai studiato tu in particolare?
MSA: È *noto che mi sono occupata delle scene sessuali che ho pubblicato integralmente nel volume Appunti 8. Come ben sai ho poi favorito la ricerca e la pubblicazione di alcuni temi presenti sulla roccia affidando lo studio ad altri: per es. le scene di aratura, che vennero pubblicate da Doriana Piombardi nella sua tesi di laurea e in un articolo degli anni '80. Tu stesso poi hai potuto studiare le scene con gli uccelli acquatici, hai presente quelli con la coda a ventaglio incisi seguendo le striature del ghiacciaio. Tu hai anche pubblicato quel bel guerriero in corsa con la lancia inciso a filiforme nella parte centrale della roccia, Per non parlare delle scene di caccia al cervo. Insieme scegliemmo un particolare*

della caccia al cervo eseguita stando a cavallo per farne il simbolo della mostra di Milano del 1991, "Immagini di una aristocrazia dell'età del Ferro nell'arte rupestre camuna".

AEF: Hai offerto la possibilità di pubblicare queste figure della roccia 12 anche ad altri?
MSA: Alcune scene incise nella parte superiore sono state spesso pubblicate prima del 1981, quando scoprii anche la seconda scena di aratura nella parte Nord superiore. Ricordati che la famosa coppia di viandanti, quelli che ora fanno da simbolo della Mostra Mercato di Pescarzo, vengono proprio dalla sezione superiore verso Sud Ovest. Ma sarebbe difficile ricordarsi di tutte le pubblicazioni che contengono parti di rilievi estrapolati dalla roccia 12.

AEF: Provaci...
MSA: Dunque, tra i contributi più importanti di Anati direi I Camuni *del 1982 dove si trovano 3 immagini della roccia, parte superiore. Non sono molte in effetti, ma il libro non pubblica ancora le nuove scoperte. Infatti saliamo a 7 immagini della roccia in* Valcamonica riscoperta, *un libro del 1987, e a ben 15 immagini del volume* La civiltà delle Pietre, *del 2004. Poi le* Le popolazioni alpine di stirpe retica *di Raffaele di Marinis del 1988, e ovviamente quello la mostra di Milano al Castello Sforzesco che abbiamo già citato del 1991* Immagini di una aristocrazia*... Lì sono state pubblicate diverse figure nel catalogo, inclusa la copertina, e ovviamente erano molte le immagini nei pannelli della mostra. Poi sparsi in moltissimi articoli di diversi autori, qua e là. Alcuni li ho già citati prima. Magari ti compilo un elenco provvisorio, anche se incompleto, così puoi pubblicarlo sotto questa intervista.*

AEF: Buona idea! Parlando di pubblicazioni e pubblicità: la roccia 12 è stata fatta conoscere anche all'estero?
MSA: Come ben sai molte delle incisioni della 12 facevano parte di "Scolpito nel tempo. Le incisioni rupestri della Valcamonica", la mostra itinerante della Cooperativa Le Orme dell'Uomo con versioni in italiano, inglese e portoghese che, a parte l'Italia (nel 1990), dal 1991 venne allestita anche in India, Thailandia, Singapore e anche qui in Portogallo dove, dopo essere inaugurata nel Museo Nazionale di Archeologia di Lisbona, è stata in decine di altri Musei regionali. Alcune immagini delle scene di caccia vennero anche inserite nella mostra "Deer in Rock art of Europe" che, dopo il 1994, girò in diversi Paesi Europei, dopo essere stata esposta a New Delhi in India e in diverse città italiane. Infine, nel Marzo 2013, ho avuto anche l'occasione, insieme a Tiziana Cittadini, Paolo Medici e mio marito Ludwig Jaffe, di mostrare la roccia 12 a Cambridge, nel MAA – Museo di Archeologia ed Antropologia, nell'ambito della Mostra "• P • I • T • O • T • I • Digital Rock-Art From Ancient Europe". Credo che a livello internazionale la roccia 12 di Seradina sia una delle più conosciute, insieme alla Grande Roccia di Naquane e alla Mappa di Bedolina.

AEF: Mila, nel ringraziarti per la collaborazione e l'entusiasmo con cui hai affrontato questa intervista, permettimi un'ultima domanda. Come mai non è stato ancora pubblicato il rilievo e lo studio integrale di questa roccia?
MSA: Beh la cosa è risaputa. Quando fui costretta a lasciare il Centro nel 1988 erano

anni difficili, eravamo in procinto di pubblicare tutto, ma poi i rapporti complicati hanno impedito l'edizione integrale. Ma ora, con il nuovo corso del Centro, stiamo ovviando a questa mancanza e promettiamo di pubblicare al più presto la roccia 12, in un volume con le altre superfici del Corno di Seradina, e che sarà edita dalle Edizioni del Centro con la partecipazione di tutti coloro che hanno lavorato sul sito.

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Recording Rock-Art Fieldwork 2015 Corso di rilevamento e analisi sull'arte rupestre della Valcamonica, località Foppe di Nadro. Relazione preliminare

Silvana Gavaldo, Cristina Gastaldi & Paolo Medici

Si è tenuto dal 22 Giugno al 2 Agosto 2015 il *Recording Rock-Art Fieldwork - corso di rilevamento e analisi sull'arte rupestre della Valcamonica*, su concessione della Soprintendenza Archeologia della Lombardia, organizzato dal Centro Camuno di Studi Preistorici - Dipartimento Valcamonica e Lombardia sotto la direzione di E. Anati. I lavori sono stati coordinati da Cristina Gastaldi, Silvana Gavaldo, Paolo Medici, coadiuvati da membri dello staff scientifico-tecnico del Centro stesso. In tutto i partecipanti, studenti universitari, studiosi del settore sono stati 7, provenienti da Italia, Armenia, Venezuela.

Il *Fieldwork* è stato articolato in due distinti momenti: dal 28 giugno al 10 Luglio e dal 19 Luglio al 2 Agosto. Sul campo è stata effettuata la preparazione delle superfici, documentazione e raccolta dati, con un cantiere di intervento a Foppe di Nadro; in laboratorio è stata svolta la digitalizzazione e ricomposizione al computer dei rilievi, catalogo e analisi preliminare dei dati. Contestualmente si sono acquisite le immagini per la ricostruzione 3D attraverso la tecnica del Structure from Motion; data la relativa semplicità delle scene istoriate è stato possibile già inserire nel database del Centro Camuno il catalogo completo delle superfici indagate.

Nel piano operativo triennale del CCSP, concordato con il Ministero dei Beni Culturali e la Soprintendenza Archeologia della Lombardia, è stato previsto l'intervento sulle superfici non ancora adeguatamente documentate all'interno del Parco delle Incisioni Rupestri di Foppe di Nadro (in particolare nel settore del Parco compreso tra la r. 24 e la r. 27), con l'intento di giungere ad una documentazione scientifica il più possibile completa ed omogenea delle testimonianze incisorie presenti sul territorio, oggetto finora di studi poco sistematici o parziali. In continuità con gli interventi degli scorsi anni e con il pieno appoggio della Direzione Scientifica della Riserva Naturale Incisioni Rupestri di Ceto, Cimbergo, Paspardo, nel cui territorio si trova il Parco di Foppe di Nadro, per il 2015 i lavori si sono concentrati sulle r. 48, 49, 61, in prossimità della quale è stata rinvenuta e studiata la r. 85.

Tra le superfici oggetto d'indagine solo la r. 49 era anche parzialmente edita; tutte sono state individuate con georeferenziazione GPS o stazione totale e censite nel catalogo Progetto Monitoraggio.

L'area è stata preliminarmente pulita durante il mese di maggio dalla vegetazione infestante ad opera di personale della "Riserva". Le superfici istoriate sono state pulite (taglio delle infestanti ove presenti, pulitura dai licheni più prossimi alle incisioni, rimo-

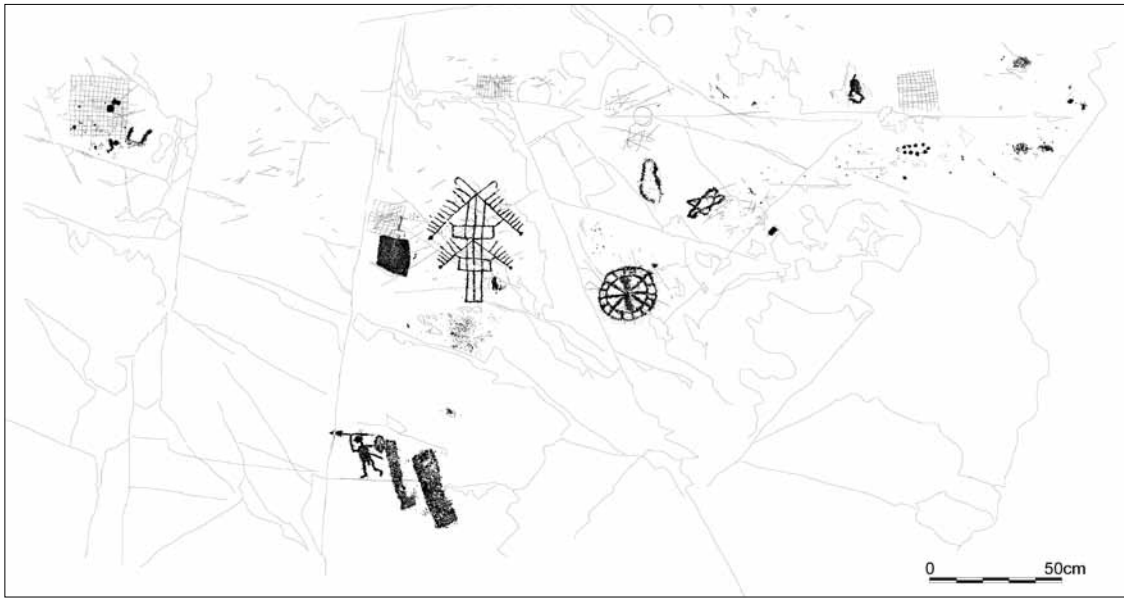

Fig. 1 - Foppe di Nadro R.48, rilievo generale. (rilievo CCSP)

zione di fogliame caduto e del terriccio sciolto e sono stati consolidati i margini detritici); è stato rilevato il livello di conservazione e leggibilità delle aree istoriate; si è proceduto quindi al rilievo fotografico e grafico a contatto su fogli di polietilene di misura standard, stesi a coprire l'intera area incisa. La leggibilità delle incisioni varia, com'è noto, in base alle condizioni di luce; per ottenere una luce radente ottimale ci si è avvalsi quindi sistematicamente di specchi e di luci artificiali radenti. Per la documentazione fotografica ci si è avvalsi anche di illuminazione artificiale radente in assenza di luce diurna (battuta fotografica in notturna).

La digitalizzazione dei rilievi è stata completata per tutte le superfici; le ricomposizioni sono ancora in fase preliminare; sono attualmente in fase di aggiornamento le schede IRweb e l'inserimento della foto relative alla r. 85, la cui scheda è già stata creata.

FOPPE DI NADRO: LE ROCCE N. 48 E 49

Le rocce 48 e 49 si trovano lungo il percorso di visita attrezzato del Parco delle Incisioni Rupestri di Foppe di Nadro, in una parte pianeggiante, in prossimità delle più conosciute r. 24 e r. 60.

FdN – Roccia 48
(BS.CETO.FOPPEDINADRO.048)

Superficie affiorante dal terreno, pressoché piana, interessata da importanti fratture trasversali e da una zona degradata nella porzione sud-occidentale. Si conservano 70 figure, di cui 38 realizzate a martellina e un importante concentrazione di 32 figure filiformi. Una prima fase vede l'esecuzione di un orante schematico femminile, alcune coppelle e due figure topografiche irregolari interamente campite, tipologia presente anche sulla adiacente r. 25; durante l'età del Ferro vengono eseguite alcune figure a martellina (7 sono le figure definibili, tra cui un armato, una impronta di piede, una ruota raggiata

Fig. 2 - Foppe di Nadro R.48. (foto C.G., Archivio CCSP).

e una figura di costruzione doppia). È interessante in particolare la figura della ruota a doppio giro di raggi, che ha confronti con incisioni presenti a Naquane a soprattutto a Paspardo (Dos Sottolaiolo). Come ultima fase, non chiaramente collocabile dal punto di vista cronologico, sono state eseguite le incisioni "filiformi", per lo più linee, reticoli e alcuni cerchi a compasso. La superficie era già stata documentata nel 1980, con la tecnica allora in uso del trattamento neutro; dopo il controllo si è ritenuto che i rilievi storici non avessero un grado di accuratezza adeguato agli standard attuali, pertanto la documentazione è stata effettuata ex novo.

FdN - Roccia 49
(BS.CETO.FOPPEDINADRO.049)

È una superficie con accentuata pendenza, ubicata alla base della scarpata che chiude a Est la radura dei "Pra' de Naquane". Individuata e georeferenziata sebbene fosse coperta da infestanti (rovi), è stata accuratamente ripulita e resa visibile. La superficie presenta una rete di fratture profonde, che determinano anche il distacco di numerosi blocchi e la conseguente perdita di parti istoriate; le incisioni si concentrano nelle fasce medio-alte del pannello. Sono state documentate 78 figure, di cui: 2 oranti schematici a grandi mani (prima fase incisoria); 1 figura di ascia, avvicinabile al tipo Desor-Robbio (tra età del Bronzo Antico e Medio); 6 cani, 8 armati in duello e simboli (dischi e un quadrangolo) dell'età del Bronzo tarda- prima età del Ferro; una impronta di piede e due antropomorfi delle media e tarda età del Ferro. Alcune profonde coppelle allineate sembrano pertinenti alla fase dell'età del Bronzo tardo. La superficie è inedita.

FOPPE DI NADRO: LE ROCCE N. 61 E 85

Sono due emergenze rocciose collocate all'interno del bosco lungo la scarpata tra la r. 44 e la r. 29. A sud si

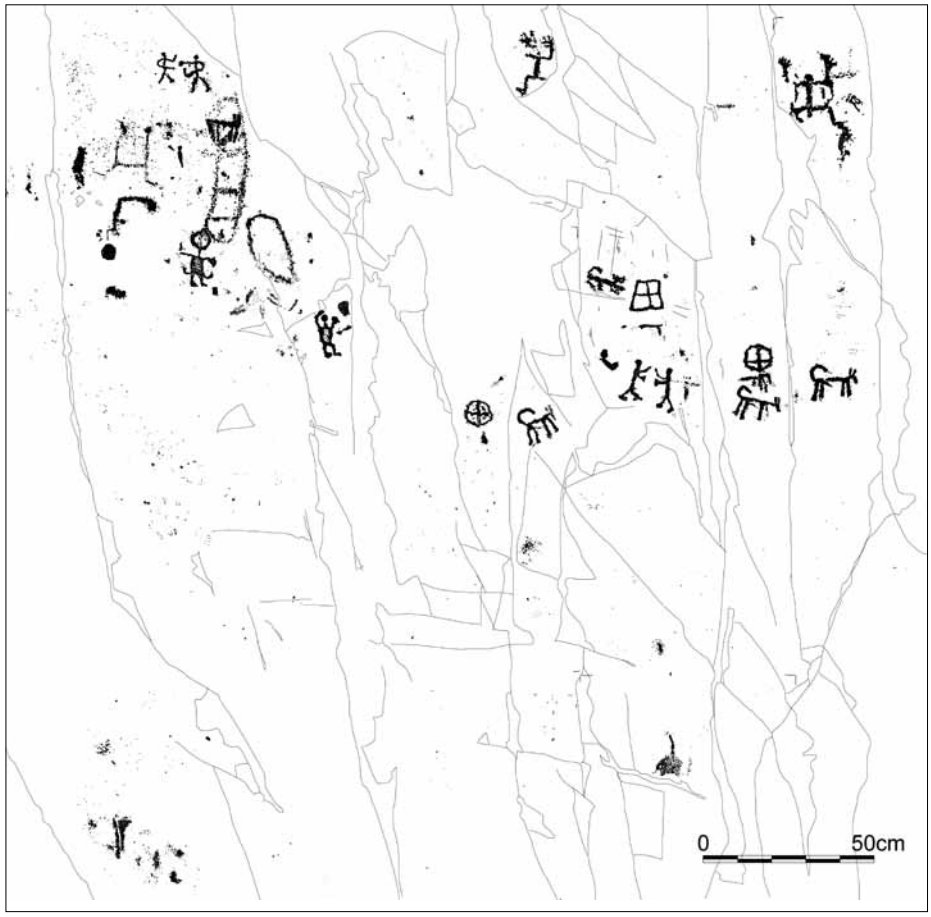

Fig. 3 - Foppe di Nadro R.49, rilievo generale. (rilievo CCSP)

Fig. 4 - Foppe di Nadro R.49. (foto C.G., Archivio CCSP).

apre una zona prativa e umida, senza emergenze, che rappresenta una facile via d'accesso all'area monumentale della r. 30 (composizione monumentale dell'età del Rame). Il dato è assai significativo perché sia tale radura che la concentrazione di rocce con le incisioni più antiche, tra cui le r. 61 e 85, sembrano avere nella r. 30 il loro punto focale.

FdN - Roccia 61
(BS.CETO.FOPPEDINADRO.061)

Masso di frana a forma di parallelepipedo, immediatamente a sud-ovest della r. 29. La superficie è molto danneggiata dagli agenti naturali e atmosferici (licheni, muschi, azione termoclastica); verso sud e nord i margini sono profondamente fratturati. Le incisioni sono visibili nella porzione orizzontale superiore della superficie. Sono state rilevate 54 figure, di cui 21 coppelle (profonde e correlate tra loro ma non disposte a modulo), 7 figure topografiche interamente campite, una ascia con lama di forma subtrapezoidale allungata, spalla dritta, larga e marcata, lati dritti e divergenti verso il taglio. Si suggerisce un confronto con asce ad alette di tipo S. Francesco e tipo Toscanella datate tra il VII e VI a.C. Confronti sono a Foppe di Nadro r. 34, r. 85 e Campanine di Cimbergo r. 16E.

FdN - Roccia 85
(BS.CETO.FOPPEDINADRO.085)

Si segnala infine la nuova superficie n. 85, rinvenuta durante i lavori di ripulitura in prossimità della r. 61. La superficie era coperta di uno strato abbastanza leggero di terriccio e fogliame. La morfologia è piuttosto articolata, con parti in pendenza e un profondo gradino formatosi già in antico per un importante distacco. Le incisioni, in buono stato di conservazione, sono disperse sulle porzioni oblique della superficie, mentre una importante composizione topografica occupa sia l'area in pendenza che l'area orizzontale del gradino. Sono state rilevate 45 figure, di cui 25 elementi topografici, realizzati anche in modo assai regolare e con confronti sulla vicina r. 24C; un piccolo pugnale dell'età del Rame e una ascia a lama subtrapezoidale, spalla dritta, larga e marcata, lati dritti. Come per il reperto della r. 61, si suggerisce un confronto con asce ad alette di tipo S. Francesco e tipo Toscanella datate tra il VII e VI a.C. Confronti iconografici sono a Foppe di Nadro r. 34, r. 61 e a Campanine di Cimbergo r. 16E.

Per tutte le superfici sono stati eseguiti: il rilevamento integrale delle incisioni, la documentazione fotografica, la digitalizzazione dei fogli di rilievo, la documentazione fotografica per il fotomosaico; la nuova superficie r. 85 è stata anche georeferenziata e lo shapefile inviato alla Soprintendenza per l'inserimento nel piano di monitoraggio.

Si ringraziano: la Riserva Naturale Incisioni Rupestri di Ceto, Cimbergo, Paspardo, il Museo delle Incisioni Rupestri di Nadro e l'Associazione Lòntano Verde.

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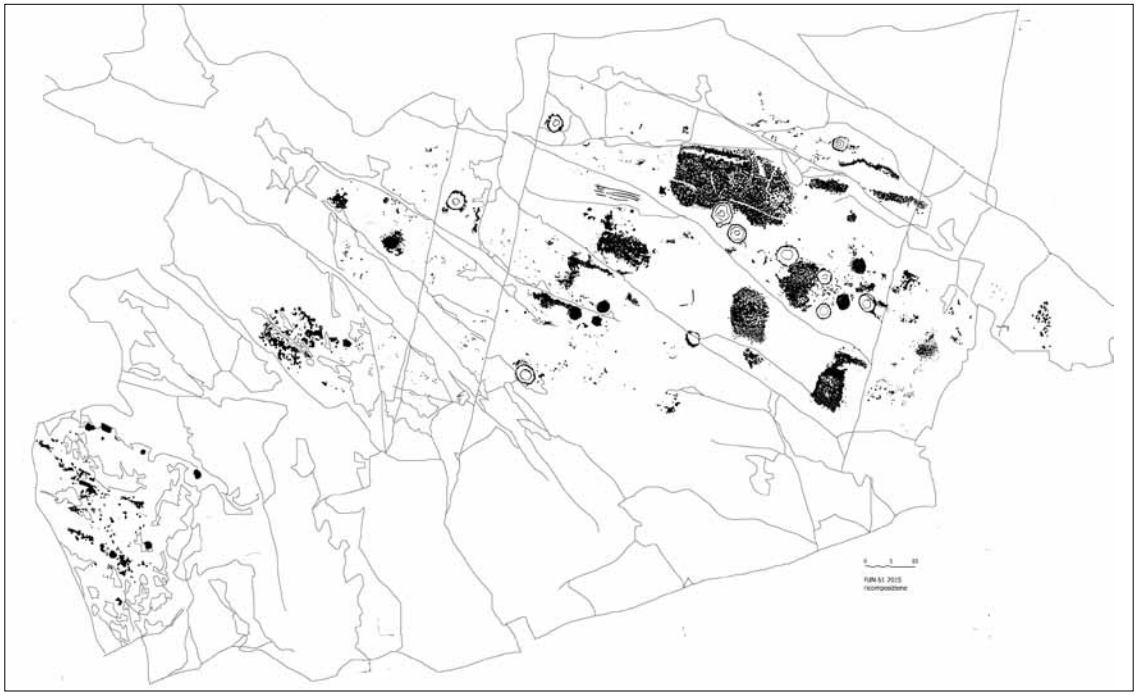

Fig. 5 - Foppe di Nadro R.61, rilievo generale. (rilievo CCSP)

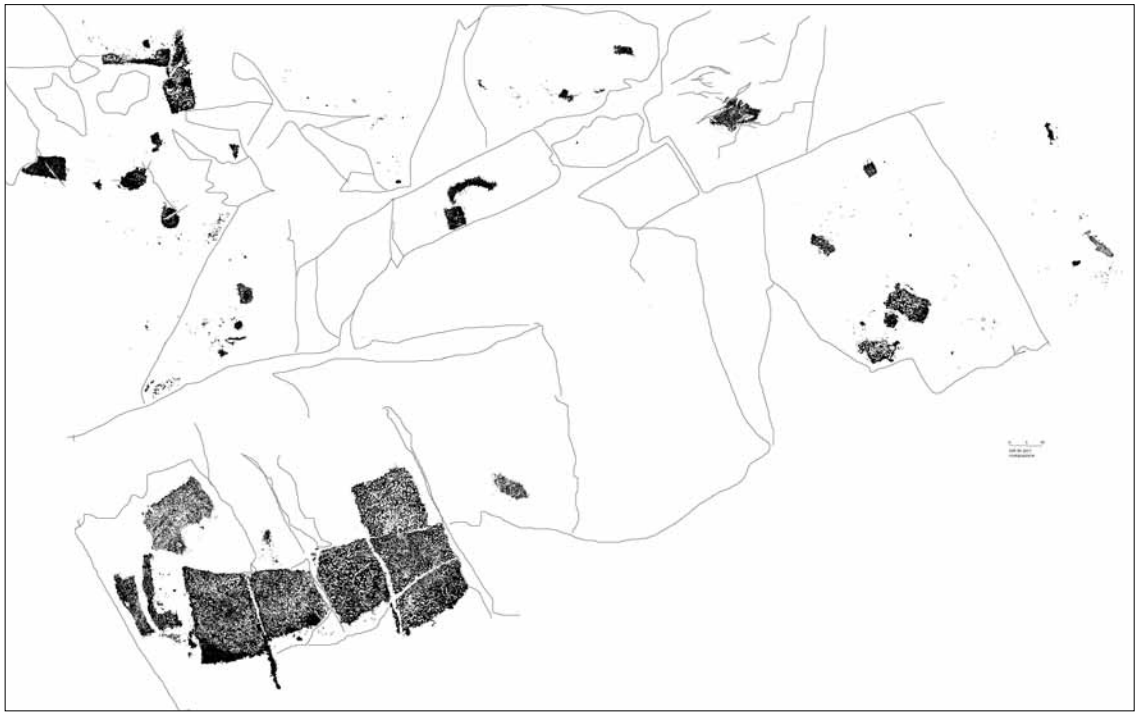

Fig. 6 - Foppe di Nadro R.85, rilievo generale. (rilievo CCSP)

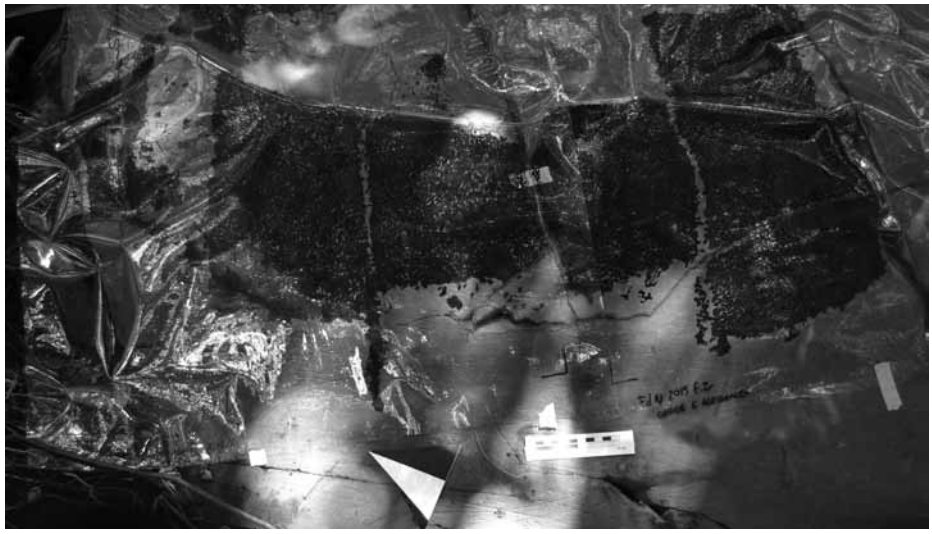

Fig. 7 - Foppe di Nadro R.85. (foto C.G., Archivio CCSP).

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Relazione preliminare dell'attività di ricerca estiva 2015 nell'area di Paspardo
Valcamonica Rock Art Archaeology Field school & Fieldwork 2015

Angelo E. Fossati[1]

Come ogni estate, ormai dal 1988, il Valcamonica Rock Art Archaeology Field school & Fieldwork si è tenuto a Paspardo tra Luglio ed Agosto 2015. Sono state indagate tre diverse località: *Cahtèl* (Castello), *La 'it - Bial do le scale* (La vite-Sentiero delle Scale) e *La Bosca* (Area boschiva), ad una quota tra gli 850 e i 1000 m slm[2].

Ricerche in località Cahtèl - *Castello*
La località Castello (*Cahtèl*) si trova ai margini dell'attuale centro abitato di Paspardo, a monte dell'area istoriata di In Valle-Castagneto. La popolazione locale riferisce il toponimo *Cahtèl* alla presenza di una fortificazione databile a tempi non meglio precisati, ma probabilmente tardo o post-medievali[3]. La zona incisa del Castello era stata segnalata fin dagli anni '60 nei repertori del Centro Camuno di Studi Preistorici, ma mancava una cartografia e una numerazione precisa delle rocce. La Carta Archeologica della Provincia di Brescia (Rossi 1991), scheda n. 1224, segnalava in quest'area 4 superfici incise. Il BC Notizie 1985 (Abreu, Cittadini 1985), invece, citava il rinvenimento nel 1984 di 8 rocce incise. Nel corso della campagna di schedatura per la catalogazione IRWeb, nell'ambito del

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Visite guidate e lezioni. Oltre al lavoro sul campo si sono svolte visite ai maggiori siti archeologici rupestri e musei della Valcamonica. Le ricerche archeologiche hanno visto la presenza di studenti e studiosi universitari italiani provenienti dall'Università Cattolica del S. Cuore di Milano e di Brescia, dall'Università degli Studi di Ferrara, e da volontari italiani e stranieri. Hanno collaborato il Dr. C. Pause del Neuss Museum e il dr. Andreas Gundelwein del Deutsches Museum di Monaco di Baviera (Germania) che con la dr.ssa Francesca Roncoroni (Università Cattolica del S. Cuore di Milano e MiBACT) e la dr.ssa Linda Bossoni (Le Orme dell'Uomo) hanno curato lo scavo ed effettuato studi di tipo ambientale. Il dr. Y. Cai della Carnagie Mellon University di Pittsburgh (USA) ha eseguito con i suoi collaboratori americani alcuni rilevamenti 3D nei diversi siti in concessione. Il dr. Giorgio Fea del Museo Civico G.B Adriani di Cherasco (CN) ha tenuto la consueta lezione sulla monetazione celtica in Italia Settentrionale. Altre lezioni serali hanno riguardato "Le religioni preistoriche della Bassa Valle del Reno" (dr. Carl Pause), "L'arte rupestre della Magura Cave, Bulgaria" (dr. Andrea Arcà), "L'arte rupestre del Monte Bego. Storia e Preistoria" (dr.ssa Silvia Sandrone), "Facies locorum. Paesaggio e arte rupestre" (dr. Giacomo Camuri), "Vulve, pioggia e pesci a raggi X. Uno sguardo d'insieme sull'arte rupestre dell'Australia" (dr. Marisa Giorgi). Una serie di conferenze aperte al pubblico sono state tenute nella Biblioteca Comunale di Cerveno da: dr. Andreas Gundelwein (Ai confini dell'Impero: spedizione nel Sahara orientale), dr.ssa Linda Bossoni (Il corpo come lavagna. Tatuaggi e decorazioni sulla pelle nel mondo antico), dr.ssa Francesca Roncoroni (La paura dei morti viventi. Zombie, vampiri e streghe nell'antichità), dr. James D. Keyser (L'arte rupestre dello Sciamano: la tradizione Dinwoody, USA), dr. Dario Sigari (Piovono capre. I capridi nell'arte rupestre dell'Iran), dr. Yang Cai (Frequenze figurative nell'arte rupestre dell'Helan, Cina).
Hanno fornito un sostanziale contributo alla ricerca gli archeologi e i collaboratori della Cooperativa Archeologica Le Orme dell'Uomo: Andrea Arcà, Linda Bossoni, Dario Sigari, Nicoletta Gelfi; Francesca Roncoroni; Marisa Giorgi.

2 Le ricerche sono state dirette dall'autore e condotte in regime di concessione ministeriale del MiBACT (per gli anni 2015-2017) all'Università Cattolica del Sacro Cuore di Brescia (Dipartimento di Scienze Storiche e Filologiche) con la collaborazione della Cooperativa Archeologica "Le Orme dell'Uomo" di Cerveno (BS), con il contributo e l'accordo della Riserva Naturale delle Incisioni Rupestri di Ceto, Cimbergo, Paspardo, del Comune di Paspardo (proprietario di alcune delle aree con rocce incise) e di alcuni privati. L'autore è grato alla Riserva e al Comune di Paspardo per il contributo e la collaborazione. Un ringraziamento particolare alla famiglia Salari per la grande disponibilità dimostrata durante il periodo delle ricerche e per l'autorizzazione all'accesso e agli studi delle rocce nella sua proprietà in località Castello. Grazie anche al Comune di Cerveno e alla dr.ssa Maria Giulia Voltini che, con il loro importante contributo, hanno permesso la realizzazione delle conferenze a Cerveno.

3 Alcuni scavi archeologici intrapresi nel 2011 dal Consorzio Incisioni Rupestri di Ceto, Cimbergo, Paspardo e condotti sotto la direzione scientifica dalla Soprintendenza Archeologica della Lombardia hanno riportato alla luce una cisterna di epoca veneziana. I lavori sono stati presentati da Alice Leoni nella comunicazione: "L'indagine archeologica nei castelli di Cimbergo e Paspardo" tenuta il 26 Novembre 2011 presso l'Ostello di Cimbergo durante la giornata di studi "Il Castello di Cimbergo: archeologia e recupero".

Progetto di Monitoraggio 2012-2013 (L. 77/06, E.F. 2010) 8 rocce sono state effettivamente individuate, numerate e georeferenziate (Bettonagli, Toninelli 2014), ma non è detto che corrispondano a quelle rinvenute nel 1984. Cinque rocce mostrano prevalentemente figure di tipo topografico antico (databili alla fase Neolitico Finale-età del Rame 1, attorno alla metà del IV Millennio a.C.) con macule, rettangoli a doppia base e pallini picchiettati; le altre tre presentano, invece, figure dell'età del Ferro e degli inizi della romanizzazione tra cui si riconoscono rappresentazioni di guerrieri, animali (cervi, capridi) ed altri segni non chiaramente identificabili. Nel corso delle ricerche archeologiche dell'estate 2015 si è pertanto deciso di iniziare il rilevamento della roccia 4, probabilmente la più interessante tra le superfici databili all'età del Ferro (Fig. 8, bs.paspardo.castello.004) e la roccia 9 (Fig. 9, bs.paspardo.castello.009), una superficie non precedentemente catalogata, dove è stata rinvenuta una figura di mantello frangiato (Fig. 10; Fossati 2015).

La roccia bs.paspardo.castello.004 è la superficie meglio conservata e anche la più estesa del sito. Si osservano figure zoomorfe, tra cui un equide con coda desinente a tre punte, abbastanza atipica nelle tipologie delle code degli animali presenti in valle (Fig. 11). Alcuni cervi maschi con palchi ben strutturati (Fig. 12) si giustappongono tra loro e sono vicini ad armati di fasi medio-tarde dell'età del Ferro (Fig. 13). Sono visibili anche figure di armati di stile IV 5, cioè attribuibili alla fase databile tra il I sec. a.C. e il I sec. d.C.. I rilievi della roccia verranno terminati nella prossima campagna archeologica permettendo così di addivenire ad un migliore inquadramento cronologico delle incisioni presenti sulla superficie.

La roccia bs.paspardo.castello.009 è stata montonata dai ghiacciai pleistocenici ma è fortemente degradata, allungata nella direzione della valle, NO-SE, in un'area dove si trovano altre rocce circondate da prati e castagni. La superficie della roccia è aperta verso NO, ma qui presenta solo muschi, licheni, rari arbusti e una tenue copertura erbosa secca ma abbastanza diffusa; verso S invece il bosco prende piede con alberi a latifoglie, ricoprendo parzialmente la roccia. L'incisione del mantello frangiato non si trova sulla porzione levigata, bensì su di uno stacco di faglia, fortemente inclinato e liscio, adatto come supporto per le incisioni, al contrario del resto della superficie rocciosa. L'utilizzo di queste aree rocciose lisce è noto anche in altre aree di Paspardo, in particolare nell'area di Vite-*'al de Plaha* dove molte rocce presentano questo aspetto. In alcuni casi, infatti, le superfici incise stesse sono massi di frana con ampi stacchi di faglia (si vedano per esempio le rocce 6 e 7 con figure prevalentemente topografiche) (Arcà 2007; Fossati 2007).

Allo stato attuale delle ricerche nella località Castel sono quindi note 9 rocce incise, ma non è escluso che altre possano essere messe in luce con l'avanzare della ricerca.

Il mantello frangiato della roccia 9 è la seconda attestazione di questo motivo nell'area Cemmo-Paspardo-Cedegolo, dopo il rinvenimento del frammento di stele Cemmo 20 (Poggiani Keller 2013; Casini, De Marinis, Fossati 2014). Esso ricorre più frequentemente sui monumenti dell'altopiano di Borno-Ossimo-Malegno, dove compare per 9 volte su 8 monumenti diversi. Il numero delle figure di mantello, con il ritrovamento sulla roccia di Paspardo,

Fig. 8 - La roccia 4 in località Cahtèl (Castello) durante i lavori e dopo la pulizia superficiale (foto Bossoni, Fossati)

Fig.9 - La roccia 9 in località Cahtèl (Castello) (foto Fossati)

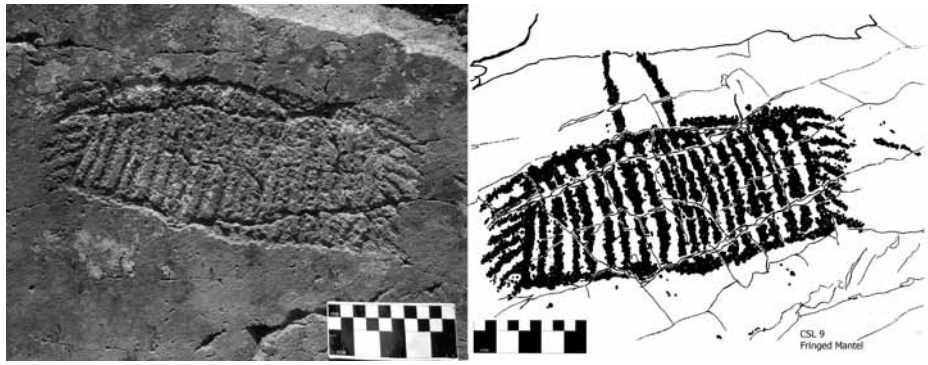

Fig. 10 - Fotografia e rilievo del mantello frangiato inciso sulla roccia 9 della loc. Cahtèl (Castello) (foto Fossati; rilievo UCSC)

sale quindi a 11. Si tratta di una figura che si distingue per la differente morfologia da quelle presenti, allo stato attuale delle ricerche, solo sulle statue-menhir della Valcamonica. Solitamente, infatti, i mantelli hanno una forma

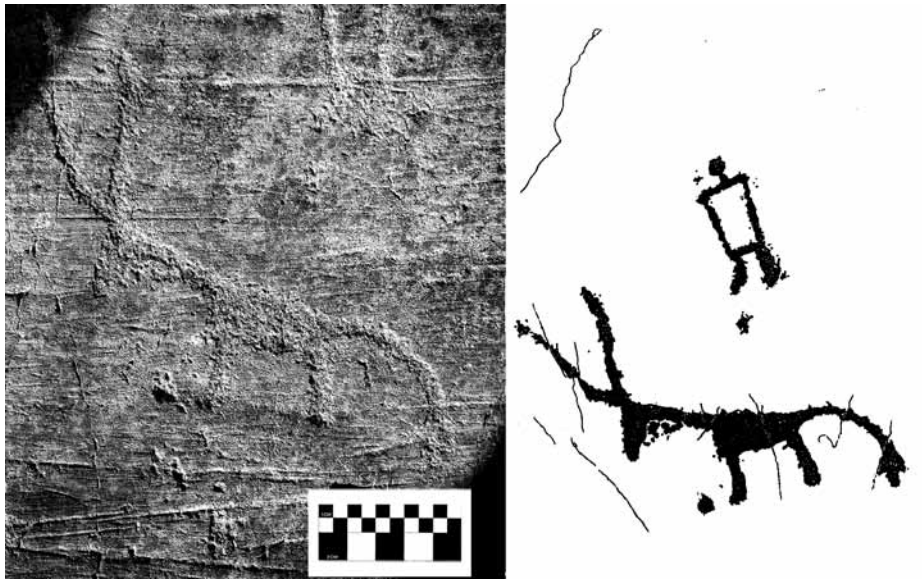

Fig. 11 - Equide a lunga coda sulla roccia 4 in località Cahtèl (Castello) (foto Giorgi; rilievo UCSC)

quadrangolare, con i quattro lati che mostrano una lunghezza quasi simile. Nel caso di Castello 9, oltre all'insolita posizione della figura su una roccia e non su una statua-menhir, il mantello, che ha tutte le caratteristiche tipologiche simili a quelle evidenziate sulle statue-menhir, appare però con una base molto più lunga rispetto all'altezza. Le dimensioni sono queste: base cm 34, altezza massima cm 24. Il mantello è del tipo a linee (ne presenta 20) con 8 frange per lato. Il numero 20 ricorre anche nelle linee verticali presenti sul masso Pat 11. Più che un mantello ricorda quindi una mantellina per la parte superiore delle spalle, quasi una sciarpa. Le frange di questi mantelli, che servono normalmente a chiudere il tessuto dal lato dell'ordito per far sì che non si disfi, sono di solito rappresentate oblique e pendono lungo i lati verticali. Visto che pendono, è probabile che gli artisti intendessero rappresentare un tessuto appeso. Inoltre lungo il lato superiore del mantello si trovano due segmenti verticali che si dipartono al centro di questo: essi raffigurano, con ogni probabilità, i lacci sotto-gola che servivano a meglio fissare il mantello al collo. La prima delle frange in alto, in qualche caso, non pende oppure è più lunga delle altre: fenomeno che si osserva su Cemmo 20, Pat 2 e Ossimo 5 e che forse può suggerire che questa prima frangia potesse servire a legare ulteriormente il mantello sul davanti del corpo.

I mantelli frangiati quando non sono rappresentati sul lato posteriore delle statue-menhir come in Ossimo 8 e Pat 2, o su quello laterale come in Pat 4, sono solitamente incisi sulla faccia frontale, in posizione elevata, come su Borno 1, Ossimo 5, Ossimo 7 e Pat 11. In due casi, molto simili tra loro, si trovano su una faccia obliqua superiore, come in Ossimo 5 e Pat 1. Stefania Casini, nel suo articolo del 1994, ha ben evidenziato che in questa figura ret-

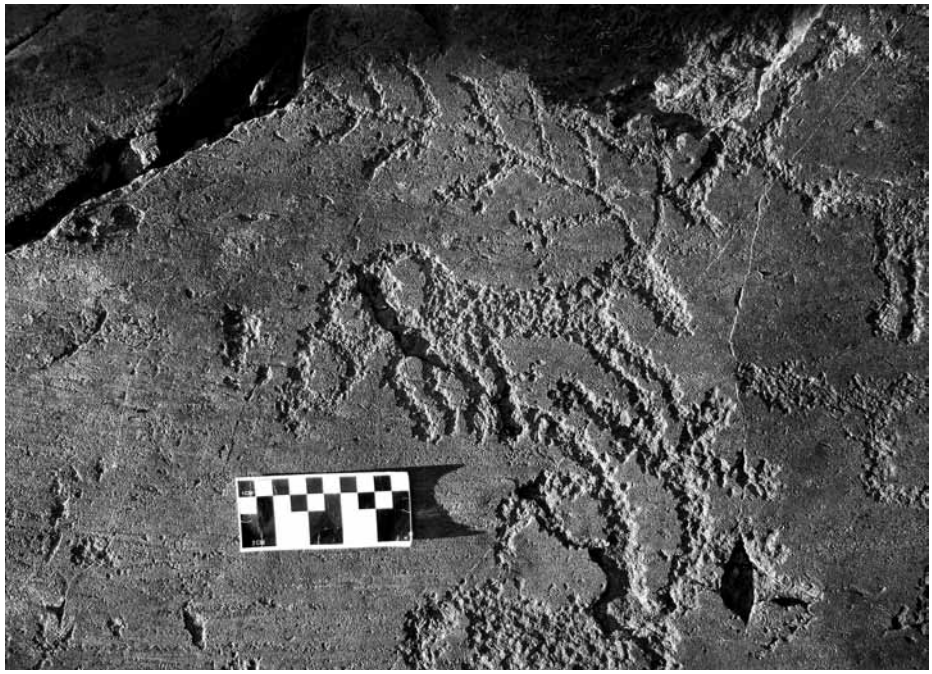

Fig. 12 - Cervi maschi di stili diversi, ma afferenti all'età del Ferro, sulla roccia 4 in località Cahtèl (Castello) (foto Giorgi)

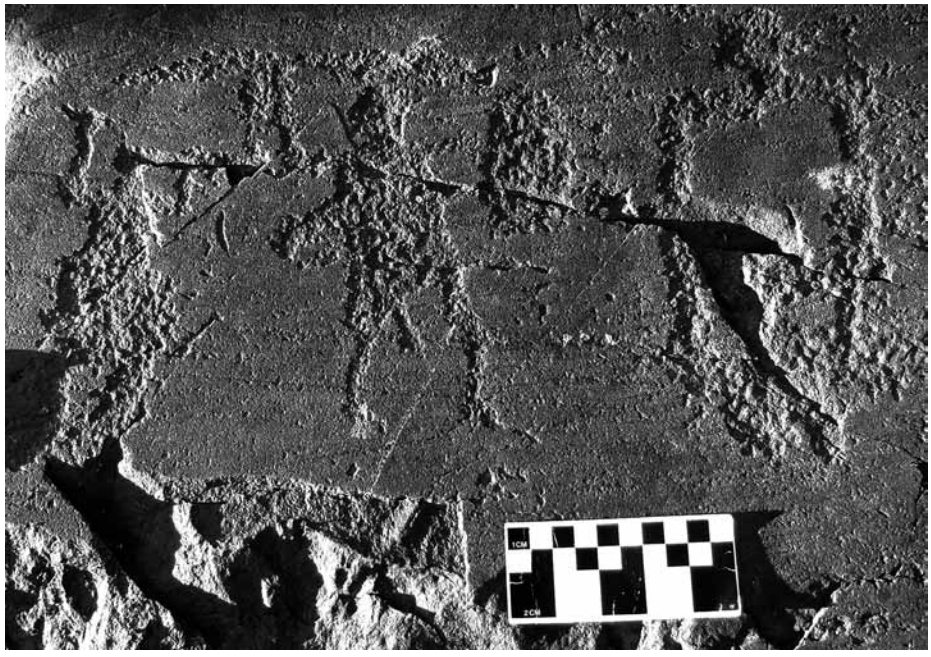

Fig. 13 - Armati in stile IV 4 e IV 5 (IV sec. a.C.-I sec. d.C.) sulla roccia 4 in località Cahtèl (Castello) (foto Fossati)

Fig. 14 - Il terrazzamento dove è stato condotto il sondaggio archeologico e vari momenti dello scavo (foto Fossati, Boddy, Bossoni)

tangolare frangiata va riconosciuto un mantello. Inoltre, era stata identificata questa figura come un simbolo maschile; infine messa in relazione con atti di devozione grazie a un confronto con l'iconografia di un vaso rinvenuto ad Arpachiya (Ninive) dove due donne sono intente ad appendere un mantello ad un muro o a reggerlo in verticale (Casini 1994; Ippolitoni Strika 1996)[4].

Come già recentemente osservato il mantello frangiato presente sulle statue-menhir della Valcamonica può essere suddiviso in tre serie sulla base delle sintassi decorative: su una base a semplici bande verticali (Ossimo 5, Pat 1, 4 e ora anche Castello 9) si impostano linee (Cemmo 20, Pat 2) o segmenti orizzontali (Ossimo 7 e Pat 11). Un modello a sé stante è quello sul masso Borno 1, con un motivo a scacchiera. Caratteri misti il mantello di Ossimo 8, a bande e scacchiera. Le varianti riscontrate permettono di ipotizzare che

4 Per i confronti con i mantelli frangiati delle statue-stele atesine si vedano: Pedrotti 1993; Fossati, Pedrotti, Nothdurfter 2007; Pedrotti, Steiner 2014; per le stele con mantelli del gruppo Rouergat in Francia: Serres 2002.

Fig. 15 - La roccia 126 in località La 'it - Bial do le scale (La vite-Sentiero delle Scale) (foto Fossati)

Fig. 16 - La roccia 130 in località La 'it - Bial do le scale (La vite-Sentiero delle Scale) (foto Fossati; rilievo UCSC)

il mantello fosse un segno di riconoscimento dell'appartenenza a un clan, come una sorta di *tartan ante litteram* (Casini, De Marinis, Fossati 2014). Malgrado questi ragionamenti, il mantello frangiato resta uno dei simboli di più problematica interpretazione tra quelli che compaiono nello stile IIIA (Fossati 2015).

Ricerche in località La 'it - Bial do le scale - *La vite-Sentiero delle Scale*

Nell'area di *La 'it - Bial do le scale* si sono effettuati due diversi interventi: un sondaggio di scavo nell'area di alcuni terrazzamenti adiacenti le rocce incise e il rilievo di due rocce istoriate. I lavori di scavo (Fig. 14) sono stati con-

dotti nell'ampio bosco misto di antichi castagni, conifere e betulle, ambiente che caratterizza l'intero versante orografico sinistro di questa zona, in un settore adiacente a rocce levigate dai ghiacciai pleistocenici, spesso incise ed affioranti. Lo scavo ha permesso di iniziare a documentare e ricercare la storia del paesaggio agricolo e culturale di questa area terrazzata. Si è cercato di rispondere ad alcune domande: qual è il rapporto tra terrazzamenti e rocce? I castagni, anche secolari, ben evidenti nell'area, vennero impiantati in questi terrazzamenti? Che cosa si coltivava in questa zona prima del castagno? Qual è la possibile data di utilizzo dei terrazzamenti? Il sondaggio ha provato a rispondere a queste e ad altre domande. I risultati sono in corso di studio[5]. Altri sondaggi sono previsti per la prossima campagna di studi.

Sono anche state rilevate due rocce incise: la BS.PASPARDO.VITE.126 e la BS.PASPARDO.VITE.130 (Figg. 15-16). Su entrambe le incisioni appaiono poco evidenti e molto consunte, a causa di una loro lunga esposizione agli agenti atmosferici o del tipo dell'arenaria. Su entrambe i segni incisi non appaiono di facile identificazione tipologica, probabilmente si tratta di figure a carattere topografico.

Ricerche in località La Bosca *(Area boschiva)*

La località detta *La Bosca* è posta lungo una fascia altimetrica tra 853 e 881 m/slm. Essa presenta fasce terrazzate naturali pianeggianti già antropizzate, con baite sia diroccate che ristrutturate e radure con emergenze rocciose piane a livello del suolo. La copertura boscosa è a castagneto, quasi sempre incolto, e betulle, particolarmente fitta e a tratti quasi impenetrabile, tanto da lasciar filtrare poca luce nel sottobosco, favorendo la crescita di muschi e licheni. Il terreno presenta rocce montonate e affioranti dal suolo in estesi lastroni levigati. L'accesso e l'individuazione delle superfici incise sono poco agevoli, considerando la ripidità del percorso, spesso scivoloso, e la progressiva obliterazione dei sentieri. Il riconoscimento delle figure incise è sfavorito dalla mancanza di luce diretta e dalla naturale ricopertura progressiva di foglie e muschi, tendente a trasformarsi in *humus*. L'area, che fa parte del territorio della Riserva Naturale delle Incisioni Rupestri di Ceto, Cimbergo, Paspardo, venne stata segnalata allo scrivente da Giovanni Dassa negli anni '80, è stata parzialmente documentata in due diverse campagne archeologiche: la prima risalente alle attività di ricerca de Le Orme dell'Uomo, in regime di autorizzazione ministeriale per gli anni 1994-1996; la seconda è quella attualmente in corso dal 2009. Nel corso dei lavori per il Progetto di Monitoraggio IRWeb sono state schedate 9 rocce, 4 delle quali sono conci o blocchi con segni storici inclusi nei muri perimetrali delle baite. Le incisioni sono riferibili a varie epoche: Neolitico, età del Bronzo Finale, età del Ferro. La superficie incisa più nota dell'area è sicuramente quella di La Bosca 2, con la verosimile raffigurazione del dio Taranis, la divinità celtica del tuono con la testa a ruota, ma nell'area sono presenti anche rocce con macule topografiche e pallini, oranti, ruote a sei raggi e doppia circonferenza, antropomorfi incompleti, duellanti

5 Si spera così di riuscire ad implementare i risultati degli studi di diversi ricercatori che in passato hanno condotto lavori in Valcamonica. Tra i più esaustivi contributi ricordiamo quello di Regula GEHRIG 1997.

Fig. 17 - La roccia 6 in località La Bosca (Area boschiva) dopo la pulizia superficiale e durante i lavori di rilievo (foto Fossati, Bossoni)

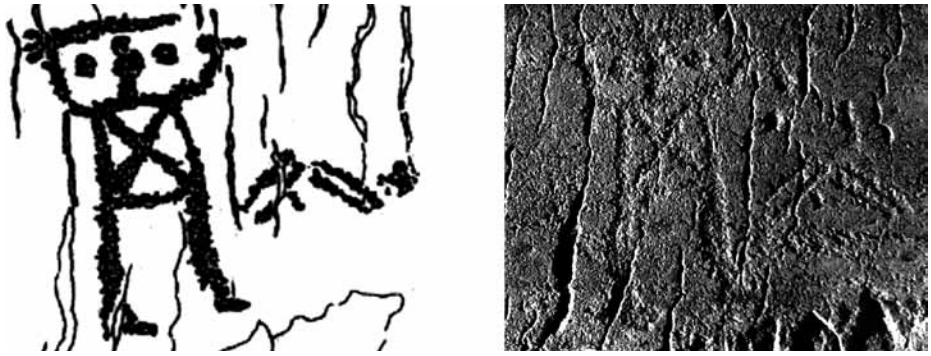

Fig. 18 - Uno degli armati di stile IV 5 (I sec. a.C.-I sec. d.C.) inciso sulla roccia 6 in località La Bosca (Area boschiva) (foto Fossati; rilievo UCSC)

Fig. 19 - Equipaggiamento necessario alla realizzazione dei rilievi 3D e momenti di rilevamento sulla roccia 6 in località La Bosca (Area boschiva) (foto Cai)

e armati. I blocchi siglati come La Bosca 5, 7, 8 e 9 recano nomi, sigle e date, tutte riferite alla seconda metà del XVI secolo e alla prima del XVII (Fossati 2014). Quest'anno si è scelto di indagare completamente la roccia BS.PASPARDO.LABOSCA.006 (Fig. 17) nei pressi di una bella baita cinquecentesca. Le incisioni sono quasi tutte riferibili allo stile IV 5 (I sec. a.C.-I sec. d.C.): armati con busto rettangolare non campito con decorazioni varie, spesso a croce di S. Andrea ad indicare corazze o *kardiophylax* (Fig. 18; Fossati 2000). Si osserva anche una figura di paletta con manico a giorno, da datare a fasi più antiche. Le ricerche proseguiranno nella prossima campagna archeologica 2016.

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Su di un masso inciso in località Scopello, Valsesia (VC)

Federico Mailland

Nel paese di Scopello Valsesia, popolazione residente circa 400 anime, è conservato un masso infisso nel terreno in posizione eretta, recante un'antica incisione rupestre, del quale non c'è traccia nella letteratura – non copiosa – sul megalitismo in Valsesia.

La posizione del cippo (coordinate WGS84 45°46'20"N, 8°5'59"E, elevazione 670 m. slm) è in un prato triangolare all'ingresso della frazione Casa Pareti sulla destra orografica della valle. Da quel punto si dipartono tre strade moderne, quella della frazione Casa Pareti, quella che porta alla frazione Chioso e la terza è la strada (carrozzabile aperta da meno di 50 anni) che porta all'Alpe di Mera e alle piste di sci.

Il masso è una roccia di tipo dioritico, con presenza di cristalli granoblastici di dimensioni piuttosto grandi, arrotondata e levigata per l'azione erosiva e meccanica conseguente a trascinamento e quindi proveniente dal letto del fiume Sesia. Il masso è saldamente conficcato nel terreno, e ha un'altezza fuori dal suolo di 1 m. La circonferenza massima è di circa 2,80 m. Sulla faccia del masso rivolta a nord è visibile un'incisione a figura di contorno, che occupa orizzontalmente la superficie curva del cippo per una lunghezza massima di 0,7 m (Fig. 20). L'incisione è profonda circa 1 cm rispetto alla superficie ed è ben conservata nella parte alta: il rilievo di Fig. 21 indica che si tratta di uno zoomorfo, del quale sono ben conservate la linea del dorso per tutta la lunghezza della figura, il muso rappresentato di profilo con orecchio appuntito, il posteriore e parte di una zampa anteriore. Benché tutta la parte inferiore dell'incisione sia illeggibile a causa dei fenomeni di erosione, è facile riconoscere la figura di un canide, molto probabilmente un lupo. L'orecchio ritto indica attenzione, come in atteggiamento di caccia. Data la durezza della roccia incisa, è da ritene-

re che l'incisione sia stata eseguita per percussione indiretta, facendo uso di una roccia ancora più dura, come un granito o un quarzo, come scalpello, e di un percussore.

Posteriormente, sulla faccia rivolta a sud, è presente una linea di frattura naturale che conferisce al masso una vaga forma di faccia umana, o di mascherone con ghigno (Fig. 22). Sopra alla frattura vi è l'incisione di un occhio, visto di profilo, della lunghezza massima di circa 20 cm e massima profondità di circa 3 cm. Forse l'occhio è stato ottenuto utilizzando una crepa naturale della roccia, orizzontale: si apprezzano bene i colpi dati in verticale per accentuare la profondità dell'incisione. Anche questa figura è stata ottenuta per percussione indiretta.

Non avendo altre informazioni più precise sulla datazione di queste incisioni, è solo possibile fare delle considerazioni sulla loro antichità. La diorite è una roccia molto dura e resistente agli agenti atmosferici, e il fatto che tutta la parte inferiore della figura zoomorfa della faccia nord sia andata perduta in seguito a fenomeni di erosione, testimonia dell'antichità millenaria dell'incisione e di conseguenza della funzione cultuale del cippo.

Difficile anche dire se l'incisione della faccia sud sia coeva della precedente, o posteriore. Sicuramente non è anteriore, come sembra indicare la relativa freschezza dell'incisione dell'occhio.

Gli scavi archeologici della preistoria della Valsesia hanno interessato soprattutto la Bassa Valle, nelle zone del Monte Fenera (Borgosesia), dove è attestato il popolamento del sito durante il Paleolitico Medio, e successivamente durante il Neolitico e l'età dei metalli nell'area dove sorgono le moderne cittadine di Borgosesia, Grignasco e Valduggia (Conti 2009). In età romana tutta la bassa valle è popolata. Ci sono meno informazioni sul popolamento dell'Alta Valle.

Incisioni rupestri, sia preistoriche che di epoca storica, sono state descritte in varie zone della bassa Valle, in particolare nella zona del Monte Fenera, di Vanzone e del lago di S. Agostino intorno a Borgosesia, nonché nei dintorni di Valduggia. Vi sono impronte di piedi e impronte di mani, coppelle e canalicoli, raffigurazioni di armi quali punte di giavellotto, pugnali, coltelli. Accanto a queste raffigurazioni, di età incerta tra età del Bronzo e età del Ferro, vi sono raffigurazioni figurative di età storica, con antropomorfi e segni schematici. Le prime informazioni si devono soprattutto agli studi effettuati tra gli anni '70 e gli anni '90 del secolo scorso da Oliviera Manini Calderini. Si devono a questa studiosa le esplorazioni sistematiche nella Bassa Valle, e le indagini che nell'Alta Valle hanno portato a scoperte nelle località di Roccapietra vicino a Varallo, nonché nelle località di Rima e di Rimella.

In un primo rapporto sulle ricerche al Lagone di Vanzone (Calderini 1974) la Studiosa descrive le seguenti incisioni: un antropomorfo filiforme, un'impronta di mano e una di piede, un pugnale, un segno a ferro di cavallo. A parte l'antropomorfo, definito di età storica, le altre figure non sono databili, nemmeno il pugnale, la cui forma non è visibile con precisione. L'Autrice le pone sia pure dubitativamente in relazione con l'abitato palafitticolo del Lagone, dal quale provengono ossuari biconici del Golasecca 1 (VIII-VII sec. a.C.), fibule a navicella in bronzo e anelli in bronzo. Successivamente (Calderini 1975a) vengono descritti ritrovamenti al castello degli Ariani a Rocca-

Fig. 20 - Scopello, Casa Pareti: cippo visto da nord. L'incisione a contorno occupa una superficie curva lunga 70 cm. La parte inferiore della figura non è visibile a causa di fenomeni erosivi.

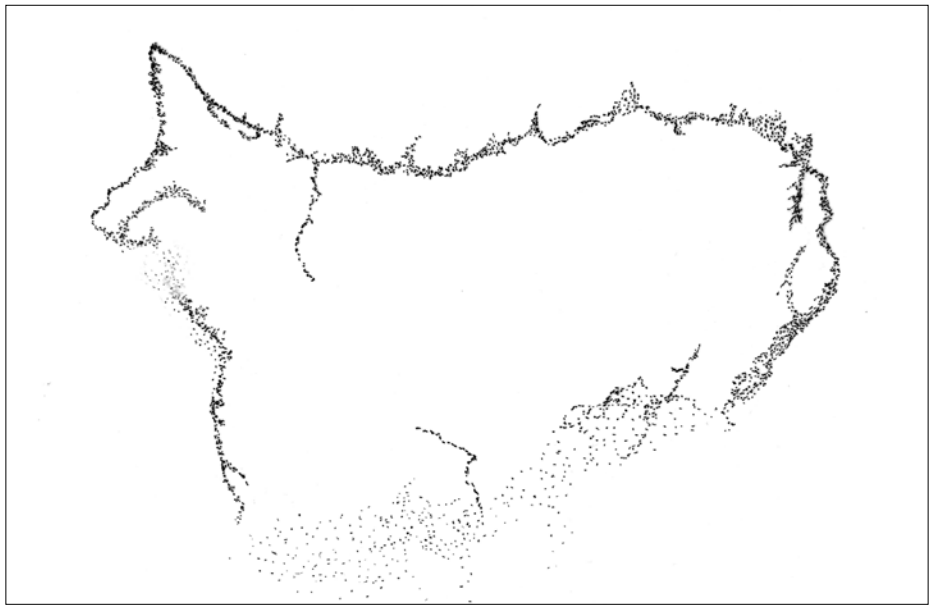

Fig. 21 - Rilievo di zoomorfo inciso sulla parete nord

pietra e al lago S. Agostino, al confine del comune di Quarona. Da notare incisioni di cuspidi di giavellotti, vaschette e coppelle. Impronte di piedi, coppelle e canaletti vengono anche rinvenute in varie località dell'Alta Valle, tra cui Rimella, Val Mastallone, Val Sermenza e all'Alpe Vallé di Sotto sopra all'abitato di Rima (Calderini 1975b). Rocce cuppellate vengono quindi descritte a Valduggia, in Bassa Valle (Calderini 1990), e ancora sul monte Fenera (Calderini 1995, Cerutti 2010). Una rassegna su fenomeni di megalitismo in Valsesia (Visconti 1983, 1988) nel frattempo richiama interessanti ritrovamenti nell'Alta Valle, con la descrizione di altari preistorici realizzati con strutture dolmeniche nel comune di Campertogno, di una tomba a galleria al Vallé di Sopra a Rima, di un masso inciso a Boccorio in comune di Riva Valdobbia, con vaschette e canaletti, cristianizzato con la costruzione della chiesetta della Visitazione della Vergine. E ancora, pietre con coppelle al Seccio, in territorio di Boccioleto, e un monolito all'Alpe Dezata, con ampio foro naturale che manda un raggio di luce sul Monte Ventolaro al sorgere del Sole. Questo masso, ancorché le incisioni che porta non siano probabilmente di opera umana (Visconti 1988) è l'unico ritrovamento riferito nella zona di Scopello.

Rispetto alle ricerche nelle Alpi lombarde e del Trentino, lo studio sistematico delle incisioni rupestri e dei resti megalitici nelle Alpi Occidentali è di epoca più recente e si deve soprattutto alla volontà di Filippo Gambari (1994 e 2003) allora Soprintendente del Piemonte, un maggior interesse per una ricerca scientifica a tappeto in queste zone, che porterà tuttavia a ritrovamenti ben più importanti nella vicina Ossola che non in Valsesia. Considerando anche i cospicui ritrovamenti nel sito di S. Martin de Corléans ad Aosta e del sito del Petit-Chasseur a Sion sull'altro versante, nel Vallese, questa relativa mancanza di reperti megalitici in Valsesia è forse da mettere in relazione anche alla durezza del materiale roccioso di origine vulcanica di questa valle, che non si presta bene come in altri siti all'incisione e all'intaglio con le tecnologie conosciute in epoca preistorica.

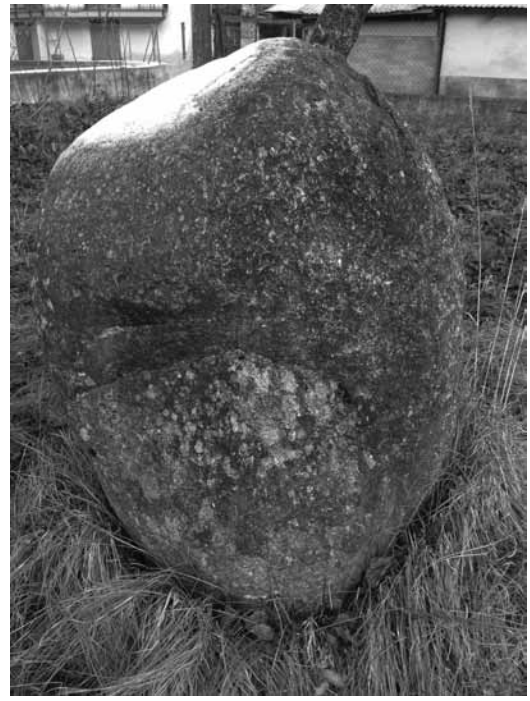

Fig. 22 - Scopello, Casa Pareti: cippo visto da sud. L'occhio del mascherone è stato intenzionalmente approfondito mediante una serie di colpi verticali paralleli.

A tutt'oggi non sono noti in Valsesia altri esempi di cippi come quello descritto, e tantomeno sono descritte incisioni rupestri di canidi. L'unico esempio di stele riportato in letteratura (Vanzi 2009) si riferisce a un cippo di vaga forma antropomorfa naturale, di proporzioni simili al cippo di Scopello,

zona da cui si ritiene provenga secondo analisi geologica e ancora infitto a Piano Rosa (Romagnano).

Il nostro masso rappresenta probabilmente un cippo posto a guardia della millenaria via di salita al Monte Mera, una mulattiera che da qui aveva inizio prima della costruzione della moderna strada asfaltata. Il Mera è un largo anfiteatro ricco di pascoli che si stendono dai 1400 m fino ai 1600 della cima Camparient e ai circa 2000 della cima Ometto, unite da una cresta semicircolare che fa da spartiacque con la valle del biellese a sud. Via millenaria di transito delle greggi, ancor oggi rappresenta la via della transumanza dal biellese alla Valsesia attraverso una sella, chiamata bocchetta della Boscarola. Per raggiungere il paese di Scopello, e viceversa, la mulattiera attraversa un fitto bosco di latifoglie, una faggeta ancor oggi habitat e rifugio di molte specie selvatiche, tra i quali cervi, caprioli, tassi, lepri, scoiattoli, ghiri e piccoli mammiferi, rettili, ecc. Gli unici predatori sopravvissuti oggi in questa zona sono volpi e faine, ma qui vivevano i lupi fino allo sterminio di circa un secolo fa. L'occhio della stele è l'occhio della divinità che si cela dentro la pietra e vigila sui mortali. La rappresentazione del lupo può avere un doppio senso, di avvertimento e di protezione per i pastori che migliaia di anni fa come oggi attraversavano questi boschi con le loro greggi.

Ringraziamenti

Ringrazio la Dr.ssa Maria Emilia Peroschi per la classificazione geologica e la Direzione e il Personale della Biblioteca Civica "Farinone Centa" di Varallo per l'accesso alla bibliografia.

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Colle Brianza - loc. Campione
Roccia con coppelle

Fabio Copiatti

A seguito della segnalazione fatta da Franco Orsenigo, Angelica Perego e Valentino Gigri Fumagalli dell'Associazione Monte di Brianza, il 28 agosto 2014 lo scrivente si è recato a Colle Brianza (LC), in località Campione, per prendere visione di una roccia con incisioni rupestri.

Nel corso del sopralluogo è stata rilevata la presenza di numerose coppelle, alcune unite tra loro da canaletti, di cui si dà di seguito descrizione.

Ubicazione del sito

Il sito dove è stata individuata la roccia incisa si trova nel territorio del Monte di Brianza, conosciuto anche come Monte S. Genesio, una montagna delle Prealpi Luganesi situata in provincia di Lecco, già provincia di Como.

La roccia incisa oggetto di questo studio è ubicata nel comune di Colle Brianza in un pianoro posto sul dosso montano che dalla località Campsirago degrada verso i ruderi della cascina Campione inferiore, lungo un antico tracciato viario di transito rurale. L'ambiente è caratterizzato da un bosco misto di latifoglie con predominanza di castagno. Poco distante scorre un ruscello. A una decina di metri dalla roccia coppellata sono presenti altri massi sui quali sono incise coppelle isolate (Fig. 23).

Quest'area, di notevole interesse naturalistico ed escursionistico (parte del Monte di Brianza recentemente è stata riconosciuta come "Parco locale di interesse sovracomunale" con delibera della Giunta provinciale n. 102 del 6 maggio 2014) si situa in posizione panoramica dominante sulla pianura e sulla sponda destra dell'Adda.

Fig. 23

La Brianza è nota agli studiosi di incisioni rupestri perché oggetto di studi da parte di don Vincenzo Barelli (1807-1890), professore al Seminario di Como e canonico della Cattedrale, studioso di letteratura, storia locale, archeologia ed epigrafia, che fu tra i fondatori della Commissione Archeologica della Provincia di Como e del Museo Civico. Con Alfonso Garovaglio diede vita alla "Rivista Archeologica della Provincia di Como" sulla quale pubblicò numerosi studi. Tra questi citiamo "Le pietre cupelliformi del Piano delle Noci in Val d'Intelvi" (fascicolo n. 18 della Rivista Archeologica della provincia di Como, settembre 1880), probabilmente la prima segnalazione in Italia di massi coppellati, e "Pietra cupelliforme in Carate di Brianza e roccia cupelliforme in Breccia" (fascicolo n. 23 della RAC, giugno 1883).

Un recente catalogo delle incisioni rupestri presenti sul territorio della provincia di Lecco è stato pubblicato a cura di Angelo Eugenio Fossati nel volume "Carta Archeologica della Provincia di Lecco. Aggiornamento" (Fossati A.E., *Nuove acquisizioni di arte rupestre dal territorio lecchese*, in *Carta Archeologica della Provincia di Lecco. Aggiornamento*, a cura di M. Ruffa, 2009, p. 17 ss.). Nel 1994 nella prima stesura della Carta Archeologica della Provincia di Lecco (a cura di Stefania Casini) erano state raccolte le prime segnalazioni di arte rupestre lecchese (si veda anche Casini S., Fossati A., *Il menhir istoriato di Ello*, in *Carta Archeologica della Lombardia. IV. La provincia di Lecco*, 1994, pp. 91 ss.).

Fig. 24

Descrizione delle incisioni

Le incisioni rupestri sono osservabili sulla superficie superiore di una roccia in arenaria (Fig. 24) che emerge a una altezza dal suolo di circa 1 ÷ 1,5 metri per una lunghezza complessiva di 4,5 metri e larghezza massima di 1,3 metri. Una porzione della roccia sembra essere stata asportata in tempi non recenti.

L'andamento naturale della roccia e delle sue fratture crea un piano su cui è stato inciso il numero maggiore di coppelle. Alcune coppelle appaiono tra loro unite da canaletti, altre sono isolate.

Le dimensioni delle coppelle variano sia per diametro che per profondità, da un massimo di circa 20 cm di diametro e 10 cm di profondità a un minimo di circa 2 cm di diametro e 1 cm di profondità. Il fondo di quelle di maggiori dimensioni è poco concavo, quello delle coppelle di minor dimensioni, invece, appare concavo. Il fondo è sempre ben levigato. Con buona probabilità coppelle e canaletti sono stati incisi per percussione con strumento metallico e in seconda fase levigate con strumento litico.

I canaletti di collegamento sono in alcuni casi profondi e larghi. Tutti tendono a "sfociare" verso il bordo esterno della roccia, quasi a voler convogliare verso il terreno l'eventuale liquido raccolto in essi e nelle coppelle. Sono state contate 31 coppelle. Due gruppi sono uniti da canaletti, una è isolata ma da essa parte un canaletto che "sfocia" verso il bordo della roccia, altre sono disposte singolarmente. Alcune delle coppelle unite da canaletti si combinano andando a formare una figura che può ricordare un antropomorfo, però si ritiene che tale disposizione sia del tutto casuale.

Le coppelle e i canaletti sono l'unica tipologia di segno inciso presente sulla roccia ad eccezione di un'incisione dalla forma che definiremmo "arcuata".

L'Associazione Monte di Brianza ha prontamente segnalato la roccia alla Soprintendenza Archeologica della Lombardia.

Etnoarcheologia e arte rupestre: il caso delle iscrizioni della Valle dei Laghi (TN)

Luca Pisoni

Accanto al sentiero che dal bosco collega i paesi di Calavino e Lasino si trovano due rocce calcaree caratterizzate dalla presenza complessiva di quattordici iscrizioni (Figg. 25-27), indagate da chi scrive per la Comunità e l'Ecomuseo della Valle dei Laghi (TN), finanziatori del progetto.

Sulle rocce sono visibili delle lettere (*GGH*) e una serie di disegni, tra cui una casetta, due cuori, due trie e un cerchio; poco lontano alcune scritte *(IG W 1948* e *Ottavio Pisoni anni 13 W Il Comunismo*), due scudi crociati e due falci e martello.

Una breve ricerca etnografica ha permesso di capire come Ottavio Pisoni, nato nel 1935 nel vicino paese di Madruzzo, non fosse di orientamento politico comunista e avesse svolto in gioventù la professione di pastore, come conferma anche la destinazione d'uso dell'area delle scritte, riservata al pascolo comunale.

In base alla menzione dell'età (13 anni) è possibile datare l'iscrizione al 1948, l'anno delle prime elezioni politiche libere dopo il Fascismo e la Seconda Guerra Mondiale. La forte contrapposizione partitica determinò un clima così acceso e sovraeccitato che muri, fabbriche, edifici, ecc. furono letteralmente ricoperti di manifesti elettorali con scudi crociati o falci e martello.

Più che l'appartenenza politica al partito di Togliatti, quanto mai improbabile nel Trentino rurale del tempo, fu la suggestione di quei giorni sull'animo di un giovane pastore a far sì che il simbolo del Partito Comunista fosse inciso sulla roccia vicino a quello dell'avversario politico storico: la Democrazia Cristiana.

Le lettere della sigla *IG* sono probabilmente da considerare come le iniziali del nome e del cognome di un altro autore delle scritte, che segna anche la propria classe (W 1948), ovvero l'anno di nascita.

Le trie, che a volte sono incise anche su pareti verticali, nel nostro caso possono essere interpretate come un vero e proprio gioco da tavola, nel quale si cimentavano i pastori.

Fig. 25 - Fotografia delle iscrizioni di Lasino (TN)

Fig. 26 - Fotografia delle iscrizioni di Lasino (TN)

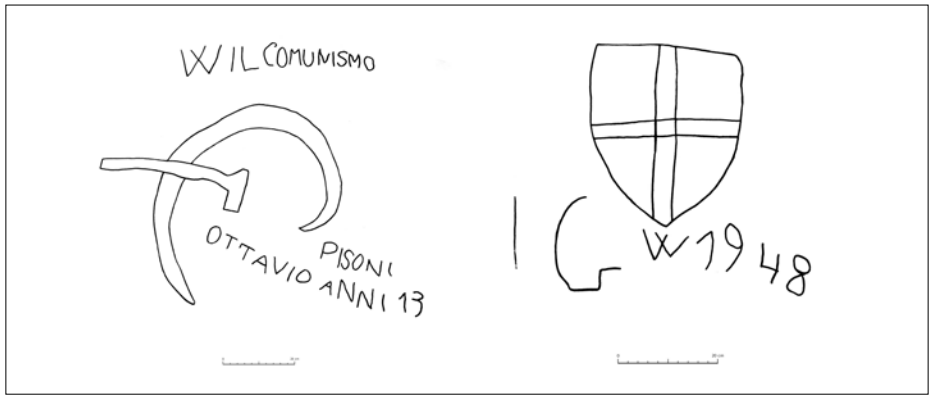

Fig. 27 - Disegno delle iscrizioni di Lasino (TN)

Infatti, come spesso accade, le iscrizioni si collocano su rocce piane o poco inclinate, situate a margine di piccole radure o in luoghi da cui, stando comodamente seduti, è facile tenere sott'occhio i capi al pascolo ed è possibile concedersi qualche svago o passatempo, come giocare, leggere o fare delle iscrizioni. Su rocce verticali, ma ugualmente situate in posizioni che facilitano il controllo delle greggi, sono state realizzate infatti la maggioranza delle scritte dei pastori del Monte Cornón in Val di Fiemme (Pisoni 2013).

Ma perché si scrive? E verso quali oggetti si orienta la scrittura?

Lo scrivere, come è noto, è frutto di un sentimento di autoaffermazione e di resistenza che accomuna i pastori ai moderni grafittari urbani (Kezich 2013). Nel caso che presentiamo qui, l'oggetto della scrittura è influenzato da una molteplice serie di fattori fondamentalmente riconducibili a due grandi questioni. La prima si riferisce all'imitazione, spesso acritica, di simboli facenti parte di un universo culturale estraneo a quello di chi scrive, come nel caso di scudi crociati e di falci con martello. La seconda riguarda invece la rappresentazione, certamente più responsabile e conscia, dell'universo culturale proprio di chi scrive, testimoniato dai nomi, dai cognomi e dalle trie utilizzate come passatempo.

In definitiva, l'importanza del presente contributo non è tanto quella di aumentare il numero delle iscrizioni note, quanto impegnare lo studioso nel lavoro dell'interpretazione, dimostrando come la posizione dominante delle rocce unita a una certa quantità di tempo libero e alla ricezione e rielaborazione di elementi propri ed estranei al sistema culturale di appartenenza possono essere considerati, in senso etnoarcheologico, dei modelli interpretativi da cui attingere per spiegare anche altri contesti di arte rupestre.

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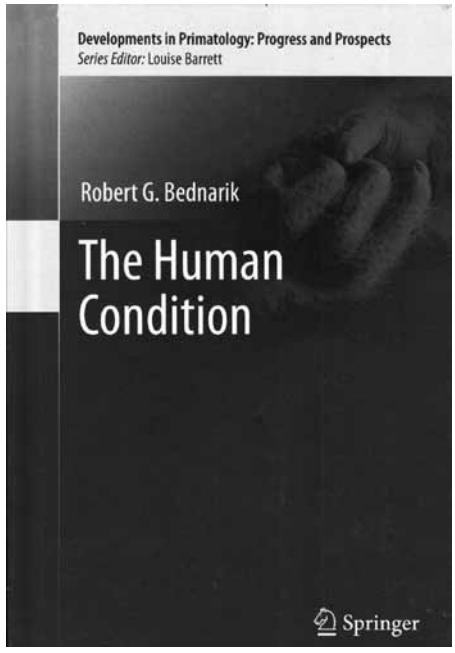
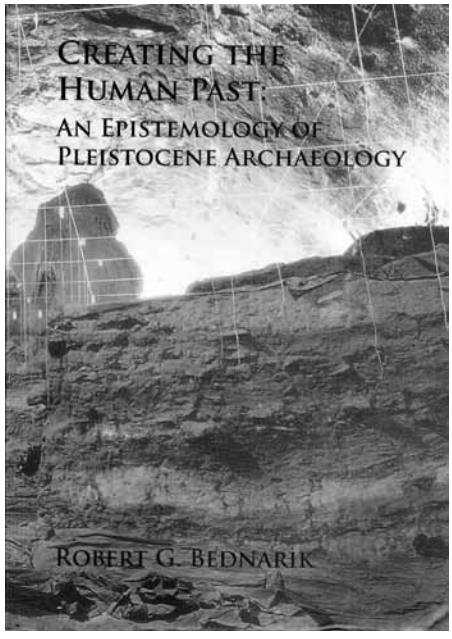
Recensioni / Reviews

Mila Simões de Abreu - Federico Troletti





The Human Condition. Developments in Primatology: Progress and Prospects. *Robert G. Bednarik. 2011. Foreword by Dean Falk. 210p. New York, Springer. ISBN 978-1-4419-9352-6*

Creating the human Past: an epistemology of Pleistocene Archaeology. Robert G. Bednarik. 2013. 187p. Oxford, Archaeopress. ISBN 978-1-905739639

Con più di mille articoli sull'arte rupestre e testi pubblicati nelle più importanti riviste scientifiche del mondo, Robert G. Bednarik è senza dubbio uno degli autori più prolifici del settore. L'autore, che si presenta come autodidatta, preferisce definirsi uno studioso di epistemologia cognitiva e paleoarte. In verità B. conosce come pochi il mondo le pitture e le incisioni rupestri di tutte le epoche e in tutti i continenti. Come fondatore dell'AURA (l'Associazione Australiana de Ricerche sull'Arte rupestre) e *Convener* dell'IFRAO è riconosciuto da tutti, anche da quelli che non sono d'accordo con le sue posizioni, come una vera autorità a livello internazionale.

I due libri qui recensiti riassumono la visione di B. riguardo la ricerca, gli studi archeologici e in particolare alcuni periodi della Preistoria.

L'autore si dimostra critico, qualche volta quasi scettico, spesso controcorrente – come nel caso del vigoroso appoggio alla teoria del multi regionalismo – tanto da non lasciare

nessuno indifferente alle sue idee.

Il primo volume, *The Human Condition*, è la pubblicazione di una serie di lezioni sulle origini dell'essere umano che B. ha tenuto per il *Semitoics Institute* di Toronto (online) su invito del famoso semiologo Paul Bouissac.

Per coloro che si occupano d'arte rupestre sono particolarmente interessanti i capitoli 3 (*Hard evidance*) e 5 (*an Alternative Paradigm*) nei quali B. presenta un'enorme quantità di fatti, esempi e dati sulle prime manifestazioni di "arte" in tutto il mondo: dal misterioso ciottolo di Makapansgat trovato in contesto dell'*Australopitecus* in Sud Africa alle coppelle trovate nella Auditorium Cave, Bhimbhetka in India.

Già in *Creating the Human past* l'attenzione si rivolge alla storia della ricerca archeologica. In modo molto chiaro B. introduce il lettore ai problemi generali, da quello che chiama l'insoddisfazione della disciplina e le sue diverse teorie, alle nozione tradizionali, alla Nuova Archeologia. L'autore passa in rassegna episodi controversi del passato come i casi di Piltdown e Gozel senza tralasciare le scoperte che hanno avuto l'eco maggiore negli ultimi anni, come la scoperta delle incisioni della Valle del Côa in Portogallo e del personaggio chiamato "Hobbit" (*Homo floresiensis*) in Indonesia. Se molti di questi episodi sono presentati come "errori", B. non dimentica le pietre miliari della ricerca come la scoperta dell'*Homo erectus* o *Bambino di Taung*.

I due volumi saranno utili agli studenti che ne apprezzeranno la sintesi e i riassunti, ai cultori e agli studiosi che vi troveranno un'estesa e approfondita bibliografia molto recente e aggiornata insieme a testi più antichi.

Nel caso di *Human Condition* si segnalano due elementi sfavorevoli: il prezzo esorbitante, più di 135 euro, che scoraggia l'acquisto anche da parte delle biblioteche universitarie e un apparato iconografico solo in bianco e nero in alcuni casi di bassa qualità, come le figure 5.2 e 6.1 talmente scure che risulta difficile comprenderne il significato. Un libro con un prezzo cosi elevato doveva avere una qualità grafica molto superiore.

Creating ha una grafica più piacevole con un apparato fotografico a colori e, cosa non secondaria, un costo più ragionevole e alla portata di tutti (meno di 20 euro).

I libri possono essere acquistati online presso
http://www.springer.com/gp/book/9781441993526
http://www.archaeopress.com/ArchaeopressShop/Public/defaultAll.asp?QuickSearch=9781905739639

SANTUÁRIOS - III INTERNATIONAL CONGRESS

SANCTUARIES, CULTURE, ART, "ROMARIAS", PILGRIMAGES, SCENERY, PEOPLE

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The third International "Santuários" Congress will be held in Valcamonica, Italy — the "Landmarks Valley". Valcamonica is one of those rare places in the world that narrates a long story rooted in spirituality. Its treasures include a rich collection of rock-art that has been recognized as a UNESCO World Heritage. The might of Roman domination was followed by a complex sequence of events accompanying the conversion to Christianity in the Alps. Its legacy includes countless churches, chapels, shrines and cult places.

The meeting sets out to challenge all the diverse dimensions of the relationship between culture, environment and man. Thus, an invitation to participate is extended to anthropologists, archaeologists, architects, artists, performers, biologists, conservators, restorers, believers, devotees and pilgrims, curators, writers, designers, philosophers, gastronomes, geologists, historians, art historians, doctors, museologists, musicians and musicologists, psychologists, priests, sociologists and all those who understand that their work and their devotion has a relationship with a broad concept of sanctuaries.

CALL FOR PAPERS

ABSTRACT – 31th March 2016

The Scientific Committee of Santuários will review the abstracts and select those that will be published and presented during the sessions of the Congress. Abstracts, in Italian and / or English, should not exceed 5000 characters and should be sent by the 31th of March 2016 to the following email address: **federico.troletti@ccsp.it**

DECISION OF THE SCIENTIFIC COMMITTEE – 15th of April 2016

Authors will be sent, by the 15th of April 2016, the decision of the Scientific Committee, as follows: a) admitted, b) admitted with changes or c) not admitted

PAPERS - 31th May 2015

Authors must send to our editorial team by 31th May 2016, including the following: full text with a maximum length of 30.000 characters (including spaces) and with at at least three images (up to a maximum of six) in .jpeg or .tiff format with a minimum resolution of 300 dpi. A summary (max 1200 characters including spaces)

SESSIONS

1) The sanctuaries and rituality from prehistory the Roman world
2) Art and Iconography: archetypes and geographical spread
3) Architecture, art, devotion and meeting places of the sacred
4) New cults, pilgrimages and religious tourism
5) Sanctuaries, landscapes and natural environments

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RECORDING ROCK-ART FIELDWORK 2016

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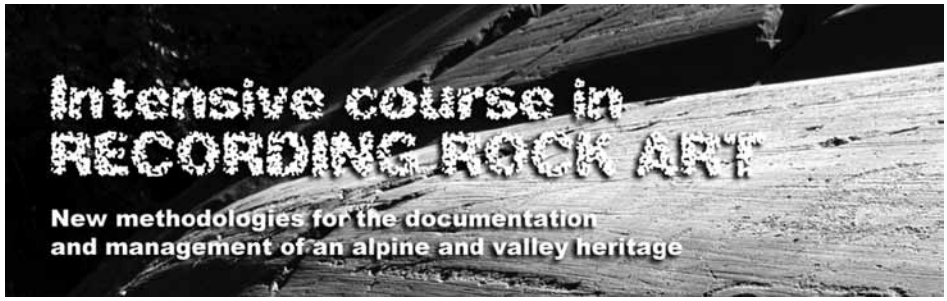
In the wonderful framework of the Landmarks Valley, recognized as UNESCO heritage since 1979, the Centro Camuno of Studi Preistorici organize the annual recording rock-art fieldwork aims at the completion and integration of the documentation of the rock art in the middle Valcamonica.
Following the previous recording rock.art fieldworks, also this year the works will continue in the area of Foppe di Nadro – Riserva naturale incisioni rupestri di Ceto, Cimbergo e Paspardo (Rock engravings Natural Reserve of Ceto, Cimbergo e Paspardo) (Valcamonica - Italy) (on the concession of the Soprintendenza Archeologia della Lombardia). The Recording Rock-Art Fieldwork aimed at the complete documentation of the rock art and environment in which is inserte

Maximum number of participants: 15
Dates of course: 18 - 31 July 2016
Cost: the participation fee to the Fieldwork will be 100 € plus the inscription to Centro Camuno di Studi Preistorici (40 €).
Deadline: curriculm and participation form has to be send by June 2016 to **recording.rockart@ccsp.it**

Requirements: the fieldwork is addresses to everyone, priority will be given to students and graduates in archaeology or anthropology (or related fields) and with experiences in rock-art recording.
Lodging in Valcamonica: the lodging is at the "Guest house" of the Natural Reserve in Nadro with an agreed upon price of 10 € per night. The guest-house has a kitchen.

AT THE END OF THE FIELDWORK WILL BE GIVEN A PARTICIPATION CERTIFICATE TO OBTAIN CREDITS FOR THE UNIVERSITY

http://www.ccsp.it/web/fieldwork2016



RECORDING ROCK-ART: NEW TECHNOLOGIES FOR THE DOCUMENTATION AND MANAGEMENT OF MOUNTAIN AND VALLEY HERITAGE

Valcamonica, Italy 22 August - 4 September 2016

In the splendid setting of Valcamonica, the Valley of Landmarks - on the UNESCO World Heritage List since 1979 - the State University of Milan (through its branch known as the University of the Mountains, a centre of excellence for study, research and training in mountain themes) and the Centro Camuno di Studi Preistorici (Camunian Centre for Prehistoric Studies), at the forefront in the documentation and analysis of rock-art for 50 years, are organising the first interdisciplinary advanced course in the recording of rock-art.
The lectures will involve the leading experts in the sector, both nationally and internationally, some participating by streaming links from major research institutes.

Maximum number of participants: 30
Dates of course: 22 August - 4 September 2016
Cost of course: € 680 (Accommodation in structures with agreed room rates)

The following degree backgrounds are deemed appropriate for participants: Undergraduate degree in Cultural Heritage, Archaeology, Anthropology, Architecture, Geology, History, Geography, Literature, Restoring of Cultural Heritage and Environmental Sciences.

To apply, write to **corso.edolo@unimi.it** attaching your CV and cover letter. Registration will be completed during the month before the start of the course using the appropriate forms.

Location and secretary
GeSDiMont
via Morino 8 – Edolo (BS) – Italy
Tel/Fax. +39 0364 71324
Web: www.unimont.unimi.it
Mail: corso.edolo@unimi.it

Fieldschool location
Centro Camuno di Studi Preistorici
via Marconi 7 – Capo di Ponte (BS) – Italy

www.ccsp.it (advanced course/corso di perfezionamento)