

LETTERE AL DIRETTORE — LETTERS TO THE EDITOR

A CORRESPONDENCY BETWEEN CLASS SYSTEM AND RELIGION REFLECTED IN MONUMENTAL COMPOSITIONS

THIRD ANNUAL SYMPOSIUM, AMERICAN ROCK ART RESEARCH ASSOCIATION.

Dear Dr. Anati,

I have read with great interest your analyses and interpretations of «monumental compositions» in the Early Bronze Age («The Bagnolo Stele», «Magou-rata Cave», both in *Archaeology* and especially the extremely illuminating *Evolution and Style in Camunian Rock Art*). I find the «Rock of Five Daggers» exquisite.

In these writings you touch on the «ideological» dimension of these compositions. It seems to me that these interpretations are quite compatible with what Dumezil has written on the tripartite ideology of the Indoeuropeans (or a quadripartite ideology which would correspond to a class systems of priests-warriors-artisans-producers, including farmers and hunters). The writings of the American anthropologists-so-called «cultural evolutionists», such as Steward, Service, White, and Sablins — on the transition from tribal to chiefdom society also come to mind here.

Are you aware of any studies which treat in a more detailed way of Dumezil's theory, or the cultural evolution theory, in relation to Alpine «monumental compositions»? I would appreciate your referring me to any of your own writings or any others on this subject. P.S. - I hope you have found time to read my 'Mesolithic, hypothesis' and have found it helpful if not enjoyable.

James B. Harrod
Waterville, Maine, U.S.A.

The Third Annual Symposium of the American Rock Art Research Association (ARARA) took place from May 29 to 31, 1976, in Ridgecrest, California. With more than 180 registered participants, it was better attended than either of the two preceding symposia (Farmington, New Mexico, 1974, and El Paso, Texas, 1975). Welcoming addresses were delivered by Dr. John Cawley, Bakersfield, California, Chairman of the 1976 Symposium Committee, by Ken Robinson, Director of the Maturango Museum of China Lake and the person primarily responsible for many of the local arrangements that made the meeting such a success, and by Dr. Klaus F. Wellmann, Brooklyn, New York, President of ARARA, who transmitted the greetings of several rock art researchers and organizations from abroad.

During the first two days of the symposium, a total of 21 papers were given; the five sessions were moderated by Campbell Grant, Klaus F. Wellmann, John Cawley, Kay Sutherland, and Wilson G. Turner. Most papers were concerned with the analysis of rock art in circumscribed geographic areas. Thus, Ken Hedges, San Diego, California, talked about rock art in the Piñonal of northern Baja California; Campbell Grant, Carpinteria, California, discussed some painted rock art sites in the Sierra, Sonora, Mexico; Daniel B. Fowler of Morgantown, West Virginia, reported on Indian petroglyphs recently discovered in his state; David Fresko, Brooklyn, New York, compared rock art panels of southeastern Anatolia (recorded by Muvaffak Uyanik) with those in North America; Alex Apostolides, El Paso, Texas, surveyed rock art of the Salt Dale quadrangle in the Moja-

N.d.R. - *We are aware of the fact that such a work would be quite useful. In fact it is in the process of being carried on.*

ve Desert; and John Cawley, Bakersfield, California, documented the pictographs of Rocky Hill near Exeter, California. Other regionally determined papers were those of Kenneth Castleton, Salt Lake City, Utah (rock art of the San Juan River between Bluff and Mexican Hat); Paul P. Steed, Jr., Dallas, Texas (rock art at La Cienega Mesa, New Mexico); Ernest E. Snyder, Tempe, Arizona (the Great Sinagua Serpent of Hart Well Canyon, Arizona); King Hastings, Ogden, Utah (rock art of Grand Gulch, Utah); Donald Martin (a survey of rock art sites in Death Valley, California); and Teresa Miller and Reed Haslam (petroglyph styles in the North Coast Ranges of California).

Functionally oriented papers included those of Dale and Eric Ritter, Chico, California (influence of the religious formulator in rock art of North America); Francine Marshall, Riverside, California (aesthetics of the Great Basin Pecked Style); Delcie Vuncannon, Palm Springs, California (do diamond chains found on the High Desert indicate puberty practices?); Carol Rector, Riverside, California (the fuction of Great Basin Style petroglyphs in the East Mojave Desert); and Kay Sutherland, El Paso, Texas (an analysis of mask motifs in Mogollon rock art). Astronomical topics were dealt with in two presentations; thus, Jack Steinbring of Winnipeg, Manitoba, spoke about prehistoric lunar cultism in the Great Lakes region (an hypothesis regarding the Old Copper Culture), and Dorothy Mayer of Berkeley, California, discussed a possible cosmological petroglyph panel of Owens Valley, California. Klaus F. Wellmann, Brooklyn, New York, reviewed ship and boat depictions in rock art of North America and of the Pacific islands, and Wilson G. Turner, Whittier, California, presented a recap and final results on carbon 14 dating of the Salton Sea petroglyphs.

The meeting on Sunday afternoon, chaired by Klaus F. Wellmann, saw the adoption, after a short discussion, of the revised bylaws of the organization. Paul P. Steed, Jr., Dallas, Texas, Chairman of the Nomenclature Committee, gave a brief report; his committee will continue its work. Several motions were adopted concerning criteria for the selection and presentation of papers for future sym-

posia. The present slate of officers (Klaus F. Wellmann, President; John V. Davis, Vice-President; Alice J. Bock, Secretary-Treasurer) was reelected for a second two-year term.

An exhibition room had again been organized by Lou Cawley of Bakersfield, California, and her associates. It featured rock art books and rock art reproductions rendered in various media.

The third and last day of the meeting was dedicated to the field trip into the Coso Range with its numerous petroglyphs most of which are prime examples of the Great Basin Representational Style. These rock drawings are located on the base of the Naval Weapons Center; they are estimated to be between one and three thousand years old and are in an excellent state of preservation since they are so well protected.

The papers presented at Ridgcrest will be published in a monograph. The volume containing those given at the 1975 El Paso Symposium has just become available (*American Indian Rock Art*, Volume 2; Papers Presented at the Second Annual Rock art Symposium, Edited by Kay Sutherland, El Paso Archaeological Society, Inc., El Paso, Texas, 1976).

The next annual symposium of the American Rock Art Research Association will take place during the last weekend of May, 1977, in Tempe, Arizona. Dr. Ernest Snyder, Arizona State University, Tempe, will act as Chairman of the 1977 Symposium Committee.

Klaus F. Wellmann
President
American Rock Art
Research Association
New York, U.S.A.

SULLA CONSERVAZIONE DELL'ARTE RUPESTRE

Ho visitato il Museo Archeologico a Sion nel Vallese, accompagnato dal suo Direttore, Albert de Wolf. I ritrovamenti di arte preistorica (Neolitico, Eneolitico e Bronzo) del «Petit Chasseur» esposti non sono molti, ma assai interessanti dal punto di vista artistico, cronologico e di significato etnologico. Quello che maggiormente mi ha colpito è stata l'ottima presentazione e la con-

servazione perfetta delle opere più significative. Statue stele e tombe rimaste all'aperto sono in parte coperte da strutture in vetro; i pezzi più importanti sono collocati nel museo, dopo essere stati sottoposti a un processo di «risanamento» della pietra; sono illuminati in modo tale da fare risaltare ogni dettaglio. Praticamente sono ormai di pieno godimento pubblico e non sono più deteriorabili col passare del tempo.

Viceversa mi piange il cuore pensando che in Valcamonica, tra una ventina di anni, gran parte dei tesori scoperti saranno scomparsi a causa delle intemperie, delle malattie della pietra e della noncuranza. Si adottano provvedimenti per la salvaguardia dell'arte rupestre in Svizzera, così come in Svezia, in Norvegia, in Francia, in Spagna. Ma in Valcamonica, riconosciuta la zona rupestre più importante al mondo, come s'intende assicurare la conservazione di rocce istoriate che si stanno degradando sotto ai nostri occhi? Almeno per qualche centinaio di rocce più significative qualcosa dovrebbe essere fatto per preservarle nell'integrità.

Dobbiamo veramente rassegnarci a lasciare ai posteri soltanto calchi, riproduzioni e fotografie? Come fare a sensibilizzare i «responsabili» dei beni culturali, perché assicurino la conservazione di questo eccezionale patrimonio? La domanda rimarrà forse senza risposta, ma chissà che non valga a smuovere qualche acqua stagnante!

Adalberto di Gropello
Firenze

ON THE DETERIORATION OF ROCK-CARVINGS IN VALCAMONICA

Despite their apparent permanence, Petroglyphs are not indestructable. Those that we study today are the ones that are left out of an even greater number. If we are to accept our responsibilities as custodians as well as interpreters of these precious socio-historical records, we must take steps to ensure their preservation. Sites at Foppe di Nadro, Bedolina and Capo di Ponte were visited and the types of rock, types of deterioration of the rocks and the causes of this deterioration were investigated.

All the Petroglyph sites visited were on sandstone faces with an orientation between the south and the west. Diagnosis in the field reveals that there are three main causes of deterioration of the sites. These causes are exfoliation or spalling of the rock surfaces, biological growths such as algae and lichens, plant growth such as the Ericaceae and Populi. Rain and melting snow leach the soluble minerals from the surface of the rock. This renders it more porous. This in turn increases the penetration of moisture. When this moisture freezes, during frost in the spring and autumn and during below zero weather in the winter, the water expands, causing fissuring. Each freeze-thaw cycle increases the effect until micro-exfoliation occurs or in the case of some surfaces, where the stratification of the rock is horizontal to the exposed surface, large plates of rock become detached.

Biological growths such as algae and lichens not only obscure the pecked or incised designs but by their acidic nature in combination with rain water they etch the surface of the rock. In some cases this etching can erase a lightly pecked or incised design.

Plant growth is considered separately, because not only is it more evident, but it also has differing effects. Plant growth is dependent upon a previous cause of degradation. Fissuring of the rock through freeze-thaw cycles collects humus and this enables small plants to gain a foothold. These in their turn compost and eventually sufficient soil is accumulated to support major plant life such as trees. The roots of these plants penetrate the micro-fissures and their expansion creates major fissuring and eventual disintegration of the rock.

Obvious causes of damage such as passage of vehicles of all types, human and animal traffic and the accretions of industrial pollution will not be discussed. They are so obvious and have been so widely publicised that further emphasis of their damaging effects is unnecessary.

Recommendations:

1. Known sites should be cleared of vegetation, soil accumulations and lichen growth and should be kept cleared. This will eliminate two of the causes of deterioration.

2. The most dramatic and pernicious cause of surface loss-exfoliation is more difficult to obviate. As the rocks cannot be removed to an environment where weathering will not take place, some method of treating the surface must be accepted. The use of resins (natural and artificial) and sealants (silicones etc.) has proved to be disastrous. Replacing the soluble minerals leached from the surface would seem to be, if not the definitive answer, a first and essential step. Hydrated aluminium silicate in a water-vapor permeable medium is an excellent protection. The white plaka Pelikan colour applied to the rock to facilitate the

recording of peck-marks and incisions meets these criteria as it is a kaolin base in a casein medium with water as a diluent. As this coating will be leached out by rain, in its turn, it should be renewed as and when necessary. Scientific research into a more permanent and less empiric protective coating is continuing. Until such a coating has been developed, the Plaka Pelikan paint should continue to be used as it is quite effective and will cause no damage.

Richard B. Renshaw-Beauchamp
Deputy Chief Conservator
of the British Columbia Provincial Museum
Victoria, Canada

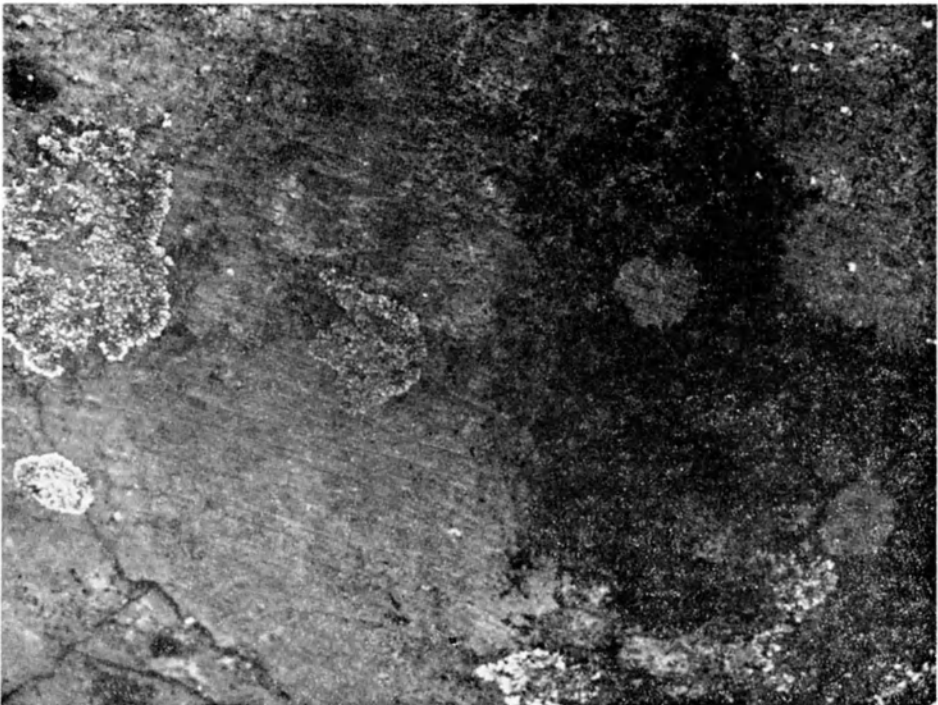


Fig. 1
Detail of engraved rock surface: Foppe di Nadro. Various types of lichen cover the surface, dark spots representing micro-lichens. Micro-lichens are particularly dangerous because they corrode the surface enough to destroy engravings. In the center of the photo one can see a pecked anthropomorphic figure partially invaded by the black lichen.