ROCK ART IN THE WESTERN ALPS: RESEARCH, METHODS, DATA AND DISCOVERIES

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While the main concentration of Alpine rock art can be found in the Valcamonica and Mt. Bego areas, important engraved rocks and petroglyphic complexes are scattered along the whole Alpine arc, particularly in the western Alps. A big gain into the knowledge of this geographical sector was obtained during the last quarter of the 20th century. Various scholars and Institutions worked and continue working in the area: among them we must cite the Archaeological Superintendence of Piedmont, the GRCM of Turin, the CesMAP of Pinerolo, the Archaeological Museum of Cuneo, the SVAPA of Aosta, the Savoy Conservation Générale du Patrimoine, Antropologia Alpina of Turin, the GERSAR of Milly la Foret.

New areas have been discovered, both in France (Haute Maurienne-Aussois area, Haute Ubaye) and in Italy (Val Vigezzo, Valsusa-Mompantero, Valcenischia, Valgrana, Cavour and Val Pellice paintings). Already known areas have been more deeply recorded and studied (Valchiusella, Albedosa, Valle Po and Mt. Bracco). A good summary of the last researches can be found in the book Immagini dalla Preistoria, printed on the occasion of the XXXII Congress of the Italian Institute of pre-history and proto-history in 1995 (Immagini dalla Preistoria 1995). Regarding the Italian side particularly important was the intervention of the Archaeological Superintendence of Piedmont (Gambari 1998), who funded rupestrian archaeology research in Susa, Po and Albedosa Valleys. These recording campaigns were conducted by the Footsteps of Man Archaeological Society (Cooperativa Archeologica Le Orme dell’Uomo, Arcà-Fossati-Marchi-Tognoni 2001), a rock art Institution specialised in rock art research and based in Valcamonica. Regarding the French side the main site of Aussois (Haute Maurienne valley) was recorded and studied by the French team led by F. Ballet and P. Raffaelli (Ballet-Raffaelli 1990).

1 Italy and France. Some records can be found online, www.europreart.net and www.rupestre.net/archiv.
3 http://www.culturamontana.altervista.org/, research in the Susa valley.
4 www.cesmap.it, research in the Pinerolo area (Val Chisone, Val Germanasca, Val Pellice), IFRAO member.
5 A definition used to describe a rock art study conducted with a fully archaeological perspective
6 The archaeological team is composed of A. Fossati, A. Arcà and E. Marchi, www.rupestre.net/orme, IFRAO member.
7 Mt. Bego area is not covered in this paper: please refer to the scientific works of the research team guided by prof. H. De Lumley.
METHODS

Recording methods utilised in rock art research in the western Alps, derived from a long experience in the Valcamonica rock art (FOSSATI-ARCA 2000), involve a series of interventions which can be quickly summarised in these ten points:

1. finding (performed after specific rock art surveys or as a consequence of casual discoveries);
2. photographing (phase A, pictures of the rock and site before any intervention);
3. cleaning (clearing the engraved surface to disclose figures without applying any invasive substance; this phase doesn’t apply to paintings);
4. tracing (reproducing engraved figures by the contact transparency method);
5. photographing (phase B, grazing light pictures of the cleaned surface, taking care of general scenes and of particular figures);
6. reducing (the complete tracing is normally reduced to a 1:8:1:16 scale);
7. digitalising (transforming the tracing into a vector-based digital drawing\(^8\), storing pictures into digital archives);
8. recording\(^9\) (filling specific site, rock and figure database entry forms);
9. studying (unveiling different phases, performing comparisons with other petroglyphs, archaeological objects and inherent iconography);
10. communicating (editing and publishing scientific papers, books, web pages and web sites; performing educational\(^10\) projects and workshops).

Not all phases are always present, but the tracing-photographing-recording pattern should represent the core of the sequence.

On the Italian side tracing is done by the “contact” method. Transparent plastic sheets are positioned over the engraved surfaces and each engraved peck, not only figures outlines, is reproduced with a black marker while directly seeing the engraved surface. Particular attention is given to the recognition of the figures and of superimpositions\(^11\). The long time needed for such a job is also the time to understand more

\(^8\) Different phases, if present, are outlined by different colours, preferably by greyscale tones.

\(^9\) This phase is better performed when the tracing activity is completed.


\(^11\) Superimpositions among engraved figures are equal to a relative archaeological stratigraphy. They are marked over the original tracing by an artificial white space which allows to “read” them in the final reduced tracing.
about the often complex sequence of figures, scenes and different styles, so opening the door for a deeper chronological and interpretative study. Photographing is preferably done under grazing light to better enhance figures and superimpositions. It is possible to work with natural grazing light, choosing the best moment in the day (generally early morning or late afternoon or utilising mirrors), or artificial night grazing light.\footnote{Halogen lamps, preferably with lenses (slide projectors) to allow a larger focal deepness.}

Recording is done utilising the International Form of western Alps Rock Art\footnote{CIARAO (International Commission of Western Alps Rock Art 1990), with the participation of the Musée Savoisien de Chambéry, Centro Studi e Museo d’Arte Preistorica di Pinerolo, Société Valdotaine de Préhistoire e d’Archéologie, Soprintendenza Archeologica del Piemonte and various rock art researchers.} (Seglie \textit{et al.} 1994), created by an international French-Italian-Swiss board at the end of the ‘80s. It is a rock form, with main sections devoted to location, environment, geomorphology, lithology, engraved surface, engraving techniques, archaeological context, engravings catalogue, bibliography. Database versions\footnote{From the DOS DBIV to the Microsoft Access} were developed by various institutions.

Digitalising (Arcà 2000) is accomplished by scanning each reduced tracing sheet and by transforming the bitmap image (a series of black and white points) into a vector\footnote{Drawing software like CorelDRAW®, Adobe Frehands® and related auto-trace applications are normally utilised.} drawing (a series of lines with inner direction points). The vector drawing is much more customisable (adding of captions, scale references, colour layers, exporting in tif-jpg-bmp image formats) and light in terms of bytes. Recording methods represent a continual work in progress, particularly regarding the computer and information technology.

**PERIODS AND SITES**

I will now deal with the most important sites, trying to give a short overview under a general chronological and stylistical frame. Western Alps rock art reveals at the same time some peculiarities (like the meandro-spiralic phase of Susa and Maurienne valleys) and some common patterns and contact-points with the rock art of the other areas, mainly Mt. Bego (particularly regarding the Copper Age and the ancient Bronze Age) and Valcamonica (particularly regarding the Iron Age), so testifying at least a solid web of cultural relationships if not a common Alpine culture.

Starting from the Neolithic we must focus over the red paintings of the Rocca di Cavour and the Pellice valley. The Rocca di Cavour paintings (Seglie-Ricchardi-Cinquetti 1988, Gambari 1992a) were discovered in 1979 by F. Zavattaro and attentively studied by the CeSMAP and by F. M. Gambari of the Archeological Superintendence of Turin, who underlined the close resemblance with the schematic Mediterranean art and proposed a Neolithic-Eneolithic chronological frame\footnote{AMS direct-dating experiences, not yet practised over western Alps paintings, are highly desirable and should contribute to confirm or to deny such a chronological approach.} which is testified by some...
Figure 3. Ubaye (F) Copper Age daggers overlapping neolithic patings (picture and tracing GRCM).
motifs that occur also in the same period topographical engravings (Arcà 1999) and by the comparison with the Les Oullas (Ubaye, F) red paintings (Muller-Jorda-Gassend 1991), which are superimposed by Copper Age daggers (Arcà 1995a). In 1997 the rock was recorded and traced by Footstep of Man. A new vector tracing was executed, while for the photographic side digital enhancements were experienced.

The Pellice valley paintings, protected under a natural rocky shelter, were discovered in 1992 by R. Rivoiro and first published by R. Nisbet (Nisbet 1994). A recent (A. Arcà 2000) vector tracing and digital photo enhancing enlightened rows of human figures, upside down human figures, while the comparison with the grids again conducts to a Neolithic-Eneolithic chronological frame (Gambari et al. 2001). These two sites of rock paintings clearly belong to the same group in which the Bessans (Nelli 1980) and the Ubaye (F) paintings must be included. Many common motifs, like rows of dotting, geometric figures or grids, schematic anthropomorphic stick figures, branches-like figures are quite recognisable and well present also in the noticeable painted shelter of Les Eissartènes (Hameau 1989), in the French Provence, at the other side of the Alps. In this sense the western Alps rock paintings represent the extreme eastern point of the schematic paintings complex so well-known in the Iberian peninsula.

Reaching the Copper Age, beside the already cited Ubaye engravings, two mains rocks (the Pera dij Cros in Valchiusella and the Roca la Casna in the Mt. Bracco area) show a large concentration of anthropomorphic figures. The first was discovered and first published in 1971 by R. Petitti (Bovis-Petitti 1971; Rossi-Micheletta 1980), the second in by A. Cavallera (Cavallera 1990). Both have been traced and digitalised by the Footsteps of Man team. A deeper comparison with the Camunnian anthropomorphic figures has been examined, giving as result a double possible chronological attribution (Arcà-Fossati-Marchi 1998), the first one in the Copper Age, by similarity with the triangular legs and opened arms stick-body of the IIIA1 style (Casini 1994)18, the second one in the recent-final Bronze Age, by similarity with the triangular legs and lowered arms stick body human figures (Arcà 2001). Another important rock is the Valgrana one, discovered in 1990 by R. Baldi (Baldi 1992), where 6 large schematic anthropomorphic

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17 Digital Photoshop filters like colour substitution, contrast exasperation, multilab channels adjustment.

18 As defined by De Marinis, it corresponds to the archaeological period of Remedello 2, 2800-2400 BC, by comparison between the engraved daggers with triangular blade and half-moon handle and the real ones found in some burials of the Remedello (BS - I) copper age cemetery.
figures were engraved in a dominant position (IMMAGINI DALLA PRESTORIA 1995). Sexual attributes are evident, with female breast indicated by two dots on each side of the bust and male sex indicated by a vertical stick between the legs. Such a schematism is common in all the cited cases and well present also in Valcamonica rock art, testifying a kind of marker for prehistoric figures. With the Pera di Cros, the Roca la Casna and the Valgrana rock the western Alps corpus of anthropomorphic schematic figures is the largest one outside the two main Alpine rock art poles.

Passing on to the Bronze Age the most important subject is represented by a class of “meandro-spiralic” figures (TONINI 1992; GAMBARI 1994; ARCA-FOSsATI 1998). They are concentrated in the Haute Maurienne (F) and Valdonsa (I) bordering areas. The basic feature is here represented by a series of filladic calcischists\(^9\) (scistes lustrées, calcescisti)

19 Metamorphic rocks composed of calcite and silicates.

slabs engraved with the pecking technique. Their siliceous component, not eroded by water, allows a sufficient conservation for some millennia and their surfaces, polished by the glaciers during the Ice Age, appear like a series of natural blackboards. So they represent the unique support where figurative engravings were executed in the Susa-Valeniscia and Maviana valleys, acting as a natural archive where different layers of human mountain cultures left their signs. Meanders and spirals clearly constitute the most ancient layer, as testified by the superimpositions and by the degree of consumption, which is as high as to prevent in some cases their complete identification. These figures consist in meanders and spirals often very intricate, giving sometimes the idea of the need to completely fill the available surface.

On the Italian side (mainly in the Mompantero area, discovered by the Toninis in the late '80s) they lie in a 700-1000 m range of altitude, while on the French side (Aussois, Lanslebourg, Lanslevillard) they are scattered along high
mountain sites, from 1800 to 2400 m. Curiously these signs are quite identical to the engravings of the Isla La Palma (Canary Islands). In both cases a pastoral economy occurs. The dating is quite problematic, here again resulting in a double hypothetical line, the ancient one being Neolithic and the recent one being Bronze Age-Iron Age (Arcà et al. 2001). A terminus ante quem is given by the late Iron Age axes, which clearly overlap meanders and spirals in the Mompantero SUS-SPP1 rock. A stylistic comparison could find some points of contact with the Megalithic period (Knowth and Boyne valley Irish sites particularly), but some meandering lines seem connected at the nearby Aussois site to the Iron Age maps, probably testifying a not so ancient chronology. In Valsamonica, where this subject is rare, beside the presence of single spirals very faded and overlapped by Bronze Age figures, meandering patterns are represented in the Bronze Age (Sonico) and the Iron Age (Zurla) engraved surfaces. The Italian side rocks have been recorded by Footsteps of Man, under the scientific charge of the Archaeological Superintendence of Piedmont.
The Iron Age probably unveiled the most important results in the research field. The main site of Aussois (Haute Maurienne, F) was discovered in the ’70s of the last century, studied by the French team led by F. Ballet and P. Raffaelli (Ballet-Raffaelli 99) and recently (July 2001) transformed into an archaeological Park, where panels and wooden gangways illustrate the main engraved surfaces. Beside the presence of rare meander and spiral faded figures, warrior figures are most commonly represented, sometimes in the classic bitriangular-body style, which can be compared with the analogous figures depicted over the geometric-style derived Italic (Sala Consilina) or French pseudo-ionic (La Pègue) pottery, with a VII-IV cent. BC chronological frame.

Figure 9. SUS.SPP1 paintings (Mompantero – I): bitriangular body warrior with spear, archer and weaponed rider(picture and tracings Le Orme dell’Uomo - Soprintendenza Archeologica del Piemonte)

The animals represented, like dogs and ibexes, are clearly related with the depiction of hunting scenes. Weapons like spears are depicted with a triangular point, sometimes highly exaggerated in dimension. Footprints, axes and two-wheels chariots are also present. All these figures and scenes clearly relate to a male-warrior-hunter culture, which can be easily compared with the analogous one of Valcamonica Iron Age rock art (late Bronze Age in some cases), where the same items are depicted. Another important subject is constituted by the topographic engravings, a pattern of rectangles and squares filled with orderly arranged series of dots, which can be compared with the Iron Age topographic phase of Valcamonica rock art (Bedolina and Le Crus rocks). Curiously in both cases chronology is testified by the superimpositions: geometric “maps” overlap first and middle Iron-Age warriors. Regarding more recent figures it is possible to outline some middle-age (XIII-XV cent. AD) engravings, depicting warriors and castles, and a long series of modern and recent engravings, mainly dates, crosses and inscriptions. All the Haute Maurienne Valley is rich in engraved rocks, due to the already outlined presence of the calcschist slabs, well suitable for figurative engravings.

Among the other important sites we must cite Arcelle Neuve, Chantelouve, Rocher du Chateau, Plan des Glières, La Fara, Pisselerand, Vallon de la Rocheure: many of them were studied by G. Nehl (Nehl 80) and the GERSAR.

In the Italian side the sites of Mompantero (Susa Valley) and Valcenischia were discovered and studied. The Mompantero petroglyphic complex hosts three sites of rock paintings (discoveries Comba 1989 and Fossati-Arcà 1991), where Iron Age warriors, archers and riders, in some cases depicted with a bitriangular style body, present many contact points with the analogous Iron Age subjects of Valcamonica rock art.

Figure 10. SUS.CHM2 (Mompantero, left): axes with half-moon shaped blade and (right) table of the Mompantero (I) corpus of axe figures (pictures and tracings Le Orme dell’Uomo - Soprintendenza Archeologica del Piemonte)
art (Arcà-Fossati 1998), like in the case of the particular representation of an acrobatic riding. Besides these paintings a very interesting sequence of engraved axes is present: Mompantero is the only area in the Alps outside the Valcamonica with such an Iron Age axes corpus. Twenty items can be divided in two main categories, both belonging to the late Iron Age. The half-moon blade shaped axes can be easily compared with the Ornavasso ones (1 cent. BC-I cent. AD), while the greater straight blade axes are well testified in the late Iron Age graves. The first type, with a shorter handle, can be identified with a one-hand throwing-axe, while the second with a two-hand shearing-axe. In two cases we have the interesting feature of a couple of axes of different dimensions, like representing a battle-set, possibly pertaining to the Celtic tribe of the Segusii, which was present in the area under the reign of king Cottius.

The Valcenischia site was discovered in 1993 by G. M. Cametti, P. Meirano and myself (Arcà-Cametti-Meirano 1996), and then recorded and traced by Foosteps of Man (Arcà-Fossati-Marchi-Tognoni 2001). Casts of the three most important engraved surfaces were executed. Engraved

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20 Two axe figures are present in the Aussois (Maurienne, F) Archaeological Park.

21 Utilising liquid elastomer for the mould and resins and glass-wool for the final reproduction.
rocks (again calcshist) are scattered along a high mountain pasture (2300-2550 m of altitude) dominated by the Rocciamelone top. The main subject is constituted by Iron Age square body warriors, holding bows and swords, very similar to the Valcamonica ones (late Iron Age - Roman period) and by figures of Spadonari (men holding sword). The interesting fact is that in the nearby villages at the bottom of the valley they still today practise a popular feast where the sword-dance (men holding swords are called Spadonari) represent a real peculiarity.

Figure 12. Lanslevillard (Moncenis pass area – F), the “ibexes rock”, roman writing overlapping an Iron Age hunting scene (picture and tracings A. Arcà-GRCM-G. Mennella)
A noticeable rock was discovered in 1989 (Arcà 1990) again by the already cited group, where an ibex hunting scene is represented. Once again a strict parallelism can be found with the analogous Valcamonica Middle Iron Age hunting scenes, with the substitution of the deer with the ibex. Dogs, which help the hunters, are depicted in the exact same way, with a curly tail. On this Rock of the Ibexes a Roman writing has been executed over the hunting scene in the 1 cent. AD, probably by a Roman officer controlling the payment of the taxes (quadragesima galliarum) in the Moncenisio pass area (Arcà-Gambari-Mennella 2001). The graffito represents a disgrace against Lucius Mettius, who is described as having inconvenient erotic practices with the ibexes (qui amat platinum). It is the highest Roman inscription found in the Alps.

I will end with some observations about cup-marks, which represent the most diffused engraving in the Alps (Gambari 1992b; Gambari 1994-1995). Various cup-marked rocks have been recorded and traced, mainly in the Valle Po Valley, in the Bessa, in the Albedosa and in the Vigezzo Valley areas. Many cup-marks with inner cylindrical sections are found to have been engraved with a metallic tool, e.g. at Susa, where cup-marks lie on a rock surface clearly cut with picks, beside the ancient Via Galliarum. The more cup-marks are deep and with a cylindrical section, the more a channel network is developed, like in the Cro da Lairi cup-marked table. At the Arcelle Neuve (Haute Maurienne – F) site cup-marks cut and overlap spirals and other geometric pecked figures. Cup-marks are often associated with footprints (Roche aux Pieds de Pisselerand, Albedosa area), which is a typical Iron Age subject. Outside the western Alps a key-site is the Rupe Magna at Grosio (Valtellina), where cup marks overlap Bronze Age and Iron Age anthropomorphic and warrior figures (Arcà 1995b). In this way many data concur to propose for the Alpine territory a chronology starting from the late Bronze Age (cup-marked stone in an archaeological level at Aussois), with patterns of middle-dimension and not deep cup-marks, and continuing all along the Iron Age (if not also more recently), with larger and deeper cylindrical cup-marks and the development of a network of channels.

In conclusion the territory of the western Alps Rock constitute nowadays a fertile area for rock art research for almost all the periods of prehistoric cultures, under the aspects of what is present and of the recording methods. The presence of different Institutions and researchers could represents a spur to conduct furthers researches and studies, in the perspective of a continual exchange of ideas and programs. The evident relation among rock art, natural resources, use of territory and alpine cultures could surely represent an interpretative key to better understand, under its basic common rules, this particular kind of iconographic phenomenon called, perhaps improperly, “rock art”.

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ET DU MÉSOLITHIQUE

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