



## VARIABILITY AND REGISTRATION. METHODOLOGICAL PROBLEMS IN THE STUDY OF ROCK ART

*María Laura Gili\**

**Abstract** - Variability and register: methodological problems in the study of rock art.

Our research is focused on the analysis of the rock art on Intihuasi hill, south of the archaeological area of Sierras Centrales and along the southern part of the Sierra Comechingones, Pedania Achirsa, Cordoba.

We aimed at studying the most relevant aspects from the point of view of documentation, and at extending the knowledge of the society who lived there for about 3000 years, sharing a symbolic system of reference.

The analysis of 13 rock art sites showed a prevalence of geometric images marked by a particularly rich graphic and composition range.

Such rock art sites share similar characteristics in their pictures, supports, themes and in the organization of the graphic space. Concerning methodological aspects, the research and the documentation borrow the methods proposed by Rocchietti for the Sierra de Comechingones (Rocchietti 1990), which considers variability as the peculiar aspect in the register of the regional rock art. The variability of rock art is revealed in the survey level, in the supports, location, graphic space, colour range and in the image perception in different moments of the year.

**Riassunto** - Variabilità e archiviazione. Problemi metodologici nello studio dell'arte rupestre

Con la nostra ricerca abbiamo analizzato le pitture rupestri della collina di Intihuasi, a Sud della regione archeologica della Sierras Centrales e nel tronco Sud della Sierra Comechingones, Pedania Achirsa, Cordoba. Il nostro intento era quello di studiare gli aspetti più rilevanti dal punto di vista della documentazione e ampliare le conoscenze della società che qui visse per circa 3.000 anni, condividendo un sistema simbolico di riferimento.

Un'analisi di 13 siti con pitture rupestri, mostra una preponderanza di figure geometriche che presentano una singolare varietà grafica e compositiva.

Tali siti rupestri presentano caratteristiche simili nei disegni, nei supporti, nelle tematiche e nell'organizzazione dello spazio grafico. In termini metodologici, la ricerca e la documentazione mutuano la metodologia proposta da Rocchietti per la Sierra de Comechingones (Rocchietti 1990) che considera la variazione come la particolarità del registro dell'arte rupestre regionale. La variabilità delle pitture rupestri si manifesta nel piano di rilevamento, nei supporti, nell'ubicazione, nello spazio grafico, nella gamma cromatica e nella percezione dei disegni nei differenti momenti dell'anno.

**Résumé** - Une comparaison sur la symbolique et le public des expressions préhispaniques et coloniales d'art rupestre du site de Ba'Cuana, au Mexique.

Une quantité considérable d'images a été peinte au cours de plusieurs siècles dans le site d'art rupestre de Ba'Cuana (isthme de Tehuantepec, Mexique) pendant la période préhispanique et aussi à l'époque coloniale. Les expressions typiques de la première période sont des motifs en « style codex », très proche des systèmes d'écriture postclassiques Mésoaméricains, tandis que celles de l'époque coloniale sont des lettres de l'alphabet latin, des croix et des autres motifs de l'iconographie chrétienne. Dans cette intervention, je vais explorer la symbolique des expressions préhispaniques, et les comparer avec celles de l'époque coloniale, pour comprendre s'il y avait une relation entre les messages des deux périodes, et aussi quels changements il y a eu par rapport aux différents types de public auxquels elles étaient dédiées.

\*\*\*

### BACKGROUND OF RESEARCH IN THE FIELD

In the south area of Sierra De Comechingones. Rocchietti has identified three stylistic forms (sensu Rocchietti 1991): Suco, India Muerta and Cuatro Vientos-Achirsa. The latter belongs to Cerro Intihuasi. The south of the Sierra De Comechingones is considered by Rocchietti (2009) a rock art region because of its constituting features.

---

\* María Laura Gili

Instituto Académico Pedagógico de Ciencias Humanas. Docente-Investigadora, Universidad Nacional de Villa María, Argentina  
e-mail mlauragili@yahoo.com.ar

The inventory of the region rock art occurs in granitic environment. The sites appear either isolated from one and other or in clusters. Cerro Intihuasi illustrates the latter distribution, clusters not far from one and other. Austral and Rocchietti, in their archaeological research in this area have called this period: Ceramolítico period Piedra del Águila (Austral y Rocchietti, 1990, 1995). It is composed of lithic and ceramic fractions that according to the archaeology of the site (*sensu* Austral y Rocchietti 2002, 2004) present an instrumental lithic technology based on quartz, opal and chalcedony with utensils for grinding fixed and mobile mortars and low faunal density. Such designation brings about the discussion about whether it is a hunting society or according to the archaeological evidence recorded so far, part of broader agro pastoral life system. The trend is to consider these societies in transition between the hunter-gatherer system and the agro pastoral one, of low intensity.

#### HYPOTHESIS DATA.

Cerro Intihuasi archaeological site is situated in Campo Los Cerros, privately owned. The research project has differentiated itself in four sectors with clustered sites. Besides to the set Intihuasi 1, Intihuasi 2, Intihuasi 3, 4 and Intihuasi 5, namely: Abra Chica sites (Abra Chica eave 1 and Abra Chica eave 2) north slope (Norte eave and Coral eave) and the eastern slope ( Mayor eave, Marcas eave, Ñandues eave and Máscara eave) Only the last are in the main body of the hill.

In Cerro Intihuasi the rock art motifs were made with paint and only in two sites by scraping. A color palette including white, yellow-ocher, red and black is seen on the walls, roof eaves and granite eaves. The paintings are figurative motifs, animal (Pic. 3) and human figures, indexical signs (Pic. 4) (*sensu* Rocchietti 1990) and non-figurative in geometric forms (Pic. 5). There are panels with just polygonal, a panel with only one human figure in one of its environmental guidelines (*sensu* Rocchietti 1996) while there are no panels with only animal figures.

Based on an analysis of thirteen sites with rock art our hypothesis is that the polygonal geometric figures tend to be universal as they are found in most of rock art sites. This is verified by the submitted material. However, although general, the geometric figures vary among them. They are equipped with graphical uniqueness and composition. In terms of dimension of variation (arqueológica, *sensu* Hodder 1988). The greater presence of signs at the sites belongs to them. Followed by camelids representations and human figures, rehidos and human figures wearing attires, and fourthly, felines and indexical signs.

Symbolic culture expressed in Cerro Intihuasi and cave painting sites (*sensu* Rocchietti 2003) there recorded, give sacredness to the town. They have similarities, although its timing is unknown. The affinity and similarity in their designs gives historical continuity. In the designs predominates an apparent expression of calm with some threatening signs, such as felines in attacking attitude with little use of red color associated with them, using panels with drawings of camelids and réhidos (Gili 2002, 2003).

Based on the above hypothesis we state that the rock art sites have similar peculiarities in their design, media, themes, graphic spatial distribution, among other things. In terms of methodology, research is based on the methodological register proposed by Rocchietti for Sierra de Comechingones (Rocchietti 1996). She considers variation as a particularity of the regional rock art. The variability of the rock art document appears in the register of survey plans, supports, location in the graphic space, chromatic range, collection of designs at different times of the year, among other things.

To support the hypothesis there will be a detailed description of the rock art sites based on the realization of periodic records and digital image documentation, reduction in scale, discrimination through signs and establishment of dimensions of the archaeological variation of the studied sites.

#### REGIONAL CONTEXT

In Sierra Centrales there researches have recognized a rock art of animal figures on paintings (gumps, ostriches, felines) geometric and human, in two large centers, Cerro Colorado, north of the province of Córdoba, and Cerro Intihuasi in southern provinces.

In the southern highlands of Comechingones, research in recent decades have recorded a rock art of animal motifs, human and geometric supports associated with rocky and graphical spaces (*sensu* Rocchietti 2002). In this context, Rocchietti argues that certain media are indicators of ordering the data, of rock art. A perspective in which the study of art is not restricted to the grounds but covers environmental and natural environment, landscape rock called (*sensu* Rocchietti 2003). With respect to archaeological information in Sierras Centrales, researches have allowed to recognize a first time



hunter-gatherer economies associated with groups that travel through the waterways in the direction SE-NW (Laguens et al 2007), with regional developments in Ayampitin technology (González 1960) and a late pre-Hispanic period, between 900 AD and 1573 AD with outdoor sites (Pastor et al 2007) which further evidence would be given in Potrero de Garay (Berberían 1984), site with remains of Home-wells. At the same time, for the southern section of the Sierra de Comechingones, marginal area of the Argentinian Great Northwest, differs a *ceramolítica* technology (Austral y Rocchietti 2004), on a sequence between the era and 500 AD, the hunter-gatherer economy, and between 500 AD and 1573, with incipient agriculture.

In research on rock art of Argentinians and foreigners authors is possible to observe different ways of expressing the study of art sites (*sensu* Rocchietti 2009) as styles, stylistic groups, modalities, stylistic units, codes, etc. In turn, in recent years has increased interest in contemplating conducting surfaces of rock art (Groenen 2000, Rocchietti 2009) besides to the motif and scenes drawn. Incorporating natural support to the cultural evidences.

#### DISCUSSION.

Intraseasonal variation is an important factor in the methodology of recording of this rock art over granite supports in southern Sierra de Comechingones. In our research we found that the rock properties are relevant (*sensu* Rocchietti 2002) in the perception of rock art, because of its components and reactions to environmental effects. Within these variations, the cave paintings we analyzed are sensitive to specific mineralogical and geomorphological conditions of granite. In order to establish similarities and differences (*sensu* Hodder 1988) are two key dimensions to consider, the temporal and spatial. The spatial dimension given by the Granite Intihuasi and its rounded landforms (Fagiagno 2007), involves specific features of the environment, factors of variation in rock art recording that we have considered relevant in this context of observation. In turn, are rocks that justify the choice of support.

The covered clay product of plagioclase, used as supports to make paintings, the lines marked on humidity and blast walls on roofs eaves and bowls, the existence of plant and animal biota in and near the eaves, they act as natural factors granite rocks that affect the perception of art by the interaction among rocks, light, water and art (*sensu* Rocchietti et al 1999).

For this we propose to the rock art sites as a synthesis that should be carefully examined with a methodology that is repeated in each documentation.

This synthesis that is each site rock art is so unique, that only a historical perspective can account for every one of them. Therefore we call upon our historical methodological approach, seeking a record and analysis that allows full documentation of the site.

In variations and repetitions that are detected within each site and the whole rock art motifs presented here, the existence of the link is verified between the universal and the particular in each event, between the act of officiating maker of the grounds and shared tradition or way of understanding reality.

In terms of what is seen. How is it organized? And what where the causes that originated it? (*sensu* Rocchietti 2009) materials recorded in Cerro Intihuasi allow us to hold that rock art can not be taken as an absolute chart. It has a dynamic of variation and repetition, observable within each site. It shows geometrical shapes, polygonal, single and overlapping; of animals, camels, réhidos, felines, venomous, bare alone human figures, with bow and shamanic garbs. Made on granite supports, walls, roof eaves and bowls, prioritizing and using unique environmental guidelines, in some cases, the depressions or niches based features granite rock art. And in most cases, preferring to expand to the width of the rocky support.

It is organized into a web of overlapping polygons, labyrinthine. Alone, broken open or closed, by way of suns, in the succession of points, elliptic. In a hunting sequence of camels and réhidos in herds, lined up or dispersed by threatening effects of some feline. Or with human figures arranged in accordance with the animal, stripped of attires or bows. Or, cephalic clothing or outfits indicating its shamanic sacredness, always related to animals, camels and réhidos.

All aspects and elements that allow us to account for the current state (*sensu* Bednarik 2002) of rock art, only a fragment of its original condition. Like any ritual act, must have involved innovation and unpredictability, for the officiating or officiating decisions about how to make drawings, on which media, what they repeat or improvise with new shapes, colors or combinations.

In the perspective that considers the style as an expression of meaning and function, rather than

makers and periods (*sensu* Lorblanchet Bahn and 1994) as submitted by the post-stylistic framework (*sensu* Lorblanchet 1990, Bahn and Lorblanchet 1994) the recording sites we have analyzed would express continuity of meaning in the repetition of the design of geometric shapes and animals rather than human figures, on granitic supports at eaves and bowls. This would enhance also the idea of a rock art for the South region of la Sierra de Comechingones (*sensu* Rocchietti 1991), expressed in Cerro Intihuasi within the stylistic mode Achiras Cuatro Vientos.

#### CONCLUSIONS

The methodological differences that the study of rock art presents, shows the complexity of it because of its variability. However we highlight the need for further studies of rock art as an important component of symbolic culture produced by the indigenous societies. With its symbolic and ideological content, it expands the vision we can build on them.

The organization of the archaeological record in order to the interpretation the meaning of cultural material, involves the establishment and identification of similarities, differences and contextual associations (*sensu* Hodder 1988). The sacredness and ritual the rock art expresses the Cerro Intihuasi, can claim to have been the attribution of meaning that their residents have assigned. In this regard, the identification of an area of activity implies the attribution of a content of meaning (Hodder 1988: 154). At the same time, the archaeological site is in itself an example of agglutination of rock art sites (*sensu* Rocchietti 1991). Thus, would be expressed the strong presence in it of art sites. (*sensu* Rocchietti 1991).

#### ACKNOWLEDGEMENTS

Principals, Dr. Antonio Southern and Dr. Ana Maria Rocchietti. Members of the Laboratory of Archaeology and Ethnohistory, History Department, Faculty of Human Sciences, National University of Rio Cuarto.

#### REFERENCE

- Austral, A. y A. M. Rocchietti.  
1990. Complejo de instalaciones indígenas en Sierras de Comechingones Meridional (Córdoba, Argentina): el caso Piedra del Águila. Anais da V Reuniao Cientifica da Sociedade de Arqueologia Brasileira. Revista do CEPA. Facultades Integradas de Santa Cruz do Sul (APESC) vol. 17, N° 20, sep. pp 371-386.
- Austral, A. y A. M. Rocchietti.  
1995. Poblamiento indígena prehistórico en el sur de Córdoba. En Rocchietti, A.M. (comp.) *Primeras Jornadas de Investigadores en Arqueología y Etnohistoria del centro-oeste del país*. Universidad Nacional de Rio Cuarto. Córdoba. Pp 1-6.
- Austral, A. Y A. M. Rocchietti.  
2002. Casa de Piedra. En Rocchietti, A.M. y A. Austral (comp.) *Segundas Jornadas de Arqueología Histórica y de Contacto del Centro Oeste de la Argentina y Seminario de Etnohistoria. Terceras Jornadas de Arqueología y etnohistoria del Centro Oeste del país*. Universidad Nacional de Rio Cuarto. Córdoba. Pp 20-35.
- Austral, Antonio y Ana María Rocchietti.  
2004. Al sur de Rio Cuarto: síntesis de la arqueología regional. En Bechis, M. (comp) *Terceras Jornadas de Arqueología Histórica y de Contacto del Centro Oeste de la Argentina y Seminario de Etnohistoria. Cuartas Jornadas de Arqueología y etnohistoria del Centro Oeste del país*. Universidad Nacional de Rio Cuarto. Córdoba. Pp 97- 115.
- Bahn, Paul y Michel Lorblanchet.  
1994. El arte rupestre: ¿La era post-estilística? o ¿A dónde vamos?. En *Revista de la SIARB*. Boletín N° 8. Bolivia. Pp 23-27.
- Bernarick, Robert.  
2002. Arte rupestre, taxonomía y epistemología. En *Rupestreweb* <http://mc2.vicnet.net.au/home/epistem/web/index.html>
- Berberián, Eduardo.  
1984. Potrero de Garay: una entidad sociocultural tardía de la región serrana de la provincia de Córdoba (República Argentina). En *Comechingonia*. Revista de de Antropología e Historia, Año 2, N° 4. Córdoba. 71-138.
- Fagiano, M.  
2007. Geología y petrología del basamento cristalino de Las Albas, sur de la sierra de Comechingones, Córdoba. Tesis Doctoral. Inédito. Universidad Nacional de Rio Cuarto.
- Gay, H. D.  
1958. Las pictografías del Cerro Intihuasi. Serie Ciencias Naturales. Separata de la Revista de la FCEFYN. Año XIX, N° 3 y 4. UNC. Córdoba.
- Gili, María Laura.  
2002. Los signos rupestres del Cerro Intihuasi. Córdoba. Argentina. *12th International Rock Art Congress. Ripon College. Ripon Wisconsin. International Federation of Rock Art Organizations. American Rock Art Research Association. Mid-America Geographic Foundation. USA. Vol.2. pp 175-182.*
- Gili, María Laura.  
2003. El registro de arte rupestre en sitios de Cerro Intihuasi. Sus particularidades metodológicas. Sur de la Sierra de Comechingones. Provincia de Córdoba. Argentina. <http://www.artepreistorica.it>
- Groenen, Marc.  
2000. *Sombra y luz en el arte paleolítico*. Editorial Ariel Prehistoria. Barcelona.
- González, Alberto Rex.  
1960. La estratigrafía de la Gruta de Intihuasi (Provincia de San Luis, R.A.) y sus relaciones con otros sitios precerámicos de Sudamérica. En *Revista del Instituto de Antropología*. Tomo I. UNC. Córdoba.
- Hodder, Ian.  
1988. *Interpretación en Arqueología. Corrientes actuales*. Editorial Crítica. Barcelona.
- Laguens, Andrés, Darío Demarchi y Mariana Fabra.  
2007. Un estudio arqueológico y bioantropológico de la colonización humana en el sector sur de las sierras pampeanas. En Olmedo, E. y F. Ribero (Comp.) *Debates actuales en Arqueología y etnohistoria*. Publicación de las V y VI Jornadas de Investigadores en Arqueología y Etnohistoria del Centro Oeste del País. Foro Pueblos Originarios-Arqueólogos. Universidad Nacional de Río Cuarto. Córdoba. Pp 119-134.
- Lorblanchet, Michel.  
1990. The archaeological significance of the results of pigment analyses in Quercy caves. En *Rock Arts Researchs*. 7 (1): 19-20. AURA. Melbourne.
- Pastor, Sebastián y Eduardo Beberían.  
2007. Arqueología del sector central de las Sierras de Córdoba (Argentina). Hacia una definición de los procesos sociales del periodo prehispánico tardío (900-1573 DC). En *Intersecciones en Antropología*, 8. 31-47. Facultad de Ciencias Sociales. UNCPBA. Argentina.
- Rocchietti, Ana María.  
1990. Arte étnico del sur de Córdoba: Estilo Cuatro Vientos-Achi-



ras. En *Revista de la Universidad Nacional de Río Cuarto*. 10 (2):133-146.

1991. Estilo y Diferencia: un ensayo en área espacial restringida. En Podestá, M.M (Comp.) *El Arte Rupestre en la Arqueología Contemporánea*. Buenos Aires. Pp 25-29.

2002. Arte rupestre en ambiente granítico de la Sierra de Comechingones: formación arqueológica y marco teórico. En *Actas XIII Congreso Nacional de Arqueología Argentina*. Universidad Nacional de Córdoba. Pp 65- 73.

2003. Sistematización de la documentación del ambiente rupestre.

En *Rupestre/web*, <http://rupestreweb.tripod.com/ambiente.html>.

2009. *Arqueología del arte. Lo imaginario y lo real en el arte rupestre*. 2009. En *Revista del Museo de Antropología 2*. Facultad de Filosofía y Humanidades. Universidad Nacional de Córdoba. Argentina. pp 23-38.

Rocchetti, A.M., E. Bolle, M.L. Gili.

1999. Procesos geomorfológicos y arqueológicos en sitios con arte rupestre. Cerro Intihuasi. Córdoba. En *Actas Tomo III. XII Congreso Nacional de Arqueología Argentina*. UNLP. La Plata. Pp 211-218.