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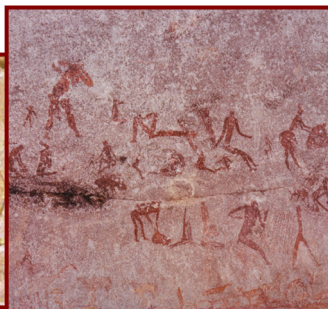
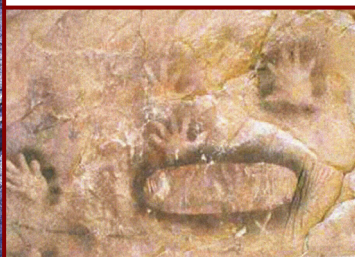
INTERNATIONAL COUNCIL
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WORLD HERITAGE CONVENTION

ROCK ART OF
LATIN AMERICA
&
THE CARIBBEAN

Thematic study

June 2006



THEMATIC STUDY OF ROCK ART: LATIN AMERICA & THE CARIBBEAN

ÉTUDE THÉMATIQUE DE L'ART RUPESTRE : AMÉRIQUE LATINE ET LES CARAÏBES

Foreword

ICOMOS Regional Thematic Studies on Rock Art

ICOMOS is preparing a series of Regional Thematic Studies on Rock Art of which Latin America and the Caribbean is the first. These will amass data on regional characteristics in order to begin to link more strongly rock art images to social and economic circumstances, and strong regional or local traits, particularly religious or cultural traditions and beliefs.

Rock art needs to be anchored as far as possible in a geo-cultural context. Its images may be outstanding from an aesthetic point of view: more often their full significance is related to their links with the societies that produced them and the meanings with which they were imbued. In order to understand these links, further research may be needed on the context of rock art. It is hoped that the thematic studies will help identify where such further work could be helpful.

ICOMOS Pre Nomination Guidance for Rock Art sites

In order to provide more general support to State Parties in preparing nominations of rock art sites identified as having potential outstanding universal value, ICOMOS is also preparing Pre-Nomination Guidance for Rock Art Nominations to address the particular issues that apply to nominations of these types of sites.

Avant-propos

Études thématiques régionales de l'art rupestre par l'ICOMOS

L'ICOMOS prépare une série d'études thématiques régionales de l'art rupestre, dont la première porte sur la région Amérique latine et Caraïbes. Ces études accumuleront des données sur les caractéristiques régionales de manière à préciser les liens qui existent entre les images de l'art rupestre, les conditions sociales et économiques et les caractéristiques régionales ou locales marquées, en particulier les croyances et les traditions religieuses et culturelles.

L'art rupestre doit être replacé autant que possible dans son contexte géoculturel. Les images sont parfois exceptionnelles par leur caractère esthétique ; plus souvent, leur valeur est liée aux sociétés qui les ont produites et aux significations dont elles sont imprégnées. Pour comprendre ce rapport, des recherches approfondies de leur contexte peuvent s'avérer nécessaires. Il est à espérer que les études thématiques contribueront à identifier les sites où ces recherches seront utiles.

Conseils préliminaires à la préparation de dossiers de proposition d'inscription d'art rupestre

Afin d'apporter aux États membres une aide plus générale pour la préparation des propositions d'inscription de sites d'art rupestre identifiés comme ayant une valeur universelle exceptionnelle potentielle, l'ICOMOS prépare des Conseils préliminaires à la préparation de dossiers de proposition d'inscription d'art rupestre afin de traiter les problèmes particuliers qui s'attachent à la proposition des ces types de sites.

Acknowledgements

In preparing this first Regional Rock Art Thematic Study, ICOMOS would like to acknowledge the support and contribution of the ICOMOS International Scientific Committee on Rock Art, a group of whose members wrote the text, and particularly the Chair, Ulf Bertilsson, and immediate past Chair, Jean Clottes, for coordinating this study with Susan Denyer, World Heritage Adviser, Regina Durighello, Director, and Gwenaëlle Bourdin, assistant World Heritage Unit.

Remerciements

En préparant cette première étude thématique régionale de l'art rupestre, l'ICOMOS remercie pour son aide et sa contribution le Comité scientifique international de l'ICOMOS sur l'art rupestre, un groupe dont les membres ont rédigé le texte, en particulier son président actuel, Ulf Bertilsson, et son précédent président, Jean Clottes, pour leur coordination de cette étude avec Susan Denyer, conseiller pour le patrimoine mondial, Regina Durighello, directeur, et Gwenaëlle Bourdin, assistante de l'Unité du patrimoine mondial.

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Introduction

Susan Denyer

The Scope and Value of Rock Art

Rock art is the oldest form of art, and has experienced the longest and widest development in terms of time and in space. Rock art is distinguished from other forms of art by the fact that it has been preserved at the place where it was carried out and by the fact that the place very often determined the scope and realisation of the art. In evaluating rock art, it is essential to take into account, not only its artistic quality and cultural importance, but also the quality of the place where it is found and particularly its natural environment.

Rock art sites, as a corpus of work, have huge potential for understanding human activity, both spiritual and temporal, over many millennia.

The aesthetic value of rock art can be appreciated without knowledge of associations. However, the full value of rock art sites, and their comparisons with other sites, usually only emerges once images have been documented and studied, to reveal an understanding of sequences, associated human activity and in some cases beliefs and traditions.

Without adequate inventories it is difficult to analyse rock art sequences and make comparative analyses. Many rock art sites have many thousands of images, considerable numbers of layers and can be said intuitively to represent vanished societies. A clearer understanding of their specific significances, geo-cultural context and relationship to present day societies is needed to evaluate them fully and this usually emerges only after systematic analysis and recording.

Le champ et la valeur de l'art rupestre

L'art rupestre est la plus ancienne forme d'art et a connu le développement le plus long et le plus étendu dans le temps et l'espace. Il se distingue d'autres formes d'art par le fait qu'il a été préservé sur le lieu même de son exécution et que ce lieu a réciproquement très souvent déterminé le champ et la réalisation de cet art. Dans l'évaluation de cet art, il est essentiel de prendre en compte non seulement sa qualité artistique et son importance culturelle, mais aussi la qualité du lieu où il est découvert et en particulier son environnement naturel.

Les sites d'art rupestre, en tant que réalisations d'ensemble, ont un potentiel énorme pour la compréhension de l'activité humaine, à la fois spirituelle et temporelle, sur plusieurs millénaires.

La valeur esthétique de l'art rupestre peut être appréciée sans connaissance d'associations. La pleine valeur des sites d'art rupestre et leur comparaison avec d'autres sites, ne s'apprécie habituellement qu'après une étude et des comparaisons approfondies, livrant une compréhension des séquences, des activités humaines associées et, dans certains cas, des croyances et des traditions.

En l'absence d'un inventaire approprié, il est difficile d'analyser les séquences d'art rupestre et de faire des analyses comparatives. De nombreux sites d'art rupestre possèdent plusieurs milliers d'images, un nombre considérable de couches et l'on peut dire intuitivement qu'ils représentent des sociétés disparues. Une compréhension plus claire de leur importance spécifique, de leur contexte géoculturel et de leur rapport aux sociétés d'aujourd'hui est nécessaire pour les évaluer pleinement et cela n'est généralement possible qu'après une analyse et une étude systématiques.

Rock Art and World Heritage

Rock Art is present within several geographical areas that are currently under-represented on the World Heritage list. Rock art sites thus have the potential to fill some of the “gaps”.

During the past five years a considerable number of rock art sites, or sites containing rock art have been nominated for inscription on the World Heritage List. Evaluating these brought up considerable difficulties as few sites have adequate inventories and this inhibits proper assessment of their significances and value and make formal comparative analysis difficult. Several sites were put forward for their association with beliefs and practices, but only a few provided substantive evidence.

In some regions rock art is highly prolific and could be said to be the dominant cultural heritage type. Analysis of its images has the potential to provide key evidence into social, economic and spiritual dimensions of past societies. Analysis, recording and conservation of rock art sites can however demand considerable resources.

In order to target scarce resources, it is crucial that the key sites, which reflect their social and geo-cultural context and can be said to have potential outstanding universal value, are nominated for possible inscription to the World Heritage List.

Art rupestre et patrimoine mondial

L’art rupestre est présent dans plusieurs zones géographiques qui sont actuellement sous représentées sur la Liste du patrimoine mondial. Les sites d’art rupestre ont par conséquent le potentiel de remplir certains « manques ».

Au cours des cinq dernières années, un grand nombre de sites d’art rupestre, ou de sites abritant de l’art rupestre, a été proposé pour inscription sur la Liste du patrimoine mondial. Leur évaluation a suscité des difficultés considérables car peu d’entre eux possédaient un inventaire approprié, ce qui empêche une évaluation correcte de leur importance et de leur valeur et complique l’analyse comparative. Plusieurs sites ont été proposés pour leur association avec des croyances et des pratiques mais peu d’entre eux ont fourni des preuves substantielles.

Dans certaines régions, l’art rupestre est très répandu et pourrait être qualifié de type de patrimoine culturel dominant. L’analyse des images peut potentiellement apporter des preuves essentielles des dimensions spirituelles, économiques et sociales de sociétés anciennes. L’analyse, la collecte de données et la conservation des sites d’art rupestre peuvent toutefois exiger des ressources considérables.

Dans le but de valoriser des ressources rares, il est essentiel que les sites clés qui reflètent un contexte social et géoculturel et peuvent présenter une valeur potentielle universelle exceptionnelle soient proposés pour une inscription possible sur la Liste du patrimoine mondial.

Zone 1: Mexico (including Baja California)

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1 Profile of Zone:

This survey refers only to rock art sites in Mexico, including the Baja California peninsula. It does not include Central America, or other adjoining regions. Although existing political borders have no relevance for earlier times, separate treatment for Mexico is justified by its distinctive archaeological tradition and particular legal, constitutional and institutional framework.

In terms of continental prehistory, modern Mexico occupies a strategic location at the neck of the North American continent, an unavoidable passage in the peopling of Central and South America, and also the ‘Mesoamerican hearth’, a key region in the independent domestication of the New World plants and animals which sustained later Mesoamerican civilizations. These circumstances give Mexican archaeology a global significance and provide a rich set of comparative problems for which rock art is relevant and valuable archaeological evidence.

Rock art manifestations are widespread throughout Mexican territory. They occur in widely diverse natural settings in both open air and sheltered locations and include petroglyphs, rock paintings, mobiliary artifacts, and geoglyphs, as well as monumental sculpture and paintings associated with some major Mesoamerican centers. They also appear to span many millennia, from early hunter-gatherer occupations up to Spanish colonial times, although not to the present. Although some Mexican indigenous groups are known to have produced rock art in the historic past, none do so today.

2 Links with other zones:

Rock art manifestations in Mexican territory are continuous both northward across the U.S.-Mexican border and southward into Central America. To the North, specific shared rock art styles and traditions include Jornada Mogollon in the upper Rio Grande valley and Hohokam rock art along the Arizona/Sonora border. More broadly, many rock art motifs are shared between the Mexican portions of the Sonoran and Chihuahuan deserts, the Baja peninsula and the rest of the North American Great Basin. Other motifs are shared with the so-called “Southeast ceremonial complex” present at sites in the lower Mississippi valley and south central Great Plains (Spiro, Oklahoma). What these similarities mean is one of the great challenges facing North American rock art studies.

Likewise, rock art traditions associated with the Maya region in southern Mexico extend southward in the Central American isthmus as far as Costa Rica. Other traditions may reflect the late prehistoric movements of Uto-Nahua peoples into Central America, especially the rock art of Ometepe Island (Nicaragua) associated with the arrival of the nicaraos.

The intensity of all these linkages is obviously variable and time-factored, but the nature and timing of these linkages have not been fully explored. Equally unexplored are connections between Mexican rock art and the Caribbean islands. Although some shared motifs are immediately obvious, especially in Cuba, none of them are culturally definitive, and archaeological evidence for contacts of any kind remains elusive. Even more important (and elusive) are the linkages of those motifs whose distribution extends from one end to the other of the Americas.

3 Known Sites:

As of 2005, a total of 2839 rock art sites are identified in Mexican territory, out of a national total of some 37,000 archaeological sites registered by the National Registry of Monuments and Archaeological Zones. The number of recorded sites has increased dramatically during the past 15 years. Up to 1991, only 644 sites had been identified. The latest figure represents an increase of 619 sites, or 28%, during the past five years, and this total is still understated due to bureaucratic delays in the registry process and limited field exploration in some areas.

Rock art sites are found in every Mexican state, but the latest increase reflects the results of more intensive field surveys in several states, particularly in northern Mexico. In the period (2000-2005), new site registrations were highest in Nuevo León (138 sites), Coahuila (78 sites), Sonora (33 sites), and Chihuahua (28 sites). In West Mexico, the states of Nayarit (50 sites), Michoacan (36 sites), Guerrero (30 sites), Jalisco (23 sites), and Sinaloa (13 sites) show significant increases. Because of its small area, the increase in the Bajío region and the Valley of Mexico is also notable, the state of Hidalgo (31 sites), DF/state of Mexico (19 sites) and Querétaro (12 sites). By way of contrast, the states in southern Mexico show only minimal increases in site registrations, due in part to limited exploration in more adverse environmental conditions.

The greatest geographical concentration of rock art sites continues to be in the Baja California peninsula with 815 sites, or 29% of the national total, but more recent surveys reveal a similar concentration of rock art in northeast and north central Mexico -Nuevo León (348 total sites), Coahuila (304 total sites), and Chihuahua (154 sites) for a total of 806 sites (or 28% of the national total). Although rock art occurs in all regions of Mesoamerica now part of Mexican territory, more than half of the registered rock art sites in Mexico are located in five northern border states.

Due to the size of the sample and the complexity of the phenomena, it is not possible to provide detailed information about each Mexican rock art site. Readers are referred to the bibliographic summaries in Murray & Valencia 1995 and Murray et al 2003 for additional information. In this report, we will generalize about conditions in order to cover the topic and limit comments about individual sites mainly to those with OUV (outstanding universal value) potential.

4 Declared and Potential World Heritage Sites:

All rock art sites in Mexico are part of the national patrimony and receive formal legal protection under the Mexican constitution. Many are also well-recognized elements of the local and regional setting, but the following sites have exceptional characteristics which merit special consideration.

A. Declared World Heritage Sites:

Sierra de San Francisco (Baja California) (1998): Major concentration of Great Mural style rock paintings in the central Baja peninsula.

B. Sites included in the Tentative List:

Boca de Potrerillos (Nuevo León): major petroglyph concentration of hunter-gatherer rock art (est. 6000-8000 images) associated with an archaeological zone extending over 6 km², and representing at least 8000 years occupation of the site. The site has a natural orientation to the cardinal directions and functions as a solar horizon calendar. At least four styles of petroglyphic representation have been identified (Valadez 2005). (nominated for inclusion as a cultural area)

Pinal de Zamorano (Querétaro): this is a sacred mountain for the indigenous groups of the region located 50 km. east of the state capital. Various rock shelters and exposed rock faces are painted, principally with a type of anthropomorph found only in this area, but also zoomorphs and to a lesser extent, geometrical figures. So far 46 rock art sites with hundreds of images have been located. (nominated for inclusion as part of a natural area)

C. Some Potential World Heritage Sites:

San Rafael de Los Milagros (Coahuila): extensive petroglyph concentration on the shore of the now-extinct Laguna de Mayran and adjacent to major federal highway about 100 km. from the state capital. Hundreds of carved rocks are distributed within six sub-areas. Elaborate geometrical motifs predominate, but anthropomorphs, fitomorphs, and zoomorphs are also found (Gonzalez 2005).

La Proveedora/La Calera (Sonora): major petroglyph concentration located 12 km. from Caborca, Sonora on a series of hills. Hundreds of rocks are carved with anthropomorphic, zoomorphic and geometric designs, including some very elaborate and complex ones, in direct association with an archaeological site attributed to the Trincheras culture (Quijada 2005).

Las Plazuelas (Guanajuato): located just outside the city of Pénjamo, Guanajuato, this site is currently open to the public and under I.N.A.H. protection. It was a major late Classic and early Post-Classic (750-1200 A.D.) centre, and more than 1400 petroglyphs have been found within the area, principally spirals, dot figures and scale models of architectural features, which are the most notable carvings at the site (Castañeda 2000).

Pila de los Monos (Nayarit): located four kms from the Huichol community of Huajicori, Nayarit, this is an important sanctuary whose petroglyphic carvings are reflected in the natural pools of water of the Arroyo Chiote. Motifs include anthropomorphs and solar representations as well as

sacred peyote plants and geometrical figures of great complexity and variety. This is a pilgrimage site still visited by the local Huichol groups (Zepeda 2001).

Juxtlahuaca/Oxtotitlan (Guerrero): these caves are located near Mochitlán and Chilapa, Guerrero respectively and contain polychrome paintings in classic Olmec style, with the jaguar as its central motif. Other figures include a serpent and richly attired personages, possibly related to rain, water and fertility rituals. These sites receive official protection.

Chalcatzingo (Morelos): considered by archaeologist David Grove to be “the oldest sacred mountain in Mesoamerica”, this prominence, located in the state of Morelos, is adorned by low-relief Olmec style rock carvings with the jaguar as their central motif. 35 carvings in all have been registered in three spatially separated zones of the mountain. The associated archaeological site is dated to 700-500 B.C.

Loltún & other cave sites in the Oxkutzkab sierra (Yucatán): Loltún is the largest of a series of gallery caves in the Puuc hills containing Maya paintings (and some petroglyphs) corresponding to the Late Preclassic, Classic and Post Classic periods. They were first discovered in the late 19th century and present significant examples of Maya glyphic writing and iconographic motifs (Stone 1995; Strecker & Stone 2003). Petroglyphs at Loltún may be attributable to an earlier preceramic occupation of the cave between 9000-3000 A.C.

A number of other sites might be included in this list, but they are still under study and it is too early to make a fair and full evaluation. These include: Cerro de Chiquihuitillos, Presa de La Mula and Icamole canyon, in the state of Nuevo León; El Pelillal and Narihua, in Coahuila; Cerro de los Chichimecas, near La Piedad, Michoacán; Sierra de Guadalupe, Baja California Sur and the Victoria site in the northwest part of Guanajuato state, among others.

5 Existing Documentation:

The National Registry of Monuments and Archaeological Zones (Registro Público de Monumentos y Zonas Arqueológicas) is the central collection point for data and statistics on rock art sites. It has maps and aerial photographs of the entire country in both digital and physical formats. Individual site records are available in a data base which is regularly updated. Photographs and drawings (on paper) of sites and motifs are on file, and recently a three-dimensional map of site locations has been generated which will soon be made available to researchers. The archive of the Archaeological Council (Consejo de Arqueología) has official reports on all projects carried out since the 1970s; these reports can be consulted by researchers two years after they have been submitted and approved by the Council.

Many other visual records are stored in INAH regional offices, museums, university library collections, and in the study collections of private researchers. The INAH regional offices, in particular, contain information derived from inspections, salvage projects, and follow-up of public reports which do not reach the Archaeological Council. Each INAH center sets its own policy about consultation of these documents, but in general, this is open to any researcher associated with an established institution.

Because of the information they contain, all archaeological files are restricted for the general public.

6 Research:

In recent years, rock art has become a regular part of Mexican archaeological research. Since most research on it is done by professional archaeologists, they relate its styles and traditions to known pre-Hispanic cultures and their associated artefacts. These relationships range from projectile point types to Mesoamerican writing styles and use a diverse range of theoretical approaches and methodological tools. Research is also organized according to geographical regions, with rock art being especially relevant for North Mexico.

At present, no Mexican indigenous groups produce rock art, and in most cases they claim no knowledge or interest in it. Nevertheless, some rock art sites are still visited and used ritually by them on a regular basis and must be considered in some sense as “sacred” within modern Native American cultural traditions. These include Huichol ritual pilgrimage sites in the states of Nayarit, Jalisco, and Nuevo León; the Pinal de Zamorano and other ritual sites associated with the Otomí cultural tradition in Querétaro; as well as sites in the Zapotec area of Oaxaca and among various Maya groups in Chiapas.

Although ethnographic analogies have attractive potential for illuminating Mexican rock art, they have not been systematically studied, nor have modern ritual traditions been used to contextualize the rock art.

7 Protection:

The archaeological patrimony is considered of public value and is property of the nation. Its study, conservation and cultural use is controlled by the State under the Federal Monuments and Archaeological, Artistic and Historic Zones Law (Ley Federal sobre Monumentos y Zonas Arqueológicas, Artísticas e Históricas), enacted in 1972. Under this law, patrimonial responsibility is shared between the three levels of government (federal, state, and municipal) and is exercised by the I.N.A.H. for all cultural patrimony dated prior to 1900, and by the I.N.B.A. (Instituto Nacional de Bellas Artes) for all later works. Archaeological research, conservation and public use are governed by several internal ordinances and regulations, such as that of the Archaeological Council and the Regulations for Archaeological Research in Mexico.

At present, a number of state governments, including the states of Mexico, Veracruz and Yucatan, have passed patrimonial laws of their own, all following the same lines as the 1972 federal law, and formed their own cultural institutes and research centers. The present trend is to open up archaeological activities of all kinds to the states, and even in some cases, to the municipalities.

Effective protection of rock art is in the hands of the Federal police based on the constitutional powers of citizen denunciation to the responsible I.N.A.H. authorities. Such threatening actions are rarely (if ever) taken and real protection depends on more informal and circumstantial conditions peculiar to each site. Ultimately, protection rests on civic responsibility. All Mexican

citizens know that archaeological remains of all kinds belong to the nation. This translates into a civic duty to respect and protect them and report any damages to the responsible authorities.

By providing means to register materials in private hands, the nation accepts and promotes citizen custody of the archaeological patrimony, but formally restricts its ownership to the federal government and denies its commercial value by limiting the right of sale. Unfortunately, these legal provisions have not prevented the growth of an active clandestine market for “patio” petroglyphs which has resulted in massive damage and theft at some sites.

8 Conservation:

Although the I.N.A.H. has a conservation laboratory and training program in Mexico City, these are mainly dedicated to other archaeological materials than rock art.

Specific rock art conservation projects have been carried out only at the existing World Heritage site of Sierra de San Francisco (Baja California) as part of the management plan for that area in collaboration with the Getty Foundation in Los Angeles.

9 Site Management:

At present, the only Mexican rock art site with a fully implemented site management plan is the Sierra de San Francisco (Baja California). Nevertheless, limited protection is provided by municipal and state authorities as well as private land owners who control access to sites on their properties.

Additional control is provided through designation of sites as official “archaeological zones”, in which case the I.N.A.H. assumes formal land ownership of an archaeological site and specific responsibility for its conservation and management. Rock art manifestations are found within a number of officially protected archaeological zones (some noted above), but at present, the only zone officially so designated in order to protect rock art is Boca de Potrerillos (Nuevo León), where a 6 km² area was ceded to the federal government by the local ejido.

At this site, access to part of the archaeological zone is controlled by a small on-site museum within a fenced enclosure and facilitated by a trail network. Surveillance is provided by a permanent custodian who registers visitors, but is limited to official hours and still gives uncontrolled open access to that part of the site lying outside the fenced perimeter. Increased visitation over the last few years has provoked some additional damage to the rock art and raised new site management issues, such as provision of overnight camping facilities, food services, and paved access from the nearby federal highway.

Other rock art sites receive protection because of their location within natural reserves, such as national parks, wildlife refuges, historical monuments, and including already designated World Heritage sites. In some cases, they may be located in recreation areas used by the community and receive some protection from local residents, but in general damage risks are directly proportional to the frequency of human visits. The only well protected sites are the ones rarely if ever visited. Urban visitors tend to vandalize rock art sites and mark them with spray-painted

graffiti, whereas rural people more often dig pits in search of buried treasure or view the stones on which rock art is placed as good building material for fences or other constructions.

10 Main Threats:

Although natural factors, such as river flooding and volcanic activity, have the potential to affect many sites, the principal threats to Mexican rock art sites are all anthropogenic and broadly relate to changes in modern land use and access, particularly:

- development projects, including highway and pipeline construction, new water reservoir and hydroelectric projects, beach and shoreline modification, among others;
- urbanization, including new sub-divisions, associated industrial districts and urban infrastructure construction;
- rapidly expanding use of all-terrain off-road vehicles of all kinds capable of providing access to previously isolated locations; and
- changes in tenancy and land use derived from the privatization of ejido and communal lands.

Given the large number of sites in Mexico, centralized control of potential threats, even at the regional or state level, is very difficult and many factors contributing to damage go undetected. The loss of important sites, such as Samalayuca (Chih.) and San Bernabé (N.L.) is attributable to conflicting interests which prevented any effective salvage intervention.

Conclusions

Site recording is complete (or very nearly so) for most of the rock art sites which might be considered for World Heritage nomination. In most cases, the site documentation exists in more than one media format, although digitalization of these records within a unified data base is still in process.

Increased visitation at nearly all sites strains the limited resources of the agencies responsible for rock art protection and has led to a slow but steady deterioration in their physical condition. In some places, this has reached the level of alarming and irreversible destruction, but at other sites, prudent and opportune intervention is still possible and can ensure their preservation for future archaeological studies.

Consideration for World Heritage status is inevitably linked to a long-term commitment to increase research activities and protective measures at the sites so designated. Improved access and provision of visitor facilities imply infrastructure investments, but human resources are perhaps the most limiting factor at present.

The value of rock art for understanding Mexican prehistory is still largely unexplored, but attracts the interest of a new generation of Mexican archaeologists.

See illustrations Annexe IV: page 216

Bibliography

Castañeda, Carlos

2000 Las Maquetas de Plazuelas, Guanajuato. *Arqueología Mexicana*, Vol. 8, #46, pp. 76-79.

González, Leticia

2005 Texto, Metatexto, Temas y Variaciones sobre el Texto: Interpretando las Manifestaciones Gráficas Rupestres de los Cazadores del Desierto, el Caso de San Rafael de los Milagros, Coahuila. In: *Los Petrograbados del Norte de México* (ed. Joel Santos Ramírez & Ramón ViñasValverde), pp. 109-136. INAH-Sinaloa/Grupo Arqueófilos (electronic publication).

Murray, William Breen & Valencia, Daniel

1996 Recent Rock Art Research in Mexico and Central America. In: *Rock Art Studies: News of the World I* (ed. Paul Bahn & Angelo Fossati), pp. 185-202. Oxford (UK): Oxbow Books.

Murray, William Breen; Gutiérrez, Maria de la Luz; Quijada, César A.; Viramontes Anzures, Carlos; and Winter, Marcus.

2003 Mexican Rock Art Studies at the Turn of the Milennium. In: *Rock Art Studies: News of the World II*, pp. 178-195. Oxford (UK): Oxbow Books.

Quijada, César

2005 Los Petrograbados del Noroeste Sonorense. In: *Los Petrograbados del Norte de México* (eds. Joel Santos Ramírez & Ramón Viñas Valverde), pp. 137-146. INAH-Sinaloa/Grupo Arqueófilos (electronic publication).

Strecker, Matthias & Stone, Andrea

2003 Arte Rupestre de Yucatán y Campeche. In: *Arte Rupestre de México Oriental y Centro América* (ed. Martin Künne & Matthias Strecker), pp. 53-77. Berlin: IberoAmerikanischen Institut.

Stone, Andrea

1995 *Images from the Underworld*. Austin: University of Texas Press.

Valadez Moreno, Moisés

2005 Los Petrograbados de Boca de Potrerillos. In: *Los Petrograbados del Norte de México* (eds. Joel Santos Ramírez & Ramón Viñas Valverde), pp. 67-92. INAH-Sinaloa/Grupo Arqueófilos (electronic publication).

Zepeda, G.

2001 *Colección de Documentos para la Arqueología de Nayarit*. Tepic: Consejo Estatal para la Cultura y las Artes.

Zone 1: Central America

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The paper consists of two different sections. The first part has a descriptive character and gives a general impression of Central American rock art. The second part collects all detailed information in tables and registers.

I. The first section is organized as follows:

1. Profile of the Zone: environments, culture areas and chronologies
2. Known Sites: modes of iconographic representation and geographic context
3. Chronological sequences and stylistic analyses
4. Documentation and Known Sites: national inventories, systematic documentation and most prominent rock art sites
5. Legislation and institutional frameworks
6. Rock art and indigenous groups
7. Active site management
8. Conclusion

II. The second section includes:

table 1	Archaeological chronologies
table 2	Periods, wares, horizons and traditions
table 3	Legislation and National Archaeological Commissions
table 4	Rock art sites, National Parks and National Monuments
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1 Profile of the Zone: environments, culture areas and chronologies:

Central America, as treated in this report, runs from Guatemala and Belize in the north-west to Panama in the south-east (the northern Bridge of Tehuantepec and the Yucatan peninsula are described by Mr William Breen Murray in Zone 1: Mexico (including Baja California)). The whole region is characterized by common geomorphologic features, constituting three different natural environments. In the Atlantic east predominates extensive lowlands cut by a multitude of branched rivers. They cover a karstic underground formed by unfolded limestone. Embedded are extensive cave systems offering a lot of subterranean water resources. The central zones are characterized by volcanic mountain ranges comprising little highlands, numerous crater lakes and deep valleys. In contrast to the western plains the Pacific coastlands form a long, narrow strip. They comprise a great variety of bays, islands and peninsulas.

The diversity of natural geography is completed by a great diversity of climates, flora and fauna. They include the tropical rainforests of the lowlands as well as the sub-alpine vegetation of the central regions high mountains. Alone Costa Rica has twelve distinctive ecosystems offering highly diversified natural resources. They provoked different strategies of adaptation since the earliest presence of man in Central America that probably dates back to 12,000 B.C. (Piperno et al. 1990: 108-16; Snarskis 1979: 125-38, 1984: 198). Whereas the first human groups were constituted by hunters of megafauna (El Bosque) their subsistence patterns were followed by maritime or fluvial modes of nutrition (Orange Walk), by gathering fruit trees and wild plants (Casita de Piedra), by mixed economies (La Esperanza) and by agricultural systems of production (El Cerén). All subsistence patterns left different landscapes and archaeological contexts.

They divide Central America in two cultural zones with different structures of spatial and chronological organization (Kirchhoff 1943: 92-107; Lange 2001a: 357-65). In the further text I refer to Belize, Guatemala, western El Salvador and the west of Honduras as Eastern Mesoamerica. All territories south of the Ulua and Lempira river systems are called Lower Central America (fig. 1). The chronology of the former region is part of the Mesoamerican culture sequence comprising the Postclassic (1530-900 A.D.), Classic (900-250 A.D.), Formative (250 A.D. – 1600 B.C.), Archaic (1600-8000 B.C.) and Paleoindian (8000 - ? B.C.) periods. The culture sequence of Lower Central America (Lange 1984: 277-81) is oriented toward the northern regions of South America. It is constituted by six different periods without any descriptive denomination. Nevertheless, periods VI, V and IV (1520 A.D. – 1000 B.C.) correspond with the Mesoamerican Late, Middle and Early Formative according to their characteristics. Periods III and II (1000-8000 B.C.) are linked with the Archaic. The earliest period I (8000-? B.C.) can be understood as Paleoindian (table 1).

At the arrival of European conquerors Eastern Mesoamerica was dominated by speakers of Mayan and Nahuatl languages. Their complex archaeological cultures show all diagnostic traits of highly diversified societies, such as site hierarchy, monumental architecture, specialized sectors of utilization, elaborated iconographies as well as writing and calendar systems, pecked in steles and public buildings. In contrast Lower Central America was mainly settled by Misumalpan- (in the north) and Chibchan- (in the south) speaking populations during the early 16th century. Their archaeological cultures mostly lack hierarchic divisions, indicating in this way horizontal social segments without rigid vertical stratification. Early historic sources (Oviedo 1851-55 [1534, 1547]; Vázquez de Coronado 1908 [1563-65]) prove that the indigenous populations of the contact period (1600-1520 A.D.) were organized in chiefdoms and interaction spheres. They never constituted competing urban states as in Eastern Mesoamerica.

Whereas both regions exhibit differences in political organization, settlement patterns and material culture they also have commonalities such as shared modes of subsistence, similar stone tool industries or polychrome ceramic traditions. Mesoamerican jade and obsidian artefacts are also found in Lower Central America. On the other hand metal objects from Lower Central America appeared in Eastern Mesoamerica too. The mutual occurrence of imported raw materials, techniques and goods suggest stable trade networks facilitating cross cultural contact and exchange. In fact, the western and central regions of Honduras (Ulua-Chamelecon-Sula and Comayagua river systems), the east of El Salvador, the whole Pacific Nicaragua and the Nicoya peninsula of north-west Costa Rica (Guanacaste province) are often

understood in terms of direct cultural transition and mutual overlapping. For the purpose of this paper I will call this region Contact Zone.

2 Known Sites: modes of iconographic representation and geographic context:

Central American rock art consists of decorated but not completely sculptured stones, rocks and lithic formations (rock shelters, grottos, caves). Their representations can be divided according to the applied techniques of manufacture into three different categories: rock engravings (petroglyphs), rock paintings (pictographs) and painted rock engravings. Petroglyphs may be scratched, incised, cut, pecked, punched or abraded into stony surfaces. They all are product of stone tools application. Pictographs were painted or drawn utilizing mineral colours or charcoal. The painted representations can be dotted, blown or stamped. Coloured petroglyphs combine additive and subtractive techniques of decoration. Although most rock art shows geometric motifs there are also elaborated zoomorphic and anthropomorphic representations. Even architectonic structures (pyramids), archaeological objects (bowls), dresses (hipcloths, belts, head bands) and adornments (ear spools) are sometimes shown. In contrast phytomorph motifs (San Miguel Cave) are seldom. A particular mode of decoration is formed by positive and negative handprints (Cueva Los Sanchez). The rock art of Central America comprises abstract, stylized and naturalistic images. Sometimes the represented forms combine different perspectives within one single motif (Pedregal). Several engravings or paintings may be grouped together. They can form friezes (Los Fierros), scenes (Oropoli), narrative registers (Naj Tunich Cave), illustrations (Naj Tunich Cave) or hieroglyphic inscriptions (Las Pinturas Cave). Whereas Postclassic and Classic Mayan cave pictographs often have narrative character the geometric petroglyphs of Lower Central America seem mainly static in nature.

Rock art can also be found as semi-sculptured stones and little mobile objects. They may be understood as marginal categories of rock art analyses according to their different contexts, decorations and weights. Semi-sculptured stones are known from El Salvador (Sta. Leticia) and Guatemala (Escuintla) as well as from Pacific Nicaragua (Sonzapote) and Panama (Nancito). In the former two countries they may show hieroglyphic inscriptions. In the latter ones the shape of semi-sculptured stones is often varied by zoomorphic reliefs (fig. 9). Brady et al. (1997b: 725-50) and Helmke et al. (2003: 108-11) documented semi-modified speleothems in the caves of Belize (Actun Chapat Cave) and Guatemala (Juteria Cave). Gigantic stone spheres, decorated with abstract engravings (fig. 4, table 6), are reported from southern Pacific Costa Rica (Künne 2003b: 215, fig. 82). Some stone cist graves, documented in the highlands of Costa Rica and Panama, contain offerings that include little engraved stones (Fonseca and Watters 2001: 142; Harte 1952-59). Another particular category of rock art is represented by cuplike depressions. They are widely distributed throughout all geographic regions (Piedra Sellada, Petroglyph Cave) and may have served as iconographic decoration as well as a container for liquids, foodstuffs or minerals.

The spatial divulgation of Central American rock art corresponds to the cultural division of the region. Even though the volcanic mountain ranges of Lower Central America possess extensive cave systems as Eastern Mesoamerican karsts, they only have a few decorated caves, known until today. Among them are the Cueva El Tigre, the Gruta de Montelimar (both in Nicaragua) and the Gruta del Espíritu Santo (El Salvador). No or almost no cave art was documented in Panama and Costa Rica. Besides, no pictographs are reported from the former country. In comparison to Lower Central America alone the limestone formations surrounding the Maya Mountains have approximately a dozen caves and grottos decorated by rock art,

such as Robertos Cave and Actun Dzib in Belize or Naj Tunich (fig. 10), Santo Domingo and San Miguel in Guatemala. Probably some of them are linked to the Chiquibul cave system that is partially flooded during every rain season. However, none of the known rock art caves is affected by floodwaters. Almost all regions of Central America possess open air rock art that is often associated with water resources, outstanding natural formations, cemeteries or settlements. Only in Belize no open air sites were found, reflecting probably more the initial state of rock art investigation than a diagnostic cultural trait. Despite of its broad divulgation most Central American rock art seems to be concentrated within zones with extensive subsistence patterns. They comprise Eastern Mesoamerica as a whole, completed by the Pacific and central regions of Lower Central America. Further documentations have to prove if the vast Atlantic plains of Lower Central America are as scarce in rock art as they seem to be. In contrast to the latter zone the lowlands of Eastern Mesoamerica were densely populated throughout the whole Classic Period (900-250 A.D.). Several important archaeological sites are situated in the near vicinity of caves (Dos Pilas) and subterranean water resources (cenotes), that may be decorated (Cahal Uitz Na). Some caves (Copan) have been used already before the construction of monumental architecture began. However, in the highlands of Guatemala there are only two rock art caves (Bambil Pec and Cueva del Venado), known until today. A. Stone estimates that the whole “Maya-region” (including the peninsula of Yucatan and the highlands of Guatemala and Chiapas) has around 40 decorated caves that possess circa 2000 images (1995: 45). Nevertheless, they constitute only a minimal portion of all utilized subterranean places.

3 Chronological sequences and stylistic analyses:

Central America served as the only continental bridge for migrations to and from South America. Anyway, there is no proven evidence of hunter and gatherer rock art, manufactured in Archaic (1600-8000 B.C.) or Paleoindian (8000-? B.C.) periods. All existing claims for Archaic and Paleoindian sites are not well substantiated. The El Gigante rock shelter (Honduras) is decorated by red handprints and a zoomorph painting. The sites early archaeological features were dated by radiocarbon analyses around 12,000 B.C. (Haseman 1996: 65-66; Scheffler 2001: 115-23). Unfortunately there is no direct association between the dated material and the documented rock art. Haberland (1972: 286-91) suggests that the pictographs (fig. 2) of the Gruta del Espíritu Santo (east El Salvador) might be Late Archaic (2000-1000 B.C.). He believes that the images are contemporary with some obsidian artefacts of a pre-ceramic stratigraphic layer. However, this has been called into question by Coladan (1995: 40-42) because of the presence of later cultural material. Even early ceramic sites often have no direct connection to rock art representations. The cave drawings of the Cueva del Río Tagua and of the Cueva de las Arañas (near Catacamas, Honduras) seem to be associated with an Early-Middle-Formative (300-600 B.D.) ossuary and with Middle Formative (300-900 B.D.) ceramics (Brady et al. 1995: 36-40; Brady et al. 2000: 111-18). But also in this case a definitive age cannot be given until the charcoal pigments of the images have been dated directly.

In the present state of investigation Central American rock art is commonly thought to be a product of agricultural societies. It might be connected with the development of sedentary village life and the manufacture of ceramics that serve as an important chronological marker throughout the whole region. Nevertheless, absolute radiocarbon dates (AMS), direct archaeological associations and iconographic superimpositions are rare. Most Central American rock art is dated by nearby archaeological deposits or stylistic comparisons. Some

sites of Eastern Mesoamerica can be classified by the represented themes, motifs and hieroglyphic inscriptions too.

The oldest datable rock art is situated in the highlands of Guatemala and in the west of El Salvador. It belongs to the Olmec-Horizon (300-1200 B.D.) that can be analyzed from its iconographic characteristics. The pictographs of the El Diablo Rojo site, situated in the vicinity of the Amatitlan Lake (Guatemala), show two opposed anthropomorphic figures linked to the Middle Formative Period (300-900 B.D.). Olmec-Horizon motifs are also represented at the Las Victorias (El Salvador) and Abaj Takalik (Guatemala) sites. At Sta. Leticia-Ahuachapan (El Salvador) and Abaja Takalik (Guatemala) semi-sculptured rocks probably form part of the Late Formative (250 A.D. -300 B.D.). The oldest datable rock art of Central American lowlands was found in the northern Petén Department of Guatemala. It is constituted by the San Diego Cliff Carvings, which resemble a Late Formative stela. However, the abstract open air petroglyphs found in the bedrock at the classic urban centres of Piedras Negras (table 6) and Yaxha may date even earlier (A. Stone 2003: 134). Some rock drawings of the Naj Tunich and the Las Pintadas caves are associated with inscriptions. The Naj Tunich texts (fig. 10) include emblem glyphs and calendar dates. In this way the cave and its drawings can be linked to ancient urban centres and ruling dynasties. The two deciphered short count dates of Naj Tunich correspond to the Late Classic (800-600 A.D.), citing the years 692 A.D. and 771 A.D. (MacLeod and A. Stone 1995). Though most of Central American rock art consists of deeply engraved and regularly redrawn petroglyphs, superimpositions (that might serve for relative dates) are unusual throughout the whole region. Even patination can't be understood as a diagnostic trait of rock arts age. The tropical climate and the regular burning of fields prevent differences in the patination of open air representations. The colour of pecked and hammered grooves is often indistinguishable from the shade of the surrounding surfaces. This reaction may be a characteristic trait of basalt, diorite and andesite materials under the prevailing climatic conditions.

On the other hand, the first multispectral analyses of Eastern Mesoamerican pictographs (Brady et al. 1997a: 91-96; Robinson 2001; Ware and Brady 2001: 1017-21) revealed not only hidden layers of paintings (Cueva Casa de las Golondrinas) and inscriptions (Cueva Las Pinturas) but also identified superimpositions (Naj Tunich). Besides, the same technique is able to show identical paint recipes which are not obvious to the naked eye. Direct rock art dates, based on pigment samples, are only available from Eastern Mesoamerica too. They were produced by Marvin Rowe and his colleagues at Texas A & M University. The first samples came from an inscription in the Naj Tunich cave, placing it within the 8th century (Armitage et al. 2001: 471-80; MacLeod and Stone 1995: 155-84). A further AMS dating was intended for one of the three painted rock shelters of the Chiquimula site (900-300 A.D.).

Whereas rock art documentation and cave investigation constitute a specialized field of research in Eastern Mesoamerica, most systematic rock art investigation of Lower Central America is included in archaeological surveys and research excavations. In this way several radiocarbon dates are available for associated contexts. The geometric petroglyphs of the Guayabo de Turrialba (UCR-46) and the Rivas (RV-148-SJ) sites (Costa Rica) are directly integrated in mounds, causeways or house rings (Fonseca and Acuña 1986: 236-54; Lange and D. Stone 1984: 385-91; Quilter 2004: table A1, chart A2). The dates prove a principal utilization of both sites that spans 1400-1000 A.D.

There are no historic sources referring to the manufacture of petroglyphs or pictographs in Central America. However, it can be supposed that the execution of rock paintings and

engravings continued during the Early Colonial period (1600-1520). A. Stone (1995: 81, 86) documented in the caves of Dzibichen and Miramar (Mexican parts of the Yucatan peninsula) rock drawings that resemble the Madrid-Codex-Style, executed during the Late Postclassic (1530-1200 A.D.) and during the Early Colonial (1600-1520 A.-D.) periods. Besides, both caves also contain crude drawings of the Habsburg Eagle, proving the manufacture of rock art in colonial times. Some modern indigenous populations of Lower Central America draw traditional motifs and images that also can be found in rock engravings. The bribri and cabécar shamans of southern Costa Rica decorate their healing stuffs with lizard-like figures that have identical counterparts in the regions petroglyphs (Künne 2003a: 124-26, 300, 303). Nevertheless, it cannot be said if the engravings were made by historic populations.

Most of ancient Central American rock art seems to be connected with the prevailing styles of ceramics and stone sculptures (table 2). However, there is no reliable scheme that treats the rock art of Central America as a closed iconographic corpus. D. Stone (1948: 170, 191) assumes that Central American rock art would express a joint formative horizon of development, that underlies as well the urban societies of Eastern Mesoamerica as the horizontal interaction spheres of Lower Central America. Krickeberg (1949: 74-80) divided the rock art corpus of Lower Central America in six different style groups, connecting them with linguistic, historic and ethnographic populations. However, both authors don't give any archaeological evidence that could prove their hypothesis. In Nicaragua, Matillo Vila (1965) distinguished five different rock art zones (Pacific, North, Chontales, Islands of the Lake of Nicaragua and Atlantic Coast). Unfortunately his classification is not based on systematic iconographic investigation.

The present state of rock art research only allows local and regional stylistic analyses. The most exhaustive modern study of Eastern Mesoamerican cave art was published by A. Stone (1995). It concentrated on the iconographic representations of the Naj Tunich Cave (Guatemala). The same author (University of Wisconsin) also prepared a comprehensive, but unpublished documentation (1995) of the Lake Guijas petroglyphs (El Salvador). The caves of the Lake Petexbatún, the Lake Itza and the Poptún region (all: Guatemala, northern lowlands) were intensively investigated by Brady (University of California) and his team. Since 1996 the Department of Archaeology of Belize has supported systematic studies of ancient caves in the Maya Mountains (Awe, Griffith and Helmke). In Lower Central American Navarro (1996) edited a systematic iconographic comparison between the rock art of the Sierra de Managua and the petroglyphs of the Lake of Nicaragua (excluding the Ometepe island). His analysis includes 110 motifs classified into 14 iconographic categories. Since 1995 Baker (actual: Witwatersrand University) guides a running documentation project of the petroglyphs scattered throughout the Ometepe island (Nicaragua). Between 1989-1993, Hardy and Vázquez (1993) prepared a systematic documentation of the Pedregal site (Costa Rica). The complete documentation is kept by the Rock Art Archive of the Fowler Institute at the University of California (UCLA). A copy may be found in the Casona de Sta. Rosa research station (Area de Conservación Guanacaste). Further systematic surveys were carried out in the highlands of Guatemala (A. Stone 1997; Batres et al. since 1995), in the north-eastern highlands of El Salvador (Coladán 1997), in Honduras (Haseman and Kittrick 1993-95), in Costa Rica (Kennedy 1964-68; Künne 1998-2000; Sol Castillo 2000; Zilberg 1983) and in Panama (Brizuela 2004; Holmberg since 2003; Künne 2000-02; Quintero 1994-95). Zilberg (1986) investigated in particular the archaeological contexts of petroglyph sites. Besides, he published a systematic iconographic analysis of the Diquís (Gran Chiriquí) rock art.

However, much more rock art sites have to be documented completely, before any broad iconographic comparison could be started in the future. Provisionally, only motifs with a broad divulgation can be separated from those with a limited occurrence. In Eastern Mesoamerica the Mixteca-Puebla-Tradition (1520- 1200 A.D.), the Classic-Maya-Horizon (900-300 A.D.) and the Olmec-Horizon (300-1200 B.C.) are also reflected in rock art representations. Besides, there is an overwhelming majority of local and regional styles that may or may not have been integrated into the more general “horizons” and “traditions.” Most motifs of Lower Central American petroglyphs carry universal character (spirals, circles, wavy lines, crosses, points) requiring additional information for their iconographic interpretation. However, the fine lined engravings (fig. 7) of the Pedregal site (Costa Rica) show complex Mesoamerican motifs that can be linked with the ceramic groups that pertain to the horizon of creme slipped polychrom wares (1520-800 B.C.). Other rock art styles characterize more likely the qualities of the decorated materials. Interestingly, the extensive and complex geometric patterns of the Chiriquí region petroglyphs (figs. 4 and 5) aren’t repeated in the simultaneous ceramics of the same zone. Leaving the cultural perspective of analyses, the social dimension of rock art styles cannot be neglected. Regarding that only a small minority of Central American rock art consists of elaborate figurative representations, A. Stone (1995: 45) distinguishes elite images from non elite iconographies. The former ones were probably manufactured by specialized full time craftsmen. Their figurative and codified motifs can be identified with the prevailing traditions and horizons of Eastern Mesoamerica. The so-called non elite rock art might be constituted in contrast by all schematic and geometric representations without detailed attributes.

Although Central American rock art probably doesn’t open an additional window into the earliest prehistory of mankind, it may complete the present knowledge toward the self perception of formative and early state societies. Besides, the hieroglyphic inscriptions of Classic Maya cave considerably increased the known prehistoric text fragments. Their analyses may support the decipherment of the whole corpus of Maya hieroglyphic signs. The figurative petroglyphs and pictographs of Gran Nicoya allude to the topics of the disappeared codices of the region. Moreover, in Central America open air rock art constitutes the most accessible testimony of prehistory. In Lower Central America it figures commonly among the most popular archaeological monuments too. Considering these sympathies, rock art documentation could constitute a key position in more general education campaigns.

4 Documentation & Known Sites: national inventories, systematic documentation and most prominent rock art sites:

Most Central American countries don’t have a national archaeological register or any particular register of rock art sites. The only exception is Costa Rica that possesses a central digital database of all reported archaeological sites, including all known rock art sites. In all other countries exist various archaeological inventories, handled by Ministries of Culture, National Museums or National Universities. In some cases anthropological associations or archaeological enterprises have their own registers. The existing inventories as well include documented rock art sites as places that are only reported by historic literature. Many of the latter ones cannot be revisited because of the lack of exact geographic details. Often there are no particular data sheets that could guide rock art documentation in the field. Regarding the initial state of archaeological investigation, even the most complete register could only provide a preliminary impression of the real number of all existing rock art sites.

Belize

The archaeological research reports are gathered by the Department of Anthropology, subordinated to the Ministry of Culture (Belmopan). Helmke et al. (2003: 97-117) mention 19 rock art sites, concentrated in the western Cayo District. All sites are in caves, 5 of them have pictographs (Actun Dzib, Roberto's Cave, Bladen 2, Actun Uayazba Kab, Actun Chapat). No single open air site was mentioned until today. The most prominent rock art site is the Actun Dzib Cave in the Toledo District (Helmke et al. 2003: 100, 114; Stone 1995: 91-94). It contains more than 75 drawings with black and brown outlines. The motifs are probably linked to the Late Postclassic (1530-1200 A.D.) and the Late Classic (900-600 A.D.) periods. The most important petroglyph sites are represented by the Petroglyph Cave and the Actun Uayazba Kab cave. Both are situated in the Cayo District. Alone the major panel of the latter site comprises more than 20 motifs. A particular category of analyses is formed by semi-modified speleothems and footprints, that were documented in the Actun Chapat cave (speleothems) and in the Actun Chek cave (footprints). Although some rock art sites of Belize belong to the Chiquibul National Park and to the Caracol Archaeological Reserve, none of the country's major rock art concentrations is included into these two areas.

Costa Rica

Künne (2003a: 59-63, 331-40; 2003b: 202) reports 171 rock art sites that are registered in a digital database at the National Museum of Costa Rica. They constitute 7% of all 2383 registered archaeological sites. 74 rock art sites are situated in the Central Highlands and in the Atlantic Watershed, 58 sites belong to the southern Diquís zone (figs. 4 and 5) and 39 sites form part of the north-west Gran Nicoya region. All together 81 sites are associated with datable archaeological deposits, mostly consisting of ceramics. 55 rock art sites (67,90%) are linked with the period between 1550-300 A.D. Hammett (1967) describes 71 sites from edited literature and oral information. According to her unpublished manuscript, only 4 sites had pictographs or painted petroglyphs. All rock paintings were located in the Gran Nicoya region (Stirling 1977: 47, 113-15). None of these representations survived natural destruction. A photographic documentation of the Diquís rock art (Gran Chiriquí) is kept by Künne. The most important sites in the country are Guayabo de Turrialba in the Central Highlands (table 6) and Pedregal on the slopes of the Orosí volcano (Gran Nicoya). In the southern Diquís region can be found some exceptional rocks with engraved scenic representations such as the rock of San Pedro (SJ-362/ SP-6), that was described by Richards et al. (1964: 139-45) and Künne (2003b: 210). The petroglyphs of Guayabo de Turrialba (UCR-43) are directly associated with monumental architecture, such as mounds, causeways and irrigation systems (Fonseca and Acuña 1986: 236-54). 90% of the 36 documented stones are linked to period VI (1450-1000 A.D.). A lot of unregistered petroglyphs can be found in the surroundings of Guayabo. The site represents the only archaeological monument of Costa Rica that is accessible to the public. The outstanding Pedregal site (G-540 Pd) comprises 465 engraved rocks. 90 boulders were documented by colour photos. The pictures are part of a report that was prepared for the National Museum of Costa Rica. The detailed, fine lined motifs of the Pedregal site show Mesoamerican images, such as the fire serpent, that are obviously connected to the Mixteca-Puebla-Horizon (1520-1200 A.D.). Similar topics appear also on the polychrome ceramics (1520-800 A.D.) of the Gran Nicoya region. The Pedregal site may constitute the most southern archaeological place that can be linked to the monumental iconography of Mexican Mesoamerica. Nevertheless, no settlement structures were found on the slopes of the Orosí volcano. The whole territory is part of the Area de Conservación Guanacaste that has constituted a World Heritage site since 1999. Yet erosion and weathering affect the almost invisible petroglyphs (fig. 7).

El Salvador

Archaeological research reports are kept in the National Museum David J. Guzmán in San Salvador. Coladan and Amaroli (2003: 143) believe there are approximately 100 rock art sites scattered throughout the whole country. In fact, they discuss 13 different places that can be completed by 3 additional sites published by Haberland (1954, 1956, 1959). All together 6 known sites have pictographs: the Gruta del Espíritu Santo, the Cueva del Toro, the Cueva de las Figuras (a rocky cliff), the Cueva de los Fierros (a rock shelter) and the Cueva de la Koquinca. They are all situated in the north-east Departments of Morazan and La Unión. In comparison, the Cueva del Ermitaño, that contains painted petroglyphs, can be found in the north-western mountains of the Chalatenango Department. A historic photographic documentation of 8 rock art sites, consisting of slides and black/white photos, is kept by Haberland. As well as Guatemala (Dos Pilas, Piedras Negras, Tikal, Yaxhá) and Honduras (Copán) El Salvador (Igualepeque, Tehuacán), has rock art sites that are associated with datable ancient urban centres. The most prominent rock art sites in the country are the Igualepeque peninsula (Department of Santa Ana) and the cave site Gruta del Espíritu Santo (Department Morazan). The stylized and geometric petroglyphs of Igualepeque (Lake Guija) were documented (but not published) by A. Stone in 1997. They are concentrated in the south-east portion of the peninsula that comprises around 250 decorated basaltic stones. The pecked boulders may be associated with an unexcavated archaeological site that is situated at the central summit of the peninsula. The cultural importance of the site is linked to the nearby Ixtepeque obsidian sources and its position puts it at the south-east frontier of Maya culture influence. The style of the deeply engraved petroglyphs indicates the Postclassic (1530-900 A.D.), Epiclassic (900-800 A.D.) or Late Classic (900-600 A.D.) periods. In comparison to the former site, the Gruta del Espíritu Santo represents a rock shelter that was decorated by petroglyphs and pictographs (paintings, positive and negative handprints). The represented motifs show anthropomorphic (fig. 2), zoomorphic and anthrozoomorphic figures. They appear as single representations or as iconographic groups. The paintings were executed in red, ochre, black and cream colours. Coladan and Amaroli (2003: 147) believe that the cream figures represent a younger iconographic layer. The particular importance of the site is linked to its unique style. Besides, Haberland claimed paleoindian obsidian artefacts. Nevertheless, Coladan also documented postclassic (1520-900 A.D.) and formative (250 A.D. – 1600 B.C.) ceramics. What kind of archaeological material is really connected with the rock art on the sites we do not know.

Guatemala

A. Stone (2003: 134) reports 60 rock art sites from Guatemala. 24 sites are scattered throughout the central highlands (Stone and Ericastilla 1999: 775-90), the other sites are situated in the northern lowlands. The highlands of Guatemala have only two painted caves (Bombil Pek and Cueva del Venado). In comparison the lowlands possess 19 decorated cave sites. The most prominent lowland sites are the eastern caves of the Poptún region. They comprise the Naj Tunich cave, the San Miguel cave, the Santo Domingo cave, Jobonche, Púsila, Jovelte, Jutería, Corosal and Poxte. Another important rock art region is the Cobanerita cave system that is situated in the south-west of Lake Itza. The zone includes the Cueva de las Pinturas, the Cueva Tecolote, the Cueva los Sapos and the Cueva los Monos (A. Stone 2003: 119-41). The extended cave system of the western Petexbatún region is under current investigation. Only the Naj Tunich cave has a direct AMS-date. Nevertheless, the documented archaeological deposits and paintings of the other caves also seem to indicate a Classic period (900-250 A.D.) site use. Three caves have hieroglyphic inscriptions. The corpus of Naj Tunich alone consists of 40 inscriptions (fig. 10), comprising circa 800 glyphs. The longest text is constituted by 64 hieroglyphs. Probably the analyzed inscriptions reflect

the Chol and Yucatec languages (A. Stone 1995: 99-233). The Cueva las Pinturas (Cobanerita cave system) has three polychrome hieroglyphic inscriptions (Brady 1997; Brady et al. 1997; Stone 2003: 126), the longest text includes 30 signs. Additional inscriptions were found in the Santo Domingo cave (Brady and Fahsen 1991: 52-55). Naj Tunich represents the most famous rock art site of Eastern Mesoamerica. The cave was discovered in 1979 and also includes rock art ceramics, fireplaces, graves and artificial terraces. Unfortunately, no part of the archaeological context is directly associated with rock art. The iconographic corpus of Naj Tunich comprises 94 panels, including 85 painted complexes. All motifs are constituted by black coloured outlines. The images represent ritual and mythic themes. They can be linked with the Late Classic (900-600 A.D.) period on the base of two calendar dates. Besides, 37 pictographs and 12 positive handprints were found. The represented emblem glyphs are connected with the urban centres of Sacul (fig. 10), Ixkun, Ixtutz and the site Q (Caracol?). Most of the detailed documentation was done by A. Stone (1995: 99-233) and Brady (1989, 1993: 141-49). A particular category of the rock art of Guatemala is formed by semi-modified speleothems. Similar representations were documented by Helmke et al. (2003: 97-117) in Belize. Brady (1999: 57-68), Siffre (1979: 163-65) and A. Stone (2003: 125) report speleothems from Pusilá, Jovelte, Jutería, Corosal and Poxte. All sites constitute petroglyph caves. The Bombil Pec cave (Alta Verpaz Department) is situated in the highlands of Guatemala. Its black-lined drawings show five animals that allude to the two hero twins of the Popol Vuh (A. Stone 1995: 96). One of the most numerous concentrations of Central American pictographs is situated at the Casa de las Golondrinas site in the western highlands (Valley of Antigua). The rocky cliff harbours more than 100 red painted, but heavily weathered motifs (Robinson and Ware 2001). One sign shows an Aztec calendar glyph (Robinson 1997: 59-70) indicating thus the use of the site during the Late Postclassic (1530-1200 A.D.) period. Minor rock art sites are spread around the shores of the Amatitlan and Atitlan Lakes. They include the El Diablo Rojo site, Monte Sión and Los Mejicanos. Another prominent rock art site is formed by the three painted Chiquimula rock shelters in the eastern highlands (Batres et al. (1997: 2-23, 1998: 499-511, 1999: 791-805). Their most complex panel shows 35 motifs, executed in red, black and green. Until today the site cannot be linked to a particular horizon, tradition or culture. The painted rock of Ayarza (Santa Rosa Department) represents at least 13 motifs that correspond to the Late Mixteca-Puebla-Horizon (A. Stone 2003: 131; Navarrete 1996: 322). The most important petroglyph site of the eastern highlands is Los Fierros, situated in the south-west of Comapa (Jutiapa Department). Its principal panels are extended along a rocky cliff, that follows the banks of the La Paz river. The almost inaccessible site possesses abstract petroglyphs that stylistically cannot be connected with other rock art representations in Guatemala (Walters 1982).

Honduras

All archaeological information is kept by the Department of Archaeology that forms part of the Honduran Institute of Anthropology and History (IHAN). Between 1993 and 1995 the Department of Archaeology realized the first systematic rock art documentation in the history of Honduras. The visited 21 rock art sites were documented by photos, drawings and sketches. Until 1995 all together 49 rock art sites have been registered. They are scattered throughout the whole country, only the rock art of the western Ocotepeque Department is unknown. 37 rock art sites have petroglyphs, 12 possess pictographs and an unknown number has painted petroglyphs (McKittrick 2003: 166; Murray and Valencia 1996: 186). Although the former project coordinator, McKittrick, published 13 sites (2003: 163-81), only 5 places were discussed more in detail. In 1994 and 1996 Brady et al. (1995, 2000) investigated a series of limestone caves surrounding the Río Talgua river (Olancho Department). The Talgua cave and the Cueva de las Arañas contain simple black and red line drawings. Besides, the Talgua

cave shows two frontal faces (Stone and Künne 2003: 203, fig. 9). The documented rock art may be exceptionally old because of the associated deposits. A preliminary evaluation of 5 Honduranian rock art sites was realized by Podestá in 2004 (Podestá 2005, pers. comm.). Considering that probably a lot of Honduranian rock art is still undiscovered, the most prominent sites in the country may be the Ayasta, Cueva Pintada, Sta. Rosa de Tenampua and Yaguacire sites. The Ayasta and Yaguacire rock shelters are situated near Tegucigalpa. The former site has mainly petroglyphs associated with some singular and heavily eroded pictographs. The engravings represent anthropomorphic and zoomorphic figures that may be superimposed in limited areas (McKittrick 2003: 166). The Yaguacire site consists of three different rock shelters decorated with white, red and orange paintings. They show zoomorphic and anthropomorphic motifs that may be grouped together. Other paintings represent handprints and genitals. Two test pits were made, but the documented material is not analyzed yet. The Cueva Pintada (La Paz Department) seems to be the most complex rock art site of Honduras. Its exceptional paintings and engravings are organized in 7 different panels (McKittrick 2003: 170-73) that may be divided into additional subgroups. Most pictographs were executed in white or ochre, others are coloured in red, blue and black. The iconographic corpus includes anthropomorphic, zoomorphic and geometric motifs. The geometric images comprise U- and V-motifs and ladder-like representations. The anthropomorphic and zoomorphic figures may be realistic or stylized. Some paintings combine different perspectives. Besides, negative handprints and genitals were represented. The superimposition of many figures and the broad variety of styles and colours suggest a continuous use during different periods. McKittrick observed that the style of the Cueva Pintada is similar to other rock art sites of the central region (Picila site). She believes that the Misumalpan-speaking populations (Lenca) of the colonial sources might have manufactured the documented paintings (2003: 173). Also the petroglyphs of Santa Rosa de Tenampua (Comayagua Department) show zoomorphic, anthropomorphic and geometric motifs. One representation is clearly a plumed serpent that alludes to the horizon of white slipped polychrome ceramics (1520-800 A.D.). Reyes Mazzoni compares this motif with a similar rock painting at the rock shelters of Sta. Elena de Azaculpa. Besides, the same theme can be found as a relief in Copan (altar O) and in Chichen Itza (Reyes Mazzoni 1976a, b). Two additional important rock art sites are represented by the El Gigante rock shelter (La Paz Department) and by the Oropoli petroglyphs (El Paraiso Department). The looted El Gigante rock shelter represents one of the scarce paleoindian and archaic sites in Central America. Although under current investigation by Scheffler, there is no direct AMS date of its positive and negative handprints. The Oropoli site consists of different volcanic cliffs, situated on both banks of the Oropoli river. Its anthropomorphic and zoomorphic petroglyphs are organized in various dense panels that are separated by natural fractures and cracks. Although only some figures were executed in fine line technique, all motifs represent the same style. McKittrick believes that the whole corpus was executed by one group of artists (2003: 174). The petroglyphs of the northern region are discussed by Reyes Mazzoni (1976c: 293-94) and by McKittrick (2003: 175-76). The former author mentions engraved rocks at the Río Plátano river that are included in the World Heritage in Danger List with the same name.

Nicaragua

The archaeological register of Nicaragua consists of data sheets and research reports that are kept by the National Museum. The whole inventory describes around 400 archaeological sites including 104 rock art places. Most sites have deeply engraved geometric or stylized petroglyphs. Only 6 rock art sites are decorated with pictographs: the El Tigre Cave (Bosawas), the Icalupe rock shelter (Somoto), the Montelimar cave (San Andrés), the Los Sanchez cave (Los Duendes), the Los Negros cave and the Laguna Asososca (Lago Nejapa).

The Montelimar cave, the Los Sanches cave and the Icalupe rock shelter also have painted petroglyphs. The polychrome representations of the Icalupe and the El Tigre sites are well preserved. In comparison the rock paintings of the Laguna Asososca (Squier 1851-52) have almost disappeared. In 1996 Navarro published the data sheets of 12 rock art sites that are scattered throughout the Pacific Managua, Masaya and Carazo Departments. Besides, his documentation includes 15 rock art sites of the Zapatera and El Muerto islands. However, the best investigated rock art of Nicaragua is situated at Ometepe. The island belongs as well as Zapatera and El Muerto to the Lake of Nicaragua (Lago Cocibolca, table 6). Its fertile soils probably attracted early agricultural populations in the past. Actually, the oldest ceramics of Central America, north of the Monagrillo site (Panama), were found in Los Angeles (Om-9). Since 1995 Baker mapped and documented 73 different rock art sites (fig. 8), that are scattered throughout the Maderas peninsula. Her detailed materials consist in digitized photos and drawings that include 1400 boulders with more than 1700 iconographic panels (Baker 1995-2002, 1996, 1997, 2000). The complete documentation is kept by the National Museum of Nicaragua. A historic collection of photos is owned by Haberland and by the Anthropological Museum of Hamburg. An additional photographic documentation, including some petroglyph sites of the Zapatera and El Muerto islands was established by Künne and Lettow. The El Muerto island (Navarro 1996: 89-90; Thornquist 1981) has probably the densest concentration of Lower Central American petroglyphs. They comprise at least 127 single motifs (fig. 11) that are located at a tremendous volcanic rock platform (IV-Z-10), from which the whole island can be seen. The culture sequence of El Muerto dates back to 500 B.C. Whereas the rock art of Ometepe is under systematic investigation, the petroglyphs of Zapatera (Navarro 1996: 81-88) are almost un-documented (fig. 9). The Sonzapote (IV-Z-1-3) and the Punta Las Figuras (IV-Z-1-2) sites consist in ancient cemeteries that are constituted by several burial mounds. Their monumental stone sculpture was already described by Squier (1851-52) and by Bovallius (1886). Some figurative motifs (figs. 8 and 10) of the Gran Nicoya region can be dated by style to the Late (1520-1350 A.D.) and Middle Polychrome (1350-800 A.D.) periods. They may be linked to the Mangué-, Nahua- and Maribio-speaking populations of the early historic sources. Laurencich Minelli et al. investigated 23 rock art sites of the Solentiname Archipelago that is situated in the eastern parts of the Nicaragua Lake (Lago Cocibolca). The reported sites belong to the Mancarrón, Mancarroncito, La Venada, Atravesada, Elvis Chaverria, and El Plato islands. All sites have petroglyphs, no pictographs are mentioned (Laurencich Minelli et al. 1996, 2000). Unfortunately, the historic photos of Matillo Vila (1965, 1968, 1973) have completely disappeared. He describes 26 rock art sites, concentrated in the Pacific and northern regions of Nicaragua. Since 2001 the SINSLANI archaeological project documented 57 boulders (with 211 panels) of the northern Estelí Department. The rocks and stones are scattered throughout the valleys of the Estelí, La Trinidad, Los Quesos and Pueblo Nuevo rivers. However, some of the documented stones were relocated in the past. The published documentation consists of sketches and photos (Gámez Montenegro y Cruz Cruz 2004). At the La Trinidad site a systematic excavation was established in 2006 (Koschmieder 2006, pers. comm.). The almost unknown Icalupe site is situated in the Madriz Department (Baker 2003: 189, fig. 71; Espinoza 2005, pers. comm.). Its motifs show anthropomorphic and zoomorphic paintings that were executed in red and blue colours. Some images are covered by a second layer of petroglyphs. Also the Atlantic El Tigre cave has two different iconographic layers. They show positive and negative handprints as well as geometric motifs (Kaufman 2005, pers. comm.). The site forms part of the Bosawas Biosphere Reserve (Región Autónoma del Atlántico Norte), that constitutes the largest remaining forest in Central America (table 6).

Panama

There is no national archaeological register in Panama. The two existing private archaeological enterprises have their own sites inventories. In the past most archaeological research was realized by Linares (Western Region) and Cooke (Central Region). The former anthropologist was affiliated with the University of Panama, the latter one with the Smithsonian Tropical Research Institute. Künne (2003b: 224) reports 63 rock art sites, that are scattered throughout the whole country: 31 sites are situated in the Western Region (Grand Chiriquí), 27 sites belong to the Central Region (Grand Coclé) and 5 sites are mentioned from the almost unknown East Region (Grand Darién). Many sites have deeply engraved petroglyphs that represent abstract or stylized forms. Neither pictographs nor decorated caves are reported. In the late 50' Harte (1960, 1961) documented 48 rock art sites that belong to the Western and Central Regions. Besides, he wrote 155 site index cards that contain rudimentary archaeological information (Harte 1952-59). Now his photographic documentation is deposited in the archive of the Fundación Gallegos in David. Künne (2003a) established a digital database that contains information about 10 revisited rock art sites of the Western Region (Gran Chiriquí). However, most Panamanian rock art lacks any documentation. Although the registered petroglyphs seem to belong to the Chiriquí (1520-800 A.D.) period, nearly nothing is known about their contexts. The earliest published (Seemann 1853) petroglyphs are located in Caldera (Western Region). The Piedra Pintada constitutes a grown basaltic rock with a length of 11m, a width of 6m and a height of 2,80m. Whereas its upper surface is covered with geometric motifs, the south-west side of the same rock exclusively shows figurative images. They represent zoomorphic masks, an anthropomorphic face and some lizards. The unique style of the petroglyphs was only repeated in Sta. Cruz (Diquís) and Palo Verde (Central Region). The Piedra Pintada is associated with the banks of the Caldera river and the nearby hot springs (Harte 1960; Holmberg 2005: 190-211; Künne 2003c: 226). The Remedios, Bongo de Cuchillas, Gualaca and Barriles petroglyphs form part of burial grounds. Whereas the Barriles, Gualaca and Remedios sites have been looted in part, the mounds of Bongo de Cuchillas are almost undisturbed. The Barriles petroglyphs pertain to an early political centre that comprised settlement mounds and monumental sculpture. Two AMS dates indicate the sites use during the Chiriquí (1550-1000 A.D.) and the Bugaba (600-200 A.D.) phases (Künne et al. 2005). Unpublished AMS dates exist for an ancient burial ground (Kotowa site) in the Boquete area, that is associated with 25 engraved boulders (Holmberg 2005, pers. comm.; 2005: 190-211). A dozen additional petroglyph sites are concentrated in the upper Chiriquí valley that formed a prehistoric migration route. Although Linares and Ranere (1980) realized systematic surveys and stratigraphic excavations, the investigation of rock art never took place. Other petroglyphs were documented in Quebrada de Piedras (Western Region), Soná, Ocu, Calobre, La Pintada and Bejuco (Central Region). The engravings of Quebrada de Piedra (Base Naval) show realistic zoomorphic and anthropomorphic figures, that cover three flat rocks. The rock art sites of the Azuero peninsula have to be revisited completely.

5 Legislation and institutional frameworks:

Legislation

In Central America rock art documentation is understood as part of archaeology. Nevertheless, only Costa Rica (University of Costa Rica) and Nicaragua (National University of Nicaragua) offer particular archaeological careers at universities. Often archaeology is included in anthropological formation. In order to prevent the uncontrolled destruction of the national cultural heritage every kind of archaeological activity is arranged by political constitutions and legislation. Generally spoken, Central American laws pronounce the state's monopoly in

decision making about all subterranean, terrestrial and marine resources that might be of national interest. The adequate legislations are commonly cited as Laws of the Protection of National Cultural Heritage (table 3). Nevertheless, often there is no particular legislation referring to rock art sites. In most countries rock art has to be declared a National Monument in order to get public attention and formal protection. However, the funding is often minimal. Panama is the only Central American nation that passed a particular law (Law no. 17, passed at 10th April in 2002), protecting all rock art sites (Künne 2000: 15-16). Its article 2 proclaims: “All images that our ancestors engraved in stone during the pre-Columbian era, are declared a Historic National Monument, in every part of the nation’s territory.” Nevertheless, the destruction of rock art usually does not have any consequences, in spite of the best intended legislative efforts. Some rock art sites are protected by their inclusion within natural reserves, National Parks (table 4) or World Heritage Sites (table 5). The protection and administration of National Monuments and National Parks is arranged by detailed regulations, decrees and laws (URL: <http://www.ccad.ws:9010/legislacion/>). Some National Parks may be World Heritage Sites as well (Archaeological Park of the Ruins of Copan, Tikal National Park). In Nicaragua, Costa Rica and Panama there are also indigenous territories including rock art sites (table 7). All indigenous territories have limited rights referring to political self-administration and resource management. Their application is arranged by the “Indigenous Law” of the appropriate Central American nation and by the “Convention No. 169 concerning Indigenous and Tribal Peoples in Independent Countries.”

Institutional frameworks

Every systematic rock art documentation should be announced to the competent national institutions. Often they are represented by the National Archaeological Commissions (table 3), that commonly belong to the National Museums. The latter ones are subordinated to the Departments of National Cultural Heritage that form part of the Ministries of Culture. Applications for rock art documentation should include a detailed task and time schedule, a short description of the applied methodology, information about the documentation team and the extent of funding. Often there are ready blanks that have to be filled in. Because most rock art sites are private properties, some countries (Nicaragua) expect a written agreement of the sites owner with the intended project. Others ignore the owners’ will, pronouncing the state’s sole claim to archaeological monuments and subterranean resources. Commonly foreign funding and the participation of at least one national archaeologist in the requested project are expected. In some countries (Costa Rica) the project leader has to join the national register of archaeologists. Registration may be gratis (Costa Rica) or subjected to fees (Guatemala). When the project is finished a preliminary report is expected within one month. A second more elaborate report should be prepared within half a year. The whole documentation (photos, drawings, sketches) remains the property of the project leader. All excavated materials have to stay in Central America, preserved by Ministries of Culture, National Museums or National Universities. In some countries (Guatemala) a second, often less complicate but not less legal way of projects request is accepted. The team leader has to enter the National University, Department of Anthropology. Commonly the fees of inscription are lower than national registration rates. Besides, an inscription in the registers of archaeologists is not obligatory. If the project leader is accepted by the university, the request for documentation or excavation projects has to be addressed to the director of the National University. This way of application is commonly preferred, if a long-term investigation is planned. Every activity in National Parks has also to be announced to the park administration. Park management may be handled by governmental or non-governmental agencies, authorized by state Ministries of Environment and Natural Resources: Instituto Nacional de Recursos Naturales Renovables (INRENARE) in Panama, Ministerio de Ambiente y

Recursos Nacionales (MARENA) in Nicaragua or Comisión Nacional del Medio Ambiente (CONAMA) in Guatemala (table 4). Research programs in indigenous territories should be coordinated with the accepted representatives of the ethnic group. Often there is a double political structure: non governmental associations compete with corporative organizations that are more linked with the central states “National Commissions for Indigenous Affairs” than with the represented populations.

In Central America anthropology and archaeology are often seen in political terms. Contrary to Western Europe, the underlying ideology of nation building is not citizenship but culture. In this way most social questions are discussed in cultural terms. Also rock art documentation might appear within this frame. The only exception to this pattern may be Costa Rica because of its different traditions of constructing identity. In the whole of Central America, rock art is not only understood as heritage of “our indigenous ancestors”, but also as spectacular phenomenon of landscape. During the last 15 years an extensive and very differentiated system of natural parks was established. They may comprise Areas, Reserves, Regional Parks, National Parks or World Heritage Parks. Often a core area, an area of limited access and an area of sustainable utilization are known. Sometimes private areas are included within the park system (Area de Conservación Guanacaste). Most National Parks work with limited state funding and international support. Often regular evaluations are intended. Unfortunately, neither the Cobanerita cave system nor the caves in the surroundings of Poptún (Guatemala) are included in the National Parks system. Some Central American parks offer laboratories for systematic research. Others are reserved for scientific investigation only (Bladen National Reserve). Besides, six of seven Central American countries have national ICOMOS committees, linked with ICOMOS international and UNESCO. Only Belize is missing. Whereas the Panamanian committee is more oriented toward the restoration of mediaeval town centres and fortresses, the Committee of Honduras was very engaged in prehistoric archaeology too.

Threats

Existing laws and institutional frames are often ignored in reality. In most cases also, rock art protection remains a problem on executive, educational and practical levels. Many rock art sites are legally protected in name only. One of the most tragic cases was the destruction of 23 exquisite Classic Maya paintings (fig. 10) from the Naj Tunich cave (Guatemala) in 1989 (Brady 1990: 4-5; Stone 1995: 111, fig. 5-20). Although the government had provided guards in order to protect the cave, they were poorly trained and supervised. Additionally, many site guards are not well paid (Nancito in Panama). Although Guatemala has a lot of attractive rock art sites, neither caves nor open air places are protected in particular. Probably the management of the famous urban centres of the “Maya” cultures appears much more important for tourism industry. Considering that Guatemala has only two archaeological sites (Tikal and Quirigua), administrated by professional archaeologists, one might think that many monuments are exploited without securing the sites continuity by the investment of even minimal funds. Other rock art places are endangered by the construction of hydroelectric dams that are planned within the Plan Puebla-Panama. The Boruca dam (Costa Rica), that constitutes the major Central American hydroelectric project, will alone inundate at least 11 rock art sites in the General Valley (Blanco and Küne 2000: 20-24).

Many open air sites are affected by natural erosion and weathering as well as by destructive social practices. Intensive urbanization, deforestation and the extension of agricultural zones threaten not only biodiversity but also rock art. During the last 50 years most of Central American forests were replaced by extensive pastures or fields. In result erosion and

weathering are one of the most destructive factors in the present. Most open air rock art is no longer covered with soil or vegetation. The lack of shadow allows extreme climatic differences that provoke fractures, cracks, fissures, exfoliation or bleaching. Often petroglyphs and pictographs that outlived several centuries seem to disappear within a dozen years. On the other hand, many “Maya” cave paintings are well preserved by nature. The selected caves are not affected by floodwaters. All decorated places consist in dry limestone walls that are covered by a thin layer of silt. Often coarse surfaces, that allow a good adherence of colour, were preferred by “Maya” artists. Besides, most caves of Yucatan (Belize) benefit from the semi-arid climate in the peninsula. Nevertheless, slash and burn agriculture as practiced in the Maya Mountains (Belize and Guatemala) may completely denude the landscape of vegetation in the future. Its loss would provoke the disappearance of the thin layer of soil that covers the karstic underground. In effect much more water could penetrate the caves roof, dissolving in this way the limestone silt on the wall and washing the rock paintings away. Lighting of the caves could produce the growth of algae as is the case in commercially used caves. Nevertheless, human generated carbon dioxide and bacterial damage should not be a problem. The size of most caves would preclude visitation in numbers that could cause an adverse impact (A. Stone 1995: 243-52).

Traditionally there is no strong consciousness of preserving history in Central America. Natural catastrophes (Hurricane Mitch), long periods of civil war (Guatemala, El Salvador, Nicaragua) and very limited financial resources (Nicaragua) prevented an active and effective management of historic and archaeological sites in the past. In this way the complex Oropoli site (Honduras) was heavily damaged by Hurricane Mitch (McKittrick, pers. comm. 2004). The Gruta del Espíritu Santo (El Salvador) probably served as camp for militaries or guerrillas during the Civil War period (Coladan, 2002, pers. comm.). On an individual level the exploitation of archaeological objects is often understood as part of sustenance. Rock art is affected by these attitudes in a direct and indirect manner. Looting rock art sites (El Gigante Cave) is very common because most people believe in hidden treasures. Movable petroglyphs are often sold (Costa Rica) or transported toward town halls, central parks (Estelí, Nicaragua) or museums (Lake Guija petroglyphs). Additionally, rock engravings are commonly scratched, chalked or painted (Caldera). Even well intended school teachers or state representatives painted petroglyphs in the recent past (Panama). Some sites (Ayasta site, Yaguacire site) serve for depositing treasure (Podestá 2004, pers. comm.). Often private landowners are afraid of expropriation, if their rock art should get additional attention (San Pedro, Costa Rica). The inhabitants of Nancito (Panama) eliminated all the engraved rocks of their territories when they learnt that anthropologists intended to establish a local Rock Art Park (figs. 3 and 6). Besides, communal or private rock art museums often tell fantastic stories about a completely imagined prehistory. Commonly there are no lectures about rock art at schools or universities. The lectures of Whitley (2004 at the San Carlos University) and Künne (2001 at the Autonomous National University of Chiriquí) are notable exceptions.

6 Rock art and indigenous groups:

Central American rock art is the product of its indigenous populations. In Eastern Mesoamerica they represent a considerable part of the present nations’ citizens (40% in Guatemala, 11% in Belize, 10% in El Salvador, 7% Honduras). In contrast, the native groups of Lower Central America constitute not only a social but also a numerical weak minority (3% in Nicaragua, 2% in Costa Rica, but 8% in Panama). Nevertheless, rock art cannot be linked directly to the present ethnic groups. The social organisation of ancient indigenous populations changed completely in the past. Not a single identity group survived European

conquest. Otherwise there are a lot of native language groups that might be connected directly with rock art. Sometimes their members preserve particular concepts of symbolic or functional interpretation. The bribri- and cabécar-speaking groups of southern Costa Rica integrate stone sculptures, semi-sculptured rocks and characteristic natural formations within the same category of classification. Besides, they don't distinguish between natural marks and culturally produced ones. For them, the iconographic potential of the modified rocks seems to be more important than the origin of the decoration. Often the mobile or immobile character of the images doesn't make a significant difference of definition (Künne 2003a: 6f., 106-16). Most probably rock art is understood as a complex icon combining natural and cultural features. The Q'eqchi' of Guatemala interpret decorated (Naj Tunich) as well as undecorated (Qawa Xucaneb) caves as entries to mythic underworlds. Rocky formations play an important role within their "sacred" geography. Some caves are included in an elaborate system of pilgrimages, ritual ceremonies and offerings. The activities exercised are oriented towards the traditional agricultural calendar or the individual life cycle (Adams and Brady 2005: 301-27; Brady 2000: 296-307). In this way many indigenous communities handle rock art as an integral part of their present social relations that are constructed by means of given natural characteristics. Although in Central America no vivid tradition of rock art manufacture continues, there is a tremendous treasure of syncretistic beliefs and popular legends that refer to ancient rock paintings and engravings.

7 Active site management:

During the past 15 years, a new, engaged and well trained generation of Central American anthropologists and archaeologists overtook responsible positions within the administration of Cultural Heritage. In the present there exist more national research, conservation and management projects than ever before. Nevertheless, most systematic investigation continues to be done by foreign scientists. In some cases their activities, sustained by national administrations of culture, stimulated the creation of rock art parks at a communal level. Funding is often minimal or non existent. Often rock art is seen as a tourist magnet. The consequences are diverse:

- The Nancito site (Panama) was in part destroyed by the relocation of many engraved rocks. Nevertheless, anthropologist activity provoked the creation of a scientific Rock Art Museum in 2002 (figs. 3 and 6). It should form part of a national network of communal museums. However, the community does not participate in the benefits except of two low-paid half time jobs.

- The "Foundation Barú" (Panama), a non-governmental and non-profit organization, offers rock art tours of petroglyph sites in the Chiriquí province. The program is sustained by the "Chamber of Commerce" and "Piedras Vivas." In consequence of the rock art lecture, held by Künne at the UNACHI University in 2001, the "Foundation Peterson" offered the payment of one complete archaeological course in the United States. However, the best student was a woman who was not allowed to leave Panama by her family.

- The archaeologist Brizuela (Arqueología S.A.) got some funding from SENACYT (Secretaría Nacional de Ciencia y Tecnología) to realize a pilot project about rock art conservation in the western highlands of the Chiriquí province (Panama). The project included the cooperation with local schools and the recording of sites in a database. Another fund was given by PRONAT (Programa Nacional de Adjudicación de Tierras) for the identification of archaeological sites (and rock art sites) within territorial studies.

- At the beginning of the 90' the Colleges of the Midwest (USA) realized various rock art surveys in the General Valley (Costa Rica). All projects were supervised by a national archaeologist (Aida Blanco). In effect, limited site management was established at Finca Sonador (fig. 5). Traditional forms of protection are used. The community benefits directly from the interest tourists, offering guides and bed and breakfast. Nevertheless, the establishment of a visitor circuit failed.

- The Guayabo site (Costa Rica) has an active management practiced by professional archaeologists. The site constitutes the main archaeological attraction of Costa Rica and is visited by many tourists every year. Although most petroglyphs of the core sectors were removed from their original position, there are undisturbed petroglyph concentrations in the surroundings. Only a small part of the museum benefits are reinvested to the site.

- In 1993 the establishment of a Rock Art Park at the Pedregal site (Costa Rica) failed. The pre-study was done by Hardy and Vázquez (1993). All rocks (fig. 7) were registered and marked by little red labels located in their vicinity. Since 1999, the complete zone has been included in the World Heritage Site "Area de Conservación Guanacaste." Research possibilities are offered at the Casona de Sta. Rosa (central administration) and at the Maritza station. The zone has a very active management and multiple research programs.

- The Sonzapote site (Nicaragua) is situated within the National Park of Zapatera Island. Nevertheless, there is almost no funding. Petroglyphs (fig. 9) are included in a pre-Columbian cemetery that is well known for the famous stone sculptures exhibited in Granada (Squier 1851-52). The archaeological core area was settled and in part destroyed by civil war refugees who have no other place to stay. There is no drinking water on the island. The rights of property are unclear. Nevertheless, a local tourist program is offered in Granada. Site protection and monitoring are wished for by the inhabitants and their organization (Unión Agua y Tierra). Monitoring has to be realized urgently before the site will disappear.

- The "Finca Magdalena" (Cooperativa Carlos Díaz Cajina) offers allocation, nutrition and guides to the petroglyphs of the Ometepe island (Nicaragua). It represents an agrarian tourist project with site management (fig. 8). There is no state funding. Additional assistance is wished for and necessary. Nowadays, Ometepe represents the main tourist attraction of Nicaragua. The island archaeological resources have been heavily looted.

- The Chaquíttilo site (Department of Matagalpa, Nicaragua) is included in a program of communal development. Almost all petroglyphs were chalked to heighten their visibility.

In the past, rock art documentation, registration or analyses was promoted by:

- Colleges of the Midwest:
General Valley in Costa Rica
- Commission des Fouilles du Ministère des Affaires Étrangères:
Gruta de Espíritu Santo in El Salvador, Rock art site El Encanto in Costa Rica
- Deutscher Akademischer Austauschdienst (DAAD):
Chiriquí Province in Panama, General Valley in Costa Rica
- Deutsche Forschungsgemeinschaft (DFG):
Ometepe in Nicaragua

- Foundation for the Advancement of Mesoamerican Studies (FAMSI):
 - Lago Guija in El Salvador
 - Casa de las Golondrinas in Guatemala
- National Geographic Society:
 - Petexbatún region in Guatemala
- Swedish International Development Agency (SIDA):
 - Guayabo de Turrialba in Costa Rica
- Smithsonian Institution:
 - Province Guanacaste in Costa Rica
- Viking Fund:
 - no example available

Most rock art study was carried out in Eastern Mesoamerica. Nevertheless, in comparison with the European cave art corpus (275 painted caves according to Bahn and Vertut 1988: 191) “Maya cave art” is characterized by its rare occurrence. The rock art of Lower Central America was less documented. However, there is a great potential of rock art investigation. Lacking archaeological sites with monumental architecture, most countries offer undisturbed natural refuges with a high tourist potential that may be completed by rock art museums.

8 Conclusions

Although Central America is characterized by strong social contrasts, there are small but prosperous elites that might participate in funding rock art projects.

Potential of rock art protection:

- offering an endogen perspective of Central American prehistory
- assistance in decipherment of the hieroglyphic corpus of Maya inscriptions
- strengthening national and communal identities
- promotion of agrarian and sustainable tourism on national and international levels
- argument for the sustainable use of natural resources (restricting in this way the effects of an aggressive dehydration of the landscape)

Main risks to rock art protection:

- destruction of rock art sites by mass tourism (cave sites) and failing management concepts
- short and middle term funding may produce destructive effects after the end of funding (more recommendation, more funding, more publicity, more destruction)

The main obstacles to rock art protection are:

- the fragility of rock art
- the ongoing deforestation and traditional agriculture
- the poverty and illiteracy of a high percentage of national population
- a limited consciousness of rock art preservation
- the scarcity of national financial resources
- no payment of duties (that could be attributed to Cultural Heritage) and the uncontrolled enrichment in the low national financial resources (Nicaragua)
- the limited profit margin of agrarian rock art tourism

- the strong centralization of Central American states threatens the communal participation in the benefits of rock art parks
- the lack in systematic documentation and comparative analyses
- the scarcity or non existence of management plans

In order to prevent further destruction of rock art one might suggest the following measures:

- application of existing laws and decrees
- regular monitoring of rock art sites, that are protected by law
- establishment of long term documentation, preservation and funding programs
- involvement of local communities in the benefits of rock art protection
- establishment of at least one rock art park in every Central American country
- divulgation of management experiences from the United States of America
- regular education programs at schools and universities
- establishment of digital rock art registers at National Museums
- closing of public entries to decorated caves and grottos
- cleaning of vandalized rock art sites
- establishment of well trained and well paid guards at important rock art sites
- application of cheap, traditional and sustainable strategies of open air site protection
- establishment of circuits and information boards
- inclusion of important rock art sites in the natural park system
- development of alternative economic strategies (sustainable tourism) as a compensation for the end to slash and burn agriculture.

See illustrations Annexe IV: page 217

Table 1: Archaeological chronologies

Eastern Mesoamerica	Main archaeological (and historical) sites	Lower Central America	Main archaeological (and historical) sites
Late Postclassic (1530-1200 A.D.)	Mixco Viejo, Iximché, Utatlán, Zaculeu, Tayasal, (Naco)	Period VI (1520-1000 A.D.)	(Tecoatega, Couto, Parita)
Early Postclassic (1200-900 A.D.)	Cihuatán	Period V (1000-500 A.D.)	Quelepa, Tenampua Conte site, Guayabo Barriles
Epiclassic (900-800 A.D.)	Tikal, Quirigua		
Late Classic (800-600 A.D.)	Tikal, Dos Pilas, Copán, Quirigua, Tazumal (Chalchuapa)		
Early Classic (600-250 A.D.)	Tikal, Copan, Cara Sucia, Cerén	Period IV (500 A.D. -1000 B.C.)	Cerro Zapote (1000 A.D. - 300 B.C.) Playa de los Muertos (300-600 B.C.)
Late Formative (250 A.D. - 300 B.C.)	Kaminaljuyú, Abaj Takalik, El Baúl (Cotzumalhuapa), Sta. Leticia, Nakbe		
Middle Formative (300-900 B.C.)	El Trapiche (Chalchuapa), Yarumela		
Early Formative (900-1600 B.C.)	Cuello (1200 B.C.?) [Chiapas]: Altamira and Ocos (1600 B.C.)	Period III (1000-4000 B.C.)	La Rama (1500 B.C.?) Monagrillo (2800 B.C.?) Boquete, Esperanza (4000 B.C.?)
Late Archaic (1600-2000 B.C.)	Quiché Valley [Chiapas]: Sta. Marta Cave		
Middle Archaic (2000-5000 B.C.)	 Los Tapiales (app. 5000 a.C.?)		
Early Archaic (5000-8000 B.C.)	San Rafael (app. 5000 a.C.?) Orange Walk (8000 B.C.?)	Período II (4000-8000 B.C.)	Acahualinca (4000 B.C.?) Cerro Mangote (4858 B.C.)
Paleoindian (8000- ? B.C.)	 Los Grifos [Chiapas] (11.000 B.C.?)	Período I (8000- ? B.C.)	Espíritu Santo Cave (?) El Gigante rock shelter (11.000 B.C.?) Guardiria and Isla Macapala (11.000 a.C.?)

Table 2: Periods, wares, horizons and traditions

Eastern Mesoamerica	Wares, horizons and traditions	Lower Central America	Wares and horizons
Late Postclassic (1530-1200 A.D.)	Mixteca-Puebla-Tradition Fine Orange Ware	Period VI (1520-1000 A.D.)	Creme Sliped Polychrome Horizon (1520-800 A.D.)
Early Postclassic (1200-900 A.D.)	Plumbat Ware	Period V (1000-500 A.D.)	
Epiclassic (900-800 A.D.)	Cotzumalhuapa-Tradition (900-500 A.D.)		
Late Classic (800-600 A.D.)	Ulua-Yojoa-Polichrome Wares (800-500 A.D.),		Early Polichrome Wares (800-500 A.D.)
Early Classic (600-250 A.D.)	Classic-Maya-Horizon	Período IV (500 A.D. -1000 B.C.)	Zoned Bichrome Horizon (500 A.D. – 500 B.C.)
Late Formative (250 A.D. -300 B.C.)	Usulután Wares (300 A.D. - 900 B.C.) Izapa-Tradition (200 A.D. - 400 B.C.)		
Middle Formative (300-900 B.C.)	Olmec-Horizon (300-1200 B.C.)		
Early Formative (900-1600 B.C.)	Monochrome Wares: Swasey and Xe Complex (600-1000 B.C.) Monochrome Wares: Ocos Complex (1200-1500 B.C.)		
Late Archaic (1600-2000 B.C.)		Período III (1000-4000 B.C.)	Monochrome Wares: Monagrillo Complex (1000-2800 B.C.)
Middle Archaic (2000-5000 B.C.)			

Table 3: Legislation and National Archaeological Commissions

Country	Legal base of rock art documentation	National Archaeological Commissions	Contact
Belize		Ministry of Culture, Department of Archaeology	Dr. Jaime Awe jaimeawe@nichbelize.org
Costa Rica	Article 140 of the Political Constitution Law no. 6703, passed at 28 th December in 1981	Museo Nacional de Costa Rica (MNCR), Comisión Arqueológica Nacional (CAR), Apartado: 749-1000, San José	Dr. Francisco Corrales fcorrales@hotmail.com
El Salvador		Ministerio de Cultura y Comunicaciones, Consejo Nacional para la Arte y Cultura (CONCULTURA), Dirección Nacional de Patrimonio Cultural, Alameda Juan Pablo II y Calle Guadalupe, edificio A-5, San Salvador	
Guatemala		Departamento de Monumentos Prehistóricos, Comisión Arqueológica Nacional, Avenida 2 y Calle 11, Zona 1 Ciudad de Guatemala	
Honduras	Decree no. 220-97, passed in 1997 (Decree no. 81-84, passed at 21 st May in 1984)	Instituto Hondureño de Antropología e Historia (IHAI), Departamento de Antropología, Villa Roy, Barrio Buenos Aires, Tegucigalpa, Apartado 1518	Dra. Gloria Lara Pinto ihah2003@yahoo.com
Nicaragua	Law no. 1142, passed in 1984 (Decree no. 142, passed in 1941)	Instituto Nicaragüense de Cultura (INC), Dirección de Patrimonio Cultural, Palacion Nacional de Cultura, Frente a Casa Presidencial Managua	Lic. Edgar Espinoza edgarespinoza1964@yahoo.com.mx
Panama	Law no. 14, passed at 05 th May in 1982 Law no. 19, passed at 09 th October 1984 Law no. 17, passed at 10 th April in 2002	Instituto Nacional de Cultura (INAC), Subdirección del Patrimonio Histórico, Apartado 662, Panama 1	Domingo Varela

Table 4: Rock Art Sites, National Parks and National Monuments

Country	National Parks	National Monument	Year of declaration	Rock Art	Administrator	References
Belize	Bladen National Reserve		1990	pictographs	Department of Environment	Helmke 2003: 101-02 http://www.turq.com/belize/belnatpk.html http://www.ccad.ws:9010/legislacion/Belize.html
	Chiquibul National Park			pictographs	Department of Environment	Helmke et al. 2003: 113 http://www.turq.com/belize/belnatpk.html http://www.ccad.ws:9010/legislacion/Belize.html
	Caracol National Park			espeleothems	Department of Environment	Helmke et al. 2003: 109 http://www.turq.com/belize/belnatpk.html http://www.ccad.ws:9010/legislacion/Belize.html
Costa Rica	Guayabo de Turrialba		1988	petroglyphs	MINAE	Fonseca and Acuña 1986: 236-54
		El Farallón de Sandillal	1995	petroglyphs	MINAE	Künne 2003b: 212
El Salvador	Parque Nacional El Imposible		1989	petroglyphs	MARN	Coladán and Amaroli 2003: 154 http://www.nps.gov/centralamerica/salvador/
		Gruta del Espíritu Santo		pictographs	MARN	Coladán and Amaroli 2003: 145-49, 157
Guatemala	Parque Nacional Sierra de Lacandón		1990	petroglyphs	CONAMA	Stone 2003: 127 http://www.parkswatch.org/parkprofile.php?l=spa&country=gua&park=slnp&page=phy
	Reserva de la Biosfera Maya		1990	petroglyphs	CONAMA	Coe 1967: 84; Hellmuth 1978: 86-89, 114-15
	Reserva Petexbatún			petroglyphs pictographs	CONAMA	Stone 2003 : 137
Honduras	Parque Eco-Arqueológica Las Cuevas de Talgua			pictographs	SERNA	Brady et al. 2000: 111-18; Stone and Künne 2003: 202-03 http://www.ihah.hn/antropologia/peat/peat.htm

Country	National Parks	National Monument	Year of declaration	Rock Art	Administrator	References
Nicaragua	Parque Nacional Arquipélago Isla Zapatera		2000	petroglyphs, semi-sculptured stones	MARENA	Baker et al. 2001: 21-59; Matillo Vila 1968; Navarro 1996: 81-103; Stone and Künne: 2003: 203-05; Thornquist 1981 http://www.ccad.ws:9010/legislacion/Nicaragua.html
	Parque Nacional Volcan Masaya		1979	petroglyphs	MARENA	Lehmann 1909, unpublished notebook http://www.ccad.ws:9010/legislacion/Nicaragua.html
	Reserva Natural Laguna de Apoyo		2005 (?)	petroglyphs	MARENA	Lehmann 1909, unpublished notebook http://www.ccad.ws:9010/legislacion/Nicaragua.html
	Reserva Natural y Patromonio Cultural Isla Ometepe		1995	petroglyphs	MARENA	Baker 2003: 183-200; Lettow 1999: 73-85; Matillo Vila 1973; Stone and Künne 2003: 203-05
	Bosawas Biosphere Reserve		1991	pictographs	MARENA	Kaufman 2005, pers. comm. http://www.ccad.ws:9010/legislacion/Nicaragua.html
		Monumento Nacional Solentiname	1990	petroglyphs	MARENA	Laurencich de Minelli et al. 1996 : 23-45, 2000 : 235-69 http://www.ccad.ws:9010/legislacion/Nicaragua.html
Panama		Parque Arqueológico Nancito	2002	petroglyphs	INRENARE	Künne 2003c: 238, 2005: 25
		Cerro de la Valeria/ Río Sta Lucía	1984	petroglyphs	INRENARE	Künne 2003c: 226-27, 237

National Parks that simultaneously constitute World Heritage Sites are not mentioned.

The utilized abbreviations mean: CONAMA: Comisión Nacional del Medio Ambiente, INRENARE: Instituto Nacional de Recursos Naturales Renovables; MARENA: Ministerio del Ambiente y Recursos Naturales, MARN: Ministerio de Medio Ambiente y Recursos Naturales, MINAE: Ministerio del Ambiente y Energía, SERNA: Secretaría de Recursos Naturales y de Ambiente de Honduras

For more detailed information see: <http://www.anam.gob.pa/links%20de%20centro%20america.htm>

Table 5: World Heritage Sites

Country	World Heritage Sites	Dates of declaration and extension	Rock art	References
Costa Rica	La Amistad National Park	1983, 1990	petroglyphs	Künne 2003a: 200, 204
	Cocos Island National Park	1997, 2002	petroglyphs	Vázquez et al. 1998
	Area de Conservación Guanacaste	1999, 2004	petroglyphs	Chávez Jiménez 1989; Hardy and Vázquez 1993; Künne 2003b: 203-04, 214
Guatemala	Tikal National Park	1979	petroglyphs	Coe 1967: 84; Hellmuth 1978: 86-89, 114-15
Honduras	Archaeological Park of the Ruins of Copan	1980	pictographs	Murray and Valencia 1996: 186-87
	Río Plátano Biosphere Reserve	1996	petroglyphs	Conzemius 1927-28: 250; Reyes Mazzoni 1976c: 194-94
Panama	Darién National Park	1981	petroglyphs	Joly Adams 2000
	La Amistad National Park	1983, 1990	petroglyphs	Joly Adams 2003, pers. comm.

Table 6: World Heritage Tentative List (2005)

Country	National Heritage Sites pertaining to the World Heritage Tentative List	Rock Art	References
Belize	non		
Costa Rica	Corcovado National Park and Isla del Caño Biological Reserve		
	Plenitude under the Sky. Park of Pre-Columbian Stone Spheres	petroglyphs	Künne 2003a: 38; 2003b: 215
	San José-Limón Region	petroglyphs	Fonseca and Acuña 1986: 236-54; Kennedy 1968: 87-91, 161, 164, 167, 177, 181, 184, 191, 207, 209,-10, 218, 246, 248, 251, 269, 273, 277, 279, 281, 284, 287, 290, 294, 298, 302, 307, 329, 332, 336; 1970: 49-99, 1973: 47-56; Künne 2003a: 331-36; 2003b: 204, 206-07, 217
El Salvador	Cara Sucia/ El Imposible	petroglyphs	Coladan and Amaroli 2003: 154
	Chalchuapa	petroglyphs	Coladan and Amaroli 2003: 144
	Lake Guija	petroglyphs	A. Stone 1998, 1999; URL: http://www.famsi.org/reports
Guatemala	Naj Tunich Cave	pictographs petroglyphs inscriptions handprints	Brady 1989; A. Stone 1995, 2003: 123-24
	National Park Sierra del Lacandón	petroglyphs	A. Stone 2003: 127
	Protected Area of Lake Atitlán	petroglyphs	A. Stone 2003: 129
Nicaragua	City of Granada and its Natural Environment	petroglyphs	Baker 2003: 183-200; Matillo Vila 1968, 1973; Navarro 1996: 80-103; Stone and Künne 2003: 196-213; Thornquist 1981
	National Reserve Bosawas	pictographs, petroglyphs, handprints	Kaufman 2005, pers. com.
	Volcano Masaya National Park	petroglyphs	Lehmann 1909, unpublished notebook
Panama	National Park Coiba	petroglyphs	Joly Adams 2000

Table 7: Indigenous territories including rock art sites

country	territory	ethnic group	rock art	references
Belize	no indigenous territories			
Costa Rica	Reserva Indígena Chirripó	Cabécar	petroglyphs	Hurtado de Mendoza et al. 1985: 91-106
	Reserva Indígena Ujarrás	Cabécar	petroglyphs	Künne 2003a: 2003, 2003c: 205
	Reserva Indígena Salitre	Bribri	petroglyphs	Künne 2003a: 200-01
	Reserva Indígena Cabagra	Bribri	petroglyphs	Künne 2003a: 200-01
	Reserva Indígena Térraba	Térraba (Teribe)	petroglyphs	Künne 2003a: 200-01; 2003b: 208; D. Stone 1961: 136
	Reserva Indígena Boruca	Brunca	petroglyphs	Blanco and Künne 2000: 20-24; Künne 2003°: 200-01
	Rerva Indígena Curré	Brunca	petroglyphs	Blanco and Künne 2000: 20-24; Künne 2001: 7-11, 2003a: 196, 226
Nicaragua	Región Autónoma del Atlántico Norte (RAAN)	Misquito, Mayangna (Sumo)	petroglyphs pictographs	Conzemius 1932: 103-06; 1997: 32, 39, 84, 103, 111, 113, 114, 137, 169, 185, 189, 201, 202, 214, 235; Kaufmann 2005, pers. comm.
	Región Autónoma del Atlántico Norte (RAAS)	Misquito, Rama	petroglyphs	Conzemius 1929: 327-28
Panama	Comarca Embera no.1	Embera (Chocó)	petroglyphs	Joly Adams 2000
	Comarca Ngöbe-Buglé	Ngöbe, Buglé (both: Guaymí)	petroglyphs	Quinterno 1994-95
	Comarca de San Blas	Cuna	petroglyphs	Fitzgerald 2004, pers. comm.

Appendix: archaeological regions and rock art

The following zones correspond to the archaeological regions of Central America. In each of the sub-areas there are various rock-art traditions. If they constitute more general traditions or horizons it still has to be investigated by systematic archaeological documentation and iconographic analyses.

Eastern Mesoamerica

- Belize: north region,
as described by Helmke et al. 2003: 97-117. The zone includes all parts north of the Maya Mountains. The north region is in geomorphologic and cultural terms an integral part of the Yucatan lowlands. No rock art site is reported.
- Belize: Maya Mountains,
as described by Brady 1989 and Helmke et al. 2003: 97-117. The geomorphologic and cultural features are linked with the lowlands of Guatemala. Cave art includes pictographs (paintings, drawings, handprints), petroglyphs and semi-sculptured speleothems. No open air rock art site is reported.
- Belize: south region,
as described by Helmke et al. 2003: 97-117. The zone includes all parts south of the Maya Mountains. No rock art is reported.
- Guatemala: northern lowlands,
as described by Brady 1989, 1997; Brady et al. 1997: 91-96; A. Stone 1995, 2003: 119-35; Stone and Künne 2003: 196-213. The zone comprises both the Verapaz Departments and the Peten Department. Cave art includes pictographs (paintings, drawings, inscriptions, handprints), petroglyphs and semi-sculptured speleothems. Open air rock art consists of petroglyphs.
- Guatemala: north coast,
as described by Orozco and Bronson 1991. The zone includes the Lake Izabal and the surrounding lowlands of the Río Motagua Valley (El Progreso and Zacapa Departments). Cave art include pictographs and petroglyphs. No open air rock art is reported.
- Guatemala: western highlands,
as described by Stone 2003: 119-35. The zone includes the Departments of Huehuetenango, San Marcos, Quiché, Quetzaltenango, Otonicapán, Sololá (Amatitlan Lake), Chimaltenango, Antigua (Valley of Antigua), Ciudad de Guatemala (Atitlan Lake). Cave art and open air rock art include pictographs (paintings, handprints) as well as petroglyphs.
- Guatemala: eastern highlands,
as described by A. Stone 2003: 119-35. The zone comprises the Departments of Chiquimula, Jalapa, Jutiapa, Santa Rosa. Cave art and open air rock art includes pictographs (paintings, handprints) as well as petroglyphs.
- Guatemala: south coast,
zone as described by Schieber de Lavarreda (ed.) 1998. The region includes the Retalhuleu, Escuintla and Santa Rosa Departments as well as parts of the San Marcos and Jutiapa Departments. No cave art is reported. Open air rock art sites consist of petroglyphs and semi-sculptured rocks.
- El Salvador: west region,
region as described by Sheets 1984: 85-112; rock art as described by Coladan and Amaroli 2003: 143-6; Stone and Künne 2003: 196-213. The zone includes all regions west and north of the Río Lempira. Cave art consists of paintings and hand prints. Open air rock art comprises petroglyphs.
- Honduras: west region,
region as described by Healy 1984: 113-61. The zone includes the Copan and Ocotepeque Departments as well as parts of the Cortes, Sta. Bárbara and Lempira Departments. Cave art and open air rock art sites show pictographs and petroglyphs.

Contact Zone

- El Salvador: east region,
region as described by Sheets 1984: 85-112; rock art as described by Coladan and Amaroli 2003: 143-6. The zone includes all regions east of the Río Lempira. Cave art consists of paintings, hand prints and petroglyphs. Open air rock art comprises petroglyphs.

- Honduras: central region,
region as described by Healy 1984: 113-61; rock art as described by Murray and Valencia 1996: 186; McKittrick 2003: 163-81. The zone includes the Río Ulua-Sula-Chamelecon river system, the Lake Yojoa region and the central highlands of Honduras with the Río Comayagua valley. No cave art is reported. Open air rock art sites consist of rock shelters, grown rocks, and stones decorated with pictographs (paintings and handprints), petroglyphs and painted petroglyphs.

- Honduras: south region
region as described by Healy 1984: 113-61; rock art as described by Murray and Valencia 1996: 186; McKittrick 2003: 163-81. The zone includes the Choluteca and Valle Departments. No cave art is reported. Open air rock art consists of petroglyphs. No pictographs are mentioned.

- Gran Nicoya,
region as defined by Lange 2001b: 517-21; rock art as described by Baker 2003: 183-200; Künne 2003: 201-21; Stone and Künne 2003: 196-213. The zone comprises as well the whole Pacific coast and mountain ranges of Nicaragua (northern sector) as the Guanacaste Province and the whole Nicoya peninsula of north-western Costa Rica (southern sector). Cave art includes pictographs (paintings and handprints), petroglyphs and painted petroglyphs. Open air rock art sites consist of petroglyphs and semi-sculptured rocks.

Lower Central America

- Nicaragua: northern mountains,
region as described by Espinoza et al. 1996; rock art as described by Baker 2003: 183-200; Gámez Montenegro and Cruz Cruz 2004. The zone comprises the north-western mountain ranges of Nicaragua, covering the Departments of Jinotega, Nueva Segovia, Matagalpa and Madriz. No cave art is reported. Open air rock art sites consist of pictographs and petroglyphs.

- Honduras: north region,
as described by Brady et al. 2000: 111-18; Healy 1984: 113-61; Murray and Valencia 1996: 186; McKittrick 2003: 163-81. The zone comprises as well the Gracias a Dios, Colon, Olancho and Atlantida Departments as parts of the Yoro Department. Cave art consists of pictographs (paintings and drawings). Open air rock art is represented by petroglyphs. No pictographs are mentioned.

- Nicaragua: Atlantic lowlands,
as described by Baker 2003: 183-200; Stone and Künne 2003: 196-213. The zone includes the autonomous indigenous regions Atlántico Norte and Atlántico Sur as well as the Department Río San Juan. Cave art consists of pictographs (paintings and handprints). Open air rock art is represented by petroglyphs.

- Costa Rica: central highlands and Atlantic watershed,
region as defined by Snarskis (1984: 195-232); Vázquez et al. 1998; rock art as described by Künne 2003: 201-21. The zone includes the highlands of San José and Cartago as well as the central pacific and atlantic lowlands. No cave art is reported. Open air rock art sites consist of petroglyphs.

- Gran Chiriquí, as defined by Haberland 1961 and described by Hoopes 1996: 15-47; rock art as described by Künne 2003: 223-39. The zone includes the southern parts of Costa Rica and the western region of Panama. It includes all territories south of Río Savegre and Río Pacuare (Costa Rica), the Panamanian provinces Bocas del Toro and Chiriquí and the autonomous Guaymí Comarca of Panama. No cave art is reported. Open air rock art consists of petroglyphs.

- Gran Coclé (Central Region),
region as defined by Cooke (1984: 263-301); rock art as described by Künne 2003: 223-39. The zone comprises the Veraguas, Herrera, Los Santos and Coclé Provinces, including the Azuero peninsula. No cave art is reported. Open air rock art consists of petroglyphs.

- Gran Darién (East Region),
as defined by Cooke (1984: 263-301); rock art as described by Künne 2003: 223-39. The zone comprises the Colon, Panama and Darien Provinces (including the Channel Zone) as well as the autonomous indigenous Comarca San Blas. No cave art is reported. Open air rock art consists of petroglyphs.

Appendix: recommended literature

The following literature may be useful for a more detailed evaluation of Central American rock art and its contexts:

Central America

Brady, James E. and Keith M. Prufer (eds.)

2005 *In the maw of the Earth Monster. Mesoamerican ritual cave use*. Austin, Texas: University of Texas Press.

Künne, Martin and Matthias Strecker (eds.)

2003 *Arte Rupestre de México Oriental y de Centro América*. Indiana Beiheft, 16. Berlin: Gebr. Mann Verlag.

Murray, William Breen and Daniel Valencia

1996 "Recent rock art research in Mexico and Central America." In: Bahn, Paul and Angelo Fossati (eds.): *"Rock Art Studies: News of the World, I: 185-201*. London: Oxbow Books.

Stone, Andrea

1995 *Images from the Underworld. Naj Tunich and the tradition of Maya cave painting*. Austin, Texas: University of Texas Press.

Stone, Andrea and Martin Künne

2003 "Rock Art of Central America and Maya Mexico." In: Bahn, Paul and Angelo Fossati (eds.): *Rock Art Studies: News of the World, 2: 196-213*. Oxford, UK: Oxbow Books.

Belize

Awe, Jaime J.; Cameron Griffith and Sherry Gibbs

2005 "Cave stelae and megalithic monuments in western Belize." In: Brady, James E. and Keith M. Prufer (eds.): *In the maw of the Earth Monster. Mesoamerican ritual cave use*, pp. 223-48. Austin, Texas: University of Texas Press.

Helmke, Christophe G. B.; Jaime J. Awe and Cameron S. Griffith

2003 "El Arte Rupestre de Belice." In: Künne, Martin and Matthias Strecker (eds.): *Arte Rupestre de México Oriental y de Centro América*. Indiana Beiheft, 16: 97-118. Berlin: Gebr. Mann Verlag.

Costa Rica

Hammett, Florence

1967 *A study of Costa Rican petroglyphs*. Associated Colleges of the Midwest Field Studies Program in Central America. Unpublished manuscript.

Künne, Martin

2003b "Arte Rupestre de Costa Rica." In: Künne, Martin and Matthias Strecker (eds.): *Arte Rupestre de México Oriental y de Centro América*. Indiana Beiheft, 16: 201-22. Berlin: Gebr. Mann Verlag.

Künne, Martin; Ines Beilke-Voigt and Kay-Uwe Voigt

2000 "Petroglyphs of the northern part of the General Valley in Costa Rica. Their situation in different landscapes." *British Archaeological Report. International Series* (Oxford, UK), 902: 131-41.

Zilberg, John

1986 "The Diquís petroglyphs: distribution, archaeological context and iconographic content." In: Lange, Frederick W. and Norr, Lynette (eds.): Prehistoric settlement patterns in Costa Rica. Journal of the Steward Anthropological Society (Urbana, Illinois), 14(1-2): 339-60.

El Salvador

Coladán, Elisenda and Paul Amaroli

2003 "Las Representaciones Rupestres de El Salvador." In: Künne, Martin and Matthias Strecker (eds.): Arte Rupestre de México Oriental y de Centro América. Indiana Beiheft, 16: 143-62. Berlin: Gebr. Mann Verlag.

Stone, Andrea

1998 "A study of the carved boulders of Lake Güija, El Salvador and a survey of Rock Art in Highland Guatemala." Report to the Foundation for the Advancement of Mesoamerican Studies (FAMSI). URL: <http://www.famsi.org/reports> [summary].

Guatemala

Batres, Lucrecia Pérez de; Carlos Batres; Ramiro Martínez; Nury Escobar de Milián and Luisa Rosada

1999 Estudio de la pintura rupestre de Chquimula: Peñasco los Migueles, Alonzo y Cerán." In: La Porte, Juan Pedro; Héctor Escobedo and Ana Claudia Monzón de Suasnávar (eds.): XII. Simposio de Investigaciones Arqueológicas en Guatemala, 2: 791-805. Guatemala-Ciudad: Ministerio de Cultura y Deportes; Museo Nacional de Arqueología y Etnología.

Brady, James E.

1989 "An investigation of Maya ritual cave use with special reference to Naj Tunich, Guatemala. Ph.D. dissertation. Los Angeles: University of California.

Stone, Andrea

1995 Images from the Underworld. Naj Tunich and the tradition of Maya cave painting. Austin, Texas: University of Texas Press.

2003 "Arte Rupestre de Guatemala." In: Künne, Martin and Matthias Strecker (eds.): Arte Rupestre de México Oriental y de Centro América. Indiana Beiheft, 16: 119-42. Berlin: Gebr. Mann Verlag.

Honduras

McKittrick, Alison

2003 "Arte Rupestre en Honduras." In: Künne, Martin and Matthias Strecker (eds.): Arte Rupestre de México Oriental y de Centro América. Indiana Beiheft, 16: 163-82. Berlin: Gebr. Mann Verlag.

Murray, William Breen and Daniel Valencia

1996 "Recent rock art research in Mexico and Central America." In: Bahn, Paul and Angelo Fossati (eds.): "Rock Art Studies: News of the World, 1: 186-87, 198. London: Oxbow Books.

Nicaragua

Baker, Suzanne

2003 "Arte Rupestre de Nicaragua." In: Künne, Martin and Matthias Strecker (eds.): Arte Rupestre de México Oriental y de Centro América. Indiana Beiheft, 16: 183-200. Berlin: Gebr. Mann Verlag.

Gámez Montenegro, Bayardo and Filiberto Cruz Cruz

2004 Registro arqueológico de los petroglifos de la cuenca del Río Estelí. Estelí: ADESO, SINSLANI.

Matillo Vila, Joaquin (Hildeberto María, Hno.)

1965 Estas piedras hablan. Estudio preliminar del arte rupestre de Nicaragua. Managua.

1968 El Muerto, isla santuario. Estudio de su arte rupestre. Managua.

1973 Ometepe. Isla de círculos y espirales. Managua: Centro de Investigaciones Rupestres.

Navarro Genie, Rigoberto

1996 Arte Rupestre del Pacífico de Nicaragua. Las variables de las representaciones entre la Costa del Pacífico y el Lago Cocibolca. Managua: Fondo Editorial INC/ASDI; Editorial Universidad Centroamericana.

Thornquist, Peter

1981 Las rocas grabadas de 'El Muerto'. Guía de la exposición en el Museo Estatal de Illinois, Springfield. Managua: Ministerio de Cultura, Dirección General de Patrimonio Cultural, Departamento de Arqueología.

Panama

Harte, Neville A.

1960 Preliminary report on petroglyphs of the Republic of Panama, 1951-1960. Panamá (Curundú, Canal Zone).

1961 Panorama of Panama Petroglyphs. Panamá.

Holmberg, Karen

2005 "The voices of stones: unthinkable materiality in the volcanic context of western Panamá." In: Meskell, Lynn (ed.): Archaeologies of materiality, pp. 190-211. Oxford, UK: Blackwell Publishing.

Künne, Martin

2003c "Arte Rupestre de Panamá." In: Künne, Martin and Matthias Strecker (eds.): Arte Rupestre de México Oriental y de Centro América. Indiana Beiheft, 16: 223-39. Berlin: Gebr. Mann Verlag.

Appendix: References

Adams, Abigail E. and James E. Brady

2005 "Ethnographic notes on Maya Q'eqchi' cave rites: implications for archaeological interpretation." In: Brady, James E. and Keith M. Prufer (eds.): In the maw of the Earth Monster. Mesoamerican ritual cave use, pp. 301-27. Austin, Texas: University of Texas Press.

Armitage, Ruth A., James Brady, Allan Cobb, John R. Southon y Marvin W. Rowe

2001 Mass spectrometric radiocarbon dates from three rock paintings of known age. In: American Antiquity, 66(3): 471-80.

Bahn, Paul and Jean Vertut

1988 Images of the Ice Age. London: Winward.

Baker, Suzanne

1995-2002 [Unpublished field notes and petroglyph forms]. Oakland, California.

1996 "Reconocimiento arqueológico y registraci3n de petroglifos, Isla Ometepe, Nicaragua. Temporada de campo 1995." [Unpublished file.] Managua: Museo Nacional de Nicaragua Departamento de Investigaciones Arqueol3gicas.

- 1997 "Reconocimiento arqueológico y registraci3n de petroglifos, Isla Ometepe, Nicaragua. Temporada de campo 1996." [Unpublished file.] Managua: Museo Nacional de Nicaragua Departamento de Investigaciones Arqueol3gicas.
- 2000 "Reconocimiento arqueol3gico y registraci3n de petroglifos, Isla Ometepe, Nicaragua. Temporada de campo 1997." [Unpublished file] Managua: Museo Nacional de Nicaragua Departamento de Investigaciones Arqueol3gicas.
- Baker, Suzanne and Michael Smith
2001 "Prospecci3n arqueol3gica en la Isla Zapatera, investigaci3n de campo de 1986." In: Huellas. Revista de Antropolog3a e Historia, 2: 21-59.
- Batres, Carlos; Lucrecia P3rez de Batres; Luisa Rosada; Ramiro Mart3nez and Nury Escobar de Mili3n
1997 "La pintura rupestre del Peñasco los Migueles." Estudios. Revista de Antropolog3a, Arqueolog3a e Historia, 3: 2-23.
- Batres A., Carlos; Ramiro Mart3nez; Nury de Mili3n and Lucrecia P3rez
1998 "Las pinturas rupestres del peñasco Los Migueles, Municipio de San Juan Ermita, Chiquimula: informe preliminar." In: La Porte, J. P. and H. L. Escobedo (eds.): XI Simposio de Investigaciones Arqueol3gicas en Guatemala (1997.), pp. 499-511 Ciudad de Guatemala: Museo Nacional de Arqueolog3a y Etnolog3a.
- Blanco, Aida und Martin K3nne
2000 "La documentaci3n de petroglifos en el Valle de El General, Costa Rica: ¿Nacimientos muertos de la investigaci3n cient3fica?," Bolet3n de la Sociedad de Investigaci3n del Arte Rupestre de Bolivia (SIARB), 14: 20-24.
- Bovallius, Carl
1886 Nicaraguan antiquities. Stockholm: Kongl. Boktryckeriet.
- Brady, James E.
1990 "Report on recent damage to the inscriptions at Naj Tunich." Mexican, 12(1): 5-6.
- 1993 "Exploraciones de la rama nueva de Naj Tunich: implicaciones para su inter-pretaci3n." In: III Simposio de Investigaciones Arqueol3gicas en Guatemala, pp. 141-49. Ciudad de Guatemala: Museo Nacional de Arqueolog3a y Etnolog3a.
- 1997 "Las Cuevas de Cobanerita, San Benito, Pet3n." Unpublished report to the Instituto de Antropolog3a e Historia, Ciudad de Guatemala.
- 1999 "The Gruta de Jobonche: an analysis of speleothem rock art." In: Gubler, Ruth (ed.): Land of the turkey and the deer, pp. 57-68. Lancaster, California: Labyrinthos Press.
- 2000 Die dunklen Geheimnisse der Maya – Arch3ologische Erforschung von Maya-H3hlen. In: Grube, Nicolai (ed.): Maya. Gottk3nige im Regenwald, pp. 297-307. K3ln: K3nemann Verlagsgesellschaft.
- Brady, James E. and Federico Fahsen
1991 "The discovery of a new Maya cave painting site in Guatemala." The Explorers Journal, 69(2): 52-55.
- Brady, James; George Haseman and John Forgety
1995 "Harvest of skulls and bones." Archaeology, 49(3): 36-40.

- Brady, James E.; Gene A. Ware; Barbara Luke; Allan Cobb; John Fogarty and Beverly Shade
1997 "Preclassic cave utilization near Cobanerita, San Benito, Peten." *Mexicon*, 14(5): 91-96.
- Brady, James; Ann Scott; Hector Neff and Michael Glascock
1997 "Speleothem beakage, movement, removal, caching: an aspect of ancient Maya cave modification." *Geoarchaeology*, 12(6): 725-50.
- Brady, James E.; Christopher Begley; John Fogarty; Donald J. Stierman; Barbara Luke and Ann Scott
2000 "Talgua archaeological project: a preliminary assessment." *Mexicon*, 32(5): 111-18.
- Brady, James and GeneWare
2001 "Las inscripciones de Naj Tuncih: avances recientes de imagen multi-espectral." In: La Porte, Juan Pedro; Ana Claudia Monzón de Suasnávar and Bárbara Arroyo (eds.): XIV. Simposio de Investigaciones Arqueológicas en Guatemala, 2: 1017-25. Guatemala-Ciudad: Ministerio de Cultura y Deportes.
- Chavez Jiménez, Adrián
1989 "Visita a la estación Maritza, faldas de volcán Orosí, Guanacaste." Unpublished Report to the Museo Nacional de Costa Rica. San José.
- Coe, William R.
1967 *Tikal. A handbook of the ancient Maya ruins*. Pittsburgh, Pennsylvania: The University Museum, University of Pennsylvania.
- Conzemius, Eduard
1927-28 "Los indios Payas de Honduras." *Journal de la Société des Américanistes de Paris*, 19: 245-303; 20 : 253-360.

1929 "Die Rama-Indianer von Nicaragua". *Zeitschrift für Ethnologie*, pp. 291-362.

1932 *Ethnographical survey of the Miskito and Sumu indians of Honduras and Nicaragua*. Bulletin of the Smithsonian Institution, Bureau of American Ethnology, 106. D.C.
- Cooke, Richard
1984 "Archaeological research in Central and Eastern Panama." In: Frederick W. and Doris Stone (eds.): *The archaeology of Lower Central America*, pp. 263-304. Albuquerque, New Mexico: University of New Mexico Press.
- Ericastilla Godoy, Sergio A.
1998 "Informe de la visita al pictograma del cerro de La Mariposa." *Utz'ib*, 2(4): 29-30.
- Espinoza Pérez, Edgar; Leraín Fletcher and Ronaldo Salgado Galeano
1996 *Arqueología de las Segovias: una secuencia cultural preliminar*. Managua: Instituto Nicaragüense de Cultura; Organización de los Estados Americanos.
- Fonseca Zamora, Oscar y Víctor Acuña Coto
1986 "Los petroglifos de Guayabo de Turrialba y su contexto." In: Lange, Frederick W. and Lynette Norr (eds.): *Prehistoric settlement patterns in Costa Rica*. *Journal of the Steward Anthropological Society*, 14(1-2): 236-54.
- Fonseca Zamora, Oscar and David Watters
2001 "Interpreting photographic documentation of C.V. Hartman's 1903 excavation at the Chinchilla site." Paper at the 66th Annual Meeting of SAA, New Orleans. Unpublished manuscript. New Orleans, Louisiana.

Haberland, Wolfgang

1954 "Apuntes sobre petrograbados de El Salvador." *Comunicaciones del Instituto Tropical de Investigaciones Científicas de la Universidad de El Salvador*, 3(4): 167-71.

1956 "Apuntes sobre petrograbados de El Salvador." *Comunicaciones del Instituto Tropical de Investigaciones Científicas de la Universidad de El Salvador*, 5(2-3): 95-96.

1959 "Apuntes sobre petrograbados de El Salvador." *Comunicaciones del Instituto Tropical de Investigaciones Científicas de la Universidad de El Salvador*, 8(3-4): 23-25.

1961 *Archäologische Untersuchungen in der Provinz Chiriquí, Panamá. Acta Humboldtiana. Serie Geografica et Etnografica*, 3. Wiesbaden: Franz Steiner.

1972 "The Cave of the Holy Ghost." *Archaeology*, 25(4), 286-91.

1991 "Informe preliminar de investigaciones arqueológicas en la Gruta de Corinto y sus alrededores." *Mesoamérica*, 21 : 95-104.

1992 "The culture history of Ometepe Island: preliminary sketch (survey and excavations 1962-1963)." In: Lange, Frederick W.; Payson D. Sheets; Anibal Martínez and Suzanne Abel-Vidor (eds.): *The archaeology of pacific Nicaragua*, pp. 63-117. Albuquerque, New Mexico: University of New Mexico Press.

Hardy, Ellen T. and Ricardo Vázquez L.

1993 "Proyecto arqueológico volcán Orosí. Results of preliminary investigation of Sitio Pedregal. Area de Conservación, Guanacaste, Costa Rica." Unpublished report to the Museo Nacional de Costa Rica.

Harte, Neville A.

1952-59 Site index cards. Museo de Historia y de Arte José Obaldía. Archivo de la Fundación Cultural Gallegos. Unpublished materials. David.

Haseman, George

1996 *El ambiente y las culturas precolombinas.* In: Hasemann, George; Gloria Lara Pinto and Fernando Cruz Sandoval (eds.): *Los Indios de Centroamérica*, 1. Madrid.

Healy, Paul

1984 "The archaeology of Honduras." In: Lange, Frederick W. and Doris Stone (eds.): *The archaeology of Lower Central America*, pp. 113-61. Albuquerque, New Mexico: University of New Mexico Press.

Hellmuth, Nicholas M.

1978 *Maya archaeology. Tikal, Copan travel guide.* Guatemala.

Hoopes, John

1996 "Settlement, subsistence and the origins of social complexity in Greater Chiriquí: a reappraisal of Aguas Buenas tradition." In: Lange, Frederick (ed.): *Paths to Central American prehistory*, pp. 15-47. Niwot, Colorado: University Press of Colorado.

Hurtado de Mendoza, Luis; Víctor Acuña and Eduardo Castillo

1985 "El sitio Ta'Lari del Pacuare (datos de una prospección inicial)." *Revista de Ciencias Sociales*, 2 : 91-106.

Joly Adams, Luz Graciela

2000 "Solicitud a la Mesa no. 6 del III Congreso Centroamericano de Antropología, para la creación de una ley por la cual se declaren Patrimonio Cultural y Monumentos Históricos todos los sitios de Petroglifos en la República de Panamá." Paper at the III Congreso Centroamericano de Antropología, Panamá. Unpublished manuscript.

Kennedy, Williams Jerald

1968. Archaeological investigations in the Reventazón river drainage area, Costa Rica. Ph.D. Dissertation. University of Michigan, Ann Arbor.

1970 "Petroglifos de la cuenca de drenaje del Río Reventazón, Costa Rica." Informe Semestral del Ministerio de Obras Públicas, Instituto Geográfico Nacional de Costa Rica, julio-diciembre, pp. 49-99.

1973 "A comparison of certain Costa Rican petroglyph designs with those from adjacent areas." Proceedings of the IV. International Congress for the study of pre-Columbian cultures of the Lesser Antilles, pp. 47-56. Gainesville, Florida.

Kirchhoff, Paul

1943 "Mesoamérica: sus límites geográficas, composición étnica y caracteres culturales." *Acta Americana*, 1: 92-107. México.

Krickeberg, Walter

1949 *Felsplastik und Felsbilder bei den Kulturvölkern Altamerikas mit besonderer Berücksichtigung Mexikos*. Berlin: Palmes Verlag.

Künne, Martin

2000 "Proyecto de Ley sobre Arte Rupestre en Panamá." *Boletín de la Sociedad de Investigación del Arte Rupestre de Bolivia (SIARB)*, 14: 15f.

2001 "Sitios arqueológicos y leyendas indígenas." *Estudios de las Tradiciones Sagradas de Abia Yala*, 8: 7-11.

2003a *Präkolumbische Felsgravuren im Valle de El General (Costa Rica). Möglichkeiten und Grenzen der Aussagen über Bodendenkmäler mit Symbolcharakter*. Ph.D. dissertation. Rahden, Westfalen: Verlag Marie Leidorf.

2005 "Nuevos estudios y enfoques sobre los petrograbados de Panamá." *Boletín de la Sociedad de Investigación del Arte Rupestre de Bolivia (SIARB)*, 19: 24-27.

Künne, Martin; Ines Beilke-Voigt and Luz Graciela Joly Adams

2004 "Fechas por radiocarbono de la excavación arqueológica en el sitio Barriles Bajo (BU-24-I), Chiriquí, Panamá." David: Universidad Autónoma de Chiriquí (UNACHI). URL: http://unachi.ac.pa/publicaciones/Fechamiento_por_radiocarbono.pdf

Lange, Frederick W.

1993 "The conceptual structure in Lower Central American studies: a Central American view." In: Miller Graham, Mark (ed.): *Reinterpreting prehistory of Central America*. Niwot: University Press of Colorado.

2001a "Intermediate Area: Overview." In: Toby Evans, Susan and David L. Webster (eds.): *Archaeology of Ancient Mexico and Central America. An Encyclopedia*, pp. 357-65. New York & London: Garland Publishing Inc.

- 2001b "Nicoya, Greater, and Guanacaste Region." In: Toby Evans, Susan and David L. Webster (eds.): *Archaeology of Ancient Mexico and Central America. An Encyclopedia*, pp. 517-22. New York & London: Garland Publishing Inc.
- Lange, Frederick W. and Doris Stone (eds.)
1984 *The archaeology of Lower Central America*. Albuquerque, New Mexico: University of New Mexico Press.
- Laurencich Minelli, Laura; L. Bolondi; C. Bolondi; F. di Cosimo and I. Sini
1996 "Un primo approccio all'archeologia dell'Arcipelago di Solentiname." *Quaderni di Neotropica*, 5(2): 23-45.
- Laurencich Minelli, Laura and Patricia di Cosimo
2000 "L'Arte Rupestre Ne'Il arcipelago di Solentiname." *Studi Americanistici*, 235-69.
- Lehmann, Walter
1909 [Unveröffentlichte Notzibücher]. Ibero-Amerikanisches Institut Berlin. Nachlass Lehmann. Berlin.
- Lettow, Hartmut
1999 "Petroglyphen von Ometepe, Nicaragua." *Das Altertum*, 45: 73-85.
- Linares de Sapir, Olga F. y Anthony Ranere (eds.)
1980 *Adaptive radiations in prehistoric Panamá*. Cambridge, Massachusetts: Peabody Museum of Archaeology and Ethnology, Harvard University.
- Loubser, Johannes
2001 "Management planning for conservation." In: Withley, David. S. (ed.): *Handbook of rock art research*, pp. 80-115. Walnut Creek, California: Altamira Press.
- MacLeod, Barbara and Andrea Stone
1995 "The hieroglyphic inscriptions of Naj Tunich." In: Stone, Andrea: *Images from the Underworld*, pp. 155-84. Austin, Texas: University of Texas Press.
- Navarrete, Carlos
1996 "Elementos arqueológicos de mexicanización en las tierras altas mayas." In: Lombardo, Sonia and Enrique Nalda (eds.): *Temas mesoamericanos*: 305-52. México, D.F: Instituto de Antropología e Historia.
- Orozco, R. and R. Bronson
1991 "Proyecto arqueológico Izabal: Fase II." Unpublished report.
- Oviedo y Valdéz, Gonzalo Fernández de
1851-55 [1534, 1547] *Historia natural y general de las Indias, islas y tierra firme del mar océano*. Madrid: Imprenta de la Real Academia de la Historia.
- Piperno, Dolores R., Mark B. Bush, and Paul A. Colinvaux
1990. "Paleoenvironments and human occupation in Late-Glacial Panama.", *Quaternary Research*, 33: 108-16.
- Quilter, Jeffrey
2004 *Cobble circles and standing stones. Archaeology at the Rivas site*. Iowa City: University of Iowa Press.

Quintero Sánchez, Blas y P. José Laín

1994-95 "Los petroglifos del distrito Tolé." Unpublished manuscript.

Reyes Mazzoni, Roberto

1975 "Representación de deidades mesoamericanas en los petroglifos de la Cañada de Santa Rosa, Honduras."

1976a "Representación de deidades mesoamericanas en los petroglifos de Santa Rosa Tenampúa." Boletín de la Academia Hondureña de la Lengua, 19(9) : 185-235.

1976b "Influências mayas y mexicanas en los petroglifos de la quebrada de Santa Rosa Tenampúa, Honduras." Katunob, 9(3): 38-51.

1976c Introducción a la arqueología de Honduras. Tegucigalpa: Editorial Nuevo Continente.

Richards, Barbara and María E. Bozzoli de Wille

1964 "Petroglifos de San Pedro de Pérez Zeledón." Informe Semestral, Instituto Geográfico de Costa Rica, pp. 139-45.

Robinson, Eugenia

1994 "Informe del Proyecto Kaqchikel: área de las faldas del volcán de Agua entre Ciudad Vieja y San Miguel Escobar." Unpublished manuscript. Ciudad de Guatemala: Instituto de Antropología e Historia.

1997 "Protohistoric to colonial settlement transition in the Antigua Valley, Guatemala." In: Gasco, Janine; Greg Charles Smith and Patricia Fournier-García (eds.): Approaches to the historical archaeology of Mexico, Central and South America, pp. 59-70. Los Angeles, California: Institute of Archaeology at university of Los Angeles, California.

Robinson, Eugenia y Gene Ware

2001 "Multi-spectral imaging of La Casa de las Golondrinas rock paintings." Unpublished report to the Foundation for the Advancement of Mesoamerican Studies (FAMSI).

Sheets, Payson D.

1984 "The prehistory of El Salvador: an interpretative summary." In: Lange, Frederick W. and Doris Stone (eds.): The archaeology of Lower Central America, pp. 85-112. Albuquerque, New Mexico: University of New Mexico Press.

Schieber de Lavarreda, Christa (ed.)

1998 Taller arqueológico de la región de la Costa Sur de Guatemala. Retalhuleu: Ministerio de Cultura y Deportes; Instituto de Antropología e História.

Sol Castillo, Felipe

2001 "Nuevos datos para la arqueología del delta Diquís: una prospección en la Fila Grisera". Vínculos. Revista de Antropología del Museo Nacional de Costa Rica, 26(1-2): 129-135.

Scheffler, Timothy E.

2001 "Research report on the Proyecto Cueva El Gigante – 2000, La Paz, Honduras." Mexican, 23(5): 115-23.

Seemann, Berthold

1853 Narrative of the voyage of H. M. S. "Herald" during the years 1845-51 [...] London.

Siffre, Michel

1979 "Mystérieuses civilisations dans les entrailles de la terre." A la recherche de l'art des cavernes du pays Maya. Nice: Editions Alain Leveuvre.

Snarskis, Michael J.

1979 "Turrialba: a paleoindian quarry and workshop site in eastern Costa Rica." *American Antiquity*, 44 (1): 125-38.

1984 "Central America: the Lower Caribbean." In: Lange, Frederick and Doris Stone (eds.): *The archaeology of Lower Central America*, pp. 195-232. Albuquerque, New Mexico: University of New Mexico Press.

Squier, Ephraim G.

1851-52 *Nicaragua: its people, scenery, monuments and the proposed interoceanic canal*. New York: Harper & Brothers.

Stirling, Matthew W. and Marion Stirling Pugh

1977 *Investigaciones arqueológicas en Costa Rica*. San José: Museo Nacional de Costa Rica.

Stone, Andrea

1998 "A study of the carved boulders of Lake Güija, El Salvador and a survey of rock art in Highland Guatemala." Report to the Foundation for the Advancement of Mesoamerican Studies (FAMSI). [a summary is available under: <http://www.famsi.org/reports>]

1999 "Rock art at the crossroads: the carved boulders of Lake Guija, El Salvador." Unpublished paper at the 65th Annual Meeting of the Society for American Archaeology (SAA), Philadelphia, Pennsylvania.

Stone, Andrea and Sergio Ericastilla Godoy

1999 "Registro de arte rupestre en las tierras altas de Guatemala: resultados del reconocimiento de 1997." In: La Porte, Juan Pedro; Héctor Escobedo and Ana Claudia Monzón de Suasnávar (eds.): *XII. Simposio de Investigaciones Arqueológicas en Guatemala*, 2: 775-90. Ciudad de Guatemala: Ministerio de Cultura y Deportes; Museo Nacional de Arqueología y Etnología.

Stone, Doris Z.

1948 "The basic cultures of Central America." In: Steward, Julian (ed.): *Handbook of South American Indians*, 4:169-93. Washington D.C.: United States Government Printing Office.

1961 *Las tribus talamanqueñas de Costa Rica*. San José: Museo Nacional de Costa Rica.

Walters, Gary Rex

1982 "In search of Cinaca-Mecalco. Part 1-A. Commentary on the 1980-81 research." *Artifact*, 8.

Vázquez, Ricardo et al.

1998 *Banco de datos sobre sitios arqueológicos de Costa Rica*. Unpublished manuscript. San José: Museo Nacional de Costa Rica.

Vázquez de Coronado, Juan

1908 *Cartas de Juan Vázquez de Coronado, conquistador de Costa Rica*. Edited by Ricardo Fernandez Guardia. Barcelona: Imprenta de la Vda. de Luis Tasso.

Zone 2: Caribbean Area and north-coastal South America

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1 Introduction:

This essay has been compiled by Jay B. Haviser and Matthias Strecker with significant reference to several publications by the late Cornelius N. Dubelaar, one of the pioneers of rock art research in the Caribbean region, as well as utilizing reports by numerous other colleagues. A further basis for this report was the data contributed by eleven regional experts who responded to an ICOMOS information form distributed in the region (see Annex I of the Thematic Study for the form itself, and Appendixes I-IX of this contribution for those submissions that arrived in digital format from Anguilla, Aruba, Curaçao/Bonaire, French Guyana, Guadeloupe, Grenada, Haiti, Martinique (not in digital format thus not presented here), St. Vincent, U.S. Virgin Islands and Venezuela (presented as a separate contribution).

Our study region includes the Lesser and Greater Antilles and some parts of the northern South American continent (north of Venezuela, north of the Guianas: Guyana, Surinam, French Guyana) which share a common cultural history in so far as the Caribbean islands were primarily populated from the South American continent (some researchers do not exclude archaic immigrations from Central and North America, as well). Primarily via the Orinoco River mouth and the Guianas, Archaic and Ceramic Age people spread over Trinidad, the Lesser Antilles and the Greater Antilles, travelling in canoes from island to island. Other smaller migrations seem to have also occurred from the northwest Venezuelan

coast via the islands of Aruba, Bonaire and Curaçao, directly across the Caribbean sea to the Greater Antilles.

Archaeologists have found **Archaic Age** (semi-nomadic, pre-agricultural/pre-ceramic groups) evidence on most of the Caribbean islands, indicating movements into the region from South America, Central America and perhaps North America, reaching the Greater Antilles at about 4000 B.P. (Before Present), with examples of South American starting points on Trinidad at about 6500 B.P., and on Curaçao at about 4500 B.P.

The **Ceramic Age** (sedentary, agricultural/ceramic producing peoples) inhabitation of the islands is archaeologically divided into various migrations into the region, coming almost exclusively from the South American mainland, and primarily via the mouth of the Orinoco River. There are four major events recognized with these movements from South America to the Caribbean.

- a. Circa 5000 B.P., movements of proto-Arawakan speaking peoples moved downstream along the Orinoco River in Venezuela. At the mid-point of this river, in the confluence of the Apure River, a major settlement development of the population took place and large rock art sites were created with both rock engraving (petroglyphs) and rock painting techniques utilized. From the Apure River confluence, one group of northern Maipuran Arawakan speakers moved along the Apure River towards the northwest, eventually reaching the island of Curaçao at about 1500 B.P.. While another group of Maipuran Arawakan speakers continued to move downstream on the Orinoco River, reaching the island of Trinidad at the mouth at about 2500 B.P., before spreading into the islands. It has been suggested by some scholars, that other peoples were simultaneously moving along the South American northern coast from the east, across the Guianas, to also eventually spread into the Antilles, via Trinidad.
- b. The diffusion over the Antilles took place in basically three early waves, named after the pottery identified from the type-sites investigated. Subsequent to these waves, a period of localized cultural developments occurred within the region, having the most significant florescence with the formation of the Taino cultural sphere centered in the eastern Greater Antilles. The earliest of these first waves represent the Early Ceramic peoples (often referred to as Huecoid from the La Hueca site on Vieques), who began movement from the mainland about 500 B.C. and reached as far north as eastern Puerto Rico by 300 B.C.; the second wave is called the Saladoid (from the Saladeros site in Venezuela), who began from the mainland at about 300 B.C., eventually reaching the eastern Greater Antilles, and occupying the entire region until about 300 A.D. The third early wave of migrations from the mainland began about 300 A.D., and is referred to as Barrancoid (or Modified Saladoid), taking its name from the Barrancas site in Venezuela. The archaeological evidence of this wave is manifested in the region from about 300-600 A.D.
- c. After the above noted early migrations, a period of localized developments occurred across the region, with the definition of primary ceramic styles such as Troumassoid and Suazoid in the Lesser Antilles, Ostionoid and Elenoid in the Greater Antilles, and Dabajuroid on the southern Caribbean islands of Aruba to Bonaire. However, the greatest manifestation of this period was the formation of the Taino cultural sphere, with its center at the area of eastern Dominican Republic and western Puerto Rico; the florescence of the Taino cultural development eventually produced a ceramic type called Chicoid (from the Boca Chica site in the Dominican Republic). The Taino reached a very high level of

social-political and economic development from about 1200-1500A.D., which allowed them to create a cultural sphere that had its classic core in the area noted above, yet with extending domination-exchange into the regions as far as western Cuba and east into the northern Lesser Antilles (See Figure 1). The highly developed Taino also created complex religious centers, plazas, and sacred areas, where rock art was used as a central feature of expression. It was the complex network of chiefdoms of the Taino that the Europeans first encountered in the late 15th century.

- d. A late, and of far less magnitude, human movement occurred from the Guianas area of the mainland into the southern Lesser Antilles from about 1400 A.D. into the contact period, these were the Island Carib. Their pottery appears in the southern windward islands of the Lesser Antilles, and is related to the pottery of the Kalinago (Carib speakers) and Lokono (Arawakan speakers) of the South American continent.

Most investigators who have dealt with the difficult question of dating Caribbean rock art assume that the Ceramic Age peoples created most of the petroglyphs and rock paintings in the area (see chapter 4). In classifying rock art of the region, most researchers have either dealt with rock art of the Antilles or rock art of the South American continent. The common origin of rock art manifestations in both regions has been scarcely investigated. Dubelaar (1992: 29-30) points out a few common motifs.

Dubelaar distinguishes between rock art in two regions of the Antilles: the Lesser Antilles (the chain of islands connecting northeastern Venezuela with Puerto Rico including Trinidad and the Virgin islands) and the Greater Antilles (Cuba, Hispaniola (the Dominican Republic and Haiti), Puerto Rico, Jamaica, and the Cayman islands). Dubelaar originally excluded Aruba, Curaçao and Bonaire (ABC islands) from the Lesser Antilles arguing that rock art on these islands related to the continent than to the rest of the Lesser Antilles. However, recent studies have shown a design/technique relationship between rock paintings on the three islands and those found on Cuba and the Dominican Republic, thus stressing a cultural unity of Caribbean rock art. Dubelaar tried to distinguish between the Lesser and Greater Antilles rock art by the dominating motifs among rock art, but recognized that Grenada (included in the Lesser Antilles) shares traits of both subregions. However, he did note that the Lesser Antilles was almost exclusively rock engraving techniques (petroglyphs), while the ABC islands and the Greater Antillean islands had far more emphasis on rock painting techniques. More recently, this phenomenon is seen as partially related to the variable origin of movements from the mainland into the region, nonetheless the manifestations of sacred functions for rock art are uniform over the region.

2 Site inventories:

Caribbean rock art consists of much more than one thousand sites across the region, with the greatest concentrations in the Greater Antilles and on the continent in Venezuela. Variable numbers of rock art sites are reported in the individual intermediate islands between these two concentrations.

In the Greater Antilles, the largest site register exists on **Puerto Rico** where more than 550 sites of both rock painting and petroglyphs, have been registered (Dubelaar et al. 1999), followed by the **Dominican Republic** where some 480 sites have been found, mostly as rock painting sites (according to Adolfo López B., pers. comm.; Atilas 2005 mentions the existence of 455 caves with rock art), and including several spectacular cave sites with rock

art in the Parque del Este region (see Figure 4). In **Cuba**, 188 locations with rock art have been registered (Rasco Fernández, pers. comm.), consisting of large numbers of rock painting sites. In **Haiti**, Hodges (1979, 1984) reported two petroglyph sites as well as referring to several other sites. A recent inventory of 17 rock art sites, consisting of both prehistoric (various sites noted by C. Moore), as well as prehistoric and/or historical origin sites (11), were reported by R. Beauvoir Dominique (2006). On **Jamaica**, 35 rock art sites in caves have been recorded (Atkinson 2003; 2006).

In the Caribbean coastal South America area, **Venezuela** has a national archive of rock art sites administered by Ruby de Valencia and Jeannine Sujo Volsky, who published their preliminary survey in 1987. At present the archive includes data on 650 rock art sites (October 2005), with both rock painting and petroglyph sites noted (Scaramelli and Tarble 2006).

Also in relation to the Caribbean coastal region, in the Guianas (**Guyana, Suriname, French Guyana**): Dubelaar (1986b) published an encyclopaedic inventory of petroglyphs of the three Guianas. According to this study some 60 sites exist in Guyana and Suriname. New investigations by archaeologists in French Guyana (Mazière 1997; Gassie 2006) have revealed 17 sites for that country. It is of importance to note here that rock painting sites are very rare in the Guianas region.

As we move from the South American continent into the eastern Caribbean archipelago, the following islands are encountered in a northward direction, spreading out from the mouth of the Orinoco River.

Trinidad: Only two rock art petroglyph sites were reported by Dubelaar (1995).

Grenada: Dubelaar reports 6 rock art sites (1995), although the small number of sites is not reflective of less art, so that some 109 petroglyphs are recorded. Marquet has recently noted only 5 rock art sites for the island (2006).

Barbados: Only one rock art site is reported for this island, which is rather distant from the other islands of the chain, by Dubelaar (1995).

St. Vincent: 12 rock art petroglyph sites were reported by Dubelaar (1995) and reconfirmed by Martin (2006). The satellite island of **Canouan** also has one petroglyph site reported by Dubelaar (1995).

St. Lucia: Dubelaar reported 6 rock art petroglyph sites for this island (1995).

Martinique: Dubelaar reported 3 rock art petroglyph sites (1995), which was confirmed by Beuze (2006).

Dominica: Until now, only one rock art petroglyph site has been reported for this island (Dubelaar 1995), however the size of the island and extensive water sources would suggest perhaps more are present but unrecorded.

Guadeloupe: Dubelaar (1995) mentioned 419 engraved figures in 12 sites. However, a recent survey trebled the number of engravings: more than 1100 figures occur in 18 sites (Société d'Histoire de la Guadeloupe 1995; Richard 2002; Richard and Petitjean-Roget 2006) (see

Figure 2). The satellite island of **Marie-Galante** is where Dubelaar (1995) also noted one petroglyph site.

St. Kitts: There are 4 rock art petroglyph sites reported by Dubelaar (1995), yet a large number of elements (65) for these few sites.

Barbuda: Only one rock art petroglyph site noted by Dubelaar (1995).

St. Martin-St. Maarten: There are 2 rock art petroglyph sites noted on the French side, still existing (Deschanez 2001), while on the Dutch side there was 1 cave site with rock art reported as destroyed in the 1960's (Dubelaar 1995; Haviser 1988, 1991).

Anguilla: There are only 2 rock art sites noted for the island, with one at a large cave site (Dubelaar 1995; Crock and Petersen 1999; Douglas 1990; Watters 1991).

St. John, St. Croix (U.S. Virgin Islands): Dubelaar (1995) reports 3 rock art petroglyph sites on St. Johns, and 1 site on St. Croix, which is confirmed by Wild (2003; 2006).

To the far northern end of the Antillean chain, in the **Bahamas**, apparently only a few sites have been registered, with 6 petroglyph sites identified (Hoffman 1972; Núñez Jiménez 1997).

In the southern Caribbean region, there are various coastal islands which have rock art sites recorded, the most prominent of these are the Dutch islands of **Aruba**, **Curaçao** and **Bonaire**, off the northwest coast of Venezuela. Aruba has 19 rock art sites recorded (Hummelinck 1990; Ruiz 2003; Kelly 2006); Bonaire has 14 rock art sites reported (Hummelinck 1990; Haviser 1991, 2006) (see Figure 3); and Curaçao has 38 rock art sites reported (Hummelinck 1990; Haviser 1987, 1993, 2001; Rancuret 2006). It is important to stress here that, except for two sites on Curaçao where very few examples are noted, all of these rock art sites on Aruba, Bonaire and Curaçao are rock painting sites.

For the sake of thoroughness, it should be noted here that the islands of the Lesser Antilles reported by Dubelaar (1995), as **not** having rock art sites, were: Antigua, Nevis, Montserrat, St. Thomas, Tortola, Anegada, Carriacou, St. Barthelémy, St. Eustatius, Saba, Beguía and Union Island among the other Grenadines. With the exception of Antigua, all of these islands noted as lacking rock art, are under 150 sq. km. in area (Dubelaar 1995).

3 Site locations:

According to Dubelaar (1992: 27) Lesser Antilles rock art is situated to a large extent along creeks or rivers; followed by locations along the coast; in river valleys or ravines; on top of low, wooded hills; in rock shelters; and only a small proportion in caves such as at Fountain Cavern in Anguilla. In the Greater Antilles, rock art is also found in those same locations, yet more significantly it abounds in the massive cave systems known on these much larger islands.

A special location and context for petroglyphs in the Greater Antilles is the case of engraved vertically placed rock slabs bordering large ceremonial plazas at various Taino sites. On Puerto Rico, at least 79 prepared plaza areas are distributed among 72 archaeological sites, 18 plazas are aligned with engraved stone slabs (Dubelaar et al. 1999: 4). The most prominent

case is Plaza A of Caguana which presents 25 engraved slabs which have been analyzed and interpreted by Oliver (1989) among others (see Figure 5).

On the mainland, in Venezuela and the Guianas, rock art sites are significantly more often situated in direct relation to water, either at rivers, lakes, springs, watersheds or sheltered areas.

4 History of rock art research:

Rock art research in the study region is indebted to the following pioneers:

- Edgar Clerc who compiled early inventories of rock art of the French islands,
- Irving Rouse and Jose M. Cruxent who from the very beginning of Caribbean Archaeology began to compile rock art data for the region,
- C. N. Dubelaar who compiled and edited rock art inventories of the Guianas, the Lesser Antilles and Puerto Rico,
- Antonio Núñez Jiménez who dedicated many years to the study of rock art in Cuba,
- Dato Pagán Perdomo who promoted rock art research in the Dominican Republic,
- Peter Wagenaar Hummelinck who compiled an inventory of rock art on the Dutch islands of Aruba, Bonaire and Curaçao.

Listed below are some (but certainly not all) additional important rock art researchers in the Caribbean Area:

in the Bahamas by Charles Hoffman and John Winter;
in Cuba by Antonio Nunez Jiminez, José Ramón Alonso, Racso Fernández Ortega and Angel Graña;
in Jamaica by James Lee, Lesley-Gail Atkinson and Phillip Allsworth-Jones;
in Haiti by Clarke Moore, William Hodges and Rachel Beauvoir Dominique;
in the Dominican Republic by Dato Pagan Perdomo, Domingo Abreu Collado, Gabriel Atilés and Adolfo López Belando;
in Puerto Rico by Ricardo Alegria, Irving Rouse, Peter Roe, Jose Oliver, Michele Hayward, Michael Cinquino, Juan Jose Ortiz-Aguila, and Angel Rodríguez;
in the Virgin Islands by Theodoor de Booy, Gudmund Hatt and Kenneth Wild;
in Anguilla by David Watters, Nik Douglas, John Crock and Jim Petersen;
in St. Martin - St. Maarten by Jay Haviser, Christophe Henocq, Christian Stouvenot and Isabelle Dechanez;
in Grenada by Sofia Marquet and Henry Petitjean Roget;
in St. Kitts by Gérard Richard and Henry Petitjean Roget;
in Guadeloupe by Edgar Clerc, Alain Gilbert, Gérard Richard and Henry Petitjean Roget;
in Dominica by Lennox Honeychurch and Henry Petitjean Roget;
in Martinique by Mario Mattioni, Louis Allaire, and Henry Petitjean Roget;
in St. Lucía by Ripley Bullen, Eric Brandford and Henry Petitjean Roget;
in St. Vincent & Grenadines by Earl Kirby;
in Aruba by P. Wagenaar-Hummelinck, Ep Boerstra, Aad Versteeg, Arminda Ruiz, Harold Kelly and Raymundo Dijkhoff;
in Bonaire by P. Wagenaar-Hummelinck, Paul Brenneker, R. Nooyen and Jay Haviser;
in Curaçao by Aad Ringma, Elis Juliana, Paul Brenneker, G. De Jong, P. Wagenaar-Hummelinck, Jay Haviser and André Rancuret et al..

Sofia Jönsson Marquet's broad regional study of petroglyphs in the Windward Islands group in the Lesser Antilles also deserves special mention. She has provided a contextual analysis and an approach to relative chronology (Marquet 2002).

Rock art studies in Venezuela have been ongoing since the 19th century by Alexander von Humboldt, Gaspar Marciano and Bartolome Tavera-Acosta, yet a more technical and scientific research approach has been developed there since the 1950-60's, with early work by Jose Cruxent, and important later work by Angelina Pollak-Eltz, Mario Sanoja, Jaime Vaz, Ruby de Valencia, Jeannine Sujo Volsky, Miguel Angel Parera, Kay Tarble, Franz Scaramelli and John Greer.

With French Guyana, Guyana and Suriname, as well, the early studies began in the 19th century as with Alexander Winter, Charles Barrington Brown, Everard Im Thurn, and later emphasis on more scientific research in the 1970-80's, by such investigators as: C. N. Dubelaar, Arie Boomert, Frans Bubberman and Aad Versteeg in Suriname; Huges Petitjean-Roget, Christian Toutouri, Guy & Marlene Maziere, Eric Gassies and Gérald Migeon in French Guyana; and C. N. Dubelaar, Edward Goodland, Ripley Bullen and Denis Williams in Guyana.

5 Brief characterization of rock art of northern South America (Venezuela/Guianas), Lesser Antilles and Greater Antilles:

The northern continental area of South America (Venezuela and the Guianas) has rock art characterized by extensive zoomorphic and anthropomorphic designs, and also geometric forms. These range from small concentrations of examples on boulders in river beds, to massive rock shelter settings where human burials are continued until the present, including huge mural designs that are up to 90 meters long. There are numerous design motifs in similarity to the Caribbean islands, however the sheer size and quantity of art at Venezuelan sites is significant in contrast to the islands. In French Guyana as well, the size of the art is impressive, while the motifs have certain, yet fewer, similarities to styles in Venezuela and the Caribbean islands.

Dubelaar recognized a comparatively homogenous corpus of petroglyphs at islands of the Lesser Antilles (excluding Aruba, Curaçao and Bonaire). He concluded that the overall majority of motifs consist of faces and anthropomorphic figures which are always stylized or schematic. These representations occur as isolated elements and rarely form complex scenes. As well, rarely do animal figures appear. Only rock engraving techniques occur in the Lesser Antilles. The one design motif that is most similar to the mainland and also among both the Lesser and Greater Antilles, is the "swaddled bodies" motif (see Figure 2), which some investigators interpret to represent a wrapped body in preparation for death rituals, thus accentuating the ancestor cult symbolism in rock art of the region. However, as this interpretation is not fully accepted, a more general denomination for the motif would be preferable.

Rock art of the Greater Antilles show more complexity and different traditions than noted in the Lesser Antilles, as Adolfo López B. (2003) has pointed out for the Dominican Republic. There are both rock engraving petroglyphs and rock painting sites in the Greater Antilles, often with some of the same motives being used in both techniques, such as abstract or geometric designs. On Cuba and the Dominican Republic rock painting is widespread and most common, while on Puerto Rico there is a more balanced representation of both

engraving and painting. Within the large cave systems of the Dominican Republic enormous murals of rock paintings occur that depict human, animal, bird and fish forms (see Figure 4), and some cases of scenic compositions, as well as both negative and positive hand prints. The paint colors in the Greater Antilles are most often red, black, brown, and infrequently white.

In the southern Caribbean islands of Aruba, Curaçao and Bonaire, rock art is almost exclusively painting in a rock shelter context, not in deeper caves, using primarily geometric designs (see Figure 3) and occasional zoomorphic or anthropomorphic forms, and positive hand prints are noted. The colors used for the rock painting have a distinctive relationship to the different islands, so that on the oldest occupied island of Curaçao only red painting occurs, on the adjacent later occupied island of Bonaire more complex designs appear and brown and black are added to the color range, while on Aruba, the island with closer ties to the mainland and latest occupations, the rock art designs are the most complex of the three islands, and include white with the other three colors, represented with scenic panels and more zoomorphic shapes. Many of the rock painting designs and techniques noted on the ABC islands also occur on Cuba and the Dominican Republic.

6 Chronology:

While for a long time, Caribbean rock art was considered not datable, recently several studies include chronological approaches. In general, most archaeologists of the region assume that the majority of the rock art in the Caribbean was made during the Ceramic Age, although there are recognized possibilities for incipient traditions in the Archaic Age.

Esteban Maciques Sánchez (2004) has proposed a sequence of rock art traditions in Cuba. He tentatively suggests an initial abstract style in preceramic times, later figurative expressions in the ceramic period and finally colonial motifs executed after the Spanish conquest. Haviser has suggested potential trans-Caribbean connections between Aruba-Curaçao-Bonaire and Cuba during the late Archaic Age, using the rock painting art as a supportive argument (2003). Furthermore, the earlier-mentioned sequence of variable color use in relation to the occupation periods on the ABC islands can be seen as a rough chronological estimation for those islands specifically.

Alain Gilbert has proposed a stylistic sequence for Martinique and Guadeloupe recognizing three phases (Richard 2002: 168-169, 172). In excavations at engraved boulders in Guadeloupe, a probable association between the petroglyphs and Saladoid ceramics was found (Société d'Histoire de la Guadeloupe 1995: 28).

In Puerto Rico, Peter Roe (1991) suggests an association between petroglyphs and the first and second phases of the late ceramic period, between 600 and 1200 A.D. The engraved stone slabs aligning ceremonial plazas on the same island are considered traits of Taíno culture dating to approximately 1200-1500 A.D. Both Peter Roe for Puerto Rico and Adolfo Lopez B. for the Dominican Republic, have proposed specific motif classifications for the rock art, which could serve for general chronological ordering.

The last expressions of rock art of the Caribbean islands are colonial human figures, for example in the Cuban site Cueva de los Generales, reported by Núñez Jiménez (1975: 403-409), this is also a temporal marker.

7 Observations on Recording and Research:

As noted from the eleven respondents to the ICOMOS information request form (see Appendixes I-IX), there seems to be basic levels of recording and research of rock art within the region. The concentrations of research are obviously focused on those areas where the larger quantities of sites occur, such as in Venezuela and on some of the Greater Antilles islands. However for other of the Greater Antilles islands (e.g. Cuba and Haiti) and most of the Lesser Antilles islands, economic pressures constrain the opportunities for extensive research. This is clearly evident in the case of the island of Hispaniola (Haiti and Dominican Republic), where vast numbers of sites are recorded in the Dominican Republic yet very few sites are recorded in Haiti.

An overall review of the present state of documentation for the rock art sites of the region, indicates that most of the sites have been placed on local government archaeological site inventory registers, and have been photographed in print, slide and digital formats, as well as drawn sketches. Unfortunately, sometimes invasive recording methods such as chalking out of engravings are still practised. Some of the site locations have been identified by GPS and UTM locational programs. Three-dimensional digital documentation is still at an experimental stage in the region, with only some few studies begun in Puerto Rico.

Other than some few attempts for a regional approach to data collection (see Dubelaar 1995; Marquet 2005), most of the site databases are restricted to local national facilities, and thus not linked to each other. As well, there is not at present a single common computer rock art registration program used in the region, and indeed the great variety of systems as well as languages being used, inhibits the potential for easy data exchange.

8 Conservation and Management Issues:

Again using the data provided from the questionnaires, it can be suggested that conservation and management issues need considerable further attention from the nations and communities where the rock art sites occur. The economic constraints for many of the countries are a significant factor in the national decisions regarding these matters, such as with the case of Haiti, among various others. As well, legislative infrastructures for rock art protection are quite varied across the region, with some countries having strong legal controls over sites protection, while most have some laws yet poor enforcement systems, and indeed several nations have no legal protection for rock art sites at all. Nonetheless, several experts of the region indicate the importance of proper public educational programs to deal with the protection and management of the rock art sites. As well, the community-based approach to site control is strongly suggested as a successful traditional method of site protection.

Few countries of the region have clearly defined management plans for their rock art sites, which are most often lumped into existent general archaeological site plans. However, most of the countries do indicate that they have a national (and in some cases private) institution which is responsible for rock art sites. These institutions range from the rare full-scale rock art focused centers, as in Venezuela (Archivo Nacional de Arte Rupestre) to the more common system of simply incorporating rock art research, management and conservation through other agencies, such as governmental archaeology and environment departments or NGO cave exploration or heritage societies.

As to the physical conservation of rock art sites, there is clearly a distinction between those countries of the region which still have administrative-government ties to larger economic metropol nations as dependencies (e.g. French, Dutch, British and American islands), and those countries that are independent. The dependency territories have greater influences of metropol conservation expertise in the advice and application of advanced conservation techniques for the rock art sites; while the independent nations, often affected by their economic constraints, take what is available from local and visiting experts or do nothing for conservation. However, there are some independent nation initiatives for specific rock art conservation work, such as in Jamaica (Loubser 2005). Indeed the education argument is very strong here as well, in regards to creating a better understanding of the need for site conservation targeted at the decision-makers in the nations.

Consistently, the primary threats to rock art sites across the region are the uniquely destructive circumstances relating to natural effects, with specific reference to earthquakes, volcanic eruptions and hurricanes, that periodically change the environment at coastlines and waterways. Yet also strongly emphasized by the regional experts, were the natural destructive forces of rock patination/peeling, chemical weathering, insects, vegetation/fungus, and dust, on the rock art. Furthermore, human land-use encroachment of the site locations, for both residential and economic reasons, is having a serious effect on the integrity of many of the sites. Indeed, the development of tourism in some rock art sites and their vicinities, when conducted without, or having inadequate management plans, results in severe destruction of the sites. Some of the more prominent of these types of site destructions are noted in the Dominican Republic, at the Borbon and Cueva de las Maravillas caves. However, there are also successful cases of development of tourism in rock art sites of the region, such as Parc Archéologique de Trois Rivières in Guadeloupe. Often the result of greater access to rock art sites through roads development, is manifested with increased destruction by vandalism and actual theft of the rock art. Again, the need for more effective educational programs about the importance of rock art protection is required to mitigate many of these human threats.

Conclusions

The rock art of the Caribbean and northern South American continent are clearly superb examples of the ancient, yet enduring, nature in human insight, creativity and expression. These images and sites link the cosmological and cultural views of the original inhabitants from the mainland into the island environments, and these sites continue to be recognized as icons of cultural identity for peoples of the region today.

There is still considerable work that needs to be done in the region for the proper conservation, management, and research of these vital symbols for regional unity. One of the most important early steps should be the regional standardization of terms, research techniques and database systems. Furthermore, educational programs must be implemented in the schools, as well as in the broader community, to develop the awareness of the significance of these rock art sites for protection as cultural patrimony. Indeed, the decision-makers and community leaders of the Caribbean should also be involved in the educational process, to be informed of the potentials from these rock art sites, if properly managed and conserved, for inspiring cultural pride, as well as a compliment to heritage tourism with an emphasis on integrity and protection of local values. In many of the region's nations, these important steps are now being taken, which provides the guidance and model for the others to follow, beyond language barriers and governments, towards a sense of Caribbean cultural linkage.

Based on a review of the rock art literature, our many years of experience, and the clear opinions expressed by the regional experts, it is suggested here that **Amerindian Rock Art of the Caribbean** has all of the necessary requirements to begin preparation for a UNESCO World Heritage nomination. It is further our opinion, that with the cooperation of regional organizations, such as the International Association for Caribbean Archaeology (IACA), among others, a viable infrastructure for the management and conservation of selected rock art sites across the region can be achieved, and thus the World Heritage nomination has a strong potential for success. Even if this nomination is not successful, the forward motion of this exercise in research unification and awareness development, will in itself significantly benefit the region, its people and its cultural heritage preservation.

See illustrations Annexe IV: page 218

Bibliography

Abreu Collado, Domingo

- 2003 El Arte Rupestre y la Historia Contada. In: *Proceedings of the 20th International Congress for Caribbean Archaeology*, p.633-638, Dominican Republic.

Acosta Saignes, Miguel

- 1980 Introducción a un Analisis de los Petroglifos Venezolanos. En *Estudios en Antropología, Sociología, Historia y Folclor*. M. A. Saignes, ed. pp. 9-32. Caracas: Biblioteca de la Academia Nacional de Historia.

Alonso, Enrique et al.

- 2004 Arte rupestre de Pinar Río. In: *Memorias del II Taller Internacional de Arte Rupestre*. CD. La Habana.

Alonso, José Ramón

- 1991 Arte Rupestre en Punta del Este, Cuba. El “motivo central” de un sistema ideográfico. In: *Estudios Culturales. La Web de José Ramón Alonso*, <http://es.geocities.com/estudiosculturales2003/arterupestre/motivocentral.html>

- 2003 Las pinturas rupestres de Punta del Este: en torno a la interpretación y lectura simbólica de este arte. In: Rupestreweb, URL: <http://es.geocities.com/estudiosculturales2003/arterupestre/arterupestre.html>

- 2004 Panorama histórico-crítico sobre el estudio del arte rupestre de Punta del Este, Cuba. In: Rupestreweb, URL: <http://rupestreweb.tripod.com/puntadeleste.html>

Álvarez, Pedro

- 2003 Lineamientos para el desarrollo de un Sendero de Interpretación Arqueológica, en Peña Viva Bumbún, Zona de Interés Histórica Cultural del Parque Nacional Sierra Nevada, Estado Barinas. Trabajo Final de Grado. Universidad Central de Venezuela.

Atilas, Gabriel

- 2003 El Arte Rupestre en la Republica Dominicana: Un Estudio a parir de las Cronicas. In: *Proceedings of the 20th International Congress for Caribbean Archaeology*, p. 603-612, Dominican Republic.

- 2005 Arte rupestre dominicano. 98 p. Internet, URL: <http://www.borbono.blogspot.com>

Atkinson, Lesley-Gail

- 2003 The status and preservation of Jamaican cave art. Paper held at the Fifth World Archaeological Congress, Washington, D.C. (June 21-26, 2003). 19 p.

Aujoulat, Norbert

- 1997 Le site d’art rupestre de la Carapa. In: *L’archéologie en Guyane*: 131-142, CD. Edition APPAAG, Association pour la Protection du Patrimoine Archéologique et Architectural de la Guyane.

Barrington Brown, Charles

- 1873 Indian Picture Writing in British Guyana. JAI 2:254-257.

Beuze, Lyne-Rose; Cécile Celma

- n.d. (2006) ICOMOS Caribbean Rock Art information request form submission for Martinique.

- Beauvior Dominique, Rachel
n.d. (2006) ICOMOS Caribbean Rock Art information request form submission for Haiti.
- Boomert, Arie
1975 Indian Art in Suriname. *Suralco Magazine* 7:3:1-6, Paramaribo.
- De Booy, Theodoor
1917 Indian Petroglyphs in the Antilles. *Forward* 36:17-18, Philadelphia.
- Brenneker, Paul
1941 Zeven vindplaatsen van Indianentekeningen op Bonaire. *Amigoe*, July 9, Curaçao.
- Brites, Natasha
1993 Prácticas Funerarias Wóthuha y Wánai: Presente y Pasado. Resultados Recientes en Arqueología Regional de Venezuela", *XLIII Convención Anual de AsoVAC*, Mérida, 1993.
- Bubberman, Frans
1980 Petroglyphs in Suriname. *Suralco Magazine* 12:1:1-6-21.
- Bullen, Ripley
1971a Further comments on Antillean Petroglyphs. In: *Proceedings of the International Congress of Americanists* 4:65-67.
1972a Petroglyphs in Guyana. In: *Proceedings of the International Congress for Caribbean Archaeology*, p. 65, St. Lucia.
1972b Petroglyphs of the Virgin Islands and Puerto Rico. In: *Proceedings of the Internatioanl Congress for Caribbean Archaeology*, p. 13-16, St. Lucia.
1973 Certain Petroglyphs of the Antilles. In: *Proceedings of the International Congress of Americanists* 5:94-109.
- Catalano, Francisco
2006 El Espacio en las Manifestaciones Rupestres de la Región Central: Casos Osma y Brasén. Trabajo Final de Grado. Universidad Central de Venezuela.
- Chaffanjon, Jean
1986 *El Orinoco y el Caura*. Relación de viajes realizados en 1886 y 1887 con 56 grabados y 2 mapas. J. Lecoin, transl. Caracas: Editorial Croquis.
- Clerc, Edgar
1972 Petroglyphs on Guadeloupe. In: *Proceedings of the Fourth International Congress for Caribbean Archaeology*, p. 21-24, St. Lucia.
- Crevaux, J.
1988 *Viajes por la America del Sur. En El Orinoco en Dos Direcciones*. M. Á. Perera, ed. pp. 121-333. Caracas: Ediciones Edime.
- Crock, J.G.
2000 *Interisland Interaction and the Development of Chiefdoms in the Eastern Caribbean*. Unpublished Ph.D. dissertation, Department of Anthropology, University of Pittsburgh, Pittsburgh.
- Crock, John
n.d. (2006) ICOMOS Caribbean Rock Art information request form submission.

Crock, J.G. and James B. Petersen

1999 *A Long and Rich Cultural Heritage: The Anguilla Archaeology Project, 1992-1998*. A report for the Anguilla Archaeological and Historical Society, The Valley.

Cruxent, Jose M.

1946-47 Pinturas Rupestres de El Carmen, en el Rio Parguaza, Estado Bolivar, Venezuela. *Acta Venezolana* 2:83-90.

1949 El Geoglifo de la Fila de Olivita. *Memorias de la Sociedad de Ciencias Naturales de La Salle*, Año IX, no. 23, Caracas.

1950 Archeology of Cotua Island, Amazonas Territory, Venezuela. *American Antiquity* 16(1):10-16.

1955 Petroglifos Venezolanos. *Revista A2*, Septiembre, Caracas.

1960 Pinturas rupestres del Cerro Papelon, Territorio Federal de Amazonas. *Boletin Informativo del Departamento de Antropologia*, IVIC 1:22-25.

1967 Litos con Hoyuelos. *Boletin Informativo IVIC* 5:5.

De Abate, John

1972 A key to the interpretation of the petroglyphs of the Orinoco. . In: *Proceedings of the fourth International Congress for Caribbean Archaeology*, p. 5-64, St. Lucia.

Dechanez, Isabelle

2001 Les Roches Graves de Saint Martin. In: *Proceedings of the 19th Congress of the International Association for Caribbean Archaeology*, p. 281-289, Aruba.

Delgado, Rafael

1977 *Los Petroglifos Venezolanos*. Caracas: Editorial Monte Ávila.

Dubelaar, C. N.

1983 The Distribution of Im Thurn's elaborate type petroglyphs in South America. In: *Proceedings of the ninth International Congress for Caribbean Archaeology*, p. 375-398, Dominican Republic.

1985 A Comparison between petroglyphs of the Antilles and the northeastern South America. In: *Proceedings of the Tenth International Congress for Caribbean Archaeology*, p.421-435, Martinique.

1986a *South American and Caribbean Petroglyphs*. 249 p. Foris Publications. Dordrecht – Holland, Riverton – USA.

1986b The Petroglyphs in the Guianas and adjacent areas in Brazil and Venezuela: an inventory, with a comprehensive bibliography of South American and Antillean petroglyphs. 326 p. *Monumenta Archaeologica*, 12. The Institute of Archaeology, the University of California, Los Angeles.

1992 Lesser Antilles rock art. In: *International Newsletter on Rock Art I.N.O.R.A.*, N° 1: 26-32. Foix, France.

1993 Lesser Antillean Petroglyph Problems. In: *Proceedings of the 14th International Congress for Caribbean Archaeology*, p.612-617, Barbados.

- 1995 *The Petroglyphs of the Lesser Antilles, the Virgin Islands and Trinidad*. 492 p. Foundation for Scientific Research in the Caribbean Region: Publication 135. Amsterdam.
- Dubelaar, C. N.; Hayward, Michele H.; Cinquino, Michael A.
 1999 *Puerto Rican rock art. A resource guide*. 165 p. Puerto Rico State Historic Preservation Office, San Juan.
- Douglas, Nik
 1990 The Fountain: An Amerindian Ceremonial Cavern on Anguilla, Its Petroglyphs and other finds, Related to Surface Archaeology of Anguilla's Major Beach Sites. In *Proceedings of the Eleventh Congress of the International Association for Caribbean Archaeology*, p. 141-151, Puerto Rico.
- Fernández Ortega, Racso; González Tenderso, José B.
 2001a El enigma de los petroglifos aborígenes de Cuba y el Caribe peninsular. La Habana.
 2001b Afectaciones antrópicas al arte rupestre aborigen en Cuba. In: *Rupestre*, 4: 16-21. GIPRI, Bogotá.
 2003 La Mitología Aborigen y el Arte Rupestre de la Cueva de Patana, Maisi, Cuba. In: *Proceedings of the 20th International Congress for Caribbean Archaeology*, p. 581- 586, Dominican Republic.
- Fincham, Alan G.
 1997 *Jamaica Underground*. Press, University of West Indies.
- Galarraga, Alicia
 2004 Indicadores de estrés nutricional y patológicos en osarios del período Republicano correspondiente a abrigos rocosos del Orinoco Medio, Municipio Cedeño, Estudios de casos, Estado Bolívar (Venezuela). Trabajo final de grado para optar al título de Antropólogo. Universidad Central de Venezuela.
- García Fernández, E.
 1991 *Petroglifos, huellas en el tiempo*. Caracas: Ediciones COBO.
- Gassie, Eric
 n.d. (2006) ICOMOS Caribbean Rock Art information request form submission for French Guyana.
- Gilbert, Alain and Eric Gassies
 2001 Les gravures rupestres de la Pointe Marie Galante, Île Saint-Joseph, Îles du Salut Cayenne, Guyane française. In: *Bulletin de la Société Préhistorique Française*, T. 98, N° 4 : 717-733. Paris. (Includes a chart explaining 6 phases of rock art in the Guianas.)
- Greer, John
 1995 Rock art chronology in the Orinoco Basin of Southwestern Venezuela. Ph.D. dissertation, University of Missouri – Columbia. 442 p. UMI Dissertation Services, Ann Arbor, Michigan.
 1997 Arte rupestre del sur de Venezuela: una síntesis. In: *Boletín*, 11: 38-52. SIARB, La Paz, Bolivia.
- Guarch, José M.
 1996 La muerte en Las Antillas. In: *El Caribe Arqueológico*, 1(1). Santiago de Cuba.

Gutiérrez, D.

- 2002 Sobre el Simbolismo y Funcionalidad del Numero en el Arte Rupestre de la Cueva de los Petroglifos, Viñales, Pinar del Rio, Cuba. In: *El Caribe Arqueológico*, 6, Santiago de Cuba.

Gutiérrez, D.; Fernández, R.; González, J. B.

- 2003 Propuesta para un nuevo estilo ideográfico en el extremo más oriental de Cuba. In: *Revista Catauro*, 5 (8). La Habana.

Haviser, Jay B.

- 1987 Amerindian Cultural Geography on Curaçao; *Natuurwetenschappelijk Studiekring voor Suriname en de Nederlandse Antillen* No. 120, Doctoral dissertation at the Rijksuniversiteit Leiden, Netherlands.

- 1988 An Archeological Survey of St. Martin - St. Maarten; *Reports of the Institute of Archaeology and Anthropology of the Netherlands Antilles*, No.7, Curaçao.

- 1991a The First Bonaireans; *Reports of the Archaeological-Anthropological Institute of the Netherlands Antilles*, No. 10, Curaçao.

- 1991b Development of a Prehistoric Interaction Sphere in the Northern Lesser Antilles; *Nieuwe West-Indische Gids*, Vol. 65, No. 3-4, Leiden, Netherlands.

- 1995 Test Excavations at the Savonet Rock Paintings Site, Curaçao, Netherlands Antilles. In: *Proceedings of the 15th International Congress for Caribbean Archaeology*, edited by R. Alegria and M. Rodriguez, p. 571-580, Centro de Estudios Avanzados de Puerto Rico y la Caribe, San Juan, Puerto Rico.

- 2000 Archaeological Excavations at the Savonet Rock Painting Site, Curaçao. *Boletín de la Sociedad Venezolana de Espeleología* 34:1-5.

- 2001 New Radiocarbon dates for the Archaic Age on Curaçao. In: *Proceedings of the 19th International Congress for Caribbean Archaeology*, pp. 110-122, Aruba.

- 2006 Distinguishing authentic prehistoric from historical replication rock painting features at prehistoric sites on Bonaire. *Paper presented at the 71st Society for American Archaeology annual meeting*, San Juan, Puerto Rico, April 28.

- n.d. (2006) ICOMOS Caribbean Rock Art information request form submission for Bonaire and Curaçao.

Hayward, Michele; Cinquino, Michael

- 2006 Rock art of Puerto Rico and the United States Virgin Islands. Ms.

Hodges, William H.

- 1979 L'art rupestre précolombien en Haïti. Étude descriptive des gravures de la Roche à l'Inde à Camp Coq dans la Vallée du Limbé. In: *Conjonction, Revue Franco-Haïtienne*, 143 : 5-34. Institut Français d'Haïti, Port-au-Prince.

- 1984 Quelques réflexions sur la Roche Tampée. In: *Bulletin du Bureau National d'Ethnologie*, 1 : 39-47. Port-au-Prince.

Hoffman, Charles

- 1972 Petroglyphs on Crooked Island, Bahamas. In: *Proceedings of the International Congress for Caribbean Archaeology*, p. 9-12, St. Lucia.

Humboldt, Alejandro

1985 *Viaje a las Regiones Equinocciales del Nuevo Continente*. 5 vols. Caracas: Monte Avila Editores.

Instituto de Patrimonio Cultural

1997 *Sitios Arqueológicos de Venezuela 1*. Caracas: Gráficas ACEA.

1999 *Sitios Arqueológicos de Venezuela 2*. Caracas: Editorial Arte.

Jesse, C.

1972 Petroglyphs and rock-cut basins at Dauphin, St. Lucia. In: *Proceedings of the International Congress for Caribbean Archaeology*, p. 33-34, St. Lucia.

Kelly, Harold

n.d. (2006) ICOMOS Caribbean Rock Art information request form submission for Aruba.

Kirby, Earl

1976 A Newly found Petroglyph Rock on St. Vincent. In: *Proceedings of the International Congress for Caribbean Archaeology*, p.214, Guadeloupe.

Van Koolwijk, A.J.

(1987) Indiaansche opschriften voorkomende op het eiland Aruba. 1881 Manuscript reproduced in *Bibliography of the Archaeology and Amerindians of the Netherlands Antilles and Aruba*, edited by M. Coomans-Eustatia and H. Coomans, UNA Uitgrave no. 31, Curaçao.

Laurie, Keith; Matheson, Duncan

1972 The Petroglyphs of St. Kitts, West Indies. In: *Proceedings of the International Congress for Caribbean Archaeology*, p. 17-20, St. Lucia.

Lee, James W.

1981 Field trip to St. Elizabeth Petroglyphs. In: *Archaeology Jamaica*, 81: 7-8.

1990 Petroglyphs of Jamaica. In: *Proceedings of the Eleventh Congress of the International Association for Caribbean Archaeology*, p.153-158, Puerto Rico.

López Belando, Adolfo

2004 *El Arte en la penumbra. Pictografías y Petroglifos del Parque Nacional del Este*. 370 p. Santo Domingo.

Loubser, Johannes

2005 Condition assessment, recording and graffiti removal at the Warminster/Genus rock art shelter, St. Elizabeth Parish, Jamaica. Report submitted to the American Foundation for the University of the West Indies, New York, New South Associates, Georgia, USA, 17 p.

Maciques Sánchez, Esteban

2004 El arte rupestre del Caribe insular: estilo y cronología. In: Rupestreweb, <http://rupestreweb.tripod.com/maciques.html>

Martin, Kathy

n.d. (2006) ICOMOS Caribbean Rock Art information request form submission for St. Vincent and Grenadines.

Marquet, Sofia Jönsson

2002 Les Pétroglyphes des Petites Antilles Méridionales. Contextes physique et culturel. 371 p. Paris Monographs in American Archaeology, 11. *BAR International Series*, 1051. Archaeopress, Oxford.

n.d. (2006) ICOMOS Caribbean Rock Art information request form submission for Grenada.

Mattioni, Mario

1972 Communication sur les Petroglyphes de Martinique. In: *Proceedings of the Fourth International Congress for Caribbean Archaeology*, p. 25-32, St. Lucia.

Mazière, Marlène

1997 L'art rupestre amérindien de Guyane. In: *L'archéologie en Guyane*: 99-130. Edition APPAAG, Association pour la Protection du Patrimoine Archéologique et Architectural de la Guyane.

Novoa Alvarez, Pablo

1985 Pinturas Rupestres del Territorio Amazonas de Venezuela. *Revista de Arqueología y Etnología (Habana)* 6(55):36-45.

1998 Arte Rupestre del Estado Barinas, Venezuela. Madrid: *Monográfico Especial de Editorial Arqueohistoria*.

Núñez Jiménez, Antonio

1975 Cuba: dibujos rupestres. 507 p. Editorial de Ciencias Sociales, La Habana / Industrialgráfica S.A., Lima.

1986 Arte rupestre de Cuba: las pictografías de las Cuevas del Indio y de los Portales en la Sierra de Cubitas. In: *Bolletino del Centro Camuno di Studi Preistorici*, 23: 123-132. Capo di Ponte, Valcamonica, Italy.

1987 *Arte rupestre de Cuba*. Jaca Books, Milano, Italy.

1991 Sinthesis del Arte Rupestre en Cuba. In: *Proceedings of the Thirteenth International Congress for Caribbean Archaeology*, p. 35-46, Curaçao.

1997 El arte rupestre del Amazonas al Caribe: Bahamas. In: *Espelunca*, nueva época, 3(2): 6-72. La Habana, Cuba.

Ortiz-Aguila, Juan Jose

1976 Aboriginal Antillean Pictographs: A new discovery. In: *Proceedings of the Sixth International Congress for Caribbean Archaeology*, p. 315, Guadeloupe.

Oliver, José

1998 El Centro Ceremonial de Caguana, Puerto Rico: Simbolismo iconográfico, cosmovisión, y el poderío caciquil Taíno de Boriquén. *BAR International Series* No. 727, British Archaeological Reports, Archaeopress, Oxford.

Padilla, R.

1957 *De los petroglifos y otras expresiones primitivas de América*. Caracas: Talleres Gráficos Nacionales.

Pagan Perdomo, Dato

- 1980 Aspectos sobre del Arte Rupestre Prehispánico de Santo Domingo. In: *Proceedings of the Tenth International Congress for Caribbean Archaeology*, p. 437-448, Martinique.

Perera, M. A.

- 1971 Contribución al Conocimiento de la Espeleología Histórica en Venezuela, Segunda parte. La Arqueología Hipogea del Orinoco Medio, Territorio Federal Amazonas. *Boletín de la Sociedad Venezolana de Espeleología* 3(2):151-163.
- 1983 Sobre un cementerio Piaroa en el río Parguaza, Distrito Cedeño, Estado Bolívar. *Boletín de la Sociedad Venezolana de Espeleología* 20:29-38.
- 1991a Contribución al Conocimiento de la Espeleología Histórica en Venezuela. II Parte. La Arqueología Hipogea del Orinoco Medio, Territorio Federal Amazonas. *Boletín de la Sociedad Venezolana de Espeleología* 3(2):151-163.
- 1991b Cuevas y cerros en la tradición oral y ceremonial de los amerindios de Venezuela. *Revista de Indias* LII(93):607-630.

Perera, M. A. and H. M. Moreno

- 1984 Pictografías y Cerámica de dos Localidades Hipogreas de la Penillanura del Norte T.F.A. y Dto. Cedeño, Estado Bolívar. *Boletín de la Sociedad Venezolana de Espeleología* 21:21-32.

Perera, M. A., et al.,

- 1988 *Etnohistoria y Espeleología Histórica en el Area de Influencia Inmediata de Los Pijiguaos*. Caracas: Proyecto de Arqueología y Espeleología Histórica en el Area de Influencia del Complejo Los Pijiguaos, Edo. Bolívar, Convenio MARNR/BAUXIVEN.

Petersen, J.B., B. Cox, J. Crock and E. Coldwell

- 2003 Big Spring: A Ceremonial Petroglyph Site in Anguilla, Lesser Antilles. In *Proceedings of the 20th International Congress for Caribbean Archaeology*, pp. 835-842, edited by C. Tavarez Maria and M. García Arévalo. Museo del Hombre Dominicano, Santo Domingo.

Petitjean Roget, Henry

- 1975 *Contribution de l'étude de la préhistoire des Petites Antilles*. Doctoral dissertation Ecole Pratique des Hautes Etudes, Paris.

- 1976 Note sur Quelques Pétroglyphes des Antilles. In: *Proceedings of the Sixth International Congress for Caribbean Archaeology*, p. 215-220, Guadeloupe.

- 1983 Mythes et origine des maladies chez les Tainos: les Zemís Bugia et Aiba. In: *Proceedings of the Tenth International Congress for Caribbean Archaeology*, p. 472-474, Martinique.

Petitjean Roget, Henry; Richard, Gérard

- 2005 Guadeloupe: les roches gravées des Petites Antilles, un patrimoine commun. In: UNESCO, *Arqueología del Caribe y Convención del Patrimonio Mundial*. Anexes (CD): 59-62. París.

Pinart, A.L.

- 1890 *Note sur les pétroglyphes et antiquités des Grandes et Petites Antilles*. 17 pp., Ms., Paris.

Pollak-Eltz, Angelina

- 1976 Venezuelan Petroglyphs: A Survey. In: *Proceedings of the Sixth International Congress for Caribbean Archaeology*, p. 221-231, Guadeloupe.

Reichel-Dolmatoff, G.

- 1967 Paintings of the Vaupes: An essay of Interpretation. *Folklore Americas*, Vol. XXVII, No. 2, p. 107-113, Los Angeles.

Richard, Gérard

- 1993 Au Sujet des Pétroglyphes de la Guadeloupe Découvertes Récentes. In: *Proceedings of the Fourteenth International Congress for Caribbean Archaeology*, p. 618-623, Barbados.

- 2002 Pétroglyphes de Guadeloupe – nouvelle approche. In: *Archéologie Précolombienne et Coloniale des Caraïbes, Actes des congrès nationaux des sociétés historiques et scientifiques, 123^e Antilles-Guyane, 1998 (publ. 2002)*: 167-176.

- n.d. (2006) ICOMOS Caribbean Rock Art information request form submission for Guadeloupe.

Rivas, P.

- 1990 Arqueología de Rescate en Caicara del Orinoco: Sub-proyecto Estudio de los Petroglifos de Punta Cedeño. Informe Final. En: *Informe del Proyecto de Arqueología y Espeleología Histórica del Area de Influencia del Complejo Los Pijiguaos, Edo. Bolívar*. Caracas: Convenio MARNR/BAUXIVEN.

- 1993 Estudio preliminar de los petroglifos de Punta Cedeño, Caicara del Orinoco, estado Bolívar. En *Contribuciones a la Arqueología Regional de Venezuela*. F. J. Fernández and R. Gassón, eds. pp. 165-197. Caracas: Fondo Editorial Acta Científica Venezolana.

Rodriguez, Angel Alvarez

- 1993 A Classification Scheme for the Puerto Rico Petroglyphs. In: *Proceedings of the Fourteenth International Congress for Caribbean Archaeology*, p. 637-671, Barbados.

Roe, Peter G.

- a. Cross-Media Isomorphisms in Taíno Ceramics and Petroglyphs from Puerto Rico. In: *Proceedings of the Congress of the International Association for Caribbean Archaeology* 14: 637-671. Barbados.

Romero, Alejandro

- 1997 El arte rupestre de la provincia de Sancti Spiritus, Cuba. In: *Revista Espelunca*, Época Nueva, 2(3), Sociedad Espeleológica de Cuba, La Habana.

Rouse, Irving

- 1949 Petroglyphs. *Handbook of South American Indians*, Vol. 5, Bulletin 143, BAE, p. 493-502, Washington.

- 1989 Peoples and Cultures of the Saladoid Frontier in the Greater Antilles. In: *Early Ceramic Population Lifeways and Adaptive Strategies in the Caribbean*, ed. P. Siegel, pp. 383-404, BAR International Series 506, Oxford.

- 1992 *The Tainos*. Yale University Press, New Haven.

Ruiz, Arminda

- 2003 Management and preservation of pictographs and petroglyph sites in Aruba. Paper presented at Session 1 of the Fifth World Archaeological Congress, Washington. Ms., 14 p.

Sanoja, Mario and Iraida Vargas-Arenas

1970 *La Cueva "El Elefante"*. Caracas: Universidad Central de Venezuela.

Scaramelli, Franz

1992 *Las Pinturas Rupestres en el Parguaza: Mito y Representación. Trabajo Final de Grado*. Universidad Central de Venezuela.

Scaramelli, Franz and Kay Tarble

1993a *Las Pinturas Rupestres del Orinoco Medio, Edo. Bolívar: Nuevos Enfoques*. Ponencia presentada en el simposio "Resultados Recientes en Arqueología Regional de Venezuela", XLIII Convención Anual de AsoVAC.

1993b *Las Pinturas Rupestres del Orinoco Medio, Venezuela: Contexto Arqueológico y Etnográfico*. XV International Congress for Caribbean Archaeology, San Juan, Puerto Rico, 1993b, pp. 607-623. Centro de Estudios Avanzados de Puerto Rico y el Caribe.

1996 Contenido arqueológico y etnográfico de los sitios de interés espeleohistórico del Orinoco medio, Bolívar, Venezuela. *Boletín de la Sociedad Venezolana de Espeleología* 30:20-32.

n.d.(2006) ICOMOS Caribbean Rock Art information request form submission for Venezuela.

Société d'Histoire de la Guadeloupe

1995 Signes Amérindiens. Les roches gravées en Guadeloupe. 32 p. Basse-Terre.

Sujo Volsky, J.

1975 *El Estudio del Arte Rupestre en Venezuela*. Montalban, Universidad Catolica Andres Bello.

Tarble, Kay

1991 Piedras y Potencia, Pintura y Poder: Estilos Sagrados en el Orinoco Medio. *Antropologica* 75-76:141-164.

Tarble, Kay and Franz Scaramelli

1999 Style, Function, and Context in the Rock Art of the Middle Orinoco Area. *Boletín de la Sociedad Venezolana de Espeleología* 33(diciembre):17-33.

Tavera Acosta, B.

1956 *Los Petroglifos de Venezuela*. Caracas: Instituto de Antropología e Historia, Universidad Central de Venezuela.

Urbani, Bernardo and Franco Urbani

2001 The Geoglyph of La Rueda del Indio, Chirgua, Venezuela. *Rock Art Research* 18(1):33-39.

Valencia, Ruby de; Sujo Volsky, Jeannine

1987 *El diseño de los petroglifos venezolanos. Le dessin dans les pétroglyphes vénézuéliens. Design in Venezuelan petroglyphs*. 390 p. Fundación Pampero, Caracas.

Vega, Bernardo

1976 Comparison of Newly found cave drawings in Santo Domingo with petroglyphs and pictographs in the Caribbean region. In: *Proceedings of the Sixth International Congress for Caribbean Archaeology*, p. 200-212, Guadeloupe.

Veloz Maggiolo, Marcio; Plinio Pina; Bernardo Vega

1972 Antillean Pictographs and Petroglyphs: Patterns and procedures which can be applied in the study of their location in time. In: *Proceedings of the Fourth International Congress for Caribbean Archaeology*, p. 1-8, St. Lucia.

Versteeg, Aad

1980 Petroglyph rescues in Suriname. *Suralco Magazine* 12:1:22-25.

Wagenaar-Hummelinck, Peter

1953-1972 Rotstekeningen van Curaçao, Aruba en Bonaire. *Natuurwetenschappelijk Werkgroep Nederlandse Antillen* (No. 2,6,13,21), Utrecht, Netherlands; and *De West-Indische Gids* (1953:173-209, 1957:93-126), *Nieuwe West-Indische Gids* (1972:1-66) Leiden, Netherlands.

1979 The Caves of the Netherlands Antilles. *Natuurwetenschappelijk Studiekring Nederlandse Antillen en Suriname*, No. 97, Utrecht, Netherlands.

1991 *De Rotstekeningen van Aruba*. Uitgeverij Presse-Papier, Utrecht.

1992 *De Rotstekeningen van Bonaire en Curaçao*. Uitgeverij Presse-Papier, Utrecht.

Watters, D. R.

1991 Archaeology of Fountain Cavern, Anguilla, West Indies. *Annals of Carnegie Museum* 60(4):255-320.

Weber, A.

1996 *Los petroglifos de Cojedes*. Valencia: Edit. Univ. de Carabobo.

Wild, Kenneth

2003 Defining Petroglyphs from the archaeological record. In: *Proceedings of the International Congress for Caribbean Archaeology* 20:639-646, Santo Domingo.

n.d. (2006) ICOMOS Caribbean Rock Art information request form submission for U.S. Virgin Islands.

Williams, Denis

1985 Petroglyphs in the Prehistory of Northern Amazonia and the Antilles. *Advances in World Archaeology* 4:335-380.

Winter, John

1991 Petroglyphs of the Bahamas. In: *Proceedings of the Fourteenth Congress of the International Association for Caribbean Archaeology* (A. Cummins & P. King, eds.): 672-680, Barbados.

APPENDIX I. ICOMOS Form for Anguilla

Rock Art of Anguilla- British Dependent Territory Compiled by John G. Crock, Ph.D. University of Vermont

Territory Description:

Anguilla is a limestone island 55 sq km in size with a maximum elevation of 65 m located at the northern end of the Lesser Antilles.

Significant Rock Art Sites: (2) Fountain Cavern (AL1-FC) and Big Spring (AL28-BS). Both sites have associated archaeological deposits.

Documentation: The rock art within the Fountain Cavern and Big Spring sites has been inventoried and this information has been published. Other publications also have placed these sites in a regional cultural context and dated their use by Amerindians to between 400-1500 A.D. Documentation includes photography and detailed mapping. Photographs exist in color slides, black and white negatives, and digital formats. Documentation is located at the University of Vermont, Burlington, Vermont and the Anguilla National Trust, The Valley, Anguilla. All material can be made available to assist with comparative studies.

Research:

The research into the cultural affiliation of the rock art in Anguilla is extensive. It has been conducted as part of scientific research conducted for the Government of Anguilla by the Carnegie Museum of Natural History, and the University of Vermont, and as part of Ph.D. research (Crock) as well as for the preparation of a World Heritage nomination.

Protection:

The Fountain Cavern site lies within the 12 acre Fountain Cavern National Park, owned by the Government of Anguilla (GOA). The one entrance to the cave has been sealed with a locked grate for the 20 years since it was determined to be regionally significant. The Big Spring site also is owned by the GOA. The property is fenced and railings separate the public from the rock art within an open sinkhole. The site opened as a National Park in 2003. In 2001, the Anguilla National Trust (ANT) helped draft National Park and Protected Areas legislation. Presently, the draft legislation is on the priority list of the GOA. In 2004, the Ministry of Environment of the GOA secured funding to incorporate a comprehensive piece of environmental legislation which will include protected areas and national parks sections. The end date for successful completion of this legislation is March 2007.

Conservation:

The closing off of Fountain Cavern to the public with an iron grate has prevented unauthorized access to the site and vandalism for 20 years. This effort has preserved the site but also has created an issue for some Anguillians who had enjoyed free access to the site earlier on (historically the site was utilized as a water source on this low island). The Big Spring site has been fenced since its identification. This has prevented livestock from entering the site and has prevented illegal dumping of rubbish which occurred previously.

Management:

The main agencies involved include the GOA, the ANT, and the Anguilla Archaeological and Historical Society (AAHS). Long-term management plans for both sites are currently being updated. Access to Fountain Cavern by permission only via the GOA Director of Environment. Access to Big Spring coordinated via the ANT. The GOA presently lacks the resources to properly develop Fountain Cavern for public access.

Main Threats:

At Fountain Cavern, potential threats include roof fall, algae growth, and chemical weathering. At Big Spring, the open natural environment is contributing to severe erosion of the petroglyphs. At Big

Spring, given that the site is only protected by a chainlink fence, access and vandalism is possible at any time the site is not attended.

APPENDIX II. ICOMOS Form for Aruba

Rock Art of Aruba

Compiled by Harold Kelly

Profile of Zone:

The Rock Art of Aruba consists of rock drawings in red, brown and white colors. Furthermore, the rock drawings occur both monochrome and polychrome in which the polychrome paintings consist of white and red colors.

The rock paintings were dated by AMS (Accelerated Mass Spectrometry) which yielded a date of 1000 AD and so placing them in the Transitional period between the Preceramic Period (2500B.C.-1000A.D.) and the Ceramic Period (1000-1515AD). The rock paintings are therefore ascribed to both the Preceramic and Ceramic Periods and thus show a very significant link in the development of the Aruban Amerindian cultures and the link between both periods. There is a very close relation between the rock paintings and documented archaeological sites occurring in the surrounding area of the Rock Art sites.

Links with other zones:

The Rock Art of Aruba is not only linked to the mainland of Venezuela and Colombia but is also linked to the continental islands of Bonaire and Curaçao. Research carried out by C.N. Dubelaar concerning South American and Caribbean Petroglyphs show that there is a clear link with zones 4 and 5 in the form of motifs such as the framed cross, ring and bar and concentric circles.

Known sites: National Park Arikok is on the preliminary list.

Documentation of significant Rock Art sites:

- The sites of Fontein cave, Quadirikiri cave, Arikok rock boulders and Ayo rock formations have all been inventoried.
- Detailed studies published in: The Rock Drawings of Aruba (W. Hummelinck, 1990). Physical records available previously published in: Reconstructing Brazilwood Island: The Archaeology and Landscape of Aruba (Versteeg & Ruiz, 1997). Detailed drawings of rock art. UTM coordinates of rock art sites available in digital format. Distribution of rock art sites is accurately pinpointed on a digital map of Aruba.
- Digital photographic records of all rock drawings of the mentioned sites.
- Digital documentation, UTM coordinates, distribution of sites and previously published research and detail studies available.
- All the documentation is located at the Archaeological Museum Aruba.

Research:

- AMS dating was carried out on 6 samples but only 2 were datable as a means to get insights in the relation between rock art and period of occupation. The AMS dating placed the rock art sites in the transitional period of the Preceramic Period and the Ceramic period.
- Research concerning the possible spatial relation between all the rock art sites of Aruba. The research brought forth that there seems to be a linear relation (in a north south direction) between rock art sites occurring on the island and that the locations of the rock paintings were not randomly chosen but were chosen on specific locations which “linked” the rock painting sites to each other.
- Research concerning the relation of rock art sites with surrounding archaeological sites as a means to get insights in how the Aruban Amerindians interacted with their environment and rock art sites has also been carried out. The rock art sites were of great significance for the Amerindians since they were considered as Religious, Ceremonial places wherein the Amerindians could communicate with the spirit world. Furthermore the rock art sites are closely related to temporary camps and large habitation sites.

Protection:

The legal protection of all cultural heritage on Aruba has undergone a similar development as in the rest of the Caribbean region. Legislation from the motherland were adopted at the beginning and in the course of the 20th century with inadequate or no framework from which to implement these laws. These ordinances were never adapted to the developments which had taken place in the country and which had an impact, often negative, on the cultural heritage.

The “Monument Ordinance” is the example of such a regulation in Aruba. Dating from the 1920’s it has not been implemented or adapted during the years. In an attempt to breathe some air into the protection of cultural heritage the Aruban Government instituted a ‘Monument Council’ and a “Monument Fund” in the 1990’s in accordance to this ordinance. An “Office of Monuments” was instituted which has documented all architectural monuments and which focuses on the protection of these.

The protection of archeological heritage including the pictograph/petroglyph sites has been for years a main task of the AMA. In the absence of adequate legislation the efforts had been focused on creating a “protection network” by allying with Government and non-Government agencies responsible for “land-use” issues. For some specific areas e.g. Ayo and Arikok support has been given by the AMA to the materialization of protective legislation and policy regulation. Currently the National Park Arikok, an area which contains a significant number of pictographs, is protected by national legislation. Another pictograph site which is also important as cultural landscape namely “Ayo” is protected through policy regulation established by the Department of Public Works and supported by the AMA.

The most significant development in the realization of protective legislation occurred recently with the adoption of the “Wet op de Ruimtelijke Ordenning” which contain some guidelines of the “Treaty of Malta”. In the future all construction or other land-use project will have to take into account the natural/cultural value of the area.

Despite this positive development the lack of an adequate protective legislative framework is still a major handicap for preservation efforts.

Conservation:

Current conservation is in the form of iron bars erected in front of the Fontein cave, Arikok site and Ayo site and access to the paintings is not permitted, unless under strict supervision of park rangers of the National Park Arikok or the department of Public Works and in consultation with the Archaeological Museum of Aruba. The preventative conservation method is in the form of limiting the known location of sites to the general public such as the case for the Quadirikiri rock art site. Some practical conservation is carried out in the form of digital documentation of rock paintings during site controls.

The pros of the conservation approaches is that the sites are conserved in the best manner possible with the means available and that access to the rock paintings is only granted under strict supervision. This dramatically reduces the chance of damage to the rock paintings by means of vandalism. Furthermore by abstaining to give the location of sites, these are automatically conserved. The con of this is that the cultural heritage in some cases is not accessible for the general public which impedes interaction.

Management:

The main agencies involved in management are, The National Park Arikok, Archaeological Museum Aruba and the Department of Public Works. The sites in the National Park Arikok are physically managed by the park rangers and the site of Ayo is managed by the Department of Public Works and the Scientific Department of the Archaeological Museum. The sites of Fontein cave and Arikok have active management in the form of park rangers posted on the sites 7 days a week which give guided tours to the visitors and the Ayo site has active management in the form of regular site controls by the Scientific Department. There are management plans concerning the conservation of rock painting sites. Traditional management arrangements at Ayo include regular visits by personnel of the Department of Public Works in charge of the maintenance of the protection fence and the surroundings. The AMA makes regular survey visits to the Ayo site. The drawings in the Park are under permanent surveillance of rangers and are also regularly surveyed by the AMA. The surrounding community of the Ayo site protected the area long before physical management was in

place. Both the drawings in the National Park as those in Ayo are popular tourist attractions and are also frequently visited by the local population. Ayo lies in a natural landscape and is used as a park for recreation by the local population.

The access to the rock painting sites is arranged by the park rangers of the National Park Arikok and the Department of Public Works. There is also a Limitation in resources present which inhibits the proper conservation of the rock painting sites.

The limitation in resources is indeed a challenge as is the lack of a master plan for management and conservation.

Main threats:

The main threats are in the form of natural vegetation-clearing factors which results in a greater accumulation of dust on the rock paintings, termites, fungus, sun bleaching and peeling of rock surfaces. Also limitations in funding make it difficult to preserve and restore the rock drawings (for example, due to covering of fungus).

Conclusions:

The rock paintings of Aruba are considered as an important expression with aesthetic value of the Amerindian culture of Aruba, expressed in different motifs (anthropomorphic, zoomorphic and geometric) and colors (monochrome and polychrome). The rock paintings also represent the link between Aruba, the continent, the Caribbean and the other zones of South America. The documentation of the rock paintings of Aruba includes inventories, photographic documentation and detail studies. Problems with management and conservation include the lack of financial and personnel resources. Vandalism in the form of graffiti painting had been a problem in the past which is carefully repressed today. Good practices include community involvement and awareness of the protection of this heritage.

The main threats to the rock paintings are mostly in the form of natural agents such as dust, termites, fungus, bleaching and peeling of rock surface which deteriorate the paintings. Pre-nomination support should include expertise on the assessment of the physical conditions of the drawings and their conservation. The rock paintings of Aruba have great potential to be included on the World Heritage List since they are protected by National legislation, have active management and are supported by the government of Aruba. Furthermore the rock paintings are a valuable artistic expression which have a clear link with the mainland and the Caribbean and the other zones and demonstrate the interaction of the Amerindians within this zone and the other zones expressed through the rock paintings.

The protection of all the Aruban rock art sites should be a priority since they represent a totality of cultural expression and heritage. All sites contain different drawings and it is imperative not to neglect any site and risk the permanent loss of motifs and other characteristics inherent to these sites. Future nomination to the WH List efforts should include this philosophy. The rock paintings of Aruba at Ayo and Arikok are protected by legislative and Government administrative guidelines. The management is very effective and is being carried out by a network of AMA, National Arikok Park and Public Works. The rock painting sites have an outstanding cultural and aesthetic value and the research and documentation carried out are of great value. All these factors result in these sites having a very significant potential for nomination.

APPENDIX III. ICOMOS Form for Bonaire/Curacao

Rock Art of Curacao and Bonaire Compiled by Jay Haviser

Profile of Zone:

The prehistoric rock art of Curacao and Bonaire is distributed over each island in very specific locations associated with rock shelters and at the opening of shallow caves within the coastal limestone terraces. There is almost always an association of these rock art sites with either permanent water (springs, sinkholes), seasonal water sources, and also coastal areas. The rock art of these islands

is almost exclusively rock painting, with only two sites with rock engravings reported on Curacao, both being simple static faces. The paint colors used at these rock art sites are red and black on Curacao, with red, black and brown used on Bonaire. Suggestions have been made for a potential chronological distinction between the colors used and the earlier occupation of Curacao (circa 4500 BP) compared to the later occupation of Bonaire (circa 3500 BP). The designs of the rock art on these islands are primarily geometric shapes, with occasional zoomorphic and rare anthropomorphic forms, also noted on Bonaire are positive hand prints.

Temporal estimations for these rock art sites are still unclear. Although it is strongly believed the majority of them were created in the Ceramic Age (500-1500 AD), the only radiocarbon dates associated have both Archaic Age and Ceramic Age readings (Haviser 1993), and thus suggestions have been made by Haviser for late Archaic incipient development of the rock art techniques (2003). Furthermore, similarities to rock painting designs and sites cultural contexts in Cuba and the Dominican Republic, have supported the hypothesis of trans-Caribbean human movement directly from the northwestern Venezuelan coast and ABC islands to the Greater Antilles of the Caribbean (Ibid.).

Links with other Zones:

The most direct associative links of the rock art on Curacao and Bonaire are with the central-upper Orinoco valley and northwestern Venezuela to the south, and with Cuba and the Dominican Republic to the north.

Known Sites:

There are 38 known rock art sites from Curacao and 14 known rock art sites from Bonaire. None of these sites are currently included on the World Heritage List, however several of the sites are included in the current Western Curacao World Heritage nomination preparation.

The most significant sites on these two islands are:

Onima (Bonaire)
Spelonk (Bonaire)
Roshikiri (Bonaire)
Pos Calbas (Bonaire)
Sta. Catherina (Curacao)
Hato (Curacao)
Savonet (Curacao)
Ronde Klip (Curacao)

Documentation and Research:

All of the sites known have been recorded and inventoried, with documentation primarily as drawing sketches done in the 1950-70's, and more recently with print, slide and digital photography of most of the Curacao sites and some of the Bonaire sites. The documentation is recorded with the National Archaeological Anthropological Museum (NAAM).

The early documentation on Curacao in the 1940-50's was done by A. Van Koolwijk, Aad Ringma, Elis Juliana, Paul Brenneker, and Peter Wagenaar-Hummelinck. Later documentation on Curacao was done by G. De Jong, Cees Dubelaar, Jay Haviser, Andre Rancuret, Jose Da Camara, Jos de Kok, Dolph te Linde, and the Curacao Rock Art Workgroup. The early documentation on Bonaire was done by A. Van Koolwijk, Paul Brenneker, R. Nooyen, and Peter Wagenaar-Hummelinck. Later documentation on Bonaire was done by Frans Booi, Cees Dubelaar, and Jay Haviser.

There are various incidental publications which relate to the rock art of these two islands, however the primarily early works were done by A. Van Koolwijk in the 19th century, then by Ringma, Brenneker, Nooyen, and Wagenaar-Hummelinck in the 1940-50's. The primary publications after that period are a reprint of Wagenaar-Hummelinck's various published data into one volume in 1992, a listing of the sites in a larger volume by Dubelaar in 1995, and chapters dedicated to rock art in two books (one for

Curacao, one for Bonaire) by Haviser in 1987 and 1991. Haviser also published the results of excavations conducted by himself, Andre Rancuret and Jose Da Camara, at the Savonet rock painting site on Curacao (1995, 2000). More recently, Haviser has presented an article, to be published, which is critical of modern destruction and falsification of rock art on Bonaire (2006).

Protection, Conservation and Management:

The primary monuments legislation which applies to rock art sites consists of laws dealing with archaeological sites protection. Only sites that are listed on the individual island monuments list can be protected under this law. Currently only three sites on Curacao are listed on such a monuments list, and two on Bonaire.

The management and protection of these sites also relates to their location within recognized National Park areas, where security patrols watch the sites. Many of the Curacao sites are protected in this way, and the three most significant Bonaire sites (Spelonk, Roshikiri and Onima) are also protected through this National Park system.

There are few conservation efforts made for the rock art sites on either island, with the exceptions being the placement of iron security bars at the Savonet and Hato sites on Curacao, and at the Onima site on Bonaire. Current investigations are being made into potential methods of eliminating the graffiti from several of the rock art sites on Bonaire, in cooperation with researchers from Aruba.

Main Threats:

The primary threats to the rock art sites of these two islands are natural effects such as rock face peeling, insects, fungus, and dust. However, the destruction by humans has taken a very significant toll, with vandalism having seriously affected some sites. The need for educational awareness for site protection is great, both for the general public and for the government leaders.

Conclusions:

I believe that all of these rock art sites are very important for the cultural heritage of Curacao and Bonaire, however I also recognize that only a few could qualify for inclusion in a serial trans-boundary consideration for World Heritage nomination. Those sites which could be considered, in my opinion, would be St. Catherina on Curacao, and Onima on Bonaire, based on the quality of the rock art at the sites and their potential for suitable protection, conservation, and management. Nonetheless, I do see the process of World Heritage preparation and involvement as a very important and positive direction for the future protection of rock art sites on our islands, due to an increase in public awareness about their value for our people and for humanity.

APPENDIX IV. ICOMOS Form for French Guyana

Réponses au questionnaire concernant la Guyane française

Préparées par Eric Gassies

Note : Dans la division de l'Amérique latine et des Caraïbes en 5 zones, il ne faut pas oublier de rajouter le plateau des Guyanes dans la Zone 2 – Les Caraïbes incluant Venezuela et Colombie.

Caractéristiques générales :

L'art rupestre guyanais se compose presque exclusivement de gravures puisque seul un site présente des peintures. A l'exception du nord-ouest et du centre du pays, les sites sont répartis sur tout le reste du territoire avec une forte concentration de gravures dans l'Île de Cayenne.

En l'état actuel des recherches, ces représentations rupestres ne sont pas rattachées aux complexes culturels archéologiques définis pour la Guyane française. Il n'y a pas encore de datations absolues disponibles sur ces sites.

Relations avec les zones voisines :

Sans vouloir définir de synthèse régionale, des liens peuvent être établis avec d'autres zones :

A l'est et dans le sud, les sites montrent un registre iconographique qui privilégie les représentations animales ou zoomorphiques, très proche de ce que l'on observe dans le *bassin amazonien* voisin.

Ailleurs, la diversité typologique laisse transparaître en fonction de certains motifs, des éléments comparatifs mettant cet art rupestre en relation avec le *Bas et le Moyen Orénoque*, ainsi qu'avec les Iles des *Petites et Grandes Antilles*.

Sites connus :

18 sites d'art rupestre sont actuellement connus dont :

- 16 sites en plein air
- 1 site d'abris-sous-roche (peintures)
- 1 site constitué d'alignements de roches.

Documentation :

- Parmi les sites recensés, 14 ont fait l'objet d'études détaillées.

2 sont classés Monument Historique - M.H. (roches de La Carapa à Kourou, de La Crique Pavé à Rémire-Montjoly).

12 sont inscrits à l'Inventaire supplémentaire des monuments historiques (I.S.M.H.).

- Il n'existe pas de fiche normalisée pour chaque figure, mais chaque site protégé a fait l'objet d'un relevé, effectué directement sur la roche par calque ou par relevé photogrammétrique.

- Des photographies, argentiques et numériques ont été prises.

- La documentation est disponible au service régional de l'archéologie (SRA) de la Direction Régionale des Affaires Culturelles (DRAC) de la Guyane à Cayenne.

- Des études comparatives peuvent être faites à partir des dossiers réalisés dans le cadre de la protection des sites, de l'article paru dans le *Bulletin de la Société Préhistorique Française*, du catalogue d'exposition *l'Archéologie en Guyane*.

Les recherches :

Les populations amérindiennes actuelles manifestent un intérêt certain pour ces sites dont l'origine est également évoquée à travers des récits véhiculés par la tradition orale.

Protection des sites :

Loi du 31 décembre 1913 sur les Monuments historiques.

Loi du 27 septembre 1941 réglementant les fouilles.

L'ensemble de la réglementation concernant l'archéologie et le patrimoine a été regroupé en 2004 dans le Code du patrimoine.

Conservation :

- Des études physico-chimiques (L.R.M.H.) sur les problèmes de conservation ont été effectuées sur deux des principaux sites (Carapa et Favard).

- Des structures couvrantes (bois et métal) ont été installées sur les deux mêmes sites et celui de la Crique Pavé a fait l'objet d'une application de produits fongicides.

- Les tentatives de protection des roches par mise hors d'eau réalisées par le service des monuments historiques ont connu des fortunes diverses. Il semble que le « parapluie » métallique installé au début des années 1990 au dessus de la roche Favard, ait pour conséquence de favoriser le développement de champignons et de micro-organismes susceptibles à terme de provoquer des desquamations de la roche et la même remarque peut être faite pour le site de la Carapa à Kourou.

Gestion :

- Les principaux services impliqués dans l'étude et la gestion des sites sont : Le service régional de l'archéologie (SRA) de la Direction Régionale des Affaires Culturelles de la Guyane (DRAC), la conservation régionale des monuments historiques (CRMH), l'architecte en chef des monuments historiques (ACMH) et l'architecte des bâtiments de France (ABF), le service départemental de

l'architecture et du patrimoine (SDAP) et le laboratoire de conservation des monuments historiques (LRMH).

- Il n'existe pas de plans actifs de gestion des sites. Le site de la Carapa à Kourou fait actuellement l'objet d'une mise en valeur par l'ACMH, qui devrait comprendre prochainement un plan de gestion.
- Des accès privilégiés existent pour un certain nombre de sites littoraux.
- Il n'y a pas, en dehors de l'Etat, d'implication des collectivités pour financer des projets de conservation et de mise en valeur.

Menaces principales :

- L'état de conservation des sites d'Art rupestre en Guyane française varie de manière notable mais le support rocheux est généralement fragile et érodé (roches précambriennes).
- Les problèmes d'altérations anthropiques par le feu et les outils métalliques sont particulièrement visibles dans les zones faciles d'accès (situées sur le littoral ou à proximité des implantations humaines) et qui sont le plus souvent cultivées en abattis en utilisant la technique du brûlis.
- En revanche, les sites de l'intérieur, qui ne sont qu'exceptionnellement fréquentés, sont eux, rapidement recouverts par la végétation.
- Des problèmes de vandalisme ont été rencontrés sur les sites facilement accessibles.
- On note une absence d'implication dans la gestion de la part des propriétaires.

Conclusions :

- Très peu de sites sont connus au regard de la superficie du territoire et des prospections qui ont été engagées sur ce thème. Le potentiel est donc largement sous évalué.
- La documentation qui existe sur les sites recensés nécessiterait d'être complétée par des études approfondies *in situ* ; cela est particulièrement vrai pour les sites géographiquement éloignés de la bande littorale qui est habitée et accessible.
- Les problèmes que l'on rencontre concernant l'étude, la conservation, la mise en valeur et la gestion prennent d'autant plus d'ampleur qu'il s'agit le plus souvent de sites difficilement accessibles et dispersés sur tout le territoire.
- Les sites d'Art rupestre en Guyane française constituent un témoignage unique sur l'univers spirituel des différentes populations amérindiennes qui ont migré à travers le territoire au cours des temps et qui ont peuplé l'ensemble du bassin caribéen.

APPENDIX V. ICOMOS Form for Grenada

Rock art of Grenada

Compiled by Sofia J. Marquet

Profile of zone:

The island of Grenada has 5 known sites that contain one or several boulders of engraved figures. The style of the representations is equivalent from site to site but could have been made during a long span of time. The sites are situated in the north and north-western part of the island, close to rivers or on the coast.

Even though the zone is relatively hard to access because of the mountains, other archaeological sites are situated close to the rock art sites. They are less though than on the southern and south-eastern part of the island. The archaeological sites of the north have been chronologically time estimated to the late period of the pre-Columbian era, to around 900-1400 BC.

The rock art site we would like to propose to the attention of ICOMOS and UNESCO is called Mount Rich situated in the parish of Saint Patrick. It is an inland site situated close to and in the river Saint Patrick.

Links with other zones:

The rock art sites of Grenada are situated close to the southern rock art sites of Saint Vincent. This island has a concentration of sites in the southern part of the island. The people who chose and engraved boulders on these islands could easily have been in contact or belonged to a homogenous and

cultural unity. The representations on the two islands share the same appearance and could have been done during the same period.

Known sites:

St Vincent has a site on the WH List; it is the natural site in the region Two Pitons. Grenada does not as far as I know, have any listed sites yet.

Documentation:

All the rock art sites of Granada have been inventoried by myself.

Cornelis Dubelaar had inventoried them before 1993 but during my inventory I discovered one site and two more figures on the site Duquesne Bay that had not been documented before. I had access to a GPS on all sites except Mount Rich. I have tried to indicate the correct position of it on a map. I documented the sites on data sheets that were suitable to the Caribbean islands. They have all been integrated digitally in a database where all the information about the rock art (technique, boulders, figures, orientation, type of rock etc) and about the physical environment as on the close archaeological data was listed. I made photographs in colour and black and white slides.

All the documentation has been published in the BAR series number 1051 2002 in “Les pétroglyphes des Petites Antilles méridionales; contextes physique et culturel”. This material is good to use as comparative material for other rock art studies in the area.

Research:

The rock art of Grenada is a complement to other archaeological data of this island that helps to affirm the occupation of the island from about 200 AC to Amerindian cultures. On the later dates of the archaeological data you can notice a local evolution due to external influence or intern sociological or economical changes.

Protection:

The Grenadian rock art sites are in a bad environment for protection. Most of the coastal sites are on private property and in one case under a dump station. The site of Mount Rich is in some way protected, the government is aware that it needs protection. For more information of official protection please contact Michael Jessamy, director of the National Museum of Grenada.

Conservation:

For practical conservation, one could establish a fence that would protect the area of access. As far as I know, no good method exists to protect the rock art. I think the protection starts in the information to people and to organise visits for the local population to inform them about what the rock art is and that it belongs to the state and the people of Grenada as a national heritage. With knowledge and awareness you are automatically eager to conserve the zone.

Management:

For the management (in the next paragraph as well) please contact Michael Jessamy.

Main threats:

The main threat at Mount Rich is the easy access and the village that lies just over the river. The biggest boulder seems to have been used to sit on.

This boulder has fallen down from the hill about maybe 10 meters. So it is already not in its right position. Three other boulders are situated in the water but somewhat protected from the streams.

Conclusion:

The Grenadian rock art, and especially the site of Mount Rich, is exceptional in the figures and the amount of figures. There are three representations of felines that can be a sign of the memory of the bigger continental animals, where the evidence is very clear.

There have been documentation of the rock art earlier but Dubelaar and my own work are the ones worth mentioning.

The problems with management are possible to solve. The threats are mostly the lack of information to the people.

The pre-nomination support is needed from media; television and radio. A local archaeologist would be needed or other experts from other Caribbean islands or, even from further away.

I believe the potential of nomination of this site is high and would be very good for Grenada. It could be a natural or cultural world heritage site. I recommend the management of the site and protection of it before the committee may visit the site.

APPENDIX VI. ICOMOS Form for Guadeloupe

Réponses au questionnaire concernant la Guadeloupe Préparées par Gérard Richard et Henry Petitjean Roget

Caractéristiques générales :

La Guadeloupe conserve le plus grand nombre de roches gravées de toutes les Petites Antilles (plus de la moitié selon Dubelaar).

Elles sont concentrées au sud de la Basse Terre.

Relations avec les zones voisines :

Des similarités importantes existent avec Sainte Lucie, St Kitts.

Le style général des gravures est partagé avec la plupart des Petites et des Grandes Antilles.

Sites connus :

Les roches gravées de Trois Rivières (trois grands complexes et douze stations) viennent d'être reconnues comme éligibles au Patrimoine mondial.

Les sites principaux :

Le parc archéologique des Trois Rivières avec la rivière du Petit Carbet, les pétroglyphes des Galets, l'abri Patate à Moule.

Documentation :

Kees Dubelaar, Alain Gilbert , Gérard Richard, Henry Petitjean Roget, Christian Stouvenot, Sofia Jonson Marquet, Corinne Hoffmann, Monique Roïg, et autres.

- Quels sites on fait l'objet de description ? :

Toutes les stations de pétroglyphes de la Guadeloupe.

- Enregistrement des données :

Publications, photographies, dessins, aquarelles, moulages, localisation GPS.

- La documentation se trouve :

Au service archéologique du conseil régional, au Musée Edgar Clerc, au service régional pour l'archéologie de la Direction Régionale des affaires culturelles, aux Archives départementales de Guadeloupe et au Musée d'Aix en Provence.

- Quel matériel est disponible pour des études comparatives :

Photos, extraits de publications, relevés graphiques, topographiques et photographiques, mobilier archéologique, rapports scientifiques spécifiques.

Les Recherches :

Les roches gravées de la Guadeloupe sont représentatives des productions de la culture des sociétés amérindiennes arawak qui ont occupé les Petites Antilles entre le début de l'ère chrétienne et leur disparition vers 1200 après J.C.

Protection des sites :

Il existe un Code du patrimoine qui rassemble toutes les mesures légales françaises de protection spécifiques des biens culturels nationaux, du classement au titre des Monuments Historiques, à l'inscription à l'inventaire, à l'archéologie préventive et à la protection des biens mobiliers.

Conservation :

L'état de conservation des ensembles gravés de la Guadeloupe, Région des Trois Rivières est satisfaisant. En dehors des phénomènes naturels, on ne signale pas d'actes de vandalisme irréparables et des altérations anciennes par nettoyage des roches ont été stoppées.

Conservation préventive, venue d'experts de France pour la préconisation de mesures de protection. Projet de partenariat avec l'Institut national du patrimoine de Paris et le laboratoire archéologique d'art rupestre de Périgueux.

Information du public :

Dans les écoles par des expositions itinérantes et visites de sites en particulier par le centre de ressources archéologiques du collège des roches gravées, information du voisinage, du milieu associatif, utilisation des médias pour expliquer l'importance des roches gravées et les faire respecter.

Gestion :

Les roches gravées sont en général la propriété de l'Etat. D'autres sont la propriété d'une collectivité publique territoriale, du Conseil général ou de privés. La protection des pierres est du ressort de l'Etat.

Aménagements en cours :

Parc des Roches gravées, d'autres ont été réalisés, Roches de du Plessis, Roches du Carbet, d'autres sont en projet La Coulisse. Il existe une réflexion sur la mise en valeur des ensembles gravés. Pas d'utilisation contemporaine des pierres gravées par la population locale.

Conclusions :

Les roches Gravées de la Guadeloupe font l'objet d'une prise de conscience collective quant à leur importance en tant que Patrimoine issu des temps précolombiens.

Les inquiétudes liées au développement de l'urbanisation sont en partie levées par la mise en application de la loi sur l'archéologie préventive portant obligation pour les aménageurs de subir des diagnostics préalables.

On peut regretter les lenteurs de l'administration à prendre des décisions de protection pour toutes les stations de pétroglyphes.

La prolifération des stations de pétroglyphes de la basse Terre, dans la Région des Trois Rivières constitue une énigme archéologique et offre un aspect du développement de cet art rupestre qui ne se retrouve nulle part.

Pour le futur, les recommandations les plus urgentes concernent la détermination de zones tampon ou d'un conservatoire pour protéger les roches.

APPENDIX VII. ICOMOS Form for Haiti

Rock Art of Haiti

Compiled By Rachel Beauvoir Dominique

Profile of Zone:

The nation of Haiti, which occupies one-third of the island of Hispaniola, is known to have been originally populated by the archaic Guanahatabey as well as the Taíno people. The oldest artifacts from this country are of the Casimiroid of the lithic period. They are from the region of Cabaret where radiocarbon dating has indicated 3630 and 4160 B.C. respectively for the Vignier III camp site and the Duclos VII shell mound. This period is followed by Archaic Casimiroid sites (early, middle and late) with sites ranging from 2780 B.C. to 390 B.C. The present era includes Ostionoid sites at Fort Liberté from 600 to 900, Meilac sites from 900 to 1200 and finally Chicoid sites from 1200 to 1500.

Following European settlement, Haitian rock art traditions also bear the mark of African slave marooning during the 16th and 17th centuries.

Petroglyphs have been found throughout the country, although there is a definite concentration in the North and the Central Plateau. More research is necessary in the southern peninsula where the nation's

most important caves are located, particularly in the South-East which nearly borders the Dominican Jaragua National Park caves that have many petroglyphs and pictographs.

Links with other zones:

Since the division between Haiti and the Dominican Republic only dates back two centuries, precolombian culture throughout the island is generally similar, featuring the same periods and traits. Both are a part, in fact, of the cultures of the Greater Antilles (with Cuba, Jamaica, Puerto Rico, in particular) in which Taino presence developed its most accomplished form.

Known sites:

- Parc National Historique, Milot, Haiti – Including Citadelle Laferrière, Sans-Souci and Ramier (World Heritage, 1980)
- Jacmel Historical Center (WH Tentative List)

Significant Rock Art Sites:

1. Voûte à Minguet (cave in Dondon, North)
2. Roche à l'Inde (river bed in Camp-Coq, North)
3. Bassin Zim (cave near Hinche, Center)
4. Roche Tampée (river bed near Cerca Carvajal, Center)
5. Bohoc (cave near Pignon, Center)
6. Saint Francisque (cave near St. Michel de l'Attalaye, Center) and surrounding caves
7. La Tortue caves
8. Merger ball court
9. Camp Perrin cave
10. Marmelade cave
11. Grotte Moreau, Port-Salut
12. Grotte Anacaona, Léogane
13. Grotte aux Indes, Pestel
14. Grande Grotte, Port à Piment
15. Grotte nan Baryè, Grande Anse
16. Deux Têtes, Limbé
17. Dubedou, Gonaives

Documentation:

Throughout the past 20 years, inventory with surface collections have been carried out by Mr. Clark Moore (who initially began this task with Dr. Irving Rouse) in conjunction with the Bureau National d'Ethnologie, which is the national legal entity charged with this domain. Recently, Mr. Clark Moore was assisted by Mr. Nils Tremmel, an architect specialized in heritage preservation contracted through international cooperation, in order to digitalize the archeological inventory. In this way, an important database including some one thousand archeological sites was put together. Radiocarbon dating was also carried out on a number of sites, particularly with respect to those of the Archaic and Lithic periods, that are endangered.

Amongst the sites listed above, the first seven have been inventoried, although often without the degree of precision/completion necessary. Numbers 7 through 17 require further investigation.

Generally, the digitalized inventory form includes site name, precise location, latitude and longitude, dates, site type and culture, material collected, material observed, area of occupation, as well as photographs and sketches.

Research:

Since the 1940's, when archeological investigation began in Haiti, the rock art sites have been researched and their association with present cultural practices has been constantly noted. My work, particularly, (Rachel Beauvoir-Dominique) as an anthropologist has highlighted this aspect. It remains that a thorough study of the rock art, specifically, with respect to present-day cultural practices, should be undertaken.

Protection:

The law of 31 October 1941 formally states the following:

« Article 1 - Il est créé un Bureau d’Ethnologie dont les attributions seront déterminées par Arrêté du Président de la République

Art. 2.- Toutes les pièces archéologiques et ethnographiques trouvées en territoire haïtien sont déclarées propriété de la Nation et leurs possesseurs éventuels, après en avoir fait la déclaration au Bureau d’Ethnologie, seront autorisés à les conserver uniquement à titre de gardiens.

Art 3.-Sont considérés comme objets archéologiques toute pièce fabriquée par les populations pré colombiennes de la République et ayant une importance scientifique ou artistique.

Art.4- Aucune pièce archéologique ne pourra être exportée sans l’autorisation du Département de l’Intérieur après rapport préalable du Bureau d’Ethnologie,

Art. 7- Aucune fouille archéologique ne pourra être faite sans l’autorisation du Secrétaire d’État de l’Intérieur qui accordera, sur recommandation du Bureau d’Ethnologie de la République d’Haïti, la permission nécessaire uniquement aux institutions du pays ou de l’Étranger qui jouissent d’une autorité scientifique reconnue et aux particuliers nationaux ou étrangers, qui représentent des institutions ou associations scientifiques dont la réputation est bien établie;

Art. 8.-L’Etat se réserve le droit d’envoyer sur le champ de fouilles un représentant qui sera proposé par le Bureau d’Ethnologie de la République d’Haïti d’accord avec le Secrétaire d’État de l’Intérieur. »

Further legislation includes the following elements:

- Loi du 21 avril 1940 classant comme monuments historiques les immeubles dont la conservation présente un intérêt Public ;
- Décret du 18 mars 1968 dénommant « Parcs nationaux ou Sites Naturels » toutes étendues de terres boisées ou pas sur lesquelles sont établis des monuments historiques ou sites naturels ;
- Décret du 18 mars 1968 relatif aux Parcs nationaux et sites naturels ;
- Loi du 5 septembre 1979 accordant à l’Etat le droit de pénétrer provisoirement sur les propriétés privées en vue de faciliter l’exécution de certains travaux urgents d’intérêt général ;
- Décret du 15 oct. 1984 portant organisation du Bureau National d’Ethnologie ;
- Décret du 4 avril 1983 énonçant diverses dispositions relatives à la gestion des Parcs Nationaux et Sites Naturels ;
- Décret du 12 mars 1986 supprimant l’INAHCA et distribuant les différents services qui en dépendaient ;
- Décret du 10 mai 1989 relatif au patrimoine national et aux biens culturels, créant un organisme autonome de consultation doté de la personnalité morale dénommée Commission Nationale du Patrimoine ;
- August 1993 Law on classification.

Archeological sites have not yet been included amongst the national heritage classification.

Conservation:

The conservation of archeological sites is still to be undertaken in Haiti, given the complex socio-political situation this country has been confronting for several decades, as well as the underdevelopment of this field nationally. While this is certainly negative, it also presents the advantage that most of the sites remain intact, subjected only to natural erosion.

On the other hand, since these locations are considered as sanctuaries in Haitian traditional culture, they are generally watched over and maintained by local traditionalists.

Management:

The fact that up to now no official management plans exist for these sites is tragic. All the sites remain controlled only by local traditionalists who, while considering – as most Haitians do – these places as the collective property of the Haitian people, nevertheless often maintain a certain control on their access to prevent their damage. This is particularly true of cave locations.

A thorough study of the states of preservation, the necessary measures of conservation, as well as management is a very clear need Haiti must address.

Main threats:

It is known that rock art is intimately linked to its surrounding environment. In the case of Haiti, the latter has been submitted to intense changes during the past centuries. Deforestation and erosion are highly advanced, with the ensuing consequences for the rock art.

Fortunately, a new and quite thorough series of measures have just passed as law for actively protecting the environment. This legislation will undoubtedly also be useful for archeological preservation.

Also, a quick survey of the rock art several years ago revealed the very negative impact of modern graffiti in many caves (signing names). Other human threats include the search for guano in the recent past, as well as major gunfire particularly on Tortuga Island caves during the 1970's, when Duvalier sought to annihilate political opponents.

Presently, major limitations in funding and the need for overall administrative reform in this sector (currently being undertaken) have impeded the detailed identification of threats and measures to counteract them.

Conclusions for the Zone:

The superb work begun by Mangones and Maximilien in 1941 concerning Haitian archeology, including rock art (*L'Art Précolombien d'Haïti, Catalogue de l'Exposition Précolombienne, IIIe Congrès des Caraïbes*, Mangones, Edmond & Louis Maximilien, Port au Prince, Haïti) was added to by Antoine Salgado in 1968, with his major publication on the rock art (*Haut lieu sacré dans le sous-sol d'Haïti*, Les Ateliers Fardin, Haïti, 1968). Throughout the following twenty years, the work of the past William Hodges advanced our knowledge of riverbed rock art in particular (Roche à l'Inde, Roche Tampée) and was further investigated by Clark Moore's extensive fieldwork. Recently, the digitalization of this work by Nilcke Tremmel and a widening of horizons through my own anthropological research (RBD) have aided in attaining a better understanding of the significance and prevalence of rock art in Haïti today.

Undoubtedly, however, although our database on rock art is already large, the scope of this art form is much more extensive than that which is known to date. The Dominican development in this sector during the past three decades (though we began at the same time, during the 1970's) confirms this fact.

An essential overhaul of the sector is needed and presently being undertaken, thanks to the recently elected President Preval's determination of its priority. With this, certainly, technical expertise, professional training and financial assistance will remain necessary – but the structural elements of solution, as well as political will, are expected to exist. In this sense, the Bureau National d'Ethnologie's presence at major IACA and UNESCO meetings in the recent past have resulted in promising offers of various natures.

The archeological inventory ("Carte Archéologique") should be completed in priority, with attention paid to deterioration and management, mentioning the measures to be undertaken.

Haiti has been called the "sleeping giant" of Caribbean Archeology: its repository of information on Casimiroid and Taino cultures is lacking for the entire region in its comparative studies. For Haiti, our position in the serial cross-boundary nomination, should be an element in the measures to be adopted.

Complete Pre-Nomination support is needed to quickly conform to the established standards.

APPENDIX VIII. ICOMOS Form for St. Vincent and the Grenadines

Rock Art of St. Vincent and the Grenadines ***Compiled by Kathy Martin***

Profile of Zone:

The Rock Art of St. Vincent and the Grenadines (SVG) consists of a series of petroglyphs engraved into andesite basalts. Most are deeply incised and very well defined, a few are more delicate and appear to have been made by abrasion or rubbing.

The sites are distributed coastally or along river valleys. They occur at a density of roughly 1 site per 25 km² over the country as a whole. They are distributed along the East, South and West of St. Vincent and one was found on Canouan in the Grenadines. None have been found so far in the still volcanically active North of the territory.

Dating these sites is contentious. Some are believed to be relatively recent (1000 to 1500AD) while some conservative estimate dates back, according to contextual ceramic evidence, ca. 2000 years to the Saladoid. Some authorities believe they may be much older.

Links with other sites:

St Vincent has many small faces along with complex faces, anthropomorphs, zoomorphs and abstracts in keeping with the rest of the Lesser Antilles and the region as a whole. It also has some much larger glyphs, 2m long and more. This is reminiscent of the larger figures of Venezuela and the Guianas. The Yambou Petroglyph no. 2, glyph 1 is a large rayed head and is the only representative of the “Elaborate Type” Petroglyph in the Antilles according to Dubelaar. These designs occur in the Guyanas and in adjacent areas of Venezuela and Brazil. Swaddled figures such as found at Petit Bordel are also reminiscent of some on the continent.

Some of the Vincentian Petroglyphs are entirely different from anything else in the region and may bear closer resemblance to glyphs in Africa particularly in relation to sun god images and scripts.

Known Sites:

Petit Bordel
Barrouallie – Glebe Rock
Barrouallie – Ogam Stone
Peter’s Hope
Mount Wynne
Layou
Buccament
Lowman’s Bay
Sharpes Stream
Indian Bay
Yambou Valley- 6 sites
Colonarie
Canouan

Practically every beach has work stones or “polissoirs” (stationary mortars and sharpening stones) often at each end of it. They are also present in many of the river valleys.

Cup holes are present in a number of locations, the most striking being the 13 stones on top of a ridge above Chateaubelair and below the Soufriere. One of these stones show signs of pecking and appears to be a geometric petroglyph.

Documentation:

Frederick A.Ober “Camps in the Caribbees”, Boston, USA 1880,

Daniel G.Brinton “On a Petroglyph from the Island of St Vincent, W.I.” Proceedings of the Academy of Natural Sciences of Philadelphia, 1889,

Alphonse L.Pinart « Note sur les Pétroglyphes et Antiquités des Grandes et Petites Antilles » 1890, (Manuscript copy in Rijksmuseum voor Volkenkunde, Leiden, The Netherlands).

Karl T.Sapper „St Vincent“ Globus Illustrierte Zeitung für Länder und Völkerkunde 84, Braunschweig, 1903,
 J. Walter Fewkes “The Aborigines of Porto Rico and neighbouring islands” Annual Report of the Bureau of Ethnology to the Smithsonian Institute, Washington, 1907,
 St Vincent Handbooks 1911 onwards,
 Thomas Huckerby, “Petroglyphs of St Vincent, British West Indies”, American Anthropologist vol. xvi no.2 p. 238-48, 1914,
 W.N.Sands “A newly discovered petroglyph” West India Committee circular, 1915,
 Thurn 1915,
 Thomas A.Joyce 1916, Central American and West Indian Archaeology, London
 Froidvaux 1920, St.Vincent (Colonial) Reports 1938-1965,
 Van der Plas 1954,
 Anonymous in the “Bajan” 1959,
 I.A.Earle Kirby 1969, ‘Pre-Columbian Monuments in Stone’
 Mario Mattioni 1971,
 Fred Olsen 1971,”Petroglyphs of the Caribbean Islands and Arawak deities” Proceedings of the International Congress for the study of Pre-Columbian Cultures in the Lesser Antilles.
 Leonardi 1972,
 Fred Olsen 1974 “On the Trail of the Arawaks”, University of Oklahoma Press
 Henri Petitjean Roget 1975,
 I.A.Earle Kirby 1977, “Pre-Columbian Monuments in Stone”
 Ripley P. Bullen & Adelaide Bullen 1972, “Archaeological investigations in St Vincent and the Grenadines, West Indies” W.L Bryant Found. American Studies 8, Orlando,
 Ripley P. Bullen 1973, “Certain Petroglyphs of the Antilles” Proceedings of the International Congress for the study of Pre-Columbian Cultures in the Lesser Antilles.
 C.N.Dubelaar 1995, “The Petroglyphs of the Lesser Antilles The Virgin Island and Trinidad” Uitgaven Natuurwetenschappelijke Studiekring voor het Caraïbisch Gebied 135, Amsterdam
 Sofia Jönsson Marquet 2002 University of Paris
 Claudius Fergus 2003 “The “Carib” Work Stones of Chateaubelair: curio or calendar system?”
 All the known Petroglyphs have been photographed and are on file at the SVG National Trust headquarters. Kirby gives a complete record from the 1970s except for Peter’s Hope and Yambou 6.

The Bullens’ and Dubelaar’s publications are available in SVG and Fergus publication is on the web.

Jönssen Marquet produced data sheets but no copy has been lodged with the public institutions in SVG.

Research:

The archaeology of St.Vincent generated little interest during the colonial period to save the notes in reports that documented engraved stones existed. Some archaeological work was done as referenced above. Thomas Huckerby appears to have placed the most value on Vincentian petroglyphs, giving them pre-eminence in the whole of the Antilles (P239).

During the 20th century the professional archaeologists largely confined themselves to work in the Greater Antilles. Research in the Lesser Antilles was done by amateur and self taught archaeologists.

The first comprehensive survey of rock art in SVG was produced in the 1960s by Kirby. He presented it to the scientific community at the Third International Congress for the Study of Pre-Columbian Cultures of the Lesser Antilles (Grenada 1969) under the title “The Pre-Columbian Monuments of St Vincent, West Indies”. His publication followed shortly after.

Several of the Vincentian petroglyphs are entirely different from those of the rest of the region. Kirby sought answers far and wide and eventually concurred with the ideas of Barry Fell that they were Amerindian copies of things they had learned at second or third hand from the Mediterranean. He recognised images of the sun god (especially on the Glebe stone and the Indian Bay rock) together with traces of Libyan, Punic and Cypro-Minoan scripts. This may well have been via free Africans who were known to have been so numerous in St. Vincent, as similarities with West and South African petroglyphs are marked. The Black Carib people, who gave rise to the World Heritage Listed

Garifuna culture, originated in St Vincent from the admixture of these free Africans with yellow Carib. Kirby also reported the significance of time and date with regard to the orientation of the Layou Petroglyph. At the winter solstice the last rays of the setting sun hit the rock with spectacular effect. The Yambou 2 and 3 sites also appear vividly on December 21st but at noon.

The late Barry Fell of the California Epigraphic Society translated the writing on the Ogam stone as “Mab visited this remote Western Isle”. Mab is believed to be descended from the sea farers who ravaged the Mediterranean around 1200 BC., when St Vincent was inhabited by the Ciboney.

Claudius Fergus’ work on the thirteen stones at Chateaubelair involved measurements. He related them to spirituality and astro-archaeological ideas in the Orinoco and to the work of Fred Olsen, who also studied the Glebe stone and saw it as the sun God, noting its uniqueness in the Caribbean.

Protection: Legislation under consideration.

Conservation:

One site in SVG, and one only, has been painted. This site is Buccament and the paint was applied to the series of carvings there by a person with mental disabilities. It was decided that, as the base material is andesite agglomerate rather than massive andesite more harm than good would be done trying to remove the paint.

The Indian Bay rock has had additions crudely scratched around the main glyph. The rock lies between two popular beaches and tourist police now patrol those beaches.

The Canouan stone was moved during hotel development and has not yet been relocated.

Historically two stones at Barrouallie were rescued from building sites and placed in the Yard of the Barrouallie Secondary School for protection. Students at the school are trained to give information about them to visitors.

The SVG National Trust is negotiating with the International Airport Development Company over the future of one site which lies within the boundary for the planned new airport.

Management:

In keeping with a country which has been largely agricultural until the 1990s the management of rock art sites has been largely informal. Sites have been protected by laws of trespass on private property. Any infringements are reported through small community networks and people generally have taken a pride in “the Carib stones”.

While we have not yet worked out how to measure the contribution of tourism to the economy it is clear that it is now playing a bigger role and is expected to increase substantially in the not too distant future. To facilitate the development of rock art sites to accommodate tourists and the visiting overseas based Vincentian diaspora, in addition to use of the sites in helping to define a national identity, formal management plans will need to be developed.

The Layou site was purchased by Government in 2003. It has been fenced and signage erected. A gentleman is employed to maintain and monitor the use of the site. Visitors come mainly with tour guides, but this is not mandatory.

Several of the sites are being cared for by local community groups.

One of the sites is in use as a Shrine by the Roman Catholic Church.

Main Threats:

International Airport development.

International Hotel development.

Lack of awareness of the importance of some lesser sites by developers.

Lack of Funding required to protect and manage sites when, even if entry charges are instituted, the visitor numbers in the short term would not be sufficient to maintain economic viability.

Conclusions:

SVG probably has the highest density of rock art per unit area in the entire region. It is an outstanding place of long term aboriginal habitation and bridges the petroglyph art between the Guiana plateau/Eastern Orinoco and the Northern Antilles. Its potential to contribute to a regional nomination to the WH List is out of all proportion to its size. Several sites are worthy of special mention.

SVG has a population of just 110,000 people. So far no native Vincentian has been trained in Archaeology so we still have to seek out technical advice from abroad. One visiting home owner became so fascinated by the sites here that she studied archaeology first to M.Sc. then to Ph.D. Level. She now advises the SVG National Trust.

As tourism takes off it is becoming clear that several initiatives are required:

1. Establishment of proper museum facilities/interpretation centres;
2. Send nationals for training in archaeology/museum curation, conservation;
3. Develop formal management plans for heritage sites like the more special rock art sites.

APPENDIX IX. ICOMOS Form for U.S. Virgin Islands

Rock Art of U.S. Virgin Islands Compiled by Kenneth Wild

Profile of Zone:

Archaeological research in the Virgin Islands National Park has determined that the rock art of this region was produced from 900 to 1500 AD. The art in this region is directly related in the social, political and religious development of the Taino culture.

Links with other zones:

The Rock Art in the Virgin Islands lies at a crossroads of cultural interaction between the Greater and Lesser Antilles. The art demonstrates characteristics of both regions and will be pivotal in defining interactions from South America, the Lesser Antilles and into the Greater Antilles.

Known sites in the Virgin Islands:

Reef Bay Petroglyph site.
Congo Cay – one set of carvings
Botany Bay – just two carvings
Robins Bay, St. Croix – two badly eroded carvings

Significant Rock Art Sites:

Reef Bay, St. John, VI in the Virgin Islands National Park

Documentation:

The Reef Bay Petroglyph site has been inventoried in the National Park Service's Archaeological Sites Management Information System (ASMIS) database. The site is also in the park's GIS database system. The general UTM coordinate for the site is Easting 315746, Northing 2027749. The site is documented with film, digital photography and drawings. A comparative study of the rock art to other Caribbean sites and to the local archaeological recorded sites has produced significant information in understanding Pre-Columbian inhabitants of the region. This information can be obtained through the Virgin Islands National Park. Results of this research have been presented at the International Association of Caribbean Archaeology. The site is listed on the National Register (82001716). All Southeast Region Register Nominations are on file with the Park Service's Regional Office in Atlanta or can be found on the National Register web page. The site is recorded in the territorial site files (12VAM2-09) which are kept by the Virgin Islands territorial SHPO.

Research:

Archaeological work conducted near the Reef Bay petroglyphs provided comparative data that have advanced an understanding of the petroglyphs at Reef Bay; why they were carved at this water source, what they represent, and how they play a significant role in the development of a hierarchy Taino culture. This Virgin Islands site, being located at the crossroads between the Greater and Lesser

Antilles with similarities in designs from both regions also provides clues to understanding cultural migration and interaction spheres.

Protection:

All sites owned by the territorial government of the Virgin Islands are protected under the Antiquities and Cultural Properties Act of 1998, which establishes certain procedures and standards in conformance with the National Historic Preservation Act (P.L. 89-665, as amended). All sites within the National Park are also protected under this territorial law and numerous federal laws as well as National Park protection policy and guidelines. The most active laws used to protect cultural sites include the 1906 Antiquities Act, and the Archeological Resource Protection Act or ARPA. ARPA is used in most U.S. criminal prosecution cases in the protection of cultural resources.

Conservation:

The rock art at Reef Bay is well preserved and monitored weekly by park rangers. Four groups of carvings have been inventoried at Reef Bay. At this time, there are no natural threats to the art so there has been no need to undertake any conservation work.

Management:

- The US National Park Service, Virgin Islands National Park manages this site.
- The entire Reef Bay Valley in which the Reef Bay Rock Art site rests has been designated the most protected area of the park. There can be no development or paved roads. The area will remain in a natural state of preservation.
- The park has two management plans; a general management plan that designates protected areas and the resource management plan that addresses both cultural and natural resources of the park. Both plans will be reviewed and updated this year to insure further protection of the ancient rock art site at Reef Bay.
- Traditional management arrangements consist of organized ranger tours, monitoring, and law enforcement patrolling.
- The local community uses the site in education.
- Contemporary use of the rock art site consists of interpretation, education, and research.
- To visit the site requires hiking approximately one hour from the center of the island and about thirty minutes if you hike in from the Reef Bay beach.
- Limitations in resources: The site is difficult if not impossible to access by individuals with some physical handicaps.

Main Threats:

The only threat to the site is the slight possibility of human degradation. The site is somewhat remote and maintaining ranger protection twenty-four hours would be impossible, however additional remote sensing detection could minimize this threat.

Zone 2: Venezuela

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1 Profile of Zone:

While the rock art has been widely documented in North America, Mesoamerica, the Andes, coastal Brazil, and the Antilles, the continental areas of Northern South America have received comparatively little scholarly attention. Paradoxically, this area contains one of the largest concentrations of rock paintings and petroglyphs in the Americas. Unfortunately the significance and distribution of these manifestations in space and time is not well known. This is in part due to the lack of reliable chronological associations between the rock art and particular archaeological contexts.

In Venezuela, the following types of rock art have been defined:

- Petroglyphs
- Geoglyphs
- Grinding basins and cupules
- Rock paintings
- Megalithic monuments

Petroglyphs are present throughout the country, wherever suitable rock formations are found: the Andean Piedmont (Barinas), the Andean Chain (Táchira, Mérida), the Northern Coast, especially from Falcón to Miranda, the Central Coastal Range (Carabobo, Aragua, Vargas, Miranda), and in Bolívar and Amazonas States in the southern part of Venezuela (along the course of the Orinoco, in Guri, Cuchivero and Caura Rivers). Geoglyphs are limited to the Chirgua glyph in Carabobo State. Grinding basins and cupules are often associated with other forms of rock art, including petroglyphs and paintings, especially when found in caves (Bolívar and Amazon State). Grinding basins, and axe sharpening grooves are also found alone, in the vicinity of streams and rivers. Rock paintings have a more limited distribution, with a large concentration in the area of the Middle Orinoco, but also in the Gran Sabana, Monagas, and the Galeras del Sinaruco in Apure State; other paintings have been reported for the Guajira Peninsula, and in Guárico and Lara. Megaliths have been reported for the Vigirima area, while rock alignments have been reported for the Upper and Middle Orinoco.

Three rock art traditions have been defined by de Valencia and Sujo (Valencia and Sujo Volsky 1987), based on the distribution of petroglyph styles. Nonetheless, very few systematic

comparisons have been carried out to this end, and no overall chronological sequence can be inferred. Greer has proposed a chronological sequence for the rock paintings of the Orinoco that he has linked to pre-ceramic and ceramic occupations of the region. His chronology, based on superposition and correlations between the styles of ceramic and rock painting, spans the entire occupational sequence, from the pre-ceramic to post-contact eras (Greer 1995).

2 Links with other zones:

Rock art in Venezuela is clearly linked with that of the Caribbean, with similarities in design and technique, both in petroglyphs and paintings (Dubelaar 1986a; Dubelaar 1986b; Haviser 2000; Rivas 1993). In particular, the Middle Orinoco has been considered the springboard for several cultural and linguistic traditions that reached the Caribbean via the Lesser Antilles, and the islands of Curaçao, Aruba and Bonaire. There is very little doubt that the Caribbean was peopled – at least 500 years before our Era - by different groups carrying various forms of social organization, languages and cultures related to those of their continental ancestors.

Less attention has been paid to the relationships between the Colombian Andes, Llanos, and Amazon, and the manifestations found in the Venezuelan territory. Recent discoveries on Andean rock art point to a relationship between the lowlands of the Orinoco with the western llanos of Colombia and Venezuela, the piedmont and the Andes.

The Guyanas and Venezuela also share traditions of rock art, although few comparative studies have been carried out (Dubelaar 1986a; Dubelaar 1986b).

3 Known sites:

Over 650 rock art sites have been reported for Venezuela (Ruby de Valencia, personal communication). Of these, three have been nominated as candidates for World Heritage Sites on the Tentative List: the Geoglyph of Chirgua, the petroglyphs and megaliths at the site of Vigirima, and the petroglyphs of Caicara del Orinoco.

4 Significant Rock Art Sites:

One of the largest petroglyph sites in Venezuela is found in the Complejo Arqueológico Piedra Pintada, Vigirima, Edo. Carabobo. This site is made up of over 165 petroglyph clusters, distributed over the site, associated with at least two alignments of megaliths. Stylistic resemblance to petroglyphs in the Orinoco, as well as with the Antilles has led to a tentative date for these manifestations between the first and tenth century of this era. The park forms part of the Parque Nacional San Esteban, under the control of the Instituto Nacional de Parques, and is protected by the Ley de Protección y Defensa del Patrimonio Cultural and the Ley Penal del Ambiente (Instituto de Patrimonio Cultural 1997).

The Geoglyph of Chirgua is the only documented geoglyph in Venezuela. It is located in Municipio Bejuma, Estado Carabobo, about 6 km north of the community of Chirgua. It is a large figure (56.7 m long) made up of several concentric circles and 4 rectilinear appendixes that have been interpreted as a highly stylized human figure. The geoglyph was created by excavating furrows between 0.5 and 0.7 m to 1.0 or 1.5 m wide and between 0.2 and 0.4 m deep on a hill

with a 40 degree inclination. Other archaeological remains found in the area of the geoglyph suggest the pre-Hispanic origin of the figure. This is supported by the similarity of the figure to other petroglyphs found in Carabobo, Cogedes, and Yaracuy. This site is protected by the Ley de Protección y Defensa del Patrimonio Cultural (Instituto de Patrimonio Cultural 1999) and was declared “Bien de Interés Cultural de la Nación” according to the Gaceta Oficial No. 5.299 / 29 January 1999 Resolución No. 009-98 / 06 November 1998 by the Instituto de Patrimonio Cultural, Consejo Nacional de la Cultura, Ministerio Secretaría de la Presidencia.

The piedmont of the state of Barinas is the home to many sites with abundant petroglyphs that show a variety of techniques and motifs. Zones such as Capitanejo, Bum-Bum, Yaure, and La Acequia are particularly notable for their deep and well-preserved petroglyphs (Novoa Álvarez 1998; Rafael Gasson, personal communication). The sites are often associated with waterways or terrestrial routes that connect the low Llanos with the highlands to the west.

Located at the geographic core of continental Venezuela, the Middle Orinoco area contains one of the largest number and variety of rock paintings and petroglyphs in Northern South America. A long-term survey of archaeological sites in the NW sector of the Municipio Cedeño, Bolivar State, and the NW corner of the Amazon State, has revealed the presence of several types of rock art including engravings and paintings. These manifestations are found in a variety of contexts ranging from isolated boulders in the water or on the shores of the Orinoco River, on hilltops and large walls, on outcroppings of granite formations, in small rock shelters created by the superposition of large boulders, to sizable shelters formed on the face of granite hillsides. The variety of the cultural manifestations including petroglyphs and pictographs and associated remains, among which are found burials; grinding basins and cupules, pre- and post-contact ceramics, and lithic artifacts, that differ considerably from site to site, suggesting chronological and functional variations. A detailed description of pictographs of the Lower Parguaza River Basin, their associational contexts and symbolic significance can be found in Scaramelli (1992), Scaramelli and Tarble (1996), Greer (1995; Greer 1997); Tarble (1991), and Tarble and Scaramelli (1999). So far five types of context for rock art have been defined in the Middle Orinoco: petroglyphs in open areas, petroglyphs in small caves, pictographs in open areas, pictographs in small caves, and pictographs in large caves. To the south, in the vicinity of Puerto Ayacucho, another context for petroglyphs may be defined: extremely large, highly visible motifs on the face of granite walls, such as those found at Piedra Pintada, Amazon State.

Caicara del Orinoco is one of the best-known petroglyph sites in the area, with several stations in the area of the town and on its outskirts. Rivas (Rivas 1990) documented over 75 different clusters at the site of Cedeño, on the banks of the Orinoco. These petroglyphs are exposed only in the dry season, when the level of the Orinoco is low, suggesting that they may have played a role in the marking of seasons for the indigenous groups who inhabited sites nearby. Other petroglyphs in Caicara are located on boulders and large outcrops. Many of the figures at this site have counterparts in sites in the Antilles; this has led Rivas to propose cultural links between the areas, possibly related to Arawak peoples (Rivas 1993). The sites at Caicara have been inventoried by the Instituto de Patrimonio Cultural and are protected by the *Ley de Protección y Defensa del Patrimonio Cultural* and the *Ley Penal del Ambiente* (Instituto de Patrimonio Cultural 1997).

Another important site for both petroglyphs and paintings is found at the Raudales de Atures, near Puerto Ayacucho in Amazon State. The petroglyphs at this large site are also seasonally flooded, but the paintings are located in rock shelters unaffected by the floodwaters. This site has not been documented systematically.

Several large rock shelters (80-120 m) in the Parguaza basin contain extraordinary collections of rock paintings, elaborated in several different superimposed styles, and associated with varied ceramic styles that suggest an extended period of time for the use of these sites (Greer 1995; Greer 1997; Perera 1983; Perera 1991a; Perera 1991b; Perera and Moreno 1984; Scaramelli 1992; Scaramelli and Tarble 1993a; Scaramelli and Tarble 1993b; Scaramelli and Tarble 1996). The motifs are painted in red, white, cream, orange, brown and black, with differing combinations from monochrome, bichrome to polychrome. A wide range of motifs include zoomorphic (fish, lizards, deer, turtles and others), anthropomorphic, and various geometric elements, some of which are reminiscent of the designs used in basketry and on maracas. Many of these sites are located in indigenous territory, and the Piaroa and Mapoyo Indians currently use these and other sites in the area as cemeteries.

One significant aspect of native religions that can be gleaned from the historic accounts refers to their ties to their ancestral territory, and the ritual and mythical significance of the mountains, rocks, watercourses, and caves (Perera 1988; Tarble 1991; 1993; Tarble and Scaramelli 1999; Scaramelli 1992). Some references clearly illustrate the attachment to a sacred landscape and the use of caves for burial and other ritual practices (Gumilla 1944). In this zone, however, we have also noted an important shift in Native forms of ritual representation following European contact, as noted in the rock paintings found in caves. The appearance of new images, differing in style and thematic symbolism has led some investigators to explain this disjunction in artistic expression as the result of iconoclastic practices led by the missionaries (Greer 1995). Evidence for this is found in the superposition of native paintings with images of buildings with crosses on the roof, and in the intentional destruction of petroglyphs. These iconoclastic practices are obviously associated with the colonial period and could be interpreted as the result of a variety of the prohibitions imposed by the Colonial authorities.

5 Documentation:

The Instituto de Patrimonio Cultural (IPC) is the official government institution charged with the documentation, conservation, and protection of all archaeological sites in Venezuela. The IPC has carried out an extensive survey of archaeological sites with the intention of creating a centralized archive that will serve as the basis for the management of the sites. Among the sites included in the survey are sites with rock art. They do not, however, have a specific form for the registration of rock art.

The Archivo Nacional de Arte Rupestre (ANAR) is a private archive, supported by the Fundación Tamayo, initiated through the efforts of Jeannine Sujo Volsky and Ruby de Valencia (1987). It was created in order to serve as a Reference Center and an Information Service for research and protection of Rock Art in Venezuela. The rock art archive at ANAR contains maps, site descriptions, and an inventory of over 650 sites located in 17 of the 23 states in Venezuela.

ANAR has developed a specialized recording sheet and is currently working on the incorporation of sites into an on-line archive, supported partially by funds from the UNESCO. The recording sheets have been sent to different experts in the country in order that they may supply the pertinent information to ANAR.

The Sociedad Venezolana de Espeleología (SVE) has undertaken documentation of numerous rock art sites associated with caves. The SVE regularly publishes reports and cadastral descriptions of these sites (Perera 1971; Perera 1983).

Several undergraduate theses presented at the Escuela de Antropología, Universidad Central de Venezuela have also dealt with rock art sites (Sujo Volsky (1975), Scaramelli (1992), Galarraga (2004), Álvarez (2003), Brites (1993), and Catalano (2006). Theses are available for consultation at the Escuela de Antropología, UCV, in Caracas.

Many other sites have been reported and documented by explorers, archaeologists, and others, with varying degrees of detail and accuracy (Acosta Saignes 1980; Chaffanjon 1986; Crevaux 1988; Cruxent 1967; Cruxent 1946-47; Cruxent 1960; García Fernández 1991; Humboldt 1985; Novoa Álvarez 1985; Novoa Álvarez 1998; Padilla 1957; Sanoja and Vargas-Arenas 1970; Tavera Acosta 1956, Weber 1996).

Some sites have been documented on web sites, such as rupestreweb:

Novoa Álvarez, Pablo. Petroglifos de la zona del Yaure, Barinas, Venezuela. En Rupestreweb, <http://rupestreweb.tripod.com/yaure.html>;

Montiel Acosta, Nelson. Inventario de Petroglifos de Barinas: Curbatí y Anime. Municipio Pedraza. Estado Barinas. Venezuela. En Rupestre/web, <http://rupestreweb.tripod.com/barinas.html>;

Novoa Álvarez, Pablo. Petroglifos del área de La Acequia, Barinas, Venezuela. En Rupestreweb, <http://rupestreweb.tripod.com/acequia.html>;

Álvarez, Pedro. Prospección arqueológica de los petroglifos de Bumbún, Barinas, Venezuela. En Rupestre/web, <http://rupestreweb.tripod.com/bumbun2.html>;

6 Research:

In dealing with rock art, particularly in Northern South America, archaeologists have tended to treat it as an isolated cultural phenomenon, a class of its own unrelated to the other archaeological sites in the area. Attempts have been made to describe the motifs (Cruxent 1946-47; Cruxent 1950; Perera 1971; Perera 1983; Perera and Moreno 1984; Perera 1988); to classify them according to broad categories i.e. geometric, anthropomorphic, zoomorphic (Perera 1983; Rivas 1990; Sujo Volsky 1975; Valencia and Sujo Volsky 1987); to speculate as to their possible ethnic origin (Cruxent 1946-47) and technique of manufacture (Cruxent 1946-47; Perera 1983).

Other more recent studies have attempted to ascribe possible meanings to motifs as related to subsistence and ceremonial activities inferred from the iconography (Reichel-Dolmatoff 1971;

Williams 1985) and the possible links with myth and ritual (Rivas 1993; Rivas 1998; Scaramelli 1992; Scaramelli and Tarble 1996; Tarble and Scaramelli 1999). Greer (Greer 1995; Greer 1997), in the most comprehensive study to date, has postulated a chronology for the pictographs in the Middle Orinoco region, based on a detailed classification, observation of superposition, and relation to archaeological and ethnographic evidence.

7 Protection:

The Law of Protection and Defense of the Cultural Heritage (Gaceta Oficial #4.623: 1993) is the law that protects archaeological sites, including those with rock art, in Venezuela. The following articles specify the State's obligation in the protection and conservation of these manifestations:

***“Artículo 1º** Esta Ley tiene por objeto establecer los principios que han de regir la defensa del Patrimonio Cultural de la República, comprendiendo ésta su investigación, rescate, preservación, conservación, restauración, revitalización, custodia, vigilancia, identificación y todo cuanto requiera su protección cultural, material y espiritual.*

***Artículo 2º** La defensa del Patrimonio Cultural de la República es obligación prioritaria del Estado y de la ciudadanía.*

Se declara de utilidad pública e interés social la preservación, defensa y salvaguarda de todas las obras, conjuntos y lugares creados por el hombre o de origen natural, que se encuentren en el territorio de la República, y que por su contenido cultural constituyan elementos fundamentales de nuestra identidad nacional.

***Artículo 5º** Corresponderá oficialmente al Instituto del Patrimonio Cultural todo cuanto atañe a la defensa de Patrimonio Cultural aquí prevista, con las excepciones que la Ley establezca, de los bienes que constituyen el Patrimonio Cultural de la Republica.*

***Artículo 6º** El Patrimonio Cultural de la República a los efectos de esta Ley, está constituido por los bienes de interés cultural **así declarados** que se encuentren en el territorio nacional o que ingresen a él quien quiera que sea su propietario conforme a lo señalado seguidamente: Los bienes muebles e inmuebles que hayan sido declarados o se declaren monumentos nacionales;*

Los bienes inmuebles de cualquier época que sea de interés conservar por su valor histórico, artístico, social o arqueológico que no hayan sido declarados monumentos nacionales.”

8 Conservation:

The state of preservation of rock art sites in Venezuela varies considerably, depending on the location, exposure to natural elements, accessibility, tourism, and current land use. Several cases of deliberate removal of petroglyphs have been documented; glyphs have been salvaged from dam sites (Guri), while others have been relocated to local museums or even public plazas (Los Teques, Vargas, Caicara del Orinoco).

Damage to rock art sites by unscrupulous or ignorant visitors has also occurred, in the form of graffiti, removal of portions of the art, re-carving, etc. (Vigirima, Caicara del Orinoco, Mérida). Most of the sites that are easily accessible have been chalked or even painted repeatedly over the years to facilitate recording.

The caves containing rock art in the Orinoco area have become popular tourist sites, and this has resulted in the illegal removal of burials, burial offerings, and other votive objects from these sites. However, the rock art motifs located in indigenous territories, particularly those that are found in sacred caves used as cemeteries, are relatively well preserved when compared to those manifestations located in areas outside indigenous control.

Deforestation has exposed some of the petroglyphs in the Barinas area to the negative effects of the natural elements. In other cases, such as the sites on the shores of the Orinoco, the annual flooding has eroded many of the figures. While the rock art in caves tends to be better preserved, there have been cases where campfires in the rock shelters have blackened the images. The rock paintings found in open air sites are subject to erosion and deterioration. The geoglyph in Chirgua is on private property, but the owners are conscientious conservers of the site, and allow viewing only from afar (Urbani and Urbani 2001).

9 Management:

In the last 10 years several projects have been proposed for the management of rock art sites but only a very limited number have been implemented. One of these involved the site of Pintado, in the Amazon State, where an interpretive center was established a few years ago. A group of local students were trained for the task and the site is open to the public on weekends.

The site Complejo Arqueológico Piedra Pintada, Vigirima, Edo. Carabobo is protected by the Instituto Nacional de Parques; a visitor center and guides are available for the public. Another project developed in the 90s was created for the protection and managing of the petroglyphs located at Caicara del Orinoco. Although this project involved considerable research, planning and investment, and despite the fact that the managing project would have benefited the entire archaeological site, the proposal has been dropped recurrently by the official government institution. As a result the petroglyphs of Caicara del Orinoco are presently unprotected against unscrupulous visitation and other sources of damage. Other management projects have been proposed by municipal and/or state authorities but all of them have yet to become reality.

10 Main Threats:

The main threats affecting the preservation and protection of Venezuelan rock art include the lack of adequate educational programs concerning the importance of the rock art manifestations, the degradable effects of certain environments, the uncontrolled visitation of rock art sites, the unrestrained growth of adventure tourism in areas that should be under protection, and the macro development plans which in the past have caused the disappearance of important rock art sites (i.e. the petroglyphs located in the Guri dam site). Despite the aforementioned obligations of the State in the protection and conservation of these manifestations, the main threat to the rock art sites in Venezuela lies in the apathy of the official government institutions in charge of the

protection of archaeological sites. As a result of this apparent lack of interest, considerable damage to rock art sites continues to occur in many areas.

Conclusion

The Venezuelan territory contains one of the largest most diverse rock paintings and petroglyphs in the circum-Caribbean area. Recent investigations have contributed to the understanding of the distribution and significance of these sites, both in space and time. Unfortunately, the lack of reliable chronological associations between the rock art and specific archaeological contexts has prevented us to move forward toward a more comprehensive analysis of the roles of these manifestations in native social life. Among other aspects, the location of these sites provides concrete grounds for the understanding of the use and construction of space both prior to and after contact. Variations in the construction of space also offer insights into the role of certain European colonial practices in the struggle for power, within the constraints of pre-existing relationships of authority and cosmological space. Unfortunately, despite the importance of these manifestations, very little has been done for the protection and management of the rock art in Venezuela. Although the legislation is very clear about the duties of the governmental offices in charge of this task, in practice what has reigned is a profound disrespect and lack of interest in the protection and defense of these ancient manifestations.

See illustrations Annexe IV: page 219

Bibliography

Acosta Saignes, Miguel

- 1980 Introducción a un Analisis de los Petroglifos Venezolanos. En Estudios en Antropología, Sociología, Historia y Folclor. M. A. Saignes, ed. pp. 9-32. Caracas: Biblioteca de la Academia Nacional de Historia.

Álvarez, Pedro

- 2003 Lineamientos para el desarrollo de un Sendero de Interpretación Arqueológica, en Peña Viva Bumbún, Zona de Interés Histórica Cultural del Parque Nacional Sierra Nevada, Estado Barinas. Trabajo Final de Grado. Universidad Central de Venezuela.

Brites, Natasha

- 1993 Prácticas Funerarias Wóthuha y Wánai: Presente y Pasado. Resultados Recientes en Arqueología Regional de Venezuela", XLIII Convención Anual de AsoVAC, Mérida, 1993.

Catalano, Francisco

- 2006 El Espacio en las Manifestaciones Rupestres de la Región Central: Casos Osma y Brasén. Trabajo Final de Grado. Universidad Central de Venezuela.

Chaffanjon, Jean

- 1986 El Orinoco y el Caura. Relación de viajes realizados en 1886 y 1887 con 56 grabados y 2 mapas. J. Lecoïn, transl. Caracas: Editorial Croquis.

Crevaux, J.

- 1988 Viajes por la America del Sur. En El Orinoco en Dos Direcciones. M. Á. Perera, ed. pp. 121-333. Caracas: Ediciones Edime.

Cruxent, J. M.

- 1946-47 Pinturas Rupestres de El Carmen, en el Río Parguaza, Estado Bolívar, Venezuela. Acta Venezolana 2:83-90.
- 1949 El geoglifo de la Fila de Olivita. Memoria de la Sociedad de Ciencias Naturales 9(23):27-30.
- 1950 Archeology of Cotua Island, Amazonas Territory, Venezuela. American Antiquity 16(1):10-16.
- 1967 Litos con Hoyuelos. Boletín Informativo IVIC 5:5.
- 1960 Pinturas rupestres del Cerro Papelon, Territorio Federal de Amazonas. Boletín Informativo del Departamento de Antropología, IVIC 1:22-25.

Delgado, Rafael

- 1977 Los Petroglifos Venezolanos. Caracas: Editorial Monte Ávila.

Dubelaar, C.N.

- 1986a The Petroglyphs in the Guianas and Adjacent Areas of Brazil and Venezuela; with a Comprehensive Bibliography of South American and Antillean Petroglyphs. Los Angeles: The Institute of Archaeology, The University of California, Los Angeles.

- 1986b South American and Caribbean Petroglyphs. Providence: Foris Publications.

Galarraaga, Alicia

- 2004 Indicadores de estrés nutricional y patológicos en osarios del período Republicano correspondiente a abrigos rocosos del Orinoco Medio, Municipio Cedeño, Estudios de casos, Estado Bolívar (Venezuela). Trabajo final de grado para optar al título de Antropólogo. Universidad Central de Venezuela.

García Fernández, E.

- 1991 Petroglifos, huellas en el tiempo. Caracas: Ediciones COBO.

Greer, J. W.

- 1995 Rock Art Chronology in the Middle Orinoco Basin of Southwestern Venezuela. Ph.D. University of Missouri.

- 1997 El Arte Rupestre del Sur de Venezuela: Una Síntesis. Boletín de la Sociedad de Investigación del Arte Rupestre de Bolivia SIARB 11:38-52.

Haviser, Jay B.

- 2000 Archaeological Excavations at the Savonet Rock Painting Site, Curaçao. Boletín de la Sociedad Venezolana de Espeleología 34:1-5.

Humboldt, Alejandro

- 1985 Viaje a las Regiones Equinocciales del Nuevo Continente. 5 vols. Caracas: Monte Avila Editores.

Instituto de Patrimonio Cultural

- 1997 Sitios Arqueológicos de Venezuela 1. Caracas: Gráficas ACEA.

- 1999 Sitios Arqueológicos de Venezuela 2. Caracas: Editorial Arte.

Novoa Alvarez, Pablo

- 1985 Pinturas Rupestres del Territorio Amazonas de Venezuela. Revista de Arqueología y Etnología (Habana) 6(55):36-45.

- 1998 Arte Rupestre del Estado Barinas, Venezuela. Madrid: Monográfico Especial de Editorial Arqueohistoria.

Padilla, R.

- 1957 De los petroglifos y otras expresiones primitivas de América. Caracas: Talleres Gráficos Nacionales.

Perera, M. A.

- 1971 Contribución al Conocimiento de la Espeleología Histórica en Venezuela, Segunda parte. La Arqueología Hipogea del Orinoco Medio, Territorio Federal Amazonas. Boletín de la Sociedad Venezolana de Espeleología 3(2):151-163.

- 1983 Sobre un cementerio Piaroa en el río Parguaza, Distrito Cedeño, Estado Bolívar. *Boletín de la Sociedad Venezolana de Espeleología* 20:29-38.

- 1991a Contribución al Conocimiento de la Espeleología Histórica en Venezuela. II Parte. La Arqueología Hipogea del Orinoco Medio, Territorio Federal Amazonas. Boletín de la Sociedad Venezolana de Espeleología 3(2):151-163.

- 1991b Cuevas y cerros en la tradición oral y ceremonial de los amerindios de Venezuela. *Revista de Indias* LII(93):607-630.
- Perera, M. A. and H. M. Moreno
 1984 Pictografías y Cerámica de dos Localidades Hipogeas de la Penillanura del Norte T.F.A. y Dto. Cedeño, Estado Bolívar. *Boletín de la Sociedad Venezolana de Espeleología* 21:21-32.
- Perera, M. A., et al. ,
 1988 Etnohistoria y Espeleología Histórica en el Area de Influencia Inmediata de Los Pijiguaos. Caracas: Proyecto de Arqueología y Espeleología Histórica en el Area de Influencia del Complejo Los Pijiguaos, Edo. Bolívar, Convenio MARNR/BAUXIVEN.
- Reichel-Dolmatoff, Gerardo
 1971 *Amazonian Cosmos: The Sexual and Religious Symbolism of the Tukano Indians*. Chicago: University of Chicago Press.
- Rivas, P.
 1990 Arqueología de Rescate en Caicara del Orinoco: Sub-proyecto Estudio de los Petroglifos de Punta Cedeño. Informe Final. En: Informe del Proyecto de Arqueología y Espeleología Histórica del Area de Influencia del Complejo Los Pijiguaos, Edo. Bolívar. Caracas: Convenio MARNR/BAUXIVEN.
- 1993 Estudio preliminar de los petroglifos de Punta Cedeño, Caicara del Orinoco, estado Bolívar. En *Contribuciones a la Arqueología Regional de Venezuela*. F. J. Fernández and R. Gassón, eds. pp. 165-197. Caracas: Fondo Editorial Acta Científica Venezolana.
- 1998 La vida cotidiana en las misiones Pumé durante el siglo XVIII. En *La vida cotidiana en Venezuela durante el siglo XVIII*. E. Amodio, ed. pp. 15-38. Maracaibo: Gobernación del Estado Zulia, Secretaría de Cultura.
- Sanoja, Mario and Iraida Vargas-Arenas
 1970 La Cueva "El Elefante". Caracas: Universidad Central de Venezuela.
- Scaramelli, Franz
 1992 Las Pinturas Rupestres en el Parguaza: Mito y Representación. Trabajo Final de Grado. Universidad Central de Venezuela.
- Scaramelli, Franz and Kay Tarble
 1993a Las Pinturas Rupestres del Orinoco Medio, Edo. Bolívar: Nuevos Enfoques. Ponencia presentada en el simposio "Resultados Recientes en Arqueología Regional de Venezuela", XLIII Convención Anual de AsoVAC.
- 1993b Las Pinturas Rupestres del Orinoco Medio, Venezuela: Contexto Arqueológico y Etnográfico. XV International Congress for Caribbean Archaeology, San Juan, Puerto Rico, 1993b, pp. 607-623. Centro de Estudios Avanzados de Puerto Rico y el Caribe.
- 1996 Contenido arqueológico y etnográfico de los sitios de interés espeleohistórico del Orinoco medio, Bolívar, Venezuela. *Boletín de la Sociedad Venezolana de Espeleología* 30:20-32.

Sujo Volsky, J.

1975 El Estudio del Arte Rupestre en Venezuela. Montalban, Universidad Catolica Andres Bello.

Tarble, Kay

1991 Piedras y Potencia, Pintura y Poder: Estilos Sagrados en el Orinoco Medio. Antropologica 75-76:141-164.

Tarble, Kay and Franz Scaramelli

1999 Style, Function, and Context in the Rock Art of the Middle Orinoco Area. Boletín de la Sociedad Venezolana de Espeleologia 33(diciembre):17-33.

Tavera Acosta, B.

1956 Los Petroglifos de Venezuela. Caracas: Instituto de Antropología e Historia, Universidad Central de Venezuela.

Urbani, Bernardo and Franco Urbani

2001 The Geoglyph of La Rueda del Indio, Chirgua, Venezuela. Rock Art Research 18(1):33-39,

Valencia, Ruby de and Jeannine Sujo Volsky

1987 El Diseño en los Petroglifos Venezolanos. Caracas: Fundación Pampero.

Weber, A.

1996 Los petroglifos de Cojedes. Valencia: Edit. Univ. de Carabobo.

Williams, Denis

1985 Petroglyphs in the Prehistory of Northern Amazonia and the Antilles. Advances in World Archaeology 4:335-380.

Zone 2: Colombia

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Translation by Harry Marriner

Since the Colonial period (16th to 19th centuries) there has been incomplete data collected on the existence of pre-Columbian rock art sites, where Colombian Indian communities left their thoughts, and with them the language they used to represent them, painted or engraved on rocks in their territorial lands. It was not until the 19th century that the Chorographic Commission-1850-59 made an attempt to document the republic and some Indian monuments (rock art) which were included as one way of getting to know the territory. It was also the government's way of showing official interest (*Watercolours of the Picturesque Album of New Granada*) in knowing and valuing their territory. Nevertheless, this first effort at registering, studying and interpreting was abandoned in the face of violence and political disputes that continue today. This attitude largely determined the type, level of knowledge and a few stages of the scientific activity involved in the study of these pre-Columbian cultural manifestations, as well as, the precariousness of the language studies, the thought and the ways of representation in pre-Columbian times. Existing references about rock art studies correspond essentially to isolated individuals (Isaacs 1883, Triana 1924, Cabrera Ortiz W. 1942, Gipri 1970-2006) who, in distinct stages of the national history, have been interested in Indian themes and have reported and registered some zones with paintings and engravings. When the limited bibliography is reviewed, gaps are found in the data from certain periods, as well as the repetition of the classic works which have deficient documentation. Without adequate training, those who did the graphics and registrations of the 19th century and of the beginning of the 20th century left incomplete descriptions, which resulted in inadequate proportions or scales. Also they omit motifs or make them into geometric figures, producing a document of rock art motifs, with drawings in forms very different from the original.

It was under these circumstances that the Gipri group began their investigations (1970-2006) in various territories of different departments, showing that there exists a high density of pictographs and petroglyphs in various areas of Colombia. Data presented here, nevertheless, correspond to a wide group of references that exist from previous investigations done during different points in time which demonstrate different levels of quality and seriousness in the registration and study. In many cases, these works correspond to simple reports, sometimes accompanied by a few graphics, paintings (watercolours) and photos. This report corresponds essentially to the data in works done by Gipri-Colombia as well as research from diverse sources that have been collected during the past 35 years.

Using accumulated data, the stable Gipri investigative group has been able to systematically register some regions, and at the same time, has been able to gradually formulate criteria and methodological structures to register and study the alterations to be used as a proposed model for future studies which preserve and administer rock art sites. Based on Cartesian criteria and the objective of correcting errors in previous works, during different stages of evolution, the

¹ The Spanish version is in Annex II of the Thematic Study.

working group has developed systems of organizing documents and has made important progress in the formats used to document motifs, their context in picture groups and their characteristics within that context. Documentation to date should be viewed as a complex methodological model, and as a practical theoretic structure that includes graphics (cartographic recording system), as well as a description of the rock art motifs (standardized field note form for the rock) and a parallel record for registering alterations that graphically discriminate different themes with a percentage of colors and a color table (CMYK and RGB). This registry format includes the petroglyph characteristics in relation to the drawings, and also complements its description with information about other conditions relative to the alterations (Bednarik 2001). The object of this task is to be able to simultaneously evaluate the group of drawings, the conditions of alteration and the agents responsible for deterioration.

Investigation and the zones:

Experience working, searching and registering during these past years has made us aware that there are many unstudied high-density rock art zones, such as the one we studied in the 1996-2005 municipal project around the town of El Colegio, Cundinamarca. In this municipality 2,000 rock art sites were found and registered in 44 areas representing 50% of the total township. If this tendency is the same for zones near other high plains towns (Anolaima, Viota, Cachipay, Nilo, San Antonio de Tequendama, Tibacuy), at least in the Cundinamarca department, then it is possible that the number of reported sites could be multiplied by at least four or five times.

It is important to say that the data that are available for these documented Colombian departments, towns and local neighbourhoods correspond to certain regions where a road network exists along with a high-density population, while other territories, not visited but mentioned in this report, do not have the same density of petroglyphs and pictographs. Eventually the zones not studied may show that they have the same number of rock art sites, since the information was gathered from scarce reports and expeditions. This seems to demonstrate that rock art was done in many territories, was the product of different people or cultures, and was something possibly done by ethnic groups that have not yet been studied. Then probably, in the group of departments not mentioned here, there exist an unknown number of rock art sites, such as those discovered in the past few years (Chiribiquete). In order to explain why this occurs, it is necessary to understand the history of the population.

Long periods of occupation have been proven by studies on hunter-gatherer communities (Correal, Van der Hammen-1970) permitting us to construct a complete image of the ethnic groups who lived in Colombia as far back as 12,000 B.P. During this investigation, Colombian archaeologists have worked in some of the study areas and have been able to describe the climatic history (flora and fauna), as well as the conditions encountered by local ethnic groups, some of whom possibly made rock art. Nevertheless, connections between the archaeological studies and the documents about rock art in those areas do not exist yet, so there is nothing to allow us to widen paths into the study of rock art and its interpretation.

In summary, we have been able to compile diverse data about an important number of rock art sites (5,899 sites), and simultaneously we have pursued new investigative themes relating to the history of rock art, which has made it possible to restudy the history of documentation and the stages in which the country has lived, the context of which has produced some interpretations relating to its meaning and function.

Unfortunately, it is important to underline the fact that many of the sites registered during the first years of our work (1970) are now in danger, and some have been destroyed by advancing urbanization (Suacha, Facatativa, Bojacá), whose accelerated growth coincides with the process of rural population displacement towards the urban centres. The situation of violence in Colombia has, without a doubt, increased deterioration of zones in which displaced populations invaded territories and caused severe deterioration and disappearance of some rock art sites. The current situation of the sites reported here is a simple example of many others that make it difficult to manage, and it generates severe problems to guarantee their protection, much more when management is performed with a minimum of training, and poorly planned, in spite of the fact that there exists a legal norm that is usually not followed. So, controlling the destruction or the deterioration is more complicated than a simple strategy of education. In addition to these examples there exist others that also makes one change one's view concerning the significance of what makes a work serious and scientific. After the 1991 Constitution, Colombia once again changed its official philosophy to take a modern stance relating to the necessity of knowing that the territory had a long history of diverse ethnic groups, of stages of population that modelled their systems of perception (pre-Columbian periods), and that were constructing their uniqueness as a country. This atmosphere permitted a new look at the nation's culture and showed that it was not simply built on a Colonial base. In spite of these initiatives, the tendency today seems to stimulate serious study, but also opens a space for activities with purely commercial tendencies. Today, pre-Columbian heritage including rock art does not appear to be a theme specifically correlated to scientific investigation, but more like an object of tourism, a tendency that seems to be also found in other countries.

Finally, regarding possible nominations to UNESCO and the idea of converting some of these places into international heritage sites, and identifying potential heritage sites, it is necessary to say that there does not yet exist conditions that would allow this country to seriously consider what is necessary to dedicate sufficient funds and civil activities to protect and administer rock art sites. The political situation and the increasing violence have left many areas without study, abandoned, and just a mental note that they should be seriously studied in the future. In order to pursue these activities, international assistance is necessary. Groups in conflict need to be contacted for permission to enter territories to do the initial registration work and systematic documentation. Finally, it is Gipri's philosophy to impede the massive distribution of detailed information about rock art sites until they are sufficiently protected, and until the delegated governmental agency responsible for rock art sites completes the education and integration of the local community in the conservation project. The first essential step to take is to push for the creation of rock art studies departments in private and public universities and cultural institutions, so that it will be in the midst of an academic and scientific environment which it is not at the present moment. We must hurry to propose that zones in conflict are registered national or international heritage sites.

1 Profile of the Zone:

Colombia has examples of three of the four rock art categories (pictographs, petroglyphs and mobile artefacts associated with rock art). References to rock art correspond basically to those found in the central-eastern zone, with some exceptions in the Sierra Nevada (Isaacs J., 1883), in Antioquia (Arcila G. 1950), and in the Colombian Amazon region. In the past, the presence of pictographs has been reported in some areas of the southeast part of the country. Within the past ten years others have been added to the list: Guayabero-State of Guaviare, Chiribiquete-State of Guaviare and Caqueta. Also, new references have emerged referring to the presence of pictographs and petroglyphs in the states of Huila, Tolima, Putumayo and Narino.

Nevertheless, the majority of the existing data and the more detailed registers correspond to the central-eastern part of the country (Cundinamarca and Boyacá) recorded within the past thirty years. In general, for all the country, there are no archaeological works that permit rock art to be dated, and neither is it possible to designate one or various ethnic groups as the rock artists. Furthermore, no information exists about the age of the rock art itself, or the duration and dissemination of it throughout time as a cultural tradition.

The complexity of the motifs and the differences in their representation, lend one to ponder the possible presence of diverse ethnic groups and the development of rock art during the time it was done in that territory. What is certain, is that most of the rock art motifs reported up to this point in time, are simplifications of complex thoughts, and very rarely appear in the form of animals or identifiable human forms. They are, in all cases, synthetic structures, some of which are repeated throughout widely spread territories from the north to the south of the country (triangular head figure, hands with spirals and spirals).

2 Links with other zones:

There are no studies that associate rock art representations with specific areas of the country. Nevertheless, some conjectures have been presented with formal analogies that may eventually lead to new knowledge about rock art. Some zones seem to have formal structures that are seen in widely spread areas. Bent over monkeys, triangular heads, frog like figures and lizard like figures (frogs and lizards), painted hands with spirals in their palms, and heads with painted feathers, appear as petroglyphs or in gold offering figurines (Reichel-Dolmatoff-“Shamanic Flights”) as spirals. The most plausible explanation for this is that pre-Columbian ethnic groups moved around within wide regions and did the rock art (pictographs and petroglyphs) in territories of other ethnic groups (Ann Osborn) who had loose relationships with them, and in a cultural and ritual environment unknown to us. In the eastern part of the country (Santander), there exist myths (Uwa-macro-Chibcha linguistic family) that are found in wide areas of the Cundinamarca-Boyaca highlands (The Flight of the Scissortail Birds). Indigenous families, for ritualistic reasons, travel long distances today to sacred places (from the Sierra Nevada de Santa Marta to Guatavita Lake in the Cundinamarca-Boyacá highlands). In general, one can say that the ethno-history, along with the oral traditions investigated, permit some general conjectures that perhaps in some years can be confirmed with registrations and archaeological studies. But, as of now, these areas have not been seriously recorded, which is necessary before a comparative study of different areas in Colombia can be done.

3 Known sites:

Actually, there are references to 5,899 rocks in 26 states of the country, and in regards to documents, there exist in the various archives, about 16,912 diverse materials in different repositories (drawings, watercolours, photographs, graphics) of varying quality and documental value. The majority of these references correspond to zones which have been worked during the past thirty years (Caquetá and Cundinamarca).

Work by Gipri has significantly increased the number of known rock art sites. From 1970 until today, it has worked in the Cundinamarca-Boyacá highlands, locating more than 2,500 rocks (42% of all recorded) with pictographs or petroglyphs in distinct townships near the Bogotá savanna and in “hot country” zones. During the period between 1996-2005, 2,000 rocks were recorded in the El Colegio township that had petroglyphs, stone tool manufacturing marks, cupules and metates. It has become known as one of the best documented sites in the country

(documents of the zone, the rocks, conservation, GIS-Arc-View). This data shows, provisionally, that the area contains 5,151 rocks with petroglyphs and only 712 rocks with pictographs. This data corresponds only to the actual archives and it is thought that if more study is done in this area, that the number of known pictograph and petroglyph sites in Cundinamarca might be significantly increased. This situation is not limited to this region, but also includes other zones that seem to have a similar density and concentration of rock art that have not been investigated.

It's necessary to explain the difference between known sites and studied sites. The first one refers to reports about their existence which may include some photos or graphics of the motifs. This level of knowledge contrasts with serious studies that include a detailed description of the motifs and their current state of conservation. The Gipri group has worked at this second level, slowly improving methods of registration, including field note cards and strategic methodologies of documentation to completely reconstruct site characteristics. Field recording cards, sheets to register the zones, rock art design cards, division into pictorial groups, motif details, cards corrected digitally, and forms formatted to determine the state of conservation of the rocks are all a fundamental part of the registration process (Methodological Model-Munoz, et. Al.-1998. Ministry of Culture grant).

4 Significant Rock Art Sites:

Noting the variety of ethnic groups and the qualities of rock art sites, it would be interesting to choose some sites from various regions and use various representational systems that permit us to better understand the qualities of the human languages and the variety shown in the procedures used to represent them. The proposal should be to organize in the future a study of distinct sites in Colombia that represent variations in the art, and relate to different thoughts and languages, with the object of supporting the study of variations in the world of human thought. Many sites could be nominated for a world heritage project. Each and every one of those has some characteristics and some particular conditions that should be shown. Nevertheless, it is possible now to list some in-country sites that could eventually fall into the classification of heritage sites: the Sasaima-Cundinamarca rock; the Aipe rock-Huila; the Pandi-Cundinamarca murals; some sites in El Colegio-Cundinamarca; the Guaybero paintings; and Chiribiquete-Guaviare and Caqueta; the Saboya rock and Gameza in Boyaca; the Poma Park in Suacha, Cundinamarca, the Vinculo and Panama pictographs in Suacha; the Putumayo petroglyphs; the La Pedrera petroglyphs in Caqueta; the Une-Cundinamarca pictographs; the Itagui petroglyphs in Antioquia; the Piedra de la Risa in San Antonio de Tequendama-Cundinamarca; the stone tool sites in Anapoima, El Colegio, Viota, the Ramiriqui murals; the Sachica-Boyaca pictographs, the Media Luna-Nilo Cundinamarca, and others.

5 Documentation:

In 1970 Gipri initiated studies in rock art. Since that time various formats have been designed to systemize the documents that have slowly grown in volume with new discoveries that have been documented each month from field work. In order to correct the errors of previous studies, organize data bases, and systematically register discoveries, many different methodological structures were developed to register rock art sites: mapping, photography, sketching details and conditions. In the past few years not only have descriptions of the motifs been done, but also some forms have been designed to register the characteristics and the condition of the sites in context. Gipri has used these forms and improved on them to be able to standardize serious documentation during the process of describing rock art sites.

Most of the zones studied by GIPRI include the following data in their folders:

- Cartography of the site (eventually an aerial photo of the sector);
- Photography and digital material of the sites in different time periods;
- Field cards of the zone and rock (showing the pictorial groups);
- Sketches of the site;
- History of the investigation (different versions);
- Digitalization of the materials;
- Data bases of the townships and rock art sites;
- Photographic archive (70,000 photos in Gipri files);
- Publication of the site in the *Rupestre* magazine and methodological model (deposited in the Luis Angel Arango Colombia Library) and in international publications;
- National and International presentations about the registration topic and bulletins about the zones studied (highlands and valleys towards the Magdalena River). All these materials are located in organized files in the Bogotá headquarters of Gipri;
- Studies about archaeoastronomy and rock art alignments in relationship to the spatial location of the site.

6 Research:

Unfortunately the little attention paid to the theme has not permitted the university community to allocate the time needed to study the language, the thought and the pre-Columbian methods of producing rock art murals. This explains why there are no archaeological studies dealing with these aspects. Actually, a good part of their time is used simply to search and document. Gipri's investigations are usually done in areas where no native peoples are now living (Cundinamarca-Boyaca highlands). They are areas where country folk continue to maintain some traditions in regards to sacred sites, maintain a history of fear, pass down local kitchen recipes, practice traditional folk medicine, and maintain ancient objects and practices, some of which appear to be based in pre-Columbian traditions of the Muisca, Panches and Pijaos (Highlands, States of Cundinamarca, Huila and Tolima). Noting these practices, Gipri designed some forms used for oral tradition, with the object of enhancing the study of local thought and language using these aesthetic traditions. Other investigations have been done in areas where traditional ethnic groups live today. There, studies were done with the local communities in regard to the themes of rites, myths and petroglyphs (Urbina).

Studies of Colombian rock art in general are found in the National Archives (AGN) and in works published by historians which give us an idea of the meaning and cultural function of rock art. However, these investigations are problematic due to the narrow-mindedness of the authors (Spanish historians) and for the censorship of these documents that always occurred. Knowing the limitations of existing documents, the Gipri group made a study of the history of rock art in Colombia.

7 Protection:

There exists a general law regarding heritage, but basically it only covers excavations and statuary. The law is not applied to rock art and the State has not dedicated anything more than a few expeditions to a few superficially known sites during the past few years. These are usually sites that have been previously recorded. There are no legal provisions for rock art with the necessary precise details, and the State does not have the necessary experience with the theme

and their advisory groups don't have the necessary training to be effective. It is enough to take a look at the San Agustín rock art in Huila in order to understand what we are talking about. In spite of the fact that this part of the country has been designated world heritage, the petroglyphs there do not have the same protection as the statuary and the associated archaeological materials at the site. As of today, there are no plans to manage rock art zones. What do appear to motivate the State are Ecotourism projects, that in the majority of cases, move ahead without any investigation.

8 Conservation:

There is no history of rock art conservation in Colombia. The only method used is to slow the release of precise site location information to the general public, while no planning is done to protect the rock art sites. However, some State organizations have begun to promote the necessity that the public knows the sites. This conflict between investigative groups and State politics has generated some reservations concerning the methods used by the ICANH (chalking petroglyphs) and for the publication of site access instructions to rock art sites, without previously studying how to protect them.

Regarding scientific aspects of the study of conservation, Gipri has developed some forms that can be used to evaluate the deterioration and alteration of the rock and its context. These can be used to graphically describe the actual conditions necessary for future decisions about the best methods to conserve the rock (Bednarik 2001-Rock Art Science) *"The principle of micro-geomorphic mapping of rock art panels is simple: whereas traditional recordings are almost universally limited to the perceived rock art motifs, Soleilhac and Munoz include also information on other features of the rock panel, such as areas of exfoliation, lichen presence, taphonomic rock markings, patination, mineral accretions and salt efflorescence"*.

These forms permit the visualization of the condition of the sites and besides describing the rock art motifs, they permit the observation of different small aspects of the rock. Digitized works and digital manipulation have permitted the observation of various themes and problems in the description of the conditions of rock art in some study zones. *"The benefits of this cartography are not limited to those for the scientist, who is likely to refer to such micro-topographical information for a variety of analytical reasons, they are also of great significance to issues of rock art conservation. Indeed, in the latter area it seems self evident that this form of recording is essential. The neglect hitherto of such an important tool of rock art research is symptomatic of a field dominated by non scientific, humanistic preoccupations, such as what is depicted and why. It is part of the general pattern that has led to the shortage of empirical information about rock art, and the abundance of meaningless claims about meaning"*. (Bednarik 2001)

9 Management:

There is no experience or management philosophy regarding rock art zones. In the past three years there has been some work done cleaning graffiti in the Facatativa Archaeological Park (ICANH). Nevertheless, complications of management of the said park have resulted in it being turned into a recreational park (picnicking and barbecuing) and it has neither the funds nor clear ideas to avoid its deterioration. All the rest of the sites close to populated areas have been left abandoned without protection and have been altered and some permanently damaged (Bojacá, Suacha, Suesca, Aipe). The same State ICANH organizations have been criticized for

the use of invasive techniques and inadequate recording (use of chalk) to better show the petroglyphs grooves.

Many rock art sites are threatened or have now been destroyed by the invasion of displaced persons coming to areas surrounding the cities, where there have been rock art sites previously protected to some degree. Holes in the rocks and the floor, and lettering with oil and water based paints, are some of the alterations seen at these sites, when destruction is not total.

One of the reasons for such severe damage is that the theme is not known in the nation's history. For many years Colonial politics pointed to rock art sites as places of the devil and in the Republican era these ideas continued to pressure the Indians to forget their heritage. Universities and governmental cultural centres have no idea of the number of sites or the cultural importance of the theme: there is no department of rock art that would allow teaching of rock art to professional archaeologists and neither have they accompanied investigators so that they would continue with this work and create a tradition for it.

Conclusions:

Work presented in this paper can be considered information relevant to **ten percent (10%)** of the complete list of rock art zones and a minimal example of the formal differences in rock art throughout the entire country. The privately financed effort of Gipri to accumulate various materials during the past thirty years is interesting, but not sufficient, so it is necessary to push for more recording work. During researches for rock art zones, the group has come across a group of archaeological sites that correspond to tool manufacturing. These are sites where pre-Columbian tribes, and probably country folk of the Colonial period, made different tools. Some finds in other areas (States) have demonstrated a high density of pictograph, petroglyph and tool manufacturing sites that have yet to be seriously recorded.

Intents to discover the state of conservation of the sites and seriously describe them contrast with the abandonment and neglect of the zones in which they are found. Until a very few years ago, the pertinent State organizations had not even noticed the theme and, only under some pressure, began a few investigations. Their inexperience has resulted in a series of international debates (ICANH y GIPRI Colombia-Rock Art Research 2005) that shows that the rock art theme is still a stranger to official government organizations.

Some deteriorated rock art zones could receive the advice of international advisors that would permit them to be saved or at least lower the chances of total destruction. It is urgent that the international community be informed and that Colombian cultural organizations are requested to:

- Push for a rock art department in universities organized by scientific academic authorities, with international assistance.
- Generate politics to record and seriously study rock art.
- Undertake serious evaluations of the state of conservation of zones in danger.
- Organize the territory in sections (Parks-Reserved Zones) and try to find ways to organize different ways to administer the rock art sites using the local community.
- Work with universities to study the archaeology of the sites and therefore be able to complete studies along with dates to directly date the pictograph pigments (C14, Plasma).

- Organize international investigative groups (ICOMOS – Car (Rock Art Committee), Ifrao) to provide assistance and cooperation in order to continue investigations done to date.
- Organize the rock art department with the objective to train university students to become rock art investigators.
- Raise funds to finance trained and interested groups wishing to study Colombian rock art.
- Organize museums and exhibitions of local rock art in universities and in the *Casa de la Cultura* of the townships of each region. This project would be to publicize the theme, train investigators, and generate investigations to show the variety of Colombian rock art. This proposal could lead to the creation of spaces that in the future could be converted eventually in heritage sites for humanity.

The greatest threat that rock art suffers is due to the deterioration from local inhabitants and occasionally from some investigators, when they conduct tests that deteriorate the sites. However, there are some examples of mining companies that have deteriorated some sites (Tunja-Boyacá, Suacha-Cundinamarca, Sachica-Boyacá). Another major threat is the tendency to convert the zones into tourist attractions with the help of different entities that do not appear to understand the necessity to protect the sites, of doing serious investigations and of not doing a discrete job of administering to protect the regional sites for future generations. This theme is seen as a curiosity in each zone and is usually converted into a place to visit, without any administration of the sites and no idea of the need to protect them.

Recommendations for the future

It is recommended that international institutions and organizations be careful to encourage the progress of the theme in Colombia and provide cooperation with initiatives which aid scientific endeavours in this field of international heritage, and assist when possible with publications, exhibitions and works produced that contribute to stimulate national and international interest in the theme. The magazine *Rupestre: Rock Art in Colombia*, is interested in receiving assistance to continue its work, since Gipri is publishing it with very limited internally generated funds.

Potential of the zone to contribute to the sites on the World Heritage List

All of the sites could eventually be inscribed on the World Heritage List, but there exist some preferences that can be enumerated. The Sasaima rock, the Aipe rock, the Pandi murals, some sites in El Colegio, Cundinamarca, the Guayabero pictographs, and Chiribiquete, the Saboya and Gameza rock, the Poma Park in Suacha, the Putumayo petroglyphs, the Pedrera petroglyphs in Caqueta, the Une pictographs, the Itagui-Antioquia petroglyphs, the Piedra de la Risa in San Antonio de Tequendama-Cundinamarca, the stone tool manufacturing sites in Anapoima, El Colegio, Viota, the Ramiriqui murals, the Sachica-Boyaca pictographs, the Media Luna –Nilo Cundinamarca, and others.

However, everyone should keep in mind the current conditions of a country at war that basically destines its funds for that task and that places little value in pre-Columbian rock art sites that barely appear in national history books and that occasionally are shown by some investigators in an eccentric academic atmosphere or in a fireside discussion of culture.

See illustrations Annexe IV: page 220

Bibliography

ARCILA VÉLEZ, Graciliano. *Estudio Preliminar de la Cultura Rupestre en Antioquia: Támesis*. En: Boletín de Instituto de Antropología. Universidad de Antioquia. Medellín, Vol 2, No 5, p 5-23, Septiembre de 1956.

Introducción al estudio arqueológico de los Titiribies y Sinufanas. En: Boletín de Antropología, Vol. III, No 11, 1969, Medellín. Págs. 13 — 42.

Valparaiso y sus aspectos étnicos. Repertorio Histórico de la Academia Antioqueña de Historia. Vol. XIX, No 175 — 177, Junio 1953, Medellín. Págs. 573 – 579

La silla del cacique en el santuario del Cerro Tusa. En: Revista Universidad de Antioquia. Tomo II, No 8, abril 1936.

"*El coloso de Cerro Tusa*". En: Revista Universidad de Antioquia. Tomo II, No 7. Marzo de 1936. Página 57 de 59 arte rupestre petroglifos Támesis Antioquia Colombia

El ara o altar de los sacrificios en Cerro Tusa. En: Revista Universidad de Antioquia, No 5 — 6. Octubre - Noviembre de 1935.

BECERRA, José Virgilio, 1990. *Arte rupestre precolombino. Pinturas rupestres del departamento de Boyacá, Colombia*. Municipios de Turmequé, Ventaquemada, Samacá y Nuevo Colón. Fundación de investigaciones arqueológicas del banco de la república. Bogotá.

BISCHLER, Helena & PINTO, Polidoro, 1959, "Pinturas y grabados rupestres en la Serranía de la Macarena", en Revista Lámpara, vol. VI, #31, Págs. 14-15, Esso Colombiana, Bogotá.

CABRERA ORTIZ, Wenceslao. *Monumentos Rupestres de Colombia*. Cuaderno Primero: Generalidades. *Algunos Conjuntos Pictóricos de Cundinamarca*. Bogotá, Revista Colombiana de Antropología. Imprenta Nacional. Vol. 14.

-*Pictógrafos y Petroglifos*. Tomo II. Boletín de Arqueología. Bogotá, 1946.

CASTAÑO, Carlos y VAN Der HAMMEN, Thomas. *Parque Nacional: Chiribiquete, La peregrinación de los jaguares*. Ministerio del Medio Ambiente, Bogotá, 1998.

CHONTO (Lleras y Vargas), 1976. *Las piedras pintadas de Facatativa: Estudio detallado de dos zonas*. Museo arqueológico del banco popular: Casa del marques de San Jorge. Concurso público para estudio sobre arqueología colombiana. Sin publicar. Bogotá.

GIPRI, Grupo de Investigación de la Pintura Rupestre Indígena:

GONZÁLEZ, Yaneth. *Zona del Tequendama. Transición entre pictografías y petroglifos. Avances de la investigación*. Revista Rupestre, Arte Rupestre en Colombia, No. 3, julio, 2000.

RODRIGUEZ, Carlos. -Los Petroglifos Del Municipio Del Colegio: Modelo Sistemático De Registro. Rupestre, Arte Rupestre en Colombia, No. 2, agosto, 1998.

TRUJILLO, Judith. *Aportes De La Tradición Oral En El Estudio Del Arte Rupestre Del Altiplano Cundiboyacense Colombianos*. Rupestre, Arte Rupestre en Colombia, No. 2, agosto, 1998.

MARRINER, Harry. Rock Artists and skywatchers in ancient Colombia. Bogotá, septiembre 1998.

Petroglifos: Una Breve Comparación De Tres Sitios. Revista Rupestre, Arte Rupestre en Colombia, Año 2, No 2, agosto, 1998.

Sitios con arte rupestre en el Valle de Subachoque. Revista Rupestre, Arte Rupestre en Colombia, No. 3, julio, 2000.

GIRÓN, Lázaro Maria. *Las piedras grabadas de Chinauta y Anacutá. Informe del Auxiliar de la Subcomisión 3a de las Exposiciones de Madrid y Chicago*, Imprenta de Antonio Silvestre, Bogotá, 1892.

ISAACS, Jorge. *Las Tribus Indígenas del Magdalena*. Sol y Luna, Bogotá, 1967.

KOCH-GRÜNBERG, Theodor. *Anfänge der Kunst im Urwald (Comienzos del arte en la selva)*, Berlín. 1905.

–1907, *Südamerikanische Feizeichnungen (Petroglifos suramericanos)*, Berlín.

–1995, *Dos años entre los indios*, 2 vols., Universidad Nacional de Colombia, Bogotá.

MASON J. Alden: *Archaeology of Santa Marta Colombia The Tairona Culture*. Part I and II. Field Museum of Natural History de Chicago U.S.A, 1931.

MONTOYA, Inés Elvira. *El Arte Rupestre en la Zona de Suacha y su relación con la Cerámica y la Orfebrería Muisca*. Tesis .Uniandes, Bogotá, 1974.

MUÑOZ, Guillermo. *Rescatan 1.000 Dibujos Chibchas*. Rev. Cromos 1980.

-*Historia de la Investigación del Arte Rupestre en Colombia* (Altiplano Cundiboyacense 1a. versión), Congreso de Americanistas, Bogotá, 1985.

-*GIPRI y la Investigación del Arte Rupestre* (Propuesta Metodológica), Congreso de Americanistas, Bogotá, 1985.

-*El Petroglifo en el Altiplano Cundiboyacense* 46 Congreso Internacional de Americanistas, Holanda Amsterdam, 1988.

-*Estado Actual de las Investigaciones en el Altiplano Cundiboyacense*. Simposio Administración del Patrimonio Arqueológico, Tema V. WAC 2, Venezuela, 1990

-*Estructura Cultural de Conservación del Arte Rupestre en el Altiplano Cundiboyacense*. Tercer Simposio Internacional de Arte Rupestre. Santa Cruz de la Sierra Bolivia, 1991.

-*La Piedra de la Risa, la fiesta y las ofrendas*. Rupestre, Arte Rupestre en Colombia, No. 2, agosto, 1998.

-*Covadonga: Primera Expedición Colombo-Francesa*. Revista Rupestre, Arte Rupestre en Colombia, No. 3, julio, 2000.

MURIEL, Carlos. "Zona arqueológica y zona antropológica del río Vides", en |*Revista Putumayo*, No 1, pp. 50-3, Ed. Gobernación Departamental, Mocoa. 1993.

OÆNEIL, Mary Sills Alice. *The Cultural Context of Prehistoric Rock Art in Western. Cundinamarca Colombia*. Tesis California University, E.U. 1973.

ORTIZ, Francisco. *Rocas y petroglifos del guainía*. Revista Rupestre, Arte Rupestre en Colombia, No. 3, julio, 2000.

PRADILLA, Helena. *Moyas y Piedras Pintadas Tras del Alto, Tunja Boyacá*. Proyecto Arte Rupestre en Boyacá: Río la Vega-Farfacá- Sectorización e inventario de 62 pictografías y moyas, 1995; Registro Gráfico, 1997; Registro Gráfico y fotográfico del sector E, 1998. Revista Rupestre, Arte Rupestre en Colombia, No. 3, julio, 2000.

PÉREZ de BARRADAS José. -*El Arte Rupestre en Colombia*. Instituto Bernardino de Sahagún, Consejo Superior de Investigaciones Científicas, Madrid, 1941.

PINTO T, Héctor; ACEVEDO T, Álvaro y PINTO M. Oscar. *Arte rupestre Guane en la mesa de los Santos*. Alcaldía Municipal de Floridablanca, Bucaramanga, 1994.

REICHEL, Elizabeth, 1977, "Levantamiento de los petroglifos del río Caquetá entre La Pedrera y Aracuará, en Revista Colombiana de Antropología, Vol. XIX, Instituto Colombiano de Antropología, Bogotá.

REICHEL-DOLMATOFF, Gerardo. "*Rock-Paintings of the Vaupes: An Essay of Interpretation*", en *Folklore Americas*, Separata, Vol. XX VIII, No. 2, junio, Los Ángeles. 1967.

Desana. Simbolismo de los Indios Tukano del Vaupés, Ed. Universidad de los Andes, Bogotá 1968.

Beyond the milky way. Hallucinatory Imagery of the Tukano Indians, Ed. University of California, Los Angeles. 1978a.

Orfebrería y Chamanismo. Museo del Oro. Editorial Colina, Primera edición, Medellín, 1988.

RENDÓN, Guillermo, GELEMUR DE RENDÓN. Anielka. *Tunebia, Reserva Ecológica y Cultural*. Universidad Pedagógica y Tecnológica de Colombia, 1972.

-Samoga. Enigma y desciframiento. Centro Editorial Universidad de Caldas, julio, 1998.

RIVET Paul. *Pétroglyphes et Antiquités Colombiens*. Journal de la Société des Americanistes Tome XXI París, 1929.

SCHINDLER, HELMUT, "*Petroglifos en el río Apaporis, Colombia*", Actas del Congreso Internacional de Americanistas, 42 (IXB): 271-275. 1976.

SILVA CELIS, Eliécer. *Pintura Rupestre Precolombina de Sáchica*. Valle del Leiva. Bogotá, Revista Colombiana de Antropología, Vol. 10, 1961.

Arqueología y Prehistoria de Colombia, Ed. Prensas de la Universidad Pedagógica y Tecnológica de Colombia, Tunja. 1968.

SOTOMAYOR CAMACHO, María Lucia; URIBE ALARCON, María Victoria 1987 *Estatuaria del macizo colombiano*. Bogotá. Instituto Colombiano de Antropología. ARQUEOLOGIA. ESTATUARIA GRUPO PREHISPANICO. MACIZO.

TASTELVIN. *Les pétroglyphes de la Pedrera, Río Caquetá, Colombia*. Journal de la Société des Americanistes Tome XV, Paris, 1923.

TOVAR Arnold. Et al. *Petroglifos del Huila*. En Opa. Instituto Huilense de Cultura. Neiva 1994.

TRIANA, Miguel. *La Civilización Chibcha*. Escuela Tipográfica. Primera edición, Bogotá. 1922.
-EL Jeroglífico Chibcha., Banco. Popular Bogotá, 1970.

URBINA RANGEL Fernando. *Amazonia: naturaleza y cultura*, Ed. Banco de Occidente, Bogotá. 1986.
La serpiente y el hombre. Mitos y petroglifos en el río Caquetá, en |Arte indígena en Colombia, pp. 124-45, Bitzoc, Palma de Mallorca. 1992.

Mitos y petroglifos en el río Caquetá. en |Boletín del Museo del Oro No. 30, pp. 2-40, Banco de la República, Bogotá, 1993.

Mito, Rito y Petroglifo a propósito del arte rupestre en el río Caquetá, Amazonía Colombiana. Revista Rupestre, Arte Rupestre en Colombia, No. 3, julio, 2000.

Arte rupestre en Colombia. Exposición itinerante, Banco de la República, Seccional Pereira. 1992.

URBINA Rafael A. y DUARTE Herminia. *Las mesitas del Colegio de nuestra Señora del Rosario de Calandaima*. Fotomecánica industrial Ltda. 1989.

Zone 3 : Brésil (État du Piauí et sertão de Sertão exceptés)

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1 Caractéristiques générales :

L'art rupestre est présent, avec une densité variable, sur une bonne partie du territoire brésilien. Alors que les sites sont rares dans le sud, au sud-ouest et le long de la côte atlantique (quelques dizaines), ils sont très nombreux dans le centre et le nord-est du pays (plusieurs centaines au moins). L'immense région amazonienne, encore peu connue au niveau archéologique, semble être assez riche partout où existent des affleurements rocheux : on y connaît près de 150 sites.

On connaît actuellement plus de 1 000 sites d'art rupestre (enregistrés auprès de l'Institut du Patrimoine – IPHAN), mais le nombre réel doit être plus important, car des régions entières n'ont pas encore été étudiées par les archéologues.

La région centrale et nord-est est caractérisée par la présence de nombreux abris ouverts dans les calcaires, les grès ou les quartzites; ceux-ci offrent de grands panneaux qui ont souvent été couverts par des centaines, voire des milliers de figures généralement peintes au cours des millénaires. L'étude des patines, des superpositions et de l'occupation des divers niveaux d'écaillage des surfaces a permis de vérifier en différentes régions la succession de moments de décorations, chacun présentant une thématique et des styles et des techniques d'exécution différenciés. La décoration de rochers est alors peu fréquente et paraît correspondre à un moment stylistique unique.

Dans les régions où les abris sont rares, moins vastes et moins protégés, on trouve peu de peintures – si elles ont existé sur des supports exposés aux intempéries, elles ont été détruites. On rencontre par contre des gravures sur les quelques parois exposées (c'est le cas dans le sud du Brésil), sur des sols concrétionnés à ciel ouvert (dans le sud-ouest du pays) ou couvrant des rochers à l'air libre (surtout en Amazonie).

Les chercheurs ont proposé de distinguer plusieurs grands ensembles rupestres (appelés « traditions ») caractérisés par leur thématique. Alors que les traditions de l'Amazonie sont bien localisées dans ce bassin, d'autres unités stylistiques sont caractéristiques surtout dans le Brésil central, et d'autres encore, du nord-est ou de l'ouest du pays, mais leurs domaines se superposent partiellement. Pour mentionner les principaux ensembles, nous suivrons notre nomenclature (Prous 1981, 1994) qui reprend en partie celle d'autres auteurs, tout en l'actualisant, car elle est largement utilisée au Brésil.

2 Les principaux ensembles stylistiques :

Les sites du sud-ouest

Les sites rupestres du bassin des fleuves Parana et Paraguay sont des ensembles gravés, souvent à ciel ouvert. Les figures emblématiques sont des empreintes de pieds, de traces d'animaux (jaguars et oiseaux). Cet ensemble, que nous avons désigné comme la *tradition Méridionale* ressemble beaucoup au style « *de pisadas* » défini par les chercheurs argentins en Patagonie. Il se prolonge vers l'est de la Bolivie et du Paraguay (ou s'ajoutent des représentations de vulves) et semble avoir influencé, au Brésil même, quelques sites plus septentrionaux en dehors du bassin de la Plata. Les sites les plus riches en figures semblent être la Pedra Grande (état de Rio Grande do Sul), et Rio Bisnau (Goiás).

Un autre ensemble, peut-être apparenté, comporte également de nombreux cercles radiés et de longs sillons qui relient les figures entre elles. Il est bien représenté depuis Corumba (état de Mato Grosso du Sud), jusqu'au cours supérieur des affluents de la rive droite de l'Amazonie et pourrait être apparenté aux ensembles de représentations « astronomiques » du Brésil central. Plusieurs auteurs attribuent ces gravures à des horticulteurs du début de notre ère.

Aucun de ces sites n'est normalement ouvert au public, et le fait que les gravures sont peu visibles les protège jusqu'à un certain point du vandalisme. Cependant, les sites piquetés sur un sol latéritique quotidiennement foulé par le bétail et par les hommes sont menacés à moyen terme.

La tradition littorale (côte méridionale)

Une trentaine de panneaux gravés occupent les plages du continent et des îles de l'état de Santa Catarina, au sud du Brésil. Ils forment sept groupes espacés les uns des autres de dix à vingt km. Les panneaux occupent des blocs de basalte face à la mer. De faibles dimensions, ils présentent quelques dizaines de figures géométriques maintes fois répétées, de forme circulaire, rectangulaire, triangulaire ou losangée. Le site le plus riche est celui du Santinho, avec 74 figures. On ne sait à qui attribuer cet art rupestre, très particulier et localisé, dont les supports ne sont proches d'aucun autre type de site, de sorte qu'on ne sait quels pourraient être leurs auteurs.

La tradition Planalto

C'est la plus ancienne des traditions qui s'étend sur les plateaux calcaires et les massifs quartzitiques de l'état de Minas Gerais, dans le Brésil central. Plusieurs sites ont été fouillés et ont livré des occupations datées entre 12 000 ans et le premier millénaire de notre ère. Des pigments sont fréquemment retrouvés dans les niveaux les plus anciens, et des peintures enfouies sont datées entre 4 000 et 7 000 ans en certains endroits. Une centaine d'abris peints ainsi que de nombreux blocs isolés ont été répertoriés. Quelques-uns comportent des centaines, voire plus de mille graphismes (régions de Lagoa Santa, Serra do Cipó, Montes Claros), mais on trouve également de petits abris et des blocs rocheux dans les zones de montagne, décorés de peu de figures (Serra do Cabral, Serra do Cipó, région de Diamantina).

On a reconnu divers faciès régionaux, tandis que plusieurs styles se succèdent dans certains cas. Les représentations sont surtout figuratives. Dominent les cervidés assez réalistes disposés dans un apparent désordre (qui n'exclue pas cependant des compositions discrètes).

Selon les régions, ils sont accompagnés de petites figures humaines très schématiques, de poissons, de tatous et de jaguars.

La tradition Agreste

Particulièrement bien représentée dans le nord-est, elle atteint également le Brésil central. Ses figures emblématiques sont de grandes représentations anthropomorphes aux corps assez naturalistes, accompagnées par quelques animaux (particulièrement des figures d'oiseaux) et figures géométriques. Les ensembles *Agreste* comportent souvent peu de figures (de quelques unités à quelques dizaines), qui alternent parfois avec celles d'autres traditions. Alors que certains paraissent très anciens dans le nord-est, d'autres sont assez récents (moins de 3000 ans) dans le Brésil central.

Les sites de la Serra dos Takrukkrak

Une dizaine d'abris peints de l'est et du sud-est de l'état de Minas Gerais occupent les parties les plus hautes des reliefs montagneux, particulièrement la Serra da Onça, qui domine le Rio Doce. Quelques milliers de figures ont été dénombrées (plusieurs centaines dans le site le plus riche) et leur style est en cours de définition. Elles sont surtout géométriques, mais incluent aussi de nombreuses représentations anthropomorphes très schématiques et quelques figurations de lézard. Les sites de la Serra da Onça se trouvent en partie dans le Parc de Sete Salões, à proximité de la réserve des Indiens Krenak qui en revendiquent la propriété, car il s'agit pour eux de lieux où habitent les esprits ancestraux, ce qui crée des difficultés avec les paysans de la région. Aucune fouille n'a encore été réalisée dans ces sites, pour lesquels on ne dispose d'aucun élément de datation.

La tradition São Francisco

Elle est connue dans de nombreux sites de la vallée du rio São Francisco (qui met en communication le Brésil central et nord-est), mais atteint aussi le Brésil occidental. Les sites comportent souvent plusieurs centaines de figures dans un même site (plusieurs milliers dans celui de Desenhos) qui occupent de grands supports bien visibles. Les dessins géométriques dominent, mais on peut trouver également des représentations d'objets - armes et outils. Sa durée s'étend sur plusieurs millénaires, au moins entre 7 000 et 2 600 BP. Au moins cinq styles se succèdent dans certains sites ; deux d'entre eux sont caractérisés par une riche polychromie, un autre par l'irruption de représentations célestes (parfois identifié comme « tradition cosmologique »). Les ensembles les plus spectaculaires se trouvent dans la vallée du Rio Peruaçu et près de Montalvânia (Minas Gerais), dans la Serra do Ramalho et dans celle de Central (Bahia). Cette tradition s'étend également dans les états de Goiás, Tocantins, Mato Grosso, et jusqu'aux terres basses de Bolivie.

Le complexe Montalvania

Il comporte des panneaux peints sur les parois verticales en escalier, et gravés sur les surfaces horizontales polies couvertes de calcin. On remarque surtout des représentations d'armes (propulseurs et dards), des empreintes de pieds et de petites figures biomorphes, complétées par des graphismes géométriques divers. Les gravures sont souvent reliées par des traits ou des lignes méandriques qui servent d'éléments de liaison. Malgré sa très forte originalité, ces ensembles intègrent des éléments qu'on retrouve dans diverses autres unités stylistiques du Brésil central, nord-est, voire occidental (et particulièrement de la tradition *Nordeste*).

L'ensemble le plus riche et spectaculaire se trouve près de la ville de Montalvânia (états de Minas Gerais et Bahia).

La tradition Nordeste

Elle domine les sites de certaines régions du Piauí, traitées par Niède Guidon dans cette étude. Contrairement à l'âge très ancien proposé pour certaines de ces manifestations dans le nord-est du Brésil, ces graphismes semblent assez récents dans le centre du pays, où ils se superposent à ceux des traditions *Planalto* et *Sao Francisco*. Cette tradition est probablement présente dans plusieurs centaines de sites.

Elle se caractérise par des figures humaines qui composent des scènes de la vie quotidienne et rituelle. Plusieurs ensembles stylistiques ont été définis hors de l'état du Piauí. On trouve dans plusieurs états du Brésil des manifestations du complexe *Serra Talhada* : vallée du Rio Peruaçu dans le Minas Gerais ; Palestina dans celui de Goiás ; Morro do Chapéu dans celui de Bahia. La sous-tradition *Seridó*, typique de la vallée éponyme dans l'état de Rio Grande do Norte est caractérisée par des figures humaines à tête ornithomorphe. Elle a influencé quelques sites de Lagoa Santa (Minas Gerais). D'une manière totalement inespérée, cette même sous-tradition se retrouve en Bolivie orientale (région de Roboré) et en Colombie sud-orientale, dans le site de Chiribiquete - où apparaissent également quelques figures de la sous-tradition *Serra Branca*.

Dans certaines régions, les figures *Nordeste* sont de faibles dimensions et de couleur sombre. Peu spectaculaires, elles n'attirent guère l'attention des visiteurs non prévenus, ce qui peut parfois contribuer à leur protection, mais risque aussi de ne pas les valoriser auprès des pouvoirs publics, alors qu'il s'agit d'une forme d'art extrêmement intéressante en raison de son caractère narratif.

Tradition Itaquatiara

La tradition *Itaquatiara* est assez mal définie. On lui attribue les gravures qui couvrent certains rochers dans la partie inondable du lit des rivières du nord-est brésilien (site Boi Branco de Pernambuco, Pedra de Inga dans le Paraíba). Certains thèmes rappellent les gravures de Corumba, dans le Mato Grosso du Sud.

La tradition « Amazonia » ou « Guyano-amazonienne »

Les abris qui bordent ce fleuve et ses affluents de la rive droite ont reçu des peintures ou des gravures peintes, tandis que les blocs rocheux visibles au bord des rivières à l'époque des basses eaux ne montrent que des gravures ; mais il est probable que celles-ci aient été peintes autrefois, comme celles des abris. Le thème dominant est la figure humaine, parfois représentée seulement par sa tête ornée, dont les détails anatomiques (nez, yeux, oreilles, bouche et dents) sont parfois indiqués, ce qui n'arrive pratiquement jamais dans les autres traditions brésiliennes. Beaucoup des abris du Pará sont ouverts dans des grès très friables et sont soumis à une intense érosion (par exemple ceux de Prainha). Quant aux rochers gravés au bord de l'eau, ils sont soumis à l'érosion fluviale lors des crues.

Les sites d'Amazonie méridionale

Encore peu étudiés, les rochers gravés le long du cours supérieur des affluents de la rive droite de l'Amazonie présentent souvent des figures apparentées à celles de traditions typiques du Brésil central et occidental.

Les sites de l'Amazonie du nord-ouest

Dans l'état de Roraima, les abris du bassin de l'Uraricoera (affluent du Rio Branco) présentent une tradition originale de peintures géométriques (style *Parimé*). On trouve encore des ensembles gravés qui ne relèvent pas non plus du style guyano-amazonien dans le nord de l'état d'Amazonas (Balbina) et le nord-est du Roraima. Ces derniers présentent des similitudes avec les gravures du Vénézuéla et de la Guiana.

3 Relations avec les zones voisines :

Nous avons vu que les gravures du sud brésilien sont en continuité avec le style *de pisadas* d'Argentine. Des ensembles peints de Bolivie orientale semblent apparentés à la tradition *São Francisco*. Quant à la sous-tradition *Serido* de la tradition *Nordeste*, elle s'étend sans aucun doute jusqu'aux terres basses de Bolivie (Roboré) et de Colombie orientales (Chiribiquete). Les représentations humaines du nord-est de l'Amazonie (tradition *Guyano-amazonienne*) se retrouvent jusqu'en Guyane française, tandis que les gravures du Roraima se rapprocheraient du style *Aishalton* de Guiana.

4 Les principaux sites :

Nous présenterons ici, par état de la Fédération, surtout des sites étudiés par les archéologues au cours des trente dernières années, mais des documents photographiques sur des endroits qui n'ont pas encore été visités par des archéologues sont également disponibles.

Etat de Mato Grosso do Sul : Corumba

A la limite du Pantanal du Mato Grosso du sud, trois grandes concrétions ferrugineuses proches de Corumba ont servi de support à des gravures piquetées et polies de la *tradition méridionale*, qui couvrent plusieurs centaines de m². Leur support assez fragile est piétiné par le bétail et les risques d'érosion sont donc importants. Des centaines de figures géométriques sont encore bien visibles. Les sites CP 01 (Lajinha) et CP 02 (Fazenda São Domingos) mériteraient une protection spéciale.

Etat de Santa Catarina : l'Ile de Campeche

Les sites rupestres à ciel ouvert du littoral de l'état de Santa Catarina ne sont pas aussi riches que ceux du centre et du nord-est du Brésil, mais sont cependant significatifs, dans le contexte régional. Le plus grand danger pour leur préservation paraît être dû aux intempéries qui provoquent l'écaillement des supports, car ces parois de basalte ne sont pas abritées. On peut souligner le cas de la petite île de Campeche (un-demi km² seulement), déjà classée sur le plan Fédéral; ses 11 panneaux gravés totalisent près de 150 figures, surtout géométriques, dont l'accès peut être facilement contrôlé par les guides. Un autre bel ensemble est celui de la Praia do Santinho, au nord de l'île Santa Catarina.

Mato Grosso : Ferraz Egreja et Santa Elina

Les fouilles des abris de Santa Elina (dans les calcaires) et Ferraz Egreja (dans les grès, à 120 km du précédent) ont montré la présence de nombreux pigments dans des couches datées entre 4 000 et 6 000 BP. Leurs parois présentent plusieurs centaines de graphismes (surtout des peintures) correspondant à plusieurs styles et traditions, peut-être apparentés à ceux du Brésil central (*São Francisco, Montalvânia, Agreste*), mais le mauvais état des supports fait que la plupart des panneaux ne sont pas spectaculaires.

Le site de Ferraz Egreja est le plus important de plusieurs dizaines d'abris peints préservés dans une RPPN (réserve maintenue par des particuliers) et les visites sont obligatoirement accompagnées. Ce dernier ensemble mériterait d'être inscrit comme Patrimoine mondial.

Etat de Mato Grosso : Pedra de Paranaíta

Située en milieu amazonien à la limite entre les états de Mato Grosso et du Para, la Pedra Preta de Paranaíta n'a pas encore été visitée par les archéologues ; on ne dispose donc que de photographies faites par des explorateurs. On y voit un grand affleurement couvert de gravures à ciel ouvert. Les graphismes, surtout géométriques, accompagnent la forme du relief ; les formes les plus typiques présentent des similitudes avec certaines peintures du panneau du Pilão, près de Monte Alegre (Para), mais un autre panneau présente également des figures circulaires radiées qui évoquent le Brésil central. On note également la présence de quelques figures animales très schématiques.

D'autres importants ensembles gravés ont été reconnus dans le sud de l'Amazonie depuis la fin du XIXe siècle mais on ne dispose pas encore de connaissances précises sur les sites de cette vaste région.

Etat de Goiás : Région de Serranópolis – Les sites de Barreiro do Cedro

Sept abris peints et gravés sur un support de grès se concentrent dans une région de 2 km de diamètre, près du corregio Grotão. Les fouilles ont montré que l'occupation humaine y remonte au début de l'Holocène et que certains ont reçu des sépultures. Le site le plus spectaculaire est l'abri des Araras (GO JA 03) dont les centaines de figures appartiennent à plusieurs ensembles stylistiques ; on trouve des motifs « astronomiques », des gravures rappelant la tradition *méridionale* (traces de pas et des pattes d'oiseau), des formes géométriques de styles locaux non encore définis, rappelant certaines figures *São Francisco*, de nombreux animaux (*Agreste?*). Ces sites se trouvent dans une réserve privée et les conditions de préservation sont bonnes. L'abri des Araras a été aménagé pour recevoir le public, sous contrôle de guides spécialisés.

Etat de Goiás : Région de Palestina (autrefois: Caiapônia)

- Sites du Corrego do Ouro

Quinze abris peints ouverts dans les grès se regroupent sur une surface d'une dizaine de km², totalisant près de 900 figures peintes et quelques gravures. Les fouilles ont permis de trouver des vestiges d'occupation remontant à environ 4 500 ans. On trouve de nombreux graphismes de la tradition *Nordeste*, ainsi que des dessins géométriques et zoomorphes relevant de styles régionaux encore non définis. La conservation et la visibilité des peintures sont souvent

médiocres. Les sites les plus riches et intéressants sont GO. CP. 16 et 27. Les touristes, encore assez peu nombreux, peuvent prendre des guides pour visiter les sites, qui ne sont pas suffisamment aménagés, malgré la présence de panneaux d'information.

- Torres do Rio Bonito

A quelques km de l'ensemble précédent, plus de 2300 peintures et quelques gravures ont été relevées dans les quinze abris peints regroupés en deux ensembles couvrant un total d'une centaine de km².

Comme les précédentes, la plupart des figures appartiennent à la tradition *Nordeste* ou à un style local qui rappelle la tradition *São Francisco*, mais quelques sites présentent également des gravures (GO. CP) ou de grandes figures animales (GO. CP 36).

Les sites les plus riches sont GO. CP 29 et 33. Ils peuvent être visités dans les mêmes conditions que les sites du Corrego do Ouro. La conservation des figures est assez bonne, mais leur visibilité varie selon les pigments utilisés.

Etat de Tocantins : Serra do Lajeado (corrego Agua Fria)

Un ensemble d'abris peints vient d'être découvert presque au sommet de la Serra do Lajeado, à quelques km de la capitale, Palma. Ils présentent de grands panneaux dont les centaines de figures fort bien conservées appartiennent à plusieurs ensembles chrono-stylistiques à dominante zoomorphe, les autres à dominante anthropomorphe, ainsi que des représentations d'objets. Quelques sondages ont été faits, montrant une occupation depuis le milieu de l'Holocène. Ces sites sont encore intacts en raison de leur isolement et de la difficulté d'accès, mais sont menacés à court terme par la proximité de la nouvelle capitale de l'état. Les abris les plus spectaculaires sont Vão Grande et Vão do Poção. Les sites se trouvent dans une APA (région de protection écologique) créée par le gouvernement local.

Ce très bel ensemble mérite certainement d'être porté sur la liste du Patrimoine mondial, depuis l'abri du Xavier jusqu'à celui de Ponta da Serra.

Etat de Minas Gerais : Lagoa Santa

Cette région calcaire est fameuse historiquement pour avoir été le berceau de la paléontologie et de l'archéologie brésilienne. La plupart des graphismes relèvent de la tradition *Planalto*, mais on y trouve aussi des figures *Nordeste*, postérieures. Transformée partiellement en APA (région sous protection fédérale), cette région est cependant soumise à de très fortes pressions en raison de sa proximité avec la capitale de l'état et de son occupation désordonnée. On y trouve divers sites de référence pour l'archéologie américaine, comme Cerca Grande et Lapa Vermelha. Seul le premier conserve encore un bel ensemble de peintures et se trouve relativement protégé par les propriétaires (sa visite est soumise à une demande d'autorisation préalable, mais s'effectue sans contrôle effectif). Les autres sites (une vingtaine) ne sont protégés que dans la mesure où ils sont peu connus. Les fouilles américano-brésiliennes à Cerca Grande (1955/56, site classé par le Gouvernement Fédéral) y ont démontré pour la première fois la très grande ancienneté du peuplement au Brésil ; puis celles de la mission franco-brésilienne à Lapa Vermelha (1971/1977) ont permis d'obtenir les premières dates minimales pour des peintures enterrées et de découvrir un très ancien squelette, connu sous le nom de « Luzia » (environ 11 000 BP).

Etat de Minas Gerais: La Serra do Cipó

Un parc naturel a été créé pour protéger la végétation de cette région, mais les principaux sites d'art rupestre se trouvent en dehors du périmètre actuel. L'un d'eux, Santana do Riacho, est un des plus anciens cimetières des Amériques et ses parois conservent plus de 2000 figures des traditions *Planalto* et *Agreste* ; certaines, enterrées, ont pu être datées. Il est bien protégé par les actuels propriétaires. Un autre très bel abri, Sucupira, se trouve à une dizaine de km mais souffre de visites peu contrôlées. Ses panneaux montrent la succession d'au moins cinq moments stylistiques.

Si les autorités pouvaient garantir leur préservation, ces deux sites formeraient un ensemble touristique qui mériterait d'être inscrit comme Patrimoine mondial.

Etat de Minas Gerais : la Vallée du Rio Peruaçu

Ce bel ensemble karstique est devenu récemment un parc national. Il comporte une soixantaine d'abris peints, dont certains comportent plus de 2000 figures, souvent bien conservées et très spectaculaires. On a pu y déterminer la succession d'au moins dix niveaux stylistiques appartenant à plusieurs traditions parmi lesquelles *São Francisco*, *Montalvânia*, *Nordeste* et *Agreste*. Des gravures enfouies ont été datées entre 9 000 et 7 000 BP. Les pigments enfouis, présents dès 12 000 BP, sont très abondants vers 7 000 BP. De nombreux vestiges organiques ont été préservés. Un plan d'aménagement doit être implanté en 2006. Plusieurs sites rupestres (abris do Caboclo, do Boquete, do Janelão) devront être prochainement ouverts au public. Le parc est en bordure de la réserve des indiens Xacriabá, qui ont été jusqu'à présent exclus du processus de création et d'aménagement. Cette vallée mérite d'être inscrite en priorité sur la liste du Patrimoine mondial.

Etat de Minas Gerais : Montalvânia

Une soixantaine de sites décorés ont été répertoriés dans une centaine de km². On trouve aussi bien des sites peints - surtout dans la Serra de Pirapama (Mamoneira), dans la Serra Preta et la Serra do Cipó (abrigo do Sol), que des sites surtout gravés, dans la Serra do Aristeu. Certains de ces derniers possèdent des panneaux extraordinaires (abris de Posseidon ou d'Esquadrilha). Les recherches des Missions franco-brésiliennes ont montré l'ancienneté du peuplement local (vers 11 000 ans) et ont étudié la succession des styles et traditions régionales (*São Francisco*, *Montalvania*, *Agreste* et *Nordeste*), particulièrement dans la Lapa do Gigante. Une partie au moins de cette région mérite certainement d'être inscrite sur la liste du Patrimoine mondial.

Etat de Bahia : Iraquara

Dans les quartzites de la Chapada Diamantina, deux des quatre sites d'Iraquara présentent des peintures très bien conservées appartenant à diverses unités chrono-stylistiques, l'une d'elle est attribuable à la Tradition *Agreste* et l'autre montre des représentations astronomiques (site de Toca do Cosmos) ; il y a aussi des figures polychromes (*São Francisco*?). En cours d'étude, ces sites sont inclus dans la APA (région de protection écologique) de Marimbus-Iraquara et sont visités sous la surveillance de guides.

Etat de Bahia : Lagoa da Velha

Proche de Morro do Chapéu, cet ensemble comporte dix-neuf abris calcaires, entourant un lac saisonnier. Tous comportent des peintures très bien préservées, en majorité attribuées à la tradition *Nordeste*, représentée par deux styles (sous-traditions *Serra da Capivara* et *Serra Branca*). La polychromie est fréquente. Plus récentes, des figures *Agrete* ainsi que des graphismes de la *tradition Géométrique* leur sont superposés. En cours d'étude, cet ensemble fait partie du parc de Morro do Chapéu établi par l'état de Bahia.

Etat de Bahia : sites de Ventura

Egalement proches de Morro do Chapéu, les deux sites de cet ensemble sont ouverts en haut d'un relief gréseux. Les figures de la tradition *Nordeste* y dominent, parmi lesquelles de nombreux animaux peints en miniature. Des peintures de la tradition *Géométrique* s'intercalent au milieu des ensembles *Nordeste*, et des figures *Agrete* y forment le niveau le plus récent. En cours d'étude, ces sites sont encore préservés grâce à leur isolement et leur accès difficile.

Rio Grande do Norte : Lajeado de Soledade (Apodi)

Cet affleurement calcaire d'environ 1 km de diamètre est percé de ravins profonds et étroits. De petits abris s'ouvrent latéralement dans les parois. Leur base rocheuse présente des ensembles de cupules et d'incisions linéaires, tandis que les parois verticales et les plafonds ont reçu des peintures. On compte 26 panneaux gravés et 30 ensembles peints, très bien conservés. Selon les abris dominent des impressions de mains, des représentations d'oiseaux ou des dessins géométriques monochromes parfois bichromes.

La base des abris est inondée lors de la saison des pluies, rendant impossible l'établissement d'une séquence stratigraphique pour ces petits abris qui étaient probablement utilisés exclusivement pour des activités rituelles.

Etat de Paraíba : La Pedra Itaquatiara de Inga

Ce site de la tradition *Itaquatiara* est un rocher décoré sur 24 m de long et plus de 2 m de large par un magnifique ensemble de figures géométriques très ordonnées. C'est le seul témoin d'un ensemble gravé qui a été en grande partie détruit au milieu du XXe siècle. Proche de Campina Grande, ce site est très connu et visité. Sa protection est actuellement assurée par le dévouement d'un paysan, qui guide les visiteurs sans en recevoir aucun bénéfice matériel. Ce site fut le premier au Brésil à être classé par le Patrimoine Fédéral.

Etat du Pará (Amazonie) : sites de Monte Alegre

Trois vigoureux reliefs (les Serras do Ererê, do Paituna et do Bode) concentrent 14 grottes et abris peints dans un diamètre d'une dizaine de km. On y trouve des centaines de peintures typiques de la tradition guyano-amazonienne. Les fouilles de la grotte du Pilão (connue aux Etats-Unis sous le nom de Pedra Pintada Cave) ont montré une présence humaine et l'existence de pigments minéraux dès 11 200 BP. Quelques-unes des figures d'un autre abri, le Panneau du Pilon (ne pas confondre avec le précédent) présentent des similitudes avec les thèmes gravés de la Pedra Preta de Paranaíta. Cet ensemble commence à être visité intensivement, malgré l'absence d'infra-structure et de guides habilités. Par sa richesse, sa

préservation encore excellente et son caractère exceptionnel dans l'état du Para, il mérite certainement d'être inscrit sur la Liste du Patrimoine mondial, mais exige une meilleure protection de la part des autorités locales.

Etat de Roraima : l'ensemble Pedra Pintada / Pedra do Pereira

Plusieurs affleurements en pain de sucre dominant les plaines de l'état de Roraima, dans la réserve récemment délimitée des indiens Makuxi. Des abris peints s'ouvrent à leur base, dont le plus célèbre est celui de la Pedra Pintada, fouillé au cours des années 1980 et proche de la Pedra do Pereira. Son occupation remonte à plus de 4 000 ans et des pigments enterrés sont nombreux entre 3 000 et 4 000 BP. Il a servi aussi de cimetière au cours de la période préhistorique tardive. Les peintures montrent surtout des formes géométriques (rectangles grillagés). Proches de la route qui relie le Brésil au Vénézuéla, ces sites sont gardés jour et nuit par de jeunes indigènes. Leur visite n'est autorisée qu'avec l'autorisation du conseil des anciens. L'ensemble est bien conservé et mériterait certainement d'être classé comme Patrimoine mondial.

6 Documentation des sites rupestres :

L'IPHAN (Institut Fédéral du Patrimoine) dispose de milliers de fiches de sites archéologiques, y compris rupestres. Mais identifier et dénombrer les sites d'art rupestre obligerait à consulter les fiches une par une. Ces fiches ne comportent d'ailleurs pas de description des graphismes. Cet organisme ne dispose pas non plus d'archives photographiques, bien que des descriptions illustrées existent dans les rapports de recherche envoyés par les archéologues et conservés dans cette Institution. Une banque de données est en cours d'installation et devrait permettre de disposer dans un avenir proche d'un instrument de travail plus efficace.

La principale documentation est donc celle qui a été publiée par les chercheurs. De nombreux calques ont été réalisés jusqu'à la fin de XXe siècle, mais les travaux actuels donnent chaque fois plus de place à la photographie. On soulignera particulièrement les relevés systématiques réalisés par les missions franco-brésiliennes de Minas Gerais et du Piauí dans les années 1979 à 1980, qui ont été publiés en microfiches par l'Institut d'Ethnologie de Paris, ou sur papier dans des revues brésiliennes. L'Institut Anchietano de Pesquisas a également publié des relevés complets de sites de Rio Grande do Sul, du Mato Grosso du Sud et de Goiás, ainsi que des relevés partiels de quelques sites de l'état de Santa Catarina. Le Musée archéologique de Xingó a publié les relevés complets des sites de Sergipe et Alagoas. D'autres relevés partiels, particulièrement de sites des états de Rio Grande do Norte, Pernambuco et de Bahia, ont été divulgués dans des revues brésiliennes ou étrangères. L'Instituto de Arqueologia Brasileira (IAB) dispose également de documents sur certains sites de l'état de Minas Gerais. Calques et photographies sont conservés par les chercheurs ou par leur institution d'origine.

Un projet actuellement en cours et auquel participent les auteurs de ces lignes avec le photographe Marcos Jorge, a permis de visiter les principaux sites du Brésil, en vue de préparer plusieurs livres de synthèse.

7 Les recherches :

De nombreux sites rupestres ont été relevés et fouillés par les Missions archéologiques françaises du Piauí, de Minas Gerais et du Mato Grosso. L'équipe de l'Institut Anchietano de

Pesquisas a également procédé à des relevés systématiques dans les états de Goiás et de Mato Grosso do Sul. D'autres institutions réalisent des recherches sur l'art rupestre, comme l'Instituto d'Arqueologia Brasileira de Rio de Janeiro, ou le Museu Goeldi du Pará. Divers archéologues ont étendu récemment ce travail à de nouvelles régions. Un gros effort a été fait par les Missions de Minas Gerais et du Piauí pour identifier des unités stylistiques dans le Brésil central et nord-est, déterminer leur succession ou les dater à partir des fouilles. La présence de l'art rupestre est attestée à partir d'environ 9 000 BP, mais ce n'est que rarement que l'association d'une unité stylistique avec des niveaux archéologiques enterrés peut être prouvée.

La plupart des archéologues évitent d'aborder l'interprétation des graphismes, bien que quelques tentatives aient été faites pour les sites de l'état de São Paulo et de Bahia. On a également comparé certaines scènes de la tradition *Nordeste* à certains rituels indigènes. Aucun groupe ne peint ou grave actuellement sur les roches, mais quelques tribus comme les Makuxi, les Krenak et les Xacriabá revendiquent certains sites peints comme étant le produit de l'activité de leurs ancêtres. Au XIX^e siècle, des indigènes ont proposé leur interprétation à Stradelli pour des sites de l'Uaupé (frontière entre le Brésil et la Colombie).

De nombreuses monographies de Master ou de thèses de Doctorat sur l'art rupestre ont vu le jour ces dernières années dans les Universités brésiliennes et quelques unes ont été soutenues en France et aux Etats-Unis.

8 Protection des sites :

Législation

Une loi Fédérale de 1961 déclare tous les sites archéologiques (et, nommément, ceux d'art rupestre) patrimoine national. Malheureusement, la dispersion sur de grandes étendues, dans des endroits souvent peu accessibles et les faibles ressources de l'organe Fédéral chargé de leur protection (IPHAN) n'ont pas jusqu'à présent permis une protection effective, malgré quelques actions ponctuelles.

Quelques ensembles rupestres se trouvent dans des parcs nationaux (Campeche, à Santa Catarina ; São Raimundo Nonato, Sete Cidades, au Piauí ; Vallée du Peruaçu dans le Minas Gerais ; Chapada dos Guimarães, au Mato Grosso) ou d'état (Morro do Chapéu, Bahia). Deux sites ont été classés par le Patrimoine Fédéral (Cerca Grande à Minas Gerais, et Inga, dans le Paraíba). Mais seuls de rares abris ont été préparés pour recevoir les touristes. D'une manière générale, il manque une coopération effective entre l'IBAMA (chargé de l'administration des Parcs) et l'IPHAN (Institut du Patrimoine Artistique et Historique National - responsable des sites archéologiques). La protection apparaît illusoire dans les régions de simple protection écologique (APA), comme celle de Lagoa Santa. La situation est un peu meilleure quand les propriétaires eux-même ou des organisations non-gouvernementales se chargent d'administrer des réserves privées (Serranópolis, dans le Goiás ; Morro de Santo Antonio et Lapa do Ballet, dans le Minas Gerais ; Fazenda Verde/Cidade de Pedra, dans le Mato Grosso).

L'état de Minas Gerais a promulgué une loi accordant des avantages fiscaux aux municipalités qui protègent leur patrimoine, éveillant ainsi l'intérêt des autorités locales, mais les résultats sont encore ambigus car ces ressources ne sont pas obligatoirement investies dans la protection des sites.

9 Conservation et menaces :

Peu de personnes ont reçu une formation dans le domaine de la conservation. Il existe une spécialiste à l'Université Fédérale du Piauí et quelques rares chercheurs indépendants dans d'autres états. Les interventions se sont généralement limitées à l'étude des facteurs d'altération des parois et des peintures (vallée du Peruaçu), voire au retrait de graffiti (Lagoa Santa) ou des agents biologiques destructeurs (Piauí). Des produits pour consolider les supports en voie d'écaillage ont été testés dans les années 1980 dans un site gravé de São Paulo, mais les résultats n'ont pas été publiés. Dans tous les cas, il s'agit d'initiatives privées, mais soumises à une autorisation Fédérale.

La conservation des graphismes dépend de celle des supports, dont la qualité est très variée (grès, quartzites et calcaires plus ou moins compacts et homogènes). Elle varie aussi, selon l'exposition à la lumière naturelle et aux intempéries, voire aux inondations périodiques (les blocs gravés dans le lit des rivières sont nombreux), l'ancienneté des figures, la profondeur des traits gravés et la qualité des teintes.

Dans les zones d'activité agricole, les sites de gravures à même le sol sont parfois parcourus par le bétail (Mato Grosso do Sul). Des abris sont soumis à des incendies de nettoyage, servent ou ont servi de garage (Lagoa Santa), voire de parc à bétail. Près des villes, la pression est très forte en raison du tourisme incontrôlé, tandis que certaines grottes sont des lieux de pèlerinage. Seuls les sites de quelques parcs bien surveillés, très isolés, ou surveillés par les communautés indigènes, sont relativement intacts. La construction de nombreux barrages au cours des dernières décennies a provoqué l'immersion de plusieurs panneaux peints ou gravés (limite entre les états de Sergipe et Alagoas). Les exploitants de calcaire détruisent parfois les sites pour éviter que les services du Patrimoine n'interviennent dans leurs propriétés, tandis que les paysans craignent que les régions où se trouvent des sites archéologiques ne soient attribuées aux communautés indigènes. Il y a donc un long travail de sensibilisation des populations à faire. Heureusement, on commence à obtenir des condamnations de ces actes illicites (site do Arco, près de Lagoa Santa) et les autorités judiciaires ont fournis ces dernières années un grand appui aux archéologues et les programmes d'éducation se multiplient auprès des communautés rurales, stimulées par les organismes patrimoniaux.

Conclusions

Le nombre de sites (en fait, plus souvent des ensembles que des sites isolés) et leurs conditions de préservation sont très variables dans l'immense territoire brésilien, de même que l'intérêt que les populations locales leur portent. Ceux que nous avons décrits ne sont certainement pas les seuls à mériter reconnaissance et protection, mais nous avons choisi ceux qui, dans le contexte de leur région, étaient les plus exceptionnels par leur richesse, leur préservation, voire leur valeur pour les groupes indigènes. Le classement d'autres sites, moins spectaculaires, pourrait être également envisagé, surtout dans des états sous-représentés dans la liste antérieure. C'est le cas, par exemple, de ceux de Boi Branco et du Parc National de Catimbau (état de Pernambuco), de Boa Vista (région de Prainha dans le Pará), de Itapeva (état de São Paulo).

L'action des services du Patrimoine, des archéologues et de diverses organisations non-gouvernementales commence maintenant à porter ses fruits et l'on peut penser que beaucoup

de sites actuellement soumis à des facteurs de risques seront bientôt reconnus et protégés par les habitants.

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Voir illustrations Annexe IV: page 221

Bibliographie

Beltrão, M. *Ensaaios de arqueologia: uma abordagem transdisciplinar*, Rio de Janeiro, ed. Zit, 2000.

Jorge, M. ; Prous, A. ; Ribeiro, L. *Brasil Rupestre*, sous presse.

Martin, G. *Pré-História do Nordeste do Brasil*, Recife, UFPE, 1996.

Pessis A. M. *Imagens da Pré-História*, FUNDHAM/PETROBRAS, 2003

Pereira, E. *Arte Rupestre na Amazonia – Para*, São Paulo, UNESP, 2003.

Prous, A. L'art rupestre du Brésil, *Bulletin de la Société Préhistorique de l'Ariège* 49 : 77-144, Foix 1994.

Vialou, A ed. *Préhistoire du Mato Grosso I – Santa Elina*, EdUSP, 2005.

Zone 3 : Brésil – Nordeste – États du Piauí, Pernambuco, Rio Grande do Norte et Paraíba

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1 Caractéristiques générales :

Dans l'État du Piauí, la région de Sete Cidades est connue depuis la fin du XIX^e siècle. Selon les descriptions de l'historien autrichien, Ludwig Schwennhagen (1928), ses formations rocheuses, du grès modelé par l'érosion ruiniforme, seraient les vestiges d'une ville bâtie par des Phéniciens il y a 3 000 ans. Dans les années 1960, Erich von Däniken a visité la région et publié un livre dans lequel il affirmait que ces roches étaient l'œuvre d'extra-terrestres. Enfin, en 1974, le Français Jacques de Mahieu suggérait que les ruines seraient les restes d'une ville viking. Ces rochers, aux formes travaillées par l'érosion, ont des abris sous roche dans lesquels les populations humaines des périodes préhistoriques ont laissé des marques : des peintures rupestres, réalisées surtout avec de la couleur rouge. Ce sont des figures non reconnaissables, géométriques, dont quelques-unes forment des corps humains et des animaux. Cet art aurait 6 000 ans.

C'est seulement en 1970 que de nouveaux sites de peintures rupestres ont été découverts dans le Piauí, cette fois au sud-est de l'État, non loin des frontières avec les États de Bahia et de Pernambuco. Dans une région très accidentée, un ensemble de plateaux gréseux surplombe la plaine, couvrant environ 200 km² selon la direction sud-ouest/nord-ouest (Fig. 2). Ce relief forme deux ensembles : la Serra da Capivara et la Serra das Confusões et c'est parmi ces formations que 8 abris ont été découverts. Ils étaient ornés de nombreuses figures peintes : figures humaines, animaux et figures non reconnaissables. C'est l'une des régions les plus pauvres du Brésil, semi-aride, avec une couverture végétale typique : la *caatinga*, mot indien qui signifie « forêt blanche ». Verte et fleurie pendant la saison des pluies, la *caatinga* perd toutes ses feuilles au mois d'août, ce qui lui donne une couleur grise blanchâtre. C'est justement l'éloignement des grands centres, le sol pauvre et pierreux, la sécheresse qui ont fait que cette partie du Piauí garde, intact, son patrimoine archéologique jusqu'aux années 70 (Fig. 3).

C'est à partir de cette découverte que nous avons organisé une mission française qui, depuis 1973, s'est consacrée à la recherche interdisciplinaire dans cette région, au sud-est de l'état du Piauí. Aujourd'hui, un Musée, un Centre de Recherches et un groupe international de chercheurs poursuivent les travaux. Depuis, 913 sites ont été recensés, dont 592 de peintures rupestres, 29 de gravures et 65 de peintures rupestres et gravures. Les autres sont des ateliers de taille, des campements, des villages et quelques sites historiques. (Fig. 1). Les sites qui se trouvent à l'intérieur du Parc National Serra da Capivara sont classés par l'UNESCO dans la Liste des sites du Patrimoine culturel mondial. Mais tous les autres sites de la région autour

du Parc appartiennent à la même tradition et ont des peintures aussi anciennes et aussi splendides. Depuis 1993, l'Instituto do Patrimônio Histórico e Artístico Nacional (IPHAN) a reconnu tous les sites de la région comme patrimoine national du Brésil, pour leur importance archéologique, ethnographique et environnementale. Ils présentent des attributs qui justifient leur classement : l'âge, les caractéristiques techniques, la finesse esthétique et le caractère narratif qui permet d'étudier les sociétés que constituent leurs auteurs (Fig. 4).

Les sites d'art rupestre sont le fait des chasseurs-cueilleurs. L'industrie lithique suit le même développement que celle de France : des galets taillés, des choppers et « *chopping tools* », des éclats utilisés, dans les périodes les plus anciennes (60 000 - 30 000). Par la suite nous avons des industries sur éclat, avec retouche uni et bifaciale. Des pointes de projectile, des limaces, des racloirs et grattoirs sont les outils qui, avec les éclats et les galets utilisés, caractérisent la période entre 15 000 et 10 000 ans. Aux environs de 10 000 apparaît la pierre polie, suivie par la céramique il y a, au moins, 9 000 ans.

Traditions de peintures

Les deux plus importantes traditions de peintures, Nordeste et Agreste, semblent être nées dans cette région.

La tradition la plus répandue est la tradition *Nordeste*, caractérisée par les techniques de dessin et de peinture et par le choix des scènes qui composent une scénographie très variable et riche en détails. On peut ainsi reconstituer, partiellement, les mœurs de ces peuples. Ces scènes sont remarquables par la représentation du mouvement : les hommes et les animaux sont saisis en pleine action. Selon A.-M. Pessis (2003) « Réalisées avec une perfection technique reflétant une maîtrise picturale et une maîtrise des techniques graphiques remarquables, les peintures expriment la préoccupation de donner à l'observateur les éléments d'identification essentiels permettant de reconnaître les figures. Les scènes représentées montrent l'existence de choix thématiques identifiables et reconnaissables par n'importe quel observateur ».

Les figures les plus anciennes sont plus petites, le trait est fin et les figures sont, dans leur grande majorité, remplies par de la peinture plate. Il y a même des miniatures, des figures humaines et animales qui ne dépassent pas trois centimètres. La couleur dominante est le rouge (Fig. 11). Au fur et à mesure que l'on avance dans le temps, les figures deviennent plus grandes, le mouvement cède la place à des positions hiératiques, conventionnelles. Des cervidés et des figures humaines sont à grandeur nature et peuvent être vus de loin. La peinture plate est accompagnée souvent par un ensemble de traits géométriques qui remplissent les corps de motifs variés. De nouvelles couleurs font leur apparition : le jaune, le blanc, le noir, le marron. Mais le rouge est toujours la couleur dominante (Fig. 12).

La tradition *Agreste* semble avoir succédé à la tradition Nordeste. A côté des outils primitifs, des éclats et des fragments obtenus à partir de galets de quartz ou quartzite, la plupart sans retouches, il y a aussi de très belles pièces faites sur du silex ou même du cristal de quartz. Aux environs de 10 000 ans BP apparaissent les premiers outils sur pierre polie, et la céramique entre en scène mille ans après. Les pointes de projectile apparaissent à cette même date (Fig. 13). L'art rupestre de la tradition Nordeste présente des figures de grande taille, représentées figées, sans action. Des figures humaines statiques, les bras ouverts vers le haut, les mains au-dessus de la tête, généralement coiffées d'un ornement de plumes, sont caractéristiques et très répandues dans tout le Nordeste semi-aride du Brésil (Fig. 14).

Quelques sites dans la région ne présentent que des graphismes purs, ensembles de figures géométriques très élaborées. Nous les avons réunis, provisoirement, sous la dénomination de tradition *Geométrica* (Fig. 15).

Il y a encore, dans la région, des sites de gravures que nous avons réunis sous le nom que les Indiens utilisaient pour les nommer : tradition *Itacoatiaras* (Fig. 17).

Dans la région du Parc National Serra da Capivara la tradition Nordeste est la dominante et présente des dates anciennes. Cela nous permet de proposer l'hypothèse née dans cette zone du sud-est du Piauí. La tradition Agreste est aussi très bien représentée, avec des panneaux entiers ou des intrusions dans les panneaux de la tradition Nordeste. Les gravures sont toujours présentes dans les berges des fleuves, surtout près d'anciennes chutes d'eau. Ces fleuves sont secs aujourd'hui.

Au centre et au nord de l'état du Piauí il y a environ 200 sites, mais ils ne sont pas tous enregistrés. Dans ces sites dominant les graphismes purs, géométriques – Tradition *Geométrica* - et les gravures sont plus nombreuses que les peintures. Quelques figures des traditions Nordeste et Agreste apparaissent parfois, dans les sites qui se trouvent dans des canyons.

2 Relations avec les zones voisines :

Dans les états de Pernambuco, Rio Grande do Norte e Paraíba se trouvent aussi des représentations typiques des traditions Nordeste et Agreste.

La concentration de sites d'art rupestre dans la région du Parc National Serra da Capivara est unique. Néanmoins, on trouve aussi, dans tout le Nordeste du Brésil, des sites de peintures ou gravures rupestres préhistoriques sur les plateaux ou au bord des fleuves et rivières. Le nombre de sites connus est le reflet des recherches réalisées.

Dans les états de Pernambuco, de la Paraíba et du Rio Grande do Norte il y a de nombreux abris peints. L'art rupestre de ces états est étudié par l'équipe du « Programa de Pós-Graduação em Arqueologia » de l'Université Fédérale de Pernambuco (Programme de l'école doctorale en archéologie de l'université fédérale de Pernambuco).

Une zone riche en peintures a été identifiée dans la Serra dos Kariris Novos et dans celle dos Kariris Velhos, dans la zone de plateaux qui forme le massif de Borborema, à la limite des états de la Paraíba et du Pernambuco. De nombreux sites rupestres présentent des figures appartenant à la tradition Agreste et des abris peu profonds où la paroi d'affleurements de granit a été utilisée comme support. Les graphismes purs sont nombreux, les grandes figures (de 50 à 100 cm) humaines ou d'animaux, isolées ou formant de petits groupes aussi. La figure emblématique caractéristique de cette tradition est une figure humaine qui peut mesurer plus d'un mètre : elle est statique et isolée, la tête ornée, les bras levés. Les animaux représentés sont difficilement identifiables : il s'agit d'oiseaux, de quadrupèdes, mais il est aussi possible de reconnaître des poissons, des tortues et des lézards. Une figure aux traits humains mais avec des plumes et des ailes est typique de cette tradition.

Le nom « agreste » défini depuis les années 1970, vient de la région où de nombreux sites ont été trouvés : il s'agit de l'agreste de Pernambuco, au pied de plateaux, parmi des vallées et des

lacs. Mais cette tradition se trouve dans tout le Nordeste, dans les « agrestes » comme dans les régions semi-arides des plateaux.

Dans l'état de Pernambuco, les peintures de la tradition Agreste, avec des datations C14 d'environ 2000 ans, sont bien plus récentes que celles des peintures du Parc National Serra da Capivara. Ce sont les charbons de deux foyers du site Peri-Peri, à Venturosa, qui ont fourni des dates de 1760 ± 160 ans BP (GIF 5878) et de 2030 ± 50 ans BP (CSIC 605). Dans ce site, les chercheurs ont trouvé des fragments d'ocre qui avaient été grattés pour former des petites concavités dans lesquelles la peinture aurait pu être préparée. Deux autres dates proviennent du site Alcobaça, près de Buique. Elles sont de 1785 ± 49 ans BP (CSIC 1070) et 1766 ± 24 ans BP (CSIC 1026) et ont été obtenues à partir des sédiments qui couvraient une partie des peintures. Dans ce site, les chercheurs du Centre d'Etudes Archéologiques de l'Université Fédérale de Pernambuco ont trouvé des racloirs et des éclats qui avaient des restes de pigment rouge sur le tranchant. Alcobaça a été occupé entre 5000 et 900 ans BP. Sur les parois et sur les blocs tombés, les peintures et gravures sont nombreuses. Une source d'eau, pérenne, jaillit à moins de 50 m des parois peintes.

Ces sites de la tradition Agreste du Pernambuco et du sud de la Paraíba occupent les régions du piémont, les vallées, toujours près d'une source d'eau. Très souvent un cimetière a été reconnu près du site rupestre. Des villages et des sites, probablement liés à la réalisation de cérémonies, ont aussi été identifiés près des sites de peintures.

A l'avenir, des recherches doivent être réalisées dans le Parc National du Catimbau, près de Buique, au Pernambuco. Des abris avec des peintures rupestres très diversifiées y ont été signalés. L'abondance de la ressource en eau dans la vallée du Catimbau permettait vraisemblablement de meilleures conditions de vie pour les peuples préhistoriques.

Une importante concentration de sites rupestres se trouve dans l'état du Rio Grande do Norte, à la limite de l'état de la Paraíba, dans la région dite du Seridó. Les peintures rupestres de cette région appartiennent à la tradition Nordeste, sous-tradition Seridó, qui a les mêmes caractéristiques de base que la tradition Nordeste du Piauí, mais qui présente certaines particularités sur le plan de la thématique et de la scénographie. Elle configure un modèle typique à l'intérieur de la tradition.

Dans certains sites de la région, les figures de la sous-tradition Seridó présentent les traits spécifiques des peintures de la tradition Nordeste mais surtout de la période initiale de la migration vers le bassin du fleuve São Francisco. Ces peintures ont évolué de manière différente, comme résultat d'une adaptation culturelle à un nouvel environnement.

La phase la plus ancienne de la sous-tradition Seridó présente des figures qui s'assimilent aux styles définis dans la Serra da Capivara avec davantage de représentations animales qu'humaines. La phase suivante montre des figures humaines décorées portant des masques, des armes, des plumes sur la tête ; les scènes sont plus complexes et il est possible d'identifier un nouveau style. La tête des figures humaines est représentée de profil, avec la cavité buccale bien marquée : il s'agit d'une figure typique de la sous-tradition Seridó qui n'existe pas dans la Serra da Capivara. Cette tête typique du Seridó rappelle la noix du cajou (Fig. 23). Parmi les scènes mettant deux personnages en jeu, on remarque que l'ouverture de la bouche est plus grande parmi celles qui font référence à une situation de lutte, de violence, que parmi celles d'apparente sérénité. La couleur rouge domine mais il y a aussi des figures peintes avec un pigment blanc. Les superpositions sont nombreuses, parfois quelques figures ou même une

seule, sont faites sur un panneau plus ancien, parfois ce sont des panneaux entiers qui recouvrent des peintures plus anciennes. Il est même possible de faire une stratigraphie des superpositions de types de figures. La technique de représentation du mouvement est aussi semblable à celle utilisée dans la Serra da Capivara: la position des bras, des mains et des jambes, celle des pattes des animaux. Certains cervidés sont représentés en pleine course, la tête tournée vers l'arrière.

Les hypothèses qui fondent la définition de la sous-tradition Seridó comme le produit d'un groupe humain qui aurait ses origines dans le Parc National Serra da Capivara, s'appuie sur la présence de certaines figures, dites emblématiques. Ces figures représentent des actions dont la signification nous échappe et qui doivent correspondre à des rites, cérémonies, représentations de mythes. Nous ne saurons jamais la signification exacte de ces figures, mais ce qui est significatif, c'est qu'elles apparaissent dans des régions différentes et distantes dans le Nordeste brésilien. Un exemple est donné par la scène constituée de trois figures humaines, deux grandes et une petite, qui pourrait être un enfant. La petite se trouve entre les deux grandes qui la protègent avec les bras levés. Cette scène existe dans la Serra da Capivara, dans le Seridó, à Lençóis et dans d'autres sites de la Chapada Diamantina dans l'état de Bahia. Nous en ignorons la signification, mais elle se retrouve dans des régions éloignées, ce qui pourrait être l'indice de la présence d'un seul grand groupe ethnique. Des scènes de danse autour d'un arbre sont aussi un trait d'identification de la tradition Nordeste.

Les fouilles indiquent que la sous-tradition Seridó est plus récente que les peintures de la Serra da Capivara et qu'elle serait le résultat de la diaspora des peuples qui auraient créé la tradition Nordeste au sud-est du Piauí.

Actuellement, les travaux réalisés par l'équipe de l'Université Fédérale de Pernambuco, coordonnent une recherche intitulée « De la Serra da Capivara au Seridó » dont l'objectif est d'établir le système d'hypothèses qui soutiendraient qu'il y a eu des déplacements de groupes issus du sud-est du Piauí et qui seraient arrivés au Seridó. Une hypothèse serait que ces groupes se seraient divisés et que certains seraient allés vers la Chapada Diamantina et d'autres vers la vallée du fleuve São Francisco.

Dans la région du Seridó, les dates C14 les plus anciennes remontent aux alentours de 9 500 ans BP. Elles se réfèrent à des sépultures dont les os ont été peints avec de l'ocre rouge, le même pigment que celui utilisé pour les peintures. A cette même période, il y a dix mille ans, dans la région du Parc National Serra da Capivara, le nombre de sites est très grand, l'occupation est probablement caractérisée par une importante démographie, ce qui pourrait expliquer que, poussés par cette pression, quelques groupes aient commencé à migrer et à peupler d'autres régions du Nordeste.

3 Documentation :

Sur les sites qui sont dans l'inventaire de la région du Parc National, 90 % sont positionnés dans le GIS du Parc National.

Nous disposons du relevé photographique complet de 80 % de ces sites, du paysage environnant, de l'ensemble de peintures et gravures. Et pour 40 % de ces sites, nous avons des photos (diapositives ou images digitales) de chaque panneau avec les détails des figures.

Pour 15 % de ces sites, nous avons des copies grandeur nature sur plastique, ou des microfiches ou des réductions à la taille 1/5 de l'original.

35 % des sites ont fait l'objet de publications et 8 % ont été fouillés.

Tous les documents sur ces sites, établis depuis 1973, se trouvent au siège de la FUMDHAM, au Centre Culturel Sérgio Motta. Nous disposons d'environ 25 000 diapositives qui sont en cours de digitalisation. À partir de 2008, nous espérons pouvoir mettre à la disposition du public, sur internet, tous nos documents, les données du GIS aussi bien que les résultats des fouilles et de l'analyse des vestiges archéologiques. Aujourd'hui, pour consulter ces documents, il faut venir à São Raimundo Nonato ou bien faire la demande par internet.

4 Les recherches :

Les fouilles dans les sites d'art rupestre ont permis de découvrir des morceaux de paroi peinte, détachés de la paroi et enfouis dans les couches archéologiques. Des morceaux ont été trouvés dans des couches datées de 29 000 ans jusqu'au sol actuel. Cette date indique l'âge minimal de la peinture, déjà présente sur le morceau de paroi rocheuse qui est tombé. Mais cette peinture aurait pu être exécutée bien avant la date de la chute, le dépôt des sédiments aurait pu être lent, des phénomènes d'érosion auraient pu mettre à nu des morceaux tombés il y a très longtemps. Dans la plaine périphérique du fleuve São Francisco, face au Parc National Serra da Capivara, il y a des affleurements calcaires dans lesquels des grottes profondes déroulent de longs couloirs qui permettent l'accès jusqu'au niveau de la nappe phréatique. Dans les grottes, nous avons trouvé de rares outils lithiques, quelques charbons et beaucoup de fossiles de la mégafaune qui a survécu dans la région jusqu'à environ – 6 000 (Guérin, C., Martine, F., 1999). Dans les abris sous roche ou près de l'entrée des couloirs et salles, dans des endroits encore atteints par la lumière du soleil, nous avons trouvé des peintures et gravures rupestres. Dans le site Toca da Bastiana des figures peintes en rouge étaient couvertes par des couches de calcite. Sur quelques-unes la couche était mince, tandis que sur une grande figure humaine, les bras ouverts, il y avait une couche épaisse de plusieurs centimètres. La calcite de ces deux dépôts a été datée par les Prof. Shiguo Watanabe et Oswaldo Baffa, tous deux de l'Institut de Physique de l'Universidade de São Paulo. En 1991, le Prof. Baffa avait obtenu une date de 17 000 +/- 2000 ans BP pour la calcite de la couche fine qui couvrait quelques menues figures humaines. En 2001, le Prof. Watanabe a daté la même couche fine et a trouvé deux résultats 35 et 43 ka (Watanabe, Ayta et Hamaguchi, 2002). Steelman; Rickman; Rowe, 2002 ont daté, par le C-14, la calcite de la couche fine et a trouvé un âge de 2490 +/- 30 ans BP. Ces auteurs ont daté aussi le pigment de quatre figures du même site et ont trouvé les dates suivantes : 1880 +/- 60, 2280 +/- 110, 2970 +/- 300 e 3320 +/- 50 ans BP. En raison de ces divergences, de nouvelles analyses sont en cours à partir d'autres techniques (Fig. 6).

Les thèmes représentés sur les panneaux sont des figures humaines, des mains, des animaux, des arbres, des objets et des graphismes purs. Ces figures sont parfois isolées, mais généralement intègrent des compositions dont les thèmes sont liés soit à la vie quotidienne (chasse, scènes de sexe, accouchement, guerre et exécution), soit à des scènes dont les thèmes nous échappent et qui peuvent être liés à des cérémonies religieuses, soit à des mythes, soit à des commémorations. Selon A.-M. Pessis (2003), « Les peintures rupestres des sites archéologiques de la région du Parc National sont très diverses, aux plans thématique et technique de réalisation, tout comme sur la manière dont les figures sont agencées sur la paroi. Dans chaque site l'ensemble des peintures apparaît comme un collage. Chaque ensemble résulte d'une succession d'oeuvres réalisées par divers groupes, à des époques

différentes et pour des raisons diverses. Ces ensembles représentent une exposition de la préhistoire de la peinture dans la région. Il existe des peintures qui permettent une reconnaissance immédiate des éléments du monde sensible, alors que d'autres n'évoquent que des formes incomplètes non reconnaissables. Dans ce foisonnement d'images apparaissent pêle-mêle, au hasard, des rites, des symboles, des événements sociaux et religieux, de diverses époques. » (Fig. 8).

Des recherches récentes ont établi des analogies entre certaines scènes, qui représentent des danses et des cérémonies, avec certaines pratiques des indiens Krahó, un groupe de langue Gê, qui vit aujourd'hui dans l'État du Tocantins. La chorégraphie, la gestualité des figures sont identiques ; une danse actuelle, filmée, reproduit exactement une peinture rupestre. Ces Indiens affirment que, dans leurs rêves, les « anciens » décrivent leur terre natale, avec ses montagnes, son relief aux formes variées et une grande pierre trouée en son milieu. Cette description et le fait qu'une pièce archéologique facilement découverte dans le sol actuel est une hache en pierre, en forme d'ancre, semblable à celle qui, pour les indiens Krahô, est le symbole le plus important de leur culture et qui est portée, lors des cérémonies, par le chanteur ou la chanteuse qui dirige la scénographie, peuvent être le fondement de l'hypothèse que les indiens Gê seraient les anciens habitants de cette région. Ce fait indiquerait la permanence de rites pendant plus de 12 000 ans dans cette société auteur de la tradition Nordeste, allant du plus ancien style, Serra da Capivara, au plus récent, Serra Branca (Buco, C., 1999) (Fig. 5).

Cet art montre aussi que ces populations préhistoriques maîtrisaient la technique du dessin, connaissaient les rapports d'équilibre, harmonie, proportion, avaient créé des techniques de perspective ; certains éléments montrent des exemples de perspective conique. Dans certaines scènes les figures sont clairement disposées selon différents plans. Le volume peut aussi être représenté, parfois en utilisant le relief de la paroi rocheuse (Fig. 9 et 10).

Les données obtenues jusqu'à présent permettent de diviser cet art rupestre en traditions, mais ce classement peut être affiné par de nouvelles découvertes.

Nous avons aussi découvert, dans la vallée, face à un abri peint, un bloc de grès, avec une figure géométrique gravée. Les blocs de 40 x 26 x 9 cm, avaient les bords et la base lissés ; la face supérieure portait la gravure et l'outil utilisé pour la faire, un morceau de roche, très usée (Fig. 16). Devant un panneau gravé dans la paroi d'un abri, les fouilles ont permis de dégager un galet utilisé pour faire la gravure. Son bord, aplati par l'utilisation, entrait parfaitement dans les sillons gravés. Les charbons d'un foyer trouvé à côté ont donné une date de 6000 ans BP. Au Nordeste du Brésil, on trouve des sites, au bord des fleuves, qui comprennent des milliers de figures gravées, le plus connu étant la Pedra do Ingá, dans l'État de la Paraíba (Pessis, 2004).

La recherche se poursuit tout le long de l'année, des stagiaires brésiliens, américains, canadiens, européens participent aux recherches aux côtés des professeurs responsables du programme. Des équipes travaillent aux fouilles, tandis que d'autres s'occupent des travaux de laboratoire.

5 Protection des sites :

Au Brésil, le patrimoine archéologique est protégé par la loi numéro 3.924 du 26 juillet 1996. Selon cette loi, les monuments archéologiques ou préhistoriques, de quelque nature qu'ils

soient, ainsi que tous les vestiges qu'ils comportent sont placés sous la protection des pouvoirs publics. Les figures rupestres, ou les roches portant des sillons qui résultent du polissage d'outils, et tout autre vestige du travail des Paléo-Amérindiens sont considérés comme des monuments archéologiques ou préhistoriques. Tous les sites archéologiques et préhistoriques sont des biens du patrimoine national, et leur destruction est considérée comme un crime contre le patrimoine de la nation.

La réalisation de recherches, prospections, fouilles, documentation sur l'art rupestre doit faire l'objet d'une autorisation de la part de l'Instituto do Patrimônio Histórico e Artístico Nacional (IPHAN). Toute découverte de site doit être communiquée à l'IPHAN, et un archéologue doit enregistrer le site auprès du Ministère de la Culture (Ministério da Cultura).

6 Conservation :

Tous les peuples qui ont laissé leurs marques dans les roches de la région ont actuellement complètement disparu. Le colonisateur est arrivé dans la région seulement à la fin du XVII^e siècle. L'éloignement et le relief ont fait de cette zone un refuge pour des Indiens qui fuyaient des colonisateurs, entrés par la côte atlantique et par le fleuve Amazonas. Au Piauí, les Indiens ont résisté et fait face aux colons, qui les ont massacrés avec les armes à feu. La riche histoire consignée sur la pierre a été brutalement interrompue.

L'état du Piauí est très riche en peintures, il y en a tout le long des berges du fleuve Parnaíba, jusqu'à la frontière avec l'état de Tocantins. Mais malheureusement la plupart des sites qui sont loin de la région du Parc National Serra da Capivara sont en passe d'être détruits. Des agriculteurs qui brûlent leurs terrains pour les nettoyer, d'immenses étendues complètement nivelées par les gros tracteurs des planteurs de soja, les graffitis des curieux ont déjà anéanti la plus grande partie de ces sites archéologiques. Cela rend encore plus indispensable le travail de préservation qui est fait quotidiennement à la Serra da Capivara. Une équipe de techniciens, formés par des chercheurs de l'Université Fédérale de Piauí, s'occupe d'éloigner termites, fourmis et guêpes. Les sites sont maintenus propres, le bois sec et les feuilles mortes sont ramassés pour éviter la propagation du feu en cas d'incendie. Des murettes sont construites dans la partie haute des abris pour dévier l'eau de pluie qui parfois s'écoule le long des parois peintes et détruit les figures. Le déboisement entraîne un processus d'érosion qui permet le passage de l'eau. Le torrent est donc dévié et transporté jusqu'au sol, à côté de l'abri, vers des réservoirs. La diminution du volume des pluies, les longues périodes de sécheresse, produisent une intense évaporation à la surface de la paroi rocheuse. Cela provoque une migration de l'eau de constitution du grès vers la surface, transportant des sels qui vont se déposer sur les peintures. Les techniciens doivent immédiatement enlever ces sels pour empêcher le développement de bactéries, ce qui augmenterait la couche déposée, en raison du dépôt des produits issus du métabolisme de ces bactéries. Les ressources accordées par le gouvernement fédéral ont sensiblement diminué depuis 2003, et nous avons dû réduire le nombre des membres de l'équipe de conservation qui ne compte, aujourd'hui, que 7 techniciens (Fig. 19, 20, 21 et 22).

Les sites qui reçoivent les visiteurs sont spécialement préparés, avec des passerelles pour éviter le piétinement du sol archéologique et des murettes de protection. Les touristes ne peuvent pas toucher les peintures, des clôtures en bois empêchent de s'approcher de la paroi peinte.

Les sites fouillés ont les coupes protégées par des murs en pierre, des escaliers et des passerelles permettent la visite.

Les techniciens empêchent que des plantes se développent dans les parois rocheuses, retirent tous les végétaux morts du site pour empêcher la propagation du feu.

7 Gestion :

L'institution qui travaille pour la protection de ces sites est surtout la Fundação Museu do Homem Americano, avec la participation de l'Université Fédérale de Pernambuco, l'Université Fédérale de Piauí et l'Université Fédérale do Vale do São Francisco.

Pour assurer la protection des sites, la Fundação Museu do Homem Americano, qui gère le Parc National en collaboration avec le ministère de la Culture (Instituto do Patrimônio Histórico e Artístico Nacional, responsable des sites archéologiques) et le ministère de l'Environnement (Instituto Brasileiro do Meio Ambiente e dos Recursos Naturais Renováveis, responsable des parcs nationaux), a élaboré un programme pour le développement du tourisme dans la région. Des routes et des sentiers ont été ouverts, 128 sites sont déjà protégés pour accueillir les visiteurs : passerelles, systèmes de protection des œuvres rupestres mais aussi des couches archéologiques. Au fur et à mesure que de nouvelles découvertes ont lieu, les sites les plus importants, remarquables pour leur beauté et leur technique, sont préparés pour la visite du public. C'est la plus grande exposition permanente d'art rupestre du monde (Fig. 18).

La FUMDHAM forme les jeunes des communautés régionales pour qu'ils puissent participer aux travaux de terrain (entretien des routes, des bâtisses, conservation et protection des sites d'art rupestre, fouilles) ou de laboratoire (analyse des vestiges archéologiques, dessin, cartographie, photo, digitalisation, actualisation de la banque de données informatisée) aussi bien que les guides touristiques. Tous les visiteurs doivent se faire accompagner par un guide, l'entrée dans le Parc sans guide est interdite.

La FUMDHAM a un programme d'éducation par l'art, suivi par 170 enfants entre 5 et 14 ans et 40 adolescents. Ils apprennent, à travers les différents langages artistiques et leurs expériences, le partage, la créativité et la valorisation du patrimoine. Ils apprennent qu'ils sont l'avenir et que le maintien de la mémoire de cette région sera leur responsabilité.

La FUMDHAM maintient le Museu do Homem Americano, avec une exposition sur l'homme et son environnement, depuis 100 000 ans jusqu'à l'arrivée du colonisateur.

Nous avons aussi un programme d'éducation patrimoniale, ensemble avec l'IPHAN et les communes voisines du Parc National. Nous cherchons à faciliter la visite du Parc, du Musée, des sites archéologiques en essayant de faire comprendre que cette région, aujourd'hui pauvre et caractérisée par une population dans sa majorité analphabète, a été le berceau d'une culture très développée. Nous avons lutté pour introduire l'enseignement sur l'archéologie dans les écoles et essayons d'introduire la valorisation du patrimoine dans la vie quotidienne de la population.

Le Parc National a un plan d'aménagement, mais il doit être revu car il date de 1996.

8 Menaces :

Le déboisement, la pratique du feu pour nettoyer les terrains qui vont être plantés, la disparition d'espèces qui mangeaient termites et fourmis, sont des menaces constantes pour les sites qui sont dans le pourtour du Parc National.

Sur certaines parois apparaissent des fissures dans le grès et nous devons alors dévier l'eau des pluies pour éviter qu'elle ne s'infilte dans ces fissures. Nous assurons ce travail dans tous les sites du Parc National et dans ceux qui sont dans des terrains privés.

Les fonds qui sont réservés au Parc National par le gouvernement fédéral du Brésil sont chaque fois plus limités. En 2005 et jusqu'à maintenant en 2006, il n'y a pas eu de libération de ressources au niveau fédéral pour le Parc National. Nous avons réussi à protéger les sites, les préparer pour l'accueil des visiteurs et à les entretenir grâce à des donations de diverses entreprises et de la Banque Interaméricaine.

Le système de drainage de ces plateaux du permien-dévonien forme un réseau serré de canyons aux parois abruptes, la *cuesta*, qui établit la limite entre le relief et la plaine du précambrien, et forme une haute paroi sculptée par l'érosion. Le dénivellement peut atteindre 200 m. C'est dans ces parois rocheuses, soit au front de *cuesta*, soit dans les parois des canyons intérieurs, que des milliers d'abris sous roche ont été modelés par le ruissellement des eaux ou les torrents qui descendaient vers les fleuves, au fond des vallées. L'homme préhistorique a pu choisir où placer ses messages graphiques. Jusqu'à maintenant, nos recherches ont indiqué une constante : les peintures occupent toujours des abris situés près d'anciennes chutes d'eau. Aujourd'hui, la région, dont le climat était tropical humide voici environ 9 000 ans, connaît un processus de désertification. Les fleuves ne coulent plus pendant 7 à 9 mois par an. Le climat est très irrégulier, 5 à 7 ans peuvent s'écouler sans aucune pluie, mais il peut aussi pleuvoir à peine un mois par an, sans arrêt, de vraies pluies diluviennes qui provoquent alors des inondations, surtout dans les villes, en général bâties sur les berges même des fleuves. Lors des fortes pluies, il est fréquent de voir des chutes d'eau, parfois des torrents puissants qui tombent du haut du plateau dans un vacarme extraordinaire, tandis que d'autres fois on observe de petits filets timides que le vent disperse. Mais il est possible de trouver des abris au sommet ou tout à fait en bas du versant, presque à la hauteur des vallées. Les peintures sont sur des parois sans orientation déterminée. Des peintures sont placées très haut sur la paroi (hauteur maximale 8 m du sol préhistorique), mais d'autres sont, actuellement, couvertes par les couches de sédiment (Fig. 7). Les sites de gravures sont aussi liés à la présence de l'eau : ils se trouvent sur les berges des fleuves, sur la rive des lacs, aujourd'hui secs, ou au bord d'anciennes chutes d'eau.

Conclusions

Le nombre de sites et de figures rupestres de cette région est vraiment unique. L'âge des peintures, leur beauté, leur variété, les thèmes et actions représentés donnent à cet ensemble toutes les caractéristiques d'un patrimoine de l'humanité. Il faudrait également inscrire sur la Liste du Patrimoine mondial de l'UNESCO les sites qui sont dans le pourtour du Parc National de Serra da Capivara (bien inscrit sur la Liste en 1991), puisqu'ils appartiennent à la même culture.

La FUMDHAM est en mesure de garantir la protection de ces sites, leur conservation et de permettre les visites touristiques en toute sécurité. L'accompagnement de tous les touristes par des guides que nous formons est la garantie pour que ces peintures ne soient pas détruites.

Si les sites en dehors du Parc étaient également classés par l'UNESCO, leur entretien serait facilité puisque nous aurions ce classement à montrer aux propriétaires des terrains où ils se trouvent.

Voir illustrations Annexe IV: pages 222-223

Bibliographie

AGUIAR, Alice, 1986. A Tradição Agreste: estudo sobre a arte rupestre em Pernambuco. Ed. Universitária, UFPE, Recife, 98 p. il.

BAFFA, O., 1991. Communication privée, non publiée.

BUCO, C. 1999. Inferências Musicais na Pré-história do Nordeste Brasileiro-Parque Nacional Serra da Capivara, Diplôme de maîtrise présenté au Département d'Histoire de l'Universidade Federal do Pernambuco. Recife, PE. 160p.

GUIDON, N.; OGEL ROSS, L. ; MARANCA, S., 1975. Abri Toca do Pinga do Boi, site typique de la variété Serra Branca et de style Varzea Grande, Brésil. *Microfiche 0238 R75 039 238 Institut d'Ethnologie*, Paris, v. 80, p. 1-15.

GUIDON, N., 1975. Peintures rupestres de Várzea Grande, Piauí, Brasil. *Cahiers d'Archéologie d'Amérique du Sud*, Paris, v. 3, p. 1-174.

GUIDON, N., 1975. Abris peints de la Serra da Capivara, région de Várzea Grande, état du Piauí, Brésil. *Microfiche Institut d'Ethnologie*, Paris.

GUIDON, N., 1976. Abris peints de la Serra Branca et Serra Nova, région de Várzea Grande, état du Piauí, Brésil. *Microfiche Institut d'Ethnologie*, Paris, v. R73039, p. 1-31.

GUIDON, N., 1978. Peintures rupestres de Várzea Grande, Piauí, Brésil- n° 2. *Microfiche R78832 207 Institut d'Ethnologie*, Paris, p. 1-137.

GUIDON, N., 1978. Arte Rupestre no Piauí. In: Instituto Goiano de Pré-história e Antropologia. (Org.). *Anuário de Divulgação Científica*. Temas de Arqueologia Brasileira. 4ed. Goiania, v., p. 15-34.

GUIDON, N.; OGEL ROSS, L. ; MONZÓN, S., 1979. Un abri décoré de la Serra Nova: Toca do Sítio do Meio. *Microfiche 78 0329 210 Institut d'Ethnologie*, Paris, v. 78.

GUIDON, N.; OGEL ROSS, L. ; MONZON, S., 1979. Deux abris décorés de la Serra Nova, région de São Raimundo Nonato, état du Piauí, Brésil. *Microfiche 0210 Institut d'Ethnologie*, Paris.

GUIDON, N., 1980,. Definição e delimitação do estilo Várzea Grande. In: XLII Congrès International des Américanistes, Paris. *Actes du XLII Congrès International des Américanistes*. Paris: Société des Américanistes, v. IX-B. p. 391-407.

GUIDON, N., 1980. Notas sobre dois abrigos pintados da Serra da Capivara, sudeste do Piauí. *Cadernos de Pesquisas Série Antropologia*, Teresina, UFPI. v. I.

GUIDON, N.; OGEL-ROS, L. ; MARANCA, S., 1980. Abri Toca do Pinga do Boi, site typique de la variété Serra Branca. Style Varzea Grande, Brésil. *Microfiche Institut d'Ethnologie*, Paris.

GUIDON, N., 1981. Tradições e estilos da arte rupestre no sudeste do Piauí. In: *Exposição Pré-história. Aspectos da Arte Parietal*, São Paulo/Belo Horizonte. São Paulo/Minas Gerais: Universidade de São Paulo/Universidade de Minas Gerais, p. 19-20.

GUIDON, N. ; OGEL-ROS, L. , 1981. Les abris Toca do Baixão do Perna I et Sites du style Varzea Grande, sud-est du Piauí, Brésil. *Microfiches Institut d'Ethnologie*, Paris.

GUIDON, N. ; OGEL-ROS, L., 1981. Abri Chapada dos Cruzes, site de la variété Serra da Capivara et de style Serra do Tapuio, sud-est du Piauí, Brésil. *Microfiches Institut d'Ethnologie*, Paris.

GUIDON, N., 1982. Da aplicabilidade das classificações preliminares na arte rupestre. *CLIO*, Recife, UFPE, n. 5.

GUIDON, N., 1983. Contribution à l'étude de l'art rupestre de l'Amérique du Sud. *L'Anthropologie*, Paris, v. 87, n. 2, p. 257-270.

GUIDON, N., 1984. Traditions et Styles dans l'art rupestre d'Amérique du Sud. Le peuplement pléistocène de l'Amérique du Sud. *Annuaire de L'EHESS*, Paris, p. 337-338.

GUIDON, Niède, 1985. A arte pré-histórica da área arqueológica de São Raimundo Nonato: síntese de dez anos de pesquisa. *CLIO - Série Arqueológica*, n.2. Recife, UFPE, p. 3-81.

GUIDON, Niède, 1985. Unidades culturais da tradição Nordeste na área arqueológica de São Raimundo Nonato. *Revista do Museu Paulista*, (Nova Série). v. 30. São Paulo, p. 115-147.

GUIDON, N., 1985. Métodos e técnicas para a análise da arte rupestre pré-histórica. *Cadernos de Pesquisa. Série Antropologia*, UFPI.Teresina, v. III, n. 4.

GUIDON, N. ; DELIBRIAS, G., 1985. L'Art Rupestre Préhistorique - Amérique du Sud. *Grand Atlas de L'archéologie. Encyclopedia Universalis*, França, p. 358-359.

GUIDON, N. ; PESSIS, A.-M. , 1985. L'Art Rupestre : Une synthèse du Procédé de Recherche. *Etudes Américanistes Interdisciplinaires*, Paris, v. 1, p. 41-54.

GUIDON, N., 1987. Cliff Notes. Rock artists may have left their mark in Brazil more than 30.000 years ago. *Natural History*, New York, v. 8, p. 9-12.

GUIDON, Niède, 1988. Les traditions d'art rupestre de l'aire archéologique de São Raimundo Nonato, Etat du Piauí, Brésil. First AURA Congrès, Darwin, *Current Anthropol.* v. 30. p. 641-642.

GUIDON, Niède, 1989. Tradições rupestres da área arqueológica de São Raimundo Nonato, Piauí, Brasil. *CLIO – Série Arqueológica*, nº 5, Ed. Universitária, UFPE, Recife, pag. 5-10.

GUIDON, N., 1991. *Peintures préhistoriques du Brasil. L'art rupestre du Piauí*. Paris: Editions Recherches sur les Civilisations, 109p.

GUIDON. N., VIDAL. I. A., BUCO. C., LA SALVIA. E. S., FELICE. G. D., PINHEIRO.P. , 2002. Notas sobre a Pré-história do Parque Nacional Serra da Capivara. *FUMDHAMentos*, Revista da Fundação Museu do Homem Americano n.2, p. 105-142.

GUIDON. N, PESSIS. A.-M, PARENTI. F, FONTUGNE. M., GUÉRIN. C., PEYRE. E., SANTOS. G. M., 2002. Pedra Furada, Brazil: paleoindians, paintings and paradoxes. in *Athena Review: Peopling of the America, New World Explorers*, Pt. v.3, n.2, p.42-52.

GUIDON, N. Contribuição ao estudo da paleogeografia da área do Parque Nacional Serra da Capivara. 2002. *CLIO - Série Arqueológica*, v. 1, n.15, Recife, UFPE, 45-60p.

GUIDON. N, PESSIS. A.-M, PARENTI. F, FONTUGNE. M., GUÉRIN. C., PEYRE. E., SANTOS. G. M., 1996. Nature and age of the deposits in Pedra Furada, Brazil:reply to Meltzer,Adovasio & Dillehay. *Antiquity* 70:408-421.

KESTERING, Celito, 2003, Registros rupestres na área arqueológica de Sobradinho, Bahia. *CLIO - Série Arqueológica*, nº15, Ed. Universitária, UFPE, Recife, pag. 131-157, il.

KESTERING, Celito, 2003, Grafismos puros nos registros rupestres da área de Sobradinho, Bahia. *FUMDHAMentos* nº III, Revista da Fundação Museu do Homem Americano, Ed. Universitária, UFPE, Recife, pag. 163-177, il.

LAGE, Maria da Conceição Soares Meneses, 2002. Contribuição da arquequímica para o estudo da arte rupestre. *FUMDHAMentos* nº II, Revista da Fundação Museu do Homem Americano, Ed. Universitária da UFPE, Recife, pag. 255-264

LUSO, Daniele Lima, 2005, *Registros rupestres na área arqueológica de Sobradinho, BA: estudo cenográfico do Boqueirão do Brejo de Dentro*. Diplome de Maitrise, Programa de Pós-graduação em Arqueologia da Universidade Federal de Pernambuco-UFPE, Recife, 120p. il.

MARTIN, Gabriela. AGUIAR, Alice, ROCHA, Jacionira, 1983, O sítio arqueológico Peri-Peri em Pernambuco. *Revista de Arqueologia*, nº1, Museu Paraense Emilio Goeldi, Belém, p.30-39, il.

MARTÍN, Gabriela, 1989. A sub-tradição Seridó de pintura rupestre pré-histórica do Brasil. *CLIO - Série Arqueológica*, n.5. Recife, UFPE, p.19-26.

MARTÍN, Gabriela, 1991. Novos dados sobre as pinturas rupestres do Seridó, no Rio Grande do Norte. *CLIO - Série Arqueológica*, n.4, extraordinário. I Simpósio de Pré-história do Nordeste Brasileiro, (Recife, 1987). Recife, UFPE, p.141-147.

MARTÍN, Gabriela, 1994. Registro rupestre e registro arqueológico do Nordeste do Brasil. *Revista de Arqueologia*, v.8, n.1, Anais da VII Reunião da Sociedade de Arqueologia Brasileira-SAB. São Paulo, p.291-302.

MARTÍN, Gabriela, 1996. Os sítios rupestres do Seridó, no Rio Grande do Norte (Brasil), no contexto do povoamento da América do Sul. Anais da Conferência Internacional sobre o Povoamento das Américas, São Raimundo Nonato, PI, Brasil

MARTIN, G. 1999. *Pré-história do Nordeste do Brasil*. 3ª. Ed., Recife, Ed. Universitária da UFPE, 440p.

MARTIN, Gabriela, 2003. Fronteiras estilísticas e culturais na arte rupestre da área arqueológica do Seridó, RN, PB. *CLIO – Série Arqueológica*, nº16, Ed. Universitária, UFPE, Recife, pag. 11-33, il.

MARTIN, Gabriela, 2005. As pinturas rupestres do sítio Alcobaça, Buíque, PE, no contexto da Tradição Agreste. *CLIO – Série Arqueológica*, nº18, Ed. Universitária, UFPE, Recife, pag. 7-26, il.

OLIVEIRA, Ana Lúcia do Nascimento, 2001. *O sítio arqueológico Alcobaça, Buíque, Pernambuco. Estudo das estruturas arqueológicas*. Thèse de Doctorat, Programa de Pós-graduação em História da Universidade Federal de Pernambuco-UFPE, Recife, 186 p. il.

PARENTI, F., FONTUGNE, M., GUIDON N., GUERIN, C., FAURE, M. 1999. Chronostratigraphie des gisements archéologiques et paléontologiques de São Raimundo Nonato (Piauí, Brésil): contribution à la connaissance du peuplement pléistocène de l'Amérique, *Supplément 1999 de la Revue d'Archéométrie*. p.327-332.

PARENTI, Fabio, 2001. *Le gisement quaternaire de Pedra Furada (Piauí, Brésil). Stratigraphie, Chronologie, Évolution Culturelle*. Editions recherche sur les Civilisations, Ministère des Affaires Étrangères, Division des Sciences Sociales de l'Archéologie, Paris, 505 pag.

- PESSIS, A.-M., 1982. Méthode d'analyse des représentations rupestres. *Études Américanistes Interdisciplinaires. Paris: Contributions Méthodologiques en Archéologie*, v.1, n.1, p.17 – 40.
- PESSIS, A.-M., 1982. Le site Toca do Baixão das Mulheres II, un abri peint de l'aire de São Raimundo Nonato, sud-est du Piauí, Brésil. *Institut d'Ethnologie. Paris - Micro-Edition*, 1982.
- PESSIS, A.-M., 1983. Méthodes d'interprétation de l'art rupestre : analyse préliminaire par niveaux. *Études Américanistes Interdisciplinaires. Amérique du Sud. Paris : Contributions Méthodologiques en Archéologie*, n.2, p.23 – 35.
- PESSIS, A.-M., 1984. Etude en couleur des superpositions de la Toca do Boqueirão do Sítio da Pedra Furada, sud-est du Piauí, Brésil. *Institut d'Ethnologie. Paris - Micro-Edition*.
- PESSIS, A.-M., 1984. Méthode d'interprétation de l'art rupestre préhistorique : analyse préliminaire de l'action. *Études Américanistes Interdisciplinaires. Amérique du Sud. Paris: Recueil*, n.3, p.38 – 63.
- PESSIS, A.-M., 1987 *Art rupestre préhistorique : premiers registres de la mise en scène. Institut d'Ethnologie. Paris - Micro Edition* Université de Paris X, 503 p. bibliog. il. (microfiche).
- PESSIS, A.-M., 1987. Contexto e apresentação social dos registros visuais na antropologia pré-histórica. In: *Simpósio de Pré-história do Nordeste*, Recife - CHESF e UFPE.
- PESSIS, A.-M., 1988. Graphic presentation and social presentation in the Nordeste Tradition of rock painting in Brazil. In: First AURA Congress, Sidney. *First AURA Congress Annals*.
- PESSIS, A.-M., 1989. Apresentação gráfica e apresentação social na Tradição Nordeste de pintura rupestre no Brasil. *CLIO*. Recife - UFPE, n.5, p.11 – 17.
- PESSIS, A.-M. , 1990. Le parc national Serra da Capivara, Brésil: problèmes de conservation des peintures et gravures rupestre préhistoriques. *Journées internationales d'étude sur la conservation de l'art rupestre. Périgueux / ICOM*.
- PESSIS, A.-M., 1992. Identidade e classificação dos registros gráficos pré-históricos do Nordeste do Brasil. *CLIO – Série Arqueológica*, nº8, Ed. Universitária, UFPE, Recife, pág. 35-68.
- PESSIS, A.-M., GUIDON, N., 1992. Registros rupestres no Nordeste do Brasil: estado atual da pesquisa. *Grafismo Indígena*. São Paulo - NOBEL: p.19 – 34.
- PESSIS, A.-M., 1993. Identidade e Classificação dos Registros Gráficos Pré-históricos do Nordeste do Brasil. *CLIO*. UFPE - Recife: UFPE, v.1, n.8.
- PESSIS, A.-M., 1993. Registros rupestres, perfil gráfico e grupo social. *CLIO - Série Arqueológica*, v.1, n.9. Recife, UFPE, p.7-14.
- PESSIS, A.-M., GUIDON, N., 1993. Les peintures du Sud-est du Piauí. *Antropologia*, v.295.
- PESSIS, A.-M., 1994. Chronology and evolution of prehistorical rock paintings in Serra da Capivara National Park. In: *Arizona. Annals of ARARA congress – FAGGSTAFF*.
- PESSIS, A.-M., 1994. Registro rupestre, perfil gráfico e grupo social. In: *VII reunião da Sociedade de Arqueologia Brasileira - SAB*, João Pessoa.
- PESSIS, A.-M., 1995. Parque Nacional Sierra da Capivara (Piauí, Brasil) políticas y acciones de preservación. *Administración y conservación de sitios de arte rupestre, SIARB*. La Paz:

PESSIS, A.-M. 1997. Sítios de pinturas e gravuras rupestres dos circuitos de visitação do Parque Nacional Serra da Capivara. Estado atual do Patrimônio Cultural In: *Simpósio sobre Patrimônio Cultural e Turismo – ICOMOS / FUMDHAM*, São Raimundo Nonato - FUMDHAM.

PESSIS, A.-M., 1999, Gestão dos sítios de pinturas e gravuras pré-históricas do Parque Nacional Serra da Capivara. In: *Simpósio Internacional sobre conservação e gestão de sítios de arte rupestre na lista do Patrimônio Mundial. UNESCO*. Porto.

PESSIS, A.-M., 1999. Pré-história da região do Parque Nacional Serra da Capivara. In: *Pré-história da Terra Brasilis*, UFRJ, Rio de Janeiro, pág.61-75.

PESSIS, A.-M., 1999. Serra da Capivara National Park. *World Heritage Review*. Paris - UNESCO: n.10.

PESSIS, A.-M., 1999. The Chronology and Evolution of the Prehistoric Rock Paintings in the Serra Capivara National Park, Brazil. In: *Dating and the earliest known rock art*, ed.Oxford: Oxbow Books, v.1, p.41 – 50 PESSIS, A. M.

PESSIS, A.-M., 1999. Serra da Capivara National Park, Brazil: the Nordeste tradition of prehistoric rock paintings In: *Ethno-Arts*, v.1, n.1, p.54 – 82. Japan ed.Naruto: Naruto University.

PESSIS, A.-M., 2000. Preservação: uma nova estratégia de desenvolvimento. Parque Nacional Serra da Capivara. *Revista do ICOMOS - Brasil*, v.1, p.190 - 218.

PESSIS, A. -M., 2000, Parque Nacional Serra da Capivara In: *Patrimônio Mundial no Brasil.1* ed.Brasília : UNESCO ; Caixa Econômica Federal.

PESSIS, A.-M. 2000, Registros rupestres e caracterização das etnias pré-históricas In: *Grafismo indígena.1* ed.São Paulo : Studio Nobel, v.1.

PESSIS, A. ; GUIDON, N., 2000. Ars indígena pré-histórica no Brasil. In: Reunião da Sociedade Brasileira de Arqueologia, 2000, Recife. Anais da X Reunião Científica da SAB. Recife: CLIO-*Revista do Curso de Mestrado em História, Série Arqueológica – UFPE*. p. 135-142.

PESSIS, A.-M. ; MARTIN, Gabriela, 2002. Área arqueológica do Seridó, RN,PB: problemas de conservação do Patrimônio Cultural. *FUMDHAMentos II*, Revista da Fundação Museu do Homem Americano, Ed. Universitária da UFPE, Recife, pág. 188-208.

PESSIS, A-M. 2003. Das origens do patrimônio cultural no Brasil. *CLIO – Série arqueológica*, Recife - PE, v. 01, n. 16, p. 7-18.

PESSIS, A-M.2003. *Imagens da pré-história*. Parque Nacional Serra da Capivara. 1ª. ed. São Paulo: FUMDHAM/PETROBRAS. v.1. 304 p.

SCHULTZ, H. 1963. *HOMBU*. 1ª. Ed., Rio de Janeiro-Amsterdan, Colibris Editora Ltda.

STEELMAN. K. L., RICKMAN. R., ROWE. M. W., BOUTTON. T. W., RUSS. J., GUIDON. N. 2002. Accelerator mass spectrometry radiocarbon ages of an oxalate accretion and rock paintings at Toca do Serrote da Bastiana, Brazil in JAKES. K. A. (edit.) *Archeological Chemistry, Materials, Methods and Meaning*. Chapter 3. p. 22-33.

WATANABE, S., AYTA, W.E.F, HAMAGUCHI, H., GUIDON, N., LA SALVIA, E., MARANCA, S., BAFFA, O. 2003. Some Evidence of a Date of First Humans to Arrive in Brazil. *Journal of Archaeological Science*, v. 30, p. 351-354.

Zone 4: West-north-west South America (north of the Andes, Peru, Bolivia, Paraguay)

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1 Introduction:

The present study discusses rock art in four countries (Ecuador, Peru, Bolivia, and Paraguay), in different geographical-ecological zones and different cultural backgrounds which make it rather difficult to combine these data in one study. I will outline the present state of rock art research in each country, as far as it is known to me through my personal studies and field work and on the basis of available publications. Conservation and management issues for the four countries are discussed separately, followed by a brief check list of sites of special importance.

2 Rock art of Ecuador:

Very little rock art research has been carried out in Ecuador as can be seen from a recent survey. Gonzáles Ojeda (publication in preparation) informs about the petroglyphs located in the following regions:

- Northern highlands: petroglyphs near El Angel and in the region of San Gabriel, Carchi province; petroglyphs of Shanshipampa, Imbabura province (Bray 2002);
- North coast: petroglyphs in the region between Santo Domingo de los Colorados and Quevedo;
- Central-south highlands: petroglyphs in Cañar province and Azuay province;
- South Ecuador: petroglyphs in the coastal region of Santa Rosa, El Oro province; petroglyphs in the region of Zaruma; 80 engraved rocks in 22 sites in Loja province;
- East Ecuador: Napo province, Misagualli valley, Amazonian region – 75 engraved rocks as described by Porras (1985); petroglyphs near Méndez; as well as the following sites: Cueva de los Tayos and Chontayacu.

Comparing these data on relatively few sites throughout the country to rock art surveys in the neighbouring countries Columbia and Peru, it is obvious that no systematic rock art inventory has been undertaken in all of Ecuador. Where intensive field work has been carried out, such as in a small region of Napo province and in Loja province, concentrations of engraved rocks have been registered.

Petroglyphs at Shanshipampa (Pimampiro district, Imbaburo province) include two monuments with complex iconography linked by Bray (2002) to the Capulí style (AD 800-1500).

Petroglyphs at Misagualli valley of Napo province feature anthropomorphic and zoomorphic figures, as well as abstract designs and cupules, apparently belonging to a tradition typical of the tropical lowlands.

In 2000, a private university in Loja (UTPL) started a project to investigate, record and preserve rock art within the province of Loja in southern Ecuador. González Ojeda (2004) published preliminary results. He links the petroglyphs in part to an Andean tradition, in part to an Amazonian tradition.

As rock art research in Ecuador has just started, it is not surprising to find that invasive recording methods are still being practised (chalking out of petroglyphs) and that no efforts have yet been undertaken to protect the engraved rocks in archaeological parks.

3 Rock art of Peru:

3.1. Rock art research in Peru

Rock art research in Peru developed in the 20th century with regional and national surveys. Núñez Jiménez (1986a) published a catalogue of 72 petroglyph sites. In the same year Ravines presented a survey with data of 236 rock art sites throughout the country. 17 years later, Hostnig (2003) published a national register of 900 sites considering petroglyphs, rock paintings, geoglyphs, and, in a few cases, "mobile art in the rock art traditions". Meanwhile, Hostnig has a much more extended database and supposes that at least 1500 rock art sites exist in Peru. He plans to publish a new version of his inventory within the next few years. Hostnig also organized a national rock art symposium held at Cusco in November 2004 (see preliminary report by Hostnig and Strecker 2005) whose publication is in preparation. Another landmark in Peruvian rock art studies is Guffroy's book (1999) based on an investigation of 17 sites with rock paintings and 38 sites with petroglyphs; the author presented a summary of the state of research, a stylistic analysis, a classification according to motif types, and some hypothesis regarding chronology, function and significance of rock art.

According to Hostnig's preliminary published survey (2003: gráfico n° 4), nearly the same amount of sites with petroglyphs (307) and those with rock paintings (403) exist, apart from relative few sites with "mobile art" (69) and geoglyphs (34). The highest rock art concentrations so far registered are in the departments of Arequipa, Puno, Huánuco and Cusco (Hostnig 2003: gráfico n° 3), as well as in the department of Cajamarca in northern Peru where Alfredo Mires (personal communication, March 2006) registered 150 sites. Within the Dept. of Puno, the region of Macusani and Corani have a dense concentration of rock art locations (about 100), investigated by Rainer Hostnig (2005). The departments with the lowest number of registered sites are the following: Amazonas, Ayacucho, Loreto and Madre de Dios. It is very likely that this situation reflects rather the lack of investigations than the lack of rock art sites though apparently the number of sites in the *altiplano* is much higher than in the Amazon lowlands. (The same holds true for Bolivia.)

Guffroy (1999: 19) points out that the number of decorated panels at the sites differ greatly, with particularly high concentrations of rock art at Alto de las Guitarras in the Dept. of La Libertad, Checta in the Dept. of Lima, and Toro Muerto, Dept. of Arequipa (Linares M. 1993).

Geoglyphs occur in seven departments (Lambayeque, Libertad, Ancash, Lima, Ica, Arequipa, and Moquegua), mainly in the regions of Nazca (Aveni 1990) and Palpa (Reindel and Isla 1999, Lambers 2006). The extensive Nazca geoglyphs have been declared World Heritage site by UNESCO and play a major role in tourist industry.

3.2. Chronology and stylistic groups

One of the best known examples of an early rock art tradition are the paintings in Toquepala cave, Dept. of Tacna (Guffroy 1999: 26-43); their antiquity has not been definitely established but apparently they date back to 4000 B.C. Guffroy denominates this tradition as “Andean Tradition”, it is also present in many other places in southern Peru (departments of Arequipa, Tacna, Cusco, and Puno) such as the Macusani and Corani region of the Dept. of Puno (Hostnig 2005). Dynamic naturalistic animal representations are combined with stylized human figures often holding objects such as spears. Huntings scenes reveal that camelids were caught in traps, fences or enclosures and hunted in ambush. Rock paintings of Cuchimachay, in the Dept. of Lima, represent dynamic large camelid figures that according to Guffroy (1999: 50) could have been created between 4000 and 2000 B.C.

Guffroy (1999) presents the “seminaturalist style” of rock paintings, also related to hunting activities and possibly of later age; and discusses some late regional traditions related to the Cupisnique and Recuay styles in the Dept. of Cajamarca.

Guffroy distinguishes between four stylistic groups of petroglyphs, the earliest belongs to the Early Horizon, is represented by sites in the north of Peru (such as Alto de la Guitarra) and can be related to Chavín culture. A second group of simpler designs is tentatively associated with the Early Intermediate period (200 B.C. – A.D. 600). A third group, located in the south of Peru, is exemplified by one of the largest petroglyph concentrations, situated at Toro Muerto in the Dept. of Arequipa, investigated by Eloy Linares Málaga (1993), Antonio Núñez Jiménez, Jean Guffroy and, more recently, by Maarten van Hoek (2003). Its dating is controversial, van Hoek agrees with Núñez Jiménez (1986a, b) who ascribes the majority of representations to the local Chuquibamba culture (A.D. 1200-1500).

A fourth stylistic group of petroglyphs is related to jungle tribes, one of the most noteworthy examples is Pusharo in the Dept. of Madre de Dios (Hostnig and Carreño 2006).

Late prehispanic rock art (paintings and charcoal drawings) at Cutimbo in the Dept. of Puno have been ascribed to the local Aymara population. The two sites (Cutimbo Grande, Cutimbo Chico) are linked to the history of the Lupacas and also feature magnificent burial towers (Chulpas) in the Aymara and Inca traditions. The rock drawings include representations of figures carrying *quipus*. Part of the rock art is pre-Inca and stylistically different from the later Aymara complex. On the other hand, the art continued into the Colonial period, and ritual offerings have been placed by the local people till our days revealing that they still perceive these sites as part of their sacred landscape. (Strecker and Paredes 2006)

Colonial manifestations occur in many rock art sites throughout Peru. An especially high concentration of indigenous Colonial rock art has been found in the Espinar Province of Dept. of Cusco (Hostnig 2004). Hostnig (2002) also investigated the use or re-use of indigenous carvings

in rock art tradition in the context of colonial churches and other buildings of the Cusco department.

4 Rock art of Bolivia:

4.1. Rock art research in Bolivia

Systematic investigations on rock art in Bolivia began with the foundation of the Bolivian Rock Art Research Society (*Sociedad de Investigación del Arte Rupestre de Bolivia*, SIARB) in 1987. The society publishes a yearly journal, *Boletín*, and a series called *Contribuciones al Estudio del Arte Rupestre Sudamericano*. It has already organized five international meetings. There is an obvious difference in the quality of occasional rock art research prior to the creation of SIARB compared to new investigations which try to provide a complete recording of sites, taking into account their context. SIARB has passed a Code of Ethics which bans potentially destructive recording techniques, such as chalking out engravings, wetting of rock surfaces, rubbings or moldings; this code also advises against the publication of the exact localization of unprotected sites in popular journals or newspapers, as this could lead to vandalism resulting from uncontrolled tourism.

4.2. Surveys of rock art regions

SIARB has registered more than 1,000 rock art sites all over Bolivia though mainly in the highlands (*altiplano*) and valleys. So far, few sites have been found in the tropical Amazon lowlands (as in the case of rock art sites in Peru). The map (Fig. 2) shows the distribution of rock art sites in the nine departments. One dot may stand for a single site or a number of sites in the same region. A distinction is made between engravings and paintings though at some sites both techniques have been used; in this case, the prevalent technique has been taken into account.

Concentration of rock art sites occur in the following regions: the Dept. of Tarija and neighbouring regions, such as the San Juan de Oro river and Cinti in the south of the Dept. of Chuquisaca (investigations by Carlos and Lilo Methfessel); the west of Chuquisaca and east of Potosí; central Potosí (investigated by the author); the drainage area of the Mizque river, Cochabamba and neighbouring regions in west Santa Cruz (investigated by Roy Querejazu Lewis and Roland Félix); San José de Chiquitos highlands, Santa Cruz (investigated by Jürgen Riester, Jorge Arellano, Erica Pia and, more recently, by Carlos Kaifler); east Oruro and west Cochabamba; north Oruro (investigated by Roy Querejazu L.); lake Titicaca region (investigated by Freddy Taboada and the author).

Few regional surveys providing an overview of existing rock art traditions have been published. Roy Querejazu Lewis (2001) presented a book on rock art in the river Mizque drainage area. My own research on central Potosí rock art accomplished extensive recording of 12 rock art sites, but has only partially been published (Strecker 2004). A detailed documentation of petroglyphs along Kaka and Alto Beni rivers, in the north-east of Dept. La Paz, by Renán Cordero, Wilmer Winkler and Enrique González, still remains unpublished. Carlos Kaifler (1993, 1999, 2002, 2005) has published complete recordings of rock art sites in Santa Cruz, including drawings of outstanding quality and careful analysis of rock art production, colour, depth of carved figures, patina, motifs, and superpositions.

Apart from rock paintings and engravings, SIARB investigators have studied cupules in several departments: Tarija (Methfessel 1998), Cochabamba (Querejazu L. 1998) and La Paz.

4.3. Chronology and continued use of rock art sites

Rock art in Bolivia has a long tradition revealing a wide range of stylistic, regional and chronological differences. SIARB proposes the following very rough preliminary chronology:

- Early hunters of the Paleo-Indian period;
- Regional pre-Inca cultures;
- Inca;
- Colonial and Republican period.

It is particularly difficult to establish the exact date of the earliest manifestations. Robert Bednarik (2001b) suggests an early cupule tradition at Inca Huasi, Mizque, which he believes to date back to the final Pleistocene or early Holocene, while later cupules at the same site are estimated to be between 1,500 and 4,000 years old. In my own research on the rock art of Betanzos, central Potosí, I have established a rough relative chronology, based on superposition and style (Strecker 2004). The first phase of paintings is represented by diminutive figures of camelids, painted in dark red colour (later in white), running or jumping in groups; sometimes they are accompanied by stick-like human figures, very stylized in contrast to the animals, and in rigid posture. Later human representations are much larger and comparatively complex. A surprising number of different types of human figures occur, some of which are painted in two colours (Strecker 1990). I assume that these later representations, as well as numerous geometric designs, were created in a period when ceramics and textiles were in use. Superposition of painted elements allow us to recognize five different phases, four of which already belong to ceramic periods. Regarding rock engravings in the same region, similar stylistic trends can be observed, apart from hunting scenes, there are deeply cut concentric circles (presumably created much later). Finally, the last stage for both paintings and engravings are representations from the Colonial period including Christian crosses, horseriders, etc.

In Paja Colorada cave in Vallegrande the earliest representations are negative white hand stencils. To a large extent, later paintings were placed in superposition on top, for example a white stylized figure holding a staff. The next phase of paintings consisted of bichrome animals. The last drawings already belong to the Colonial period. Among the later prehispanic representations there are also engravings featuring a lizard-like animal which can be related to the so-called “Tripatito” tradition in the Mizque basin (rock art and ceramics dating presumably to 1000-1400 AD).

An absence of rock art belonging to the Tiwanaku culture has been noted by several investigators. Petroglyphic figures have been pecked on monumental slabs of the Pumapunku ruins at Tiwanaku, but are believed to have been created after the abandonment of the site by its former population. However, among numerous petroglyphs in the valley of Tiwanaku there are two representations of llama heads with “weeping eyes”, possibly showing an influence of Tiwanaku iconography (Albarracín-Jordán 1991: 39, Fig. 5), while the majority of these engravings are estimated to belong to the late prehispanic “Pacajes” phase, and some date to the

Colonial period. It is a curious fact that the only clear case of Tiwanaku style rock art has been found outside Bolivia, in northern Chile (Berenguer, J., 1999: 33, rock painting at Zurita).

Strecker and Taboada (2004) have recently defined a rock art tradition linked to the prehispanic and later Aymara population of the lake Titicaca region, with different stylistic and thematic trends: geometric or “abstract” elements, schematic camelid figures, ‘religious scenes’ and scenes representing conflicts between armed persons. At least some of the sites, and possibly the vast majority, are considered of particular importance as part of the ritual landscape of the Indians. One of the most impressive Colonial sites has been studied in depth by F. Taboada (1992). It features distinct folkloric dances, pilgrimages to churches with people moving on lines symbolizing paths, etc.

A rare case of Republican rock paintings at Palmarito, in the Andean section of Santa Cruz Dept., has been investigated by R. Querejazu L. (1992). These paintings portray Christian saints which are worshipped by the local population and pilgrims.

The continued use of rock art sites is evident from recent offerings and rites carried out at sites, as in the case of paintings in the Los Andes province of Dept. La Paz investigated by F. Taboada and Korini-3 in the north of Oruro studied by R. Querejazu L. (1994). In both cases, members of the neighbouring indigenous population consider the site part of their sacred realm. Animals sacrificed at rock art sites include llamas and a bull, blood was spattered upon the paintings. Chewed coca leaves were placed on rock carvings and paintings at sites in the departments of Cochabamba and Potosí.

5 Rock art of Paraguay:

Apparently, rock art research in Paraguay has hardly begun. This may be due to the fact that petroglyphs are still considered testimonies of outside cultural influences and foreign people, for example they are ascribed to Vikings or Celts believed to have visited South America, and are popularly labelled as “runic inscriptions”. These fantastic interpretations have not only been published in a number of very popular books by Mahieu in several languages (for example, Mahieu 1979), but can also be found in school books, press reports, tourist leaflets, and printed government information (Consens 2002: 213).

On the other hand, a scientific recording of rock engravings in Paraguay was published by Pallestrini and Perasso (1984), but this has remained an exception. For an understanding of rock art in the country, unfortunately the investigator has still to consider reports by Mahieu (1972, 1975) which are tainted by his imaginary interpretations.

Rock engravings, such as those of Gasory rock shelter in Amabay Cordillera in East Paraguay (Consens 2002: Fig. 8-9) and Fernández rock shelter in Ybytyruzú Sierra (Dept. of Guayrá or Guaira in South Paraguay, cf. Pallestrini & Perasso: 46-49) represent abstract designs such as parallel strokes, circular forms in a combination of a circle and radiating lines, “grids”, “combs”, undulating lines, etc., apparently with the occasional inclusion of very stylized lizard-like creatures. Consens (1994: 153) considers that morphologically these representations are closely related to the rock art in the central area of Brazil.

6 Observations on recording and research:

Recording of rock art in the area is generally done by taking photos. A trend towards a more detailed documentation is obvious in the last years, including location maps and drawings.

Unfortunately, invasive and potentially destructive recording methods, such as chalking and wetting rock art, are still practiced by many investigators. However, in the last ten years rock art researchers have become aware of the necessity to respect the integrity of sites and not interfere with the rock art in any way. There is also a trend towards a complete and systematic recording of sites (Taboada & Strecker, eds., 2002).

As noted in the cases of Ecuador and Paraguay, rock art research should be intensified in order to achieve national inventories.

7 Conservation and management issues:

Rock art sites, which in some cases have been preserved over thousands of years, are extremely vulnerable like all open-air sites. Their conservation depends on natural deterioration factors, explained by Bednarik (2001a: 84-92) such as moisture, physical weathering, biological weathering, pictogram deterioration, climate; as well as “anthropogenic deterioration” (ibid.: 97-102), the destruction of rock art by human visitors. Destruction of rock art sites in the four countries considered in this study is mainly due to anthropogenic damage.

In theory, rock art sites are protected by state legislation as part of the nation’s cultural heritage. However, reality is very different because of the lack of enforcement of existing laws. In consequence, if rock art sites are destroyed actions are seldom taken. Two examples from Bolivia: Civil authorities took legal action against a mining company responsible for the destruction of petroglyphs due to the opening of a road, but the case was soon abandoned. The company argued that it was not aware of the importance of the petroglyphs. No legal action was taken in the case of the complete destruction of a petroglyph site by lumberjacks in the Dept. of Beni, although the council of the indigenous group Chimane requested an official investigation. (Strecker & Taboada 1999: 37)

Some sites have received the status of National Heritage such as rock art sites of Macusani and Corani (Dept. of Puno) in Peru, Calacala (Strecker and Taboada 2001) and Incamachay in Bolivia. The geoglyphs of Nazca / Peru (Aveni 1990; Hostnig 2003: 173-175) and the sculptured rock at Samaipata, Santa Cruz/Bolivia (Meyers 1993, 1998) have been inscribed in the list of World Heritage sites by UNESCO. There are numerous other sites of particular significance in the region, such as the petroglyphs of Toro Muerto, Arequipa/Peru, one of the largest rock art sites which has attracted visitors and scientific studies since the 1960s (Núñez Jiménez 1986b; Linares Málaga 1993; Hostnig 2003: 62; van Hoek 2003); the extraordinary petroglyphs of Pusharo in the Amazon region of Madre de Dios Dept. / Peru (Hostnig and Carreño 2006), and the spectacular rock art of Macusani and Corani, Cordillera de Carabaya, Puno/Peru (including ancient hunting scenes) which I particularly recommend to be considered for World Heritage status (Hostnig 2003: 297, 304-305, 307-311, 313-317, 319-323; Hostnig 2005). In Bolivia, the following sites should be recognized as National Heritage: El Buey, Cochabamba, a site with magnificent rock paintings linked to regional cultures with ceramics and textiles (Querejazu L.

1989), rock paintings of Tucavaca, Chiquitanía / Santa Cruz, rock paintings of Vallegrande / Santa Cruz (different sites spanning from early times, including very rare negative hand prints up to Colonial and Republican rock art), rock art in the río San Juan de Oro region of departments Tarija, Potosí and Chuquisaca (Methfessel 1997), and Chirapaca / La Paz with outstanding examples of Colonial rock art (Taboada 1992).

As the first step towards a preservation of sites, it is absolutely necessary to carry out regional surveys and documentation programs. Unfortunately, the present database on rock art sites is insufficient, particularly in Ecuador and Paraguay.

Very few archaeological parks with rock art exist in the four countries and their development and management is still in the early stages. In Peru and Bolivia some archaeological parks were created in the past without any administration, inviting tourism to unprotected sites. Too frequently, this has resulted in vandalism and destruction. Some administration for the protection of rock art exists in the cases of the following Peruvian sites: Nazca geoglyphs, petroglyphs of Toro Muerto (Arequipa) and Miculla (Tacna) (for the latter, cf. Gordillo, in prep.)

While state agencies such as national heritage institutions often lack a coherent policy for the preservation of rock art sites, the role of private institutions and independent rock art specialists may be crucial to bring about long-term conservation projects and the administration of sites (Strecker & Taboada 1999). In Bolivia the private organization SIARB is collaborating with local municipalities in the preservation of rock art in archaeological parks (Strecker & Podestá 2006).

Raised wooden boardwalks provide efficient measures for visitor control at the sites and, at the same time, allow visitors a convenient view of the rock art (Bednarik 2001a: 98); they have been implemented at sites at Calacala (Oruro) and Samaipata (Santa Cruz) in Bolivia. Infrastructure at a recently inaugurated archaeological park Incamachay – Pumamachay in Chuquisaca / Bolivia includes a paved path in a rock shelter, information boxes, and a metal frame impeding access to a cave which is still accessible to visitors in a guided tour accompanied by the guardian or site steward who received some basic training.

Community involvement has recently increased in the archaeological parks of Calacala (where a new guardian was appointed who was chosen by the community) and Incamachay (where the municipality of Sucre and the community of Tumpeca have come to a basic agreement on the administration of the site which benefits the community).

Education campaigns should play an important role in the management of rock art sites and some models exist in work by SIARB in Bolivia (Strecker 2001b) and by the author in Peru (Strecker 2005). SIARB tries to inform the public on the importance of rock art and promote an appropriate visitors' etiquette (for example, in the web page www.siarb-bolivia.org).

Professional conservation measures at rock art sites are still rare in Latin America. In Incamachay / Bolivia a conservation treatment (cleaning of graffiti) was carried out in 2004 (Loubser and Taboada, 2005) followed by the inauguration of the park in May 2005. Conservation and administration of rock art sites play an increasing role at rock art meetings and in academic publications (Strecker & Taboada, eds. 1995).

Conclusions

It is estimated that some 3000 rock art sites exist in Ecuador, Peru, Bolivia, and Paraguay. Rock art investigations in Peru and Bolivia are increasing, and some efforts are undertaken to preserve rock art within archaeological parks. The situation in Ecuador and Paraguay is very different; apparently, no systematic rock art surveys have been undertaken yet in these two countries with the exception of Loja province and a small area of Napo province in Ecuador.

Only a few archaeological parks exist, and professional conservation measures at rock art sites are still very rare. A major problem is the lack of financial resources for research, recording and preservation of the cultural heritage and the lack of well-trained local archaeologists. There is a great need for training courses in rock art recording, conservation strategies and site administration. International assistance should be given by UNESCO and other organizations.

See illustrations Annexe IV: page 224

Bibliography

Albarracín-Jordán, Juan

1991 Petroglifos en el valle bajo de Tiwanaku. In: *Boletín*, 5: 35-56. SIARB, La Paz.

Aveni, Anthony F. (ed.)

1990 The Lines of Nasca. 344 p., fold-out photo. The American Philosophical Society, Philadelphia.

Bednarik, Robert G.

2001a Rock Art Science. The scientific study of paleoart. Brepols Publ., Turnhout, Belgium.

2001b Age estimates for the petroglyph sequence of Inca Huasi, Mizque, Bolivia. In: *Andean Past*, 6: 227- 287. Cornell University, Latin American Studies Program, New York.

Berenguer R., José

1999 El evanescente lenguaje del arte rupestre en los Andes atacameños. In: *Arte Rupestre en los Andes de Capricornio* (J. Berenguer R. & F. Gallardo I., eds.): 9-56. Museo Chileno de Arte Precolombino, Santiago, Chile.

Bray, Tamara L.

2002 Rock art, historical memory, and ethnic boundaries. In: *Andean Archaeology II* (Silverman, H. & Isbell, W., eds.): 333-354. Kluwer Academic/Plenum Publ., New York.

Consens, Mario

1994 Rock art sites of southeastern South America. In: *Rock Art Studies in the Americas. Papers from the Darwin Rock Art Congress* (Steinbring, J., ed.): 151-163. Oxbow Monograph 45, Oxford.

2002 Vikings and rock art in Paraguay: ethno-anthropological discrepancies. In: *1999 International Rock Art Congress Proceedings*, 2 (Whitehead, P. et al., eds.): 209-214. *American Indian Rock Art*, 26. ARARA, Tucson, Arizona, USA.

González Ojeda, Diego S.

2004 El arte rupestre de Loja. 191 p. Loja.

González Ojeda, Diego

---- Rock art investigations in southern Ecuador. To be published in: *Rock Art Studies, News of the World III* (P. Bahn and A. Fossati, eds.). Oxbow Books, Oxford.

Gordillo Begazo, Jesús

---- “Puesta en valor” de los petroglifos de Miculla, Tacna, Peru. Paper presented at I Simposio Nacional de Arte Rupestre (Cusco – 2004). To be published in the transactions.

Guffroy, Jean

1999 El arte rupestre del antiguo Perú. IFEA, IRD. Prefacio de Duccio Bonavia. 147 p., 2 maps, 55 figs., Travaux de l’Institut Français d’Etudes Andines, 112, Lima.

Hostnig, Rainer

2002 Interrogantes sobre las piedras grabadas en templos coloniales del sur del Perú. In: *Boletín*, 16: 39-46. SIARB, La Paz.

2003 Arte Rupestre del Perú. Inventario Nacional. 447 p. CONCYTEC, Lima.

- 2004 Arte rupestre postcolombino de la provincia Espinar, Cusco, Perú. In: *Boletín*, 18: 40-64. SIARB, La Paz.
- 2005 Macusani y Corani, repositorios de arte rupestre milenario en la cordillera de Carabaya, Puno, Perú. In: Rupestreweb, UTM: <http://rupestreweb2.tripod.com/macusani.html>
- Hostnig, Rainer and R. Carreño Collatupa
- 2006 Pusharo, un sitio rupestre extraordinario en la selva amazónica de Madre de Dios, Perú. In: Rupestreweb, UTM: <http://rupestreweb2.tripod.com/pusharo.html>
- Hostnig, Rainer and Matthias Strecker
- 2005 I Simposio Nacional de Arte Rupestre – Cusco, Perú 2004. In: *Boletín*, 19: 19-23. SIARB, La Paz.
- Kaifler, Carlos
- 1993 Tres sitios de pinturas rupestres en la parte occidental de la Serranía San José, Depto. de Santa Cruz, Bolivia. In: *Boletín*, 7: 59-95. SIARB, La Paz.
- 1999 Los petroglifos de Capinsal, Depto. de Santa Cruz, Bolivia. In: *Boletín*, 13: 53-63. SIARB, La Paz.
- 2002 El sitio de petroglifos Cañón de los Tocos, departamento de Santa Cruz, Bolivia. In: F. Taboada and M. Strecker (eds.), *Documentación y Registro de Arte Rupestre*: 67-93. Contribuciones al Estudio del Arte Rupestre Sudamericano, 6. SIARB, La Paz.
- 2005 Los petroglifos de Huirapucuti, Charagua, Depto. de Santa Cruz, Bolivia. In: *Boletín*, 19: 58-74. SIARB, La Paz.
- Lambers, Karsten
- 2006 The Geoglyphs of Palpa, Peru. Documentation, analysis, and interpretation. 184 p., 83 illus., 10 fold-out maps and aerial photos, 1 DVD. Deutsches Archäologisches Institut, Linden Soft Verlag, Aichwald, Germany.
- Linares Málaga, Eloy
- 1993 The largest site in the world: Toro Muerto, Arequipa (Peru). In: *International Newsletter on Rock Art*, 6: 25-27. Foix, France.
- Loubser, Johannes; Taboada, Freddy
- 2005 Conservación de Incamachay: limpieza de graffiti. In: *Boletín* 19: 49-57. SIARB, La Paz.
- Mahieu, Jacques de
- 1972 Las inscripciones rúnicas precolombinas del Paraguay. Instituto de Ciencias del Hombre, Buenos Aires.
- 1975 Las inscripciones rúnicas precolombinas del Paraguay. Complemento: Cerro Guazú. Instituto de Ciencias del Hombre, Buenos Aires.
- 1979 El Rey Vikingo de Paraguay. 180 p. Hachette, Buenos Aires.
- Methfessel, Carlos & Lilo
- 1997 Arte rupestre de la “Ruta de la Sal” a lo largo del río San Juan del Oro. In: *Boletín*, 11: 76-84. SIARB, La Paz.

1998 Cúpulas en rocas de Tarija y regiones vecinas. Primera aproximación. In: *Boletín*, 12: 36-47. SIARB, La Paz.

Meyers, Albert

1993 Trabajos arqueológicos en Samaipata, Depto. de Santa Cruz, Bolivia. Primera temporada 1992. In: *Boletín*, 7: 48-58. SIARB, La Paz.

1998 Las campañas arqueológicas en Samaipata, 1994-1996. Segundo informe de trabajo. In: *Boletín*, 12: 59-86. SIARB, La Paz.

Núñez Jiménez, Antonio

1986a Petroglifos del Perú. Panorama mundial del arte rupestre. PNUD-UNESCO – Proyecto Regional de Patrimonio Cultural y Desarrollo. 4 vols. La Habana, Cuba.

1986b El libro de piedra de Toro Muerto. La Habana.

Pallestrini, Luciana and José Antonio Perrazo

1984 Arqueología: método y técnicas en superficies amplias. 54 p. *Biblioteca Paraguaya de Antropología*, IV. Asunción.

Porras Garcés, Pedro I.

1985 Arte rupestre del Alto Napo – Valle del Misagualli, Ecuador. 393 p. Quito.

Querejazu Lewis, Roy

1989 El Arte Rupestre de "El Buey", Depto. de Cochabamba, Bolivia. In: *Boletín*, 3: 30-35. SIARB, La Paz.

1992 El arte rupestre de Palmarito. En: Roy Querejazu Lewis (ed.), *Arte Rupestre Colonial y Republicano de Bolivia y Países Vecinos*: 62-75. SIARB, La Paz.

1994 Contemporary indigenous use of traditional rock art sites at Yaraque, Bolivia. In: *Rock Art Research*, 11 (1): 3-9. AURA, Melbourne.

1998 Tradiciones de cúpulas en el departamento de Cochabamba. In: *Boletín*, 12: 48-58. SIARB, La Paz.

2001 El arte rupestre de la cuenca del Río Mizque. 182 p. Cochabamba.

Ravines Sánchez, Rogger Hernán (ed.)

1986 Arte rupestre del Perú. Inventario general (primera aproximación). Instituto Nacional de Cultura. Lima.

Reindel, Markus and Jonny Isla Cuadrado

1999 Das Palpa-Tal –Ein Archiv der Vorgeschichte Perus. In: Rickenbach, Judith (ed.): *Nasca. Geheimnisvolle Zeichen im Alten Peru*. Museum Rietberg, Zürich.

Sociedad de Investigación del Arte Rupestre de Bolivia (SIARB)

1987-2005 *Boletín* (M. Strecker, ed.). SIARB, La Paz.

Strecker, Matthias

1990 The rock paintings of Lajasmayu, Betanzos, Department of Potosí. In: *American Indian Rock Art*, 16: 189-210. ARARA, Austin, Texas.

2001a Rock art research in Bolivia. In: *International Newsletter on Rock Art*, 30: 23-30. Foix, France.

2001b ¿Vandalismo vs. Conciencia? Las campañas educativas de la SIARB. In: *Rupestre* No. 4: 22-29. GIPRI, Bogotá.

2004 Arte Rupestre de Betanzos, Depto. de Potosí, Bolivia. Aproximación a su cronología. In: Rupestreweb, UTM: <http://rupestreweb.tripod.com/betanzos.html>

2005 New children's brochure on rock art of Peru. In: *La Pintura*, Vol. 31 N° 3: 7. American Rock art Research Association (ARARA), Lemon Grove, CA, USA.

Strecker, Matthias; Podestá, Mercedes

2006 Rock Art Preservation in Bolivia and Argentina. En: Coalition, SCIC Thematic Network on Cultural Heritage, Electronic Newsletter, UTM: <http://www.rtphc.csic.es/boletin.htm> N° 11, January 2006 – Conservation of Rock Art, Part II: 5-10. Sevilla, España.

Strecker, Matthias; Taboada, Freddy (eds.)

1995 Administración y conservación de sitios de arte rupestre. 161 p. *Contribuciones al Estudio del Arte Rupestre Sudamericano*, 4. SIARB. La Paz, Bolivia.

Strecker, Matthias; Taboada, Freddy

1999 Rock art protection in Bolivia. In: *Rock Art Research*, 16(1): 36-41. Melbourne.

2001 Calacala, Monumento Nacional de Arte Rupestre. In: *Boletín*, 15: 40-62. SIARB, La Paz.

2004 “Aymara” rock art of Lake Titicaca. In: *Rock Art Research*, 21(2): 111-125. AURA, Melbourne.

Taboada Téllez, Freddy

1992 El arte rupestre indígena de Chirapaca, Depto. de La Paz. In: Roy Querejazu L. (ed.), *Arte Rupestre Colonial y Republicano de Bolivia y Países Vecinos*: 111-167. Contribuciones al Estudio del Arte Rupestre Sudamericano, 3. SIARB, La Paz.

Taboada, Freddy; Strecker, Matthias (eds.)

2002 Documentación y Registro del Arte Rupestre. 156 p. *Contribuciones al Estudio del Arte Rupestre Sudamericano*, 6. SIARB. La Paz, Bolivia.

Van Hoek, Maarten

2003 The rock art of Toro Muerto. *Rock Art Research*, 20 (2): 151-170. Melbourne.

Zone 5: West-south-west and southern South America: Chile, Argentina, Uruguay

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1 Profile of Zone:

Zone 5 is extremely rich in rock art sites in its various expressions: paintings or pictographs, engravings or petroglyphs, engravings-paintings, colored stone structures, and geoglyphs. The latter can be found in the Chilean Big North, and exceptionally in north-western Argentina. Most of them are open-air sites and their main supports are unprotected rocky shelters, blocks, rock substrata, and mountain slopes (Chilean geoglyphs). Sites in caves are less numerous and, although under rock, they are not deep and they almost always receive sunlight, except rare cases.

Aiming at a very general report that offers a summarized panorama of rock art in Latin America and the Caribbean, Zone 5 (West-south-west and southern South America-Chile, Argentina, Uruguay) may be divided in three large areas: a- the Andean Area, b- the Pampa-Patagonian Area and c- Area of the Río de la Plata Basin. Broadly speaking, these large divisions present similar geographic conditions and cultural aspects. These similarities are rock art examples with common and specific characteristics for each area, expressed in the types of representations, the topics presented, the techniques used, and the surfaces chosen, among other aspects.

Rock art practice by indigenous people in this part of the South American south is a very old tradition that began more than 10,000 years ago. It went on practically uninterrupted until it suffered an abrupt decline as of the period of the Spanish-aboriginal contact, at the beginning of the sixteenth century. In spite of this collapse, rock art expression went on –in some sub-areas until recently– although there were long periods without any production. In the Pampa-Patagonian and Andean areas, rock art production went on until the eighteenth, nineteenth, and mid-twentieth centuries, respectively. In spite of the changes, rock art expression wholly maintains its native roots, although the contribution of the Creole groups during the last stage is striking. Currently, some aboriginal and non-aboriginal communities inhabiting Zone 5 are somehow related to the rock art sites. The offerings left in some rock surfaces or the modern human and animal burials near some of the sites indicate that many of them are still considered sacred places by members of the local communities.

The general characteristics of the areas in Zone 5 are: (Fig. 1)

a-the *Andean Area*: it comprises the central-southern area of the Andes, which is the northern half of Chile (Big North, Small North, and Central Chile), and the Argentine northwest. Argentine Central-western region is also included in this Area. Archaeological research,

¹ The Spanish version is available in Annex III of the Thematic Study.

which backs the possibility of assigning rock art expressions to a specific chronological and cultural period, has enabled us to reconstruct ten millennia of rock art creation. We recognize a first stage during which the hunter-gatherer groups moving along the Andes Range – between the desert Chilean coast up to the *yungas* or forest in the Tucumán and Salta region towards the eastern part of the Area– created the first simple geometric paintings in small shelters and caves. Some millennia after that, the Andean farmer-shepherd groups, specialized in the raising of llamas, maintained the rock art tradition and included this animal's figure in their thematic repertoires. In the later stages, they created the big geoglyphs along the main valleys of the Chilean Big North as an expression of the caravan system carried out with the help of the llama as beasts of burden. Towards the mid-fifteenth century, the Inca Empire expanded along the Andean Area, whose geopolitical center was located in Cusco (Peru). As of that time, there was a considerable reduction in the production of rock art expressions. This decline was emphasized during the period immediately following that time, which corresponds to the conquest and colonization of the Area by the Spanish culture. Rock art production had a brief resurgence –from the end of the nineteenth century to the mid-twentieth century– related to the activity of driving cattle in the northwest and center west of Argentina and, perhaps, in the north of Chile. There is ethnohistorical information about rock art production (García report, in Podestá 2003). After that, there was an interruption in the production of this symbolic expression.

In several regions of the Andean Area, rock art sequences have been found which cover large periods. Among some significant examples, we find the rock art sequence in Inca Cueva (Quebrada de Humahuaca, Jujuy, Argentina), Antofagasta de la Sierra (Las Parinas, Catamarca, Argentina), Sierras de Arica, in the Alto Loa River (Chile), among others (Podestá *et al.* 2005a, Berenguer 2004, Mostny & Niemeyer 1983, Schobinger & Gradin 1985, Schobinger & Strecker 2001).

b-the *Pampa-Patagonian Area*: this area comprises the Patagonia and the Pampa regions. The former includes the southern part of Argentina and Chile, south of rivers Colorado and Bio Bío, and the wide plains (“*pampas*”) in Argentina. Patagonia has the Andean Range as its axis, with lake environments surrounded by forests (Patagonian Andes Forest) and rain forests (Valdivian Forest). Towards the east of the ranges stretches a wide semidesertic plateau with steppe vegetation reaching the coasts of the Atlantic Ocean. To the west, Patagonia borders the Pacific Ocean. In Tierra del Fuego Island (Chile and Argentina), the southernmost end of the American continent, there is no record of rock art expressions. The Pampas region (Wet Pampa and Dry Pampa), on the other side, comprises mainly the provinces of La Pampa and Buenos Aires (Argentina). These are plains with some low mountains encompassing a wide area of the Atlantic coastline.

The first evidence of human settlement in the area goes back 12,000 years, and rock art production goes back more than 10,000 years in Santa Cruz Central Plateau (according to Paunero, in Podestá *et al.* 2005b). Subsistence during this long period was based on hunting and gathering, and the guanaco was these groups' main prey.

As in the Andean Area, many rock art sequences have been scientifically defined. Among them, the Pinturas River sequence (province of Santa Cruz, Argentina) with Cueva de las Manos –*Cave of the Hands*– (UNESCO World Heritage site) as its main example, La María sequence (Santa Cruz central plateau, Argentina), and Chico River (Chile), among others.

c- *Area of the Río de la Plata Basin*²: includes the whole of Uruguay and the north-eastern area of Argentina. It stretches towards the north across Brazilian territory. The Area comprises the lowlands washed by the Río de la Plata tributaries, among which, the most important are the Paraná and Uruguay rivers. While the area east of the Uruguay River (belonging to Uruguayan territory) concentrates a significant amount of rock art sites, the one located west of the river (Argentine northeast), with some exceptions, has no record of sites featuring rock art expressions. This absence is due to the lack of rock surfaces for its execution. The defined age for the execution of the first groups of geometrical engravings in the area of north-eastern Uruguay is 8,000 or 9,000 years BP. For paintings, the age is between 3,000 and 600 years (Consens 2000 and 2002). Part of this chronology is based on estimates and should be supported by systematic archaeological works.

Other: Rapa Nui Island (Easter Island), in the middle of the Pacific Ocean, 3,850 kilometres away from the coast of Chile (Chilean jurisdiction), has an important rock art heritage.

1.1 Links with other zones:

The three areas are closely related to neighbouring regions, and the Andean Area, to Zone 4, which encompasses most of the so-called Central Andean Area. On the other hand, rock art in Uruguay (Area of the Río de la Plata Basin) is linked with sites in southern Brazil (Zone 3). Rapa Nui (Easter Island) bears a clear connection with Polynesian rock art (Lee 1992).

2 Known sites:

As it was mentioned, Zone 5 is extremely rich in rock art sites. An Argentine documentation survey carried out until 1985 enlisted 1,500 sites (Renard de Coquet 1988) (see details in point 3). Andean and Pampa-Patagonia Areas are prominent in the number of rock art sites.

In the following paragraph there is a list with the main rock art sites regions (Area and country of location). It is necessary to considerer that each region could include dozens or hundreds of rock art sites. The Outstanding Universal Value sites and rock art sequences are also mentioned. In the list I have pointed out if the site has a specific heritage nomination.

- 1: World Heritage sites (WHS).
- 2: sites of utmost importance which have either been proposed for World Heritage status (WHTLa), or might be considered in the near future to be declared World Heritage site (WH Tentative List) in other words sites with potential to justify “OUV” (outstanding universal value) in World Heritage terms (WHTLb).
- 3: sites which will probably not be considered for the World Heritage list, but have been declared National Heritage site (NHa) or should be registered as such in the future (NHb) (Loubser 2001, see report Zone 4 by Strecker).

² This denomination was taken from Consens 1998 with modifications, as the Pampas region is not included in it.

2. *a- Andean Area*: (regions and sites are mentioned from North to South).

CHILE:

Regions and rock art sites of Norte Grande: (from the Peru-Chile limit; 17° - 27° South latitude)

Lluta River

Azapa River

Camarones River

Tiliviche Gorge

Tarapacá Gorge: an outstanding geoglyph is Cerro Unitas

Guatacondo Gorge (Tamentica Oasis) and Mani Gorge

Pampa del Tamarugal. Outstanding geoglyphs are “Pintados” or “Cerros Pintados” (NH)

Loa and Salado rivers (Antofagasta region). An outstanding site is “Taira”. In 2005 Toconce-Ayquina region (Salado River Basin) was included in the World Heritage Tentative List (WHTLa). The region comprises a big quantity of rock art sites (report by Gallardo and Castro, see Museo de Arte Precolombino 1999).

San Pedro de Atacama Region (WHTLa)

Quebrada del Médano

Las Lizas site.

Rock art sites and regions in Norte Chico (27° - 32° South latitude):

El Encanto gorge (Limarí style)

Elqui river

Río Grande and Río Limarí (Limarí style). Stand out Mialqui rock art sites

Combarbalá region

Hurtado river region

Illapel river

Choapa river.

Rock art sites and regions in Central Chile: (32° -39° South latitude)

Aconcagua River- Putaendo Valley (Aconcagua River Style).

Guaiquivilo River (Guaiquivilo Style)

Achibueno River.

ARGENTINA:

Rock art sites and regions in NW and Central - West Areas in Argentina:

Yavi

Quebrada de Humahuaca (WHS), in the buffer zone stylistic rock art sequence of Quebrada Inca Cueva stands out. Other sites: Pintoscayoc region: Abrigo de los Emplumados and Alero de las Circunferencias; Coctaca, Cerro Negro; Los Pintados de Sapagua; Hornaditas, others.

Los Cardones National Park

Valle del Cajón

Antofagasta de la Sierra and Laguna Blanca. Stylistic rock art sequence of Antofagasta de la Sierra stands out. One of the sites “Campo de las Tobas” was nominated (NHa). Both regions are in Las Parinas area (WHTLa).

Cerro Pintado (localidad de Las Juntas, Guachipas) (NHa) (WHTLb)

Quebrada del Toro: Tastil rock art

Valle Calchaquí (WHTLa):

Fiambalá region: an outstanding site is Guanchincito.

Villa Castelli-Vinchina area
 Palancho or Paluque (NHb)
 Ischigualasto/Talampaya National Park (NHa) (both WHS) (nominated under “natural criteria” with many rock art sites).
 Sierra de Ancasti (WHTLb) (La Tunita style)
 Famatina-Campana area
 Cerro Colorado (NHa)
 Guasapampa
 Sierra de Comechingones
 El Tunduqueral
 Cordillera de Ansilta
 Payunia

Chile/Argentina: “Qhapaq Ñan” (WHTLa), rock art sites are included in its direct and buffer areas.

2. b- Pampa-Patagonia area:

CHILE:

Includes Chilean Patagonia (39° - 55° South latitude)

The “Chilean Patagonia Rock Art” is included in the Tentative List (WHTLa). Main regions are: 1- Aysen (includes Rio Chico style) and 2- Magallanes (Ultima Esperanza and Pali-Aike zones). Pali-Aike includes two sites listed in the Tentative List (WHTLa): Pali Aike and Fell caves. The last one, with human occupations dated 11.000 years before present, presents rock art paintings.

ARGENTINA:

Tandilia and Ventania Systems

Lihue Calel

Quehue

Chosmalal

Piedra del Aguila area

Colomichicó

Aluminé, Lacar, Traful and Nahuel Huapi lakes

Pilcaniyeu region

Manso river low basin.

Andean zone 42°

Lago Puelo and Los Alerces National Parks

Piedra Parada (Chubut river) (NHb)

Valdés Península (WHS) and Atlantic coast. Province of Chubut

Perito Moreno National Park

Posadas-Pueyrredón lakes

River Pinturas, includes Cueva de las Manos site (NHa-WHS)

Central plateau of Province of Santa Cruz: Los Toldos, Piedra Museo, Cerro Tres Tetras,

Estancia La María, El Ceibo (NHb) (WHTLb)

Strobel and Cardiel lakes

Santa Cruz river.

2. c- Area of the Rio de la Plata Basin:

As it was mentioned before, the north-eastern area of Argentina, one of the extended regions of this area, has only three rock art sites registered. On the contrary, on the east of the Uruguay River, which comprises the Republic of Uruguay, two big regions with rock art sites have been recorded.

URUGUAY:

North-eastern Uruguay:

Ñandubay (Department of Artigas)

Túmulo

Colonia Rubio (Tangarupá stream) and Itapebí

Arapey: outstanding sites are La Soledad and Las Piedritas

Cuchilla del Fuego

Department of Salto (NHa).

South-Central Uruguay:

Chamangá stream, Porongos stream, Grande stream, “Puntas del Arroyo San José”, Pinto stream (Department of Flores). “Localidad Rupestre Chamangá” (NH) is an outstanding rock art place. Fifteen sites have been proposed to the Tentative List (WHTLa).

Sauce Vullanueva, Arroyo Pajar, Cerro Copotón, Arroyo del Pescado (todos en el departamento Florida)

Arroyo Maestre Campo (Department of Durazno)

Arroyo de la Virgen, Sierra Mahoma (Department of San José)

Cerro pan de Azúcar, Cerro Cortez (Department of Maldonado)

Colonia Quevedo (Department of Colonia).

Note: a third part of the sites mentioned above are national heritage sites (NHa).

2.d- Other: Rapa Nui National Park (Easter Island) (WHS)

2.1 Sites with the most significant rock art:

The following sites are those which have been identified as having a special significance which makes them stand out from the others listed in item 2 according to my criteria and those of the representatives of the countries comprising Zone 5. These are sites with outstanding characteristics which justify their future inclusion on the World Heritage List. They should be given priority.

2.1.1 Andean Area:

CHILE:

Geoglyphs of the Lluta, Azapa, Camarones, Tiliviche, Tarapacá, Pampa del Tamarugal valleys as well as the “Pintados” site, among others.

Justification of outstanding value: the geoglyphs of the Chilean desert area are rock art sites which have outstanding value because of their impressive appearance, aesthetic value and technical execution. This type of rock art occurs very infrequently worldwide. In South America, these sites only occur in the Nazca Plain, Peru (Zone 4) and are included in the World Heritage List and identified with the name “Lines and Geoglyphs of Nasca and Pampas

de Jumana.” They are a cultural expression of the pre-Hispanic settlers who travelled many times through the valleys that cross the desert using llamas to carry loads of goods. The geoglyphs bear witness to this ancient system of desert caravans and it is possible that they had ritual meaning. (Note: see the proposal in Conclusions, item 7, to consider integrating these sites with the World Heritage Site “Lines and Geoglyphs of Nasca,” Peru.)

Rock art of the Loa and Salado rivers (Atacama Desert)

Justification of outstanding value: one of the most long-lasting and representative sequences of rock art in the Andean Area is found along the Loa River and its tributary the Salado river, in the Atacama Desert. The sites of carved and painted art located along the banks of these rivers are excellent examples of how rock art sites act as a "symbolic appropriation of territory" (Gallardo *et al.* 1999:61). The site “Taira” stands out for its painted and engraved expressions of great aesthetic value. Some of the sites are included in the Chilean proposal “Toconce-Ayquina Region” (WHTLa) and have been defined as a cultural landscape. The communities of this region maintain ancestral ties with the environment in the same way that ancient Andean peoples have for 9,000 years (Castro 2002, Gallard *et al.* 1999, Museum of Pre-Columbian Art (Chile) 1999).

ARGENTINA:

Cerro Pintado (in the areas of Las Juntas and Guachipas) (WHTLb)

Justification for inscription: Cerro Pintado consists of a group of sites located on a hill with paintings of striking aesthetic quality. The art is the symbolic expression of groups of farmers and livestock owners who inhabited this Andean region prior to the arrival of the Spanish and at the time of first contact between Hispanic and indigenous peoples. Of particularly important symbolic value are groups of polychrome representations of “shield-bearers.”

Sierra de Ancasti (Catamarca)

Justification of outstanding value: This group of cave painting sites in the Sierra de Ancasti is an expression of the ceremonial practices of people of the Aguada Culture who inhabited the region between about 900 and 1200 years AD. Ritual practices that included the use of hallucinogenic substances are expressed through the medium of rock art of exceptional aesthetic value. It is possible that the location of the sites with rock art represented enclaves along the Cebil Route, an important communication network connecting groups of people from diverse Andean regions.

2.1.2 Pampa-Patagonia Area

CHILE:

Rock Art of Chilean Patagonia (WHTLa)

Justification for inscription: These rock art sites are the cultural expression of the oldest inhabitants of the most southerly region of South America. They represent the way of life of a hunter-gatherer society which occupied Chilean Patagonia thousands of years ago.

ARGENTINA:

Santacruceña Central Plateau:

Los Toldos, Piedra Museo, Cerro Tres Tetas, Estancia La María, El Ceibo, La Reconquista.

Justification of outstanding value: The hundreds of rock painting sites located in this zone of the Patagonian Steppe in Argentina are the expression of the first hunters and gatherers who occupied this environment at the beginning of the inhabitation of the area that occurred towards the end of the Pleistocene (12,000 years ago). One of the oldest occurrences of rock

art in South America, they are located in an almost pristine landscape where one can imagine the hunting way of life which disappeared long ago (Podestá 2002). This graphic art has exceptional aesthetic value and includes representations of both extinct Patagonian fauna and species still present in the area (note: as explained in item 7, these sites could be included with “Cueva de las Manos, Río Pinturas”).

2.1.3 Río de la Plata Basin

URUGUAY:

Chamangá Rock Art Area (WHTLa)

Justification for inscription: The Chamangá area of Uruguay has the largest concentration of rock paintings in the country. The rock art was done by groups of hunters, gatherers and fishers in pre-Hispanic times. In this region occur different examples of the rock art of south-central Uruguay including such features as painted hands.

3 Research and Documentation:

Interest in Argentina’s rock art began towards the end of the 19th century. Since then, the study of rock art has been included in scientific research and, most particularly, in archaeology. A national register enlists 1,500 rock art sites until 1986 all over the country (Renard de Coquet 1988). Many documentation projects have been conducted in Argentina in recent years. In 2001 was completed an “Archaeological Map and Rock Art Catalogue” which records rock art sites in the province of Jujuy (Andean Area) (Fernández Distel 2001). PAR (Rock Art Program) (University of Buenos Aires) has organized a computerised database which compiles more than 2,000 registered rock art sites (Rolandi *et al.* 2004).

In Andean the Area, the National Institute of Anthropology’s (INAPL) Program registered more than 30 rock art shelters in Cerro Pintado (Las Juntas, Guachipas) (NHa) (WHTLb) and more than 20 in Ischigualasto. Alvarez Rodriguez has recorded 47 rock art sites in Guasapampa; Rocchietti has published a regional synthesis which includes more than 30 sites in Sierra of Comechingones; Lanza have been working on the documentation of engravings located in the Calchaquí valley, among other examples which show the impetus of the rock art research in the last years. In Pampa-Patagonia Area, Oliva has summarized the information on 21 rock painting sites in Ventania system, Paunero has registered more than 86 sites in Estancia La María, Podestá and Bellelli have documented around 30 sites in Comarca Andina 42° and Manso river. New documentations of rock art have been carried out recently in Strobel and Cardiel lakes (Goñi y Re) and in the Santa Cruz river (Franco and Fiore).

The National Parks Administration (APN) is developing a “Program of Management of Cultural Resources” which focuses its activities on investigation, conservation and heritage diffusion, as part of the strategy of conservation. Until 2002 it has recorded 119 rock art sites in ten national parks. Some of these sites (25) are included in research archaeological projects (report by Ferraro).

It is possible to estimate that the actual number of sites in Argentina could be close to 4,000 which are distributed mainly in Andean and Pampa-Patagonia areas (Podestá 2003, Rolandi *et al.* 2004, Strecker & Podestá 2006).

In Argentina a recent development of methods and techniques is being implemented. The firsts direct dating methods using AMS (accelerator mass spectrometry) were used in the

Andean Area. Pigments and associated materials from several rock paintings sites were analyzed as part of an Argentinean-Canadian (Canadian Conservation Institute, Ottawa) research project to study selected rock art sites in the country. Other mineral pigment analyses have recently been reported (Podestá 2003, Wainwright *et al.* 2002).

Chile shares with Argentina a similar theoretical and methodological approach, and rock art research is framed within archaeological research. There are thorough documentation works throughout the territory, and numerous university specialists are devoted to the subject, and several stylistic sequences have been defined in the different regions. Of great importance are the works by the Archaeological Museum of San Miguel de Azapa (Arica) and the University of Tarapacá with the Big North geoglyphs, a cultural heritage with exceptional characteristics comparable to those in Zone 4 (Nazca, Peru, declared a World Heritage Site), and those of the Loa and Salado rivers (Berenguer 2004), among others.

New techniques, such as low-altitude aerial photographs, have been implemented in Norte Grande chileno to record geoglyphs in Quebrada de Guatacondo, Pintados and Honda in northern Chile with superb results (report by Clarkson and Briones). In Rapa Nui (Easter Island) some intensive works have been carried out and more than 4000 rock art representations have been documented (Lee 1992).

In Uruguay (Area of the Río de la Plata Basin) progress of archaeological research on rock art occurred as of the '70s, although there are records since the end of the nineteenth century. Of enormous importance are the works by Figueira, Figuerido, Consens, Bepali, Femeninas, Peláez, Florines, and Martínez, among others. According to some of these researchers, large areas of the territory were never approached in a systematic way (Florines *et al.* 2004:1). Some ten years ago, surveys increased in northern Uruguay and hundreds of rock art sites were discovered although they are still not inventoried. In many cases, conclusions related to the cultural and chronological assignment of rock art sites have been made regardless of any other archaeological information. Thus, most of these should be considered trials. The sites' characteristics, plus the lack of archaeological research, have prevented us from setting an accurate correlation among sites with rock art and stratified occupation sequences. For example, Consens (1995) informs about the execution of more than 30 archaeological surveys with sterile results. Part of this problem may be ascribed to the lack of rock art specialists (professionals) mainly due to the scarce resources for these studies in university environments (Consens 2000).

4 Protection:

Rock art sites- considered as part of archaeological record- are protected by state legislations:

- *Argentina*: law of "Protection of the Archaeological and Paleontological Heritage" N° 25.743 (2003) and Regulatory Decree N° 10.22 (2004).
- *Chile*: law of "National Monuments" N° 17.288 (1970). Regulatory Decree N° 484 (1990) of the Educational Ministry: "Reglamento sobre excavaciones y/o Prospecciones Arqueológicas, Antropológicas y Paleontológicas".
- *Uruguay*: Heritage Law 14.040. Regulatory Decree N° 10/1971. Other laws: Ley de Ordenamiento Territorial y Medio Ambiente, N° 16.466 and its Regulatory Decree N° 435/1994. Law N° 17. 234 created the "National System of Protected Natural Areas"

which includes the protection of rock art sites (for example: Localidad Rupestre Chamangá).

Some rock art sites also have the status of National Heritage and have specific legislation: (see National Heritage Sites- NH- in point 2).

4.1- National Institutions in charge of rock art sites protection:

- *Argentina:* Instituto Nacional de Antropología y Pensamiento Latinoamericano (INAPL). Secretaría de Cultura de la Nación. Contact to: Dra. Diana Rolandi. Address: 3 de febrero 1379. (1426) Ciudad de Buenos Aires. Phone number: (54+11) 47843371. www.inapl.gov.ar NGO: CIAR-SAA. Address: Av. Santa Fe 983, 1059 Buenos Aires, Argentina; National Park's Administration (APN) www.parquesnacionales.gov.ar; Comisión Nacional de Museos y de Monumentos y Lugares Históricos, Secretaría de Cultura de la Nación.
- *Chile:* Consejo de Monumentos Nacionales de Chile (CMN). Contact to: Mrs. Nivia Palma, Mr. Oscar Acuña. Address: Av. Vicuña Mackenna n° 84. Providencia. Santiago, Chile. PC: 750.0910. Phone number: 56-2-665 15 16/ 56-2-665-15 18; Servicio Nacional de Turismo (SERNATUR). www.monumentos.cl/pu001.htm
- *Uruguay:* Comisión de Patrimonio Cultural de la Nación, Departamento de Arqueología. Contact to: Elianne Martínez. Phone number: (598+2) 9157681; NGO: CIARU, Address: Casilla de Correo 18.007. Montevideo, Uruguay. Phone number: (598+2) 5064313. Contact to: Mario Consens.

5 Conservation and Management:

National institutions related to conservation and management are mentioned above (4.1).

There are organizations that work at a provincial/departmental level such as museums, agencies or culture and tourism secretariats, and universities. National institutions are responsible for keeping the national record of archaeological sites where rock art records are included.

Records have a detailed inventory of rock art sites entered through computer databases and mappings.

The INAPL has been working since 1995 on “Documentation and Conservation of rock art in Argentina Program”. Several organizations have provided their advice as well as economic assistance. A professional in conservation from the Canadian Conservation Institute, Ottawa, has been in charge of laboratory analysis (Wainwright *et al.* 2002). The main objectives of the Program are: 1- documentation of rock art sites, 2- recording of rock art deterioration processes, 3- computerised image databases, among others. Chile also has a detailed rock art record.

In Argentina and Chile management plans are increasing: this is notable in Quebrada de Humahuaca, Palancho, Ischigualasto/Talampaya, Lihue Calel and Lanin National Parks, Manso River, Comarca Andina 42° (Bellelli *et al.* 2005), Los Alerces National Park, Cueva de las Manos (Onetto 2001), La María, Lago Roca (Argentina); Quebrada de Huatacondo,

Calle de Codpa in Tarapacá, Choapa River (Chile), among others (Ortiz Troncoso 2001). There is information about a project carried out in Uruguay in 1998 on rock art in Flores (Chamangá stream), interrupted some years later (Florines report).

Management plans usually include the following steps: rock art documentation, path design, interpretation for the visiting public through explanatory brochures and signage, boardwalks or protective fence building, guides' training, site guards, in addition to other facilities for the visitors in more intensive use sites (Ischigualasto/ Talampaya, Los Alerces National Park, Cueva de las Manos). There are few cases of sites closure (Cerro Pintado, Las Juntas, Guachipas, Cueva de las Manos, Argentina) although the results have not been effective. In Uruguay, there have also been closures with adverse effects (Florines, personal communication).

Just before the new millennium, we could sense certain concern to include local communities in the decision-making process in relation to the value enhancement of rock art sites. Thus, we intend to stop the monopolized management of archaeological resources. One of the goals for management plans is the creation of the first site commissions to preserve the cultural heritage, an issue which is currently being increasingly developed. Some efforts worth mentioning are: Cueva de las Manos (Onetto 2001, Podestá & Onetto 2004), Cerro Pintado in Comarca Andina 42° and Paredón Lanfré in Manso River (Bellelli *et al.* 2005), (Argentina); Tamentica-1 in Quebrada de Huatacondo, Valle de Codpa (Tarapacá) (Ajata & Briones 2004), San Pedro de Atacama (Chile). In Uruguay, there is a site in the Localidad Rupestre (Rock Art Area) Chamangá for whose preservation an inter-institutional commission has been formed that includes owners of the site plot (Martínez & Florines, personal communication).

Few rock art restoration works have been carried out because, except rare cases, they are not considered adequate, or there have not been enough resources to that end. The main project in the Area, that started three decades ago, was the one that involved geoglyphs restoration in Lluta, Azapa, Chiza and Tiliviche, Pampa del Tamarugal (Pintados and Cerro Unitas geoglyphs included) (Luis Briones, Universidad de Tarapacá and SERMATUR). Another case is n° 19 site in San Pedro de Atacama (Muñoz *et al.* 2001). In Argentina there are some cleaning works of rock art surfaces (Rolandi *et al.* 1998).

The contemporary use of rock art is focused on the tourist activity (in the three countries). As was explained in point 1, there are few cases, mainly in the Andean Area, where sites are still valued by local communities. This is expressed through offerings left in some of them, the burials carried out near them, and the popular beliefs related to the "sacred".

6 Main threats:

Rock art is a non-renewable cultural resource which is particularly sensitive to deterioration due to its exposure and attraction. The tourist boom which broke out a few decades ago has facilitated visitors' access to places formerly protected due to their isolation and inaccessibility. Nowadays this phenomenon has alarmingly accelerated and has put in serious danger sites which had been naturally preserved for hundreds or thousands of years. There is an increasing concern regarding site preservation in Chile and Argentina but few results have been obtained so far. Many of them are related to new tourism developments: Quebrada de Huamahuaca including Inca Cueva site, Antofagasta de la Sierra, Palancho, Talampaya/Ischigualasto, Cerro Tundukueral are some of the examples in Andean Area/Argentina. In Chile the main conservation projects have been developed in the Big

North with the geoglyphs and in Choapa River sites (report by Briones and Guerra) and in Sierras de Tandil, Colomichicó, Comarca Andina 42°, Cueva de las Manos, Estancia La María in Pampa-Patagonia Area (Argentina). In some of these cases a management site committee has been created: Cerro Pintado and Cueva de las Manos. Tourism in Uruguay does not affect rock art sites yet, as the tourism offer is focused on other attractions (Nelsys Fusco report, Cultural Heritage Commission, Uruguay).

There have been damages caused by the increase of large public works, the construction of gas pipelines, electricity links, roads, and hydroelectric dams. Environmental Impact Assessment (EIA) has frequently omitted recommendations for the preservation of archaeological heritage sites. Sometimes, the weakness of control authorities increases the seriousness of the deterioration process of sites. For example, see the cases of Minera Alumbra (Argentina), archaeological site #19 in San Pedro de Atacama (Chile) (Muñoz G. *et al.* 2001). In Uruguay, there has been information of the destruction caused by stone extraction, especially granite (that serves as a rock art surface). The sites in the Chamangá Stream, in Flores Department, have been particularly damaged, with an estimated loss of around 30% of the department's paintings (Consens 1998, Florines 2004). Similar threats have been recorded in the Andean Area, both in Chile and Argentina. As an example, we can mention the quarries in Guasamayo (Alvarez Rodríguez, personal communication). Cattle production constitutes another significant threat (construction of low stone walls, the animals that lean against the rock to rub their bodies, etc.) in Uruguay. The same happens in Chile and Argentina, where we often learn about the loss of paintings due not only to the direct action of herds against the rocks, but also to the "levelling" of fields for cattle production. The farming activity might be another cause of rock art heritage destruction due to the fields "clearance".

Other aspects that hamper the good development of rock art study and protection are caused by the conflicts within the sphere of the state agencies themselves, and the conflicts among these and other non-governmental agencies. The latter have been discussed in Uruguay (see Consens 2000). The former, more serious still, occur within the shared action spheres between the tourism and culture areas. These are frequently opposed as regards decisions related to the public use of rock art sites. This controversy is also present in Argentine cases. The scarce resources assigned to the protection of archaeological sites disappear more quickly when they are not jointly managed.

Conclusion and recommendations for the Zone

Over the last two decades a variety of regional rock art studies, especially in Chile and Argentina, have produced substantial increases in the number of rock art sites recorded. New efforts have been made to continue this task especially in Uruguay where rock art research is not enough developed. In this country more archaeological research must be made in order to emphasize scientific studies on rock art.

In Zone 5 direct methods for dating rock art sites are beginning, but so far concern only a tiny fraction of the total number of sites. The use of this method is still very expensive for scholars who have to make requests for international cooperation in order to secure funding for dating.

In spite of the achievements reached until now, many efforts must be made in visitor management, interpretation and policy of rock art in the future. Many places, prematurely opened to the public, are suffering acts of vandalism which will lead irreversibly to their complete destruction. These sites urgently need the implementation of a management plan to

establish actions to prevent and stop more damage. At the same time more budget is necessary to implement management plans, especially in Uruguay.

The three countries should implement stricter controls of the environmental impact assessment in relation to large public works, as sites are often affected by them. Uruguay should try harder to come to agreements with national authorities associated with the mining industry to minimize damages on rock art by stone extraction activities. In the Chamangá region there have been good results thanks to the steps taken.

It is vital to continue organizing “site commissions” to manage rock art sites with good results. These commissions should be formed by local community members, apart from the representatives of different interested areas. Otherwise, experience indicates not only that management plans do not produce good results but also that they are often abandoned with negative consequences for the sites.

Rock art sites in Chile and Argentina are well represented in the Tentative Lists, as these are included in several of the general proposals made, although rock art is not the specifically privileged asset (examples: Las Parinas, Valles Calchaquies in Argentina, Toconce-Ayquina, San Pedro de Atacama, and Pali Aike – Cueva Fell in Chile and Qhapaq Ñan in Zones 2, 4, and 5). Consequently, we may suppose that new sites might be included in the World Heritage List in the future. This does not occur in Uruguay, with only one site recently included in the Tentative List. This means that it is recommendable to increase the efforts in Uruguay to reverse the situation. It is also important to stress that among all the nominations in Chile and Argentina, only one, “Cave of the Hands, Pinturas River” belongs specifically to a site for its values related to rock art expression. “Talampaya-Ischigualasto” a WHS nominated under natural criteria, also includes many rock art sites already documented (Rolandi *et al.* 2004). These, besides other cultural assets, might justify a consideration of the asset as a mixed cultural heritage. In Zone 5, there are two mentions in the Tentative List justified by the presence of rock art: “Rock Art in Patagonia” and “Chamangá Rock Art Area” (Chile and Uruguay, respectively). Efforts should be focused on these proposals to increase the list of the World Heritage with rock art sites. It is recommendable to join efforts so that these nominations materialize in the next few years. Moreover, I suggest including in the Tentative List the sites with geoglyphs in the Chilean Big North. These, together with the site “Lines and geoglyphs of Nasca and Pampa de Jumana” (Peru) constitute a cultural heritage of exceptional characteristics. A joint work could be carried out with Peru (Zone 4 in this report) to consider a shared nomination. Argentina, on the other hand, might include other rock art sites such as Sierra de Ancasti and Cerro Pintado (Las Juntas, Guachipas) (NHa) (WHTLb) to the Tentative List. Sites in the Central Plateau (Santa Cruz) should be likewise considered, and maybe they could be unified to the World Heritage Site of “Cave of the Hands, Pinturas River”.

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See illustrations Annexe IV: page 225

Bibliography

- Ajata López, R. y L. Briones Morales
2004 Puesta en valor y difusión de un yacimiento de arte rupestre en la Quebrada de Huatacondo: los petroglifos de Tamentica-1. Presentado a Actas del II Congreso Chileno de Conservación y Restauración
- Bellelli, C., V. Scheinsohn, M. M. Podestá, M. Carballido, P. Fernández, S. Caracotche 2005. Arqueología, arte rupestre y turismo. Comarca Andina del Paralelo 42°. Argentina. Estudios y perspectivas en Turismo 14 (1): 22-50.
- Berenguer Rodríguez, J.
2004 *Caravanas, Interacción y Cambio en el Desierto de Atacama*. Museo Chileno de Arte Precolombino. Santiago: SIRAWI ediciones.
- Castro Rojas, V.
2002 Ayquina y Toconce: Paisajes Culturales del Norte Árido de Chile. Editado por E. Mujica B. Paisajes Culturales en los Andes. UNESCO, CPM, Perú, pp.193-206.
- Consens, M.
1995 Rock Art Sites of Southeastern South America. (Steinbring ed.) *Rock Art Studies in the Americas*. Oxbow Monograph 45 (pp. 151-163).

1998 Nueva aproximación al arte rupestre de la Cuenca del Río de la Plata. *Boletín SIARB* 12: 18-25.

2000 Report from the CAR-ICOMOS national co-ordinator for Uruguay. *INORA* 25: 27-29.

2002 New petroglyphs in North Western Uruguay. *INORA* 33:14-18.
- Aldunate, C., J. Berenguer & V. Castro (editores)
1985 Estudios en Arte Rupestre. Santiago: Museo Chileno de Arte Precolombino.
- Fernández Distel, A.
2001 Catálogo del Arte Rupestre de Jujuy y su Región. Buenos Aires: Dunken.
- Florines, A. M.
2004 Relevamiento arqueológico de la localidad rupestre del Arroyo Chamangá, Edited by Flores. Beovide, Barreto, Curbelo. *X Congreso Uruguayo de Arqueología: La Arqueología uruguaya ante los desafíos del nuevo siglo*, Montevideo. CD-ROM.
- Gallardo, F., C. Sinclair & C. Silva
1999 Arte rupestre, emplazamiento y paisaje en la Cordillera del Desierto de Atacama. Arte Rupestre en los Andes de Capricornio. Museo Chileno de Arte Precolombino, Chile, pp.57-96.
- Lee, G.
1992 *The Rock Art of Easter Island*. The Institute of Archaeology. University of California. Los Angeles. Monumenta Archaeologica 17.
- Loubser, J.
2001 Management Planning for Conservation. Edited by D. S. Whitley. *Handbook of Rock Art Research*, pp. 80-115. USA: Altamira Press.

- Mostny Glaser, G. & H. Niemeyer Fernández
1983 *Arte Rupestre Chileno*. Serie El Patrimonio Cultural Chileno. Colección Historia del Arte Chileno. Publicación del Departamento de Extensión Cultural del Ministerio de Educación.
- Muñoz G., E., P. Núñez & M- Bahamondez
2001 Conservación y restauración del sitio arqueológico n° 19 de San Pedro de Atacama. Consejo de Monumentos Nacionales. Ministerio de Educación. Gobierno de Chile.
- Museo Chileno de Arte Precolombino
1999 *Arte Rupestre en los Andes de Capricornio*. Santiago de Chile.
- Onetto, M.
2001 Conservación y Manejo de un sitio del Patrimonio Mundial: Cueva de las Manos, Río Pinturas, Argentina. *Arqueología* 11: 203-239.
- Ortiz Troncoso, A.
2001 Rock art in Central Chile: Forms and Style. *INORA* 28: 6-15.
- Podestá, M. M.
1996 Yesterday and Today in Argentina's Rock Art. Edited by P. Bahn & Fossati. *Rock Art Studies. News of the World* 1. Oxbow Monograph 72: 225-229.

2003 Rock Art research en Argentina at the End of the Millennium. Edited by P. Bahn & Fossati. *Rock Art Studies. News of the World* 2: 242-251. UK: Oxbow Books.
- Podestá, M.M.
2002 Cueva de las Manos as an example of cultural-natural heritage hybrids. Nature and Culture. Ambivalent Dimensions of our Heritage. Change and Perspective. German Commission for UNESCO. Brandenburg University of Technology at Cottbus. Germany, pp.119-137.
- Podestá, M. M. & M. de Hoyos (editoras)
2000 *Arte en las Rocas. Arte rupestre, menhires y piedras de colores en Argentina*. Buenos Aires: Sociedad Argentina de Antropología y Asociación Amigos del Instituto Nacional de Antropología.
- Podestá, M. M. & M. Onetto
2004 Role of Local Communities in the Management of World Heritage in Argentina: the case of Cueva de las Manos. Linking Universal and Local Values: Managing a Sustainable Future for World Heritage, pp. 159-164. The Netherlands National Commission for UNESCO. Amsterdam: UNESCO WH Center.
- Podestá, M. M., D. Rolandi & M. Sánchez Proaño
2005a *Arte Rupestre de Argentina Indígena. Noroeste*. Academia Nacional de la Historia & Union Academique International. Buenos Aires: GAC.
- Podestá, M. M., R. Paunero & D. Rolandi
2005b *Arte Rupestre de Argentina Indígena. Patagonia*. Academia Nacional de la Historia & Union Academique International. Buenos Aires: GAC.
- Renard de Coquet, S.
1988 *Sitios arqueológicos con arte rupestre en la República Argentina. Registro/Documentación*. Buenos Aires: FECIC.

- Rolandi, D., C. Gradín, C. Aschero, M. M. Podestá, M. Onetto, M. Sánchez, I. Wainwright y K. Helwig
1998. Documentación y preservación del arte rupestre argentino. Primeros resultados obtenidos en la Patagonia Centro-Meridional. *Chungara* 28 (1 y 2): 7-31.
- Rolandi, D, M. M. Podestá, M. Onetto, A. Re & M. I. Hernández Llosas.
2004 Current Rock Art Research in Argentina. (edited by U. Bertilsson and L. McDermott)
The Future of Rock Art-a World Review. Rapport från Riksantikvarieämbetet 7: 176-187.
- Schobinger, J.
1997 *Arte Prehistórico de América*. Cremona: Jaca Book & Consejo Nacional para la Cultura y las Artes.
- Schobinger, J & C. J. Gradín
1985 *Arte Rupestre de la Argentina. Cazadores de la Patagonia y Agricultores Andinos*. Madrid: Editorial Encuentro.
- Schobinger, J. & M. Strecker
2001 Andean South America. Edited by D. S. Whitley. Handbook of Rock Art Research, pp. 707-759. USA: Altamira Press.
- Strecker, M. & M. M. Podestá
2006 Rock Art Preservation in Bolivia and Argentina. *Coalition. CSIC Thematic Network on Cultural Heritage*. Electronic Newsletter: 11. January. Coalition@irnase.csic.es
- Wainwright, I. N. M. , K. Helwig, D. Rolandi, M. M. Podestá, M. Onetto & C. Aschero
2002 Rock paintings conservation and pigment analysis at Cueva de las Manos and Cerro de los Indios, Santa Cruz, Patagonia Argentina. 13th Triennial Meeting Río de Janeiro, 22-27 September. ICOM Committee for Conservation. Preprints, II: 582-589.

Rock art in Latin America and the Caribbean: an over-view

L'art rupestre en Amérique Latine et Caraïbes : vue d'ensemble

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This thematic study covers a vast continent and a very large number of countries. To simplify matters, it has been decided to divide them into five main zones, and not to divide countries up between two or three entities, but instead to allocate a particular country to one specific zone. Obviously this breakdown may run counter to geographic or cultural realities (for example with regard to the Andean countries). This will be taken into account.

The diversity of specific situations in each country is perhaps more manifest on this continent than anywhere else in the world. The precision of the information received is therefore variable. Rather than a photograph, this is more of an Impressionist painting, in which the main lines of the landscape can be perceived, but in which it is not always possible to distinguish details. Details do however gradually emerge.

Overall profile:

Rock art, in Latin America and in the Caribbean, takes various forms, which are often combined in the case of the two main techniques: paintings and engravings, also called petroglyphs. There are zones in which engravings are the rule (Lesser Antilles), while paintings dominate elsewhere (Cuba, Rio Peruaçu, Capivara). In most cases however both are found, albeit with different subjects and roles (Baja California). A very specific kind of rock art known as geoglyphs (very large figures drawn on the ground, usually by scraping) is not restricted to the South American continent, but it is there that it is best and most abundantly represented (Chile, Peru, north-western Argentina, Venezuela). This art is truly original.

Cette étude thématique porte sur un vaste continent qui compte de très nombreux pays. Pour la commodité pratique, il a donc été décidé d'en faire une répartition en cinq grandes zones et de ne pas partager des pays en deux ou trois entités, mais d'attribuer un pays donné à une zone précise. Il est évident que cette répartition peut aller à l'encontre de réalités géographiques ou culturelles (par exemple pour ce qui concerne les pays andins). Il en sera tenu compte.

La diversité des situations particulières dans chaque pays est peut-être plus manifeste sur ce continent que partout ailleurs dans le monde. En conséquence, les renseignements parvenus sont d'une précision inégale. Plutôt que d'une photographie, il s'agit d'un tableau impressionniste, où l'on perçoit bien les grandes lignes du paysage, mais sans que l'on puisse toujours en distinguer les détails, qui, cependant, se précisent peu à peu.

Profil d'ensemble :

L'art rupestre, en Amérique Latine et dans les Caraïbes, se présente sous diverses formes, souvent associées pour les deux techniques majeures : les peintures et les gravures, aussi appelées pétroglyphes. Il existe des zones où les gravures sont la règle (Petites Antilles), alors que les peintures dominent ailleurs (Cuba, Rio Peruaçu, Capivara). La plupart du temps, cependant, on trouve les deux, fût-ce avec des sujets et des rôles différents (Baja California). Un art rupestre tout à fait particulier, les géoglyphes (figures de très grandes dimensions dessinées à même le sol, le plus souvent par raclage), n'est pas restreint au continent sud-américain, mais c'est là qu'il s'y trouve le mieux et le plus abondamment représenté (Chili, Pérou, nord-ouest de l'Argentine, Venezuela). Cet art constitue une véritable originalité.

Tens of thousands of engravings have also been made in the open air, on rocks, often close to watering places, from the north to the south of the continent. Although it seems likely that paint may also have been used, conditions are such that it has not survived the test of time. The other places chosen for the drawings – consisting of both paintings and engravings – are shelters of every size, whether inhabited or not, which have sometimes been used as tombs, in ancient or contemporary times. Mention should be made of the large number of deep decorated caves in some regions, particularly in Zones 1 (Mexico, Guatemala, Belize) and 2 (Dominican Republic, Cuba), which is something very rare in worldwide cave art.

The subjects represented are extremely varied, both in terms of choice (themes) and rendering (pictorial techniques), reflecting the infinite ingenuity and resources of the human spirit. Original features can be identified, and styles and similarities can be observed which are specific to a region of greater or lesser extent. To give just a few examples, the phenomenal Gran Mural style, with hundreds of shelters painted with imposing figures, is specific to the central southern area of Baja California. In the very vast ensemble of the Caribbean, stylised human faces predominate, often making use of natural contours, and geometrical figures. In the Rio Peruaçu valley (Minas Gerais, Brazil), there are multi-coloured geometrical signs, frequently drawn in high positions, while in another region of this vast country (Piauí), hundreds of rock faces are decorated with lively scenes in which small figures dance, hunt, copulate or carry out mysterious rites around a tree.

The theme of the negative hand is found almost everywhere, but at La Cueva de las Manos (Argentina) it dominates the whole of the iconography. In Brazil alone, 12 rock art traditions, or ensembles with common graphic elements, have been identified, without counting the many "sub-Traditions".

This variety is a reflection of that of cultures. This is not the place to list them all, particularly as archaeologists are a long way from having established their exact nature and succession throughout the continent. The main problem in fact is first dating the works, and then relating them directly to the culture which produced

Des dizaines de milliers de gravures ont été également faites à l'air libre, sur des rochers, souvent près de points d'eau, du nord au sud du continent. Si, comme on peut le penser, la peinture a été elle aussi utilisée, elle ne s'est pas conservée dans ces conditions. Les autres lieux choisis pour les dessins – peintures et gravures – sont des abris de toutes dimensions, habités ou non, qui ont parfois servi de lieux de sépultures, antiques ou même contemporaines. Il faut noter l'importance des grottes profondes ornées dans certaines régions, particulièrement dans les Zones 1 (Mexique, Guatemala, Belize) et 2 (République Dominicaine, Cuba), ce qui est très rare dans l'art rupestre mondial.

Les sujets représentés présentent une variété extrême, tant par leur choix (thèmes) que par leur rendu (techniques picturales), témoignant ainsi de l'infinie ingéniosité et des ressources de l'esprit humain. Des originalités se dégagent et l'on constate des styles ou des similitudes propres à une région plus ou moins étendue. Pour ne donner que quelques exemples, le phénomène Gran Mural, avec des centaines d'abris peints de figures imposantes, est propre au centre-sud de la Baja California. Dans le très vaste ensemble des Caraïbes dominent les faces humaines stylisées, souvent utilisant des contours naturels, et des figures géométriques. Dans la vallée du Rio Peruaçu (Minas Gerais, Brésil), ce sont des signes géométriques multicolores, fréquemment dessinés en hauteur, alors que, dans une autre région (Piauí) de ce vaste pays, des centaines de parois sont ornées de scènes vivantes où de petits personnages dansent, chassent, copulent ou se livrent à des rites mystérieux autour d'un arbre.

Le thème de la main négative se trouve un peu partout, mais à la Cueva de las Manos (Argentine) il domine toute l'iconographie. Pour le seul Brésil, il a été déterminé 12 Traditions d'art rupestre, ou ensembles ayant une communauté d'éléments graphiques, sans compter les nombreuses « sous-Traditions ».

Cette variété répond à celle des cultures. Il ne saurait être question de les rappeler ici, d'autant que le travail archéologique est très loin d'avoir établi leur nature et leur succession exactes partout sur le continent. Le grand problème, d'ailleurs, est d'abord de dater les œuvres, ensuite de les mettre en rapport direct avec la culture dont elles procèdent.

them. The only place in which rock art has been attributed to the Paleolithic is La Serra da Capivara (Piauí, Brazil), with very ancient dates going back as far as 30,000, which raises the problem of the first population of this region – and indeed of the south of the Americas – and the evolution of its art. Elsewhere, the art is post-glacial, and in most cases dates back less than 10,000 years. *Mutatis mutandis*, in many regions (but not everywhere, cf. Baja California for example), there are very roughly three phases: that of the ancient hunters, that of the great cultures (Mayas, Incas) or of the cultures of the sedentary peoples (Ceramic), which may be preceded or followed by various phases (Pre-Incas, Tainos, etc.), and finally Colonial art, at the time of or after the arrival of the Westerners. At present, although rock art may be venerated by local populations (cf. below), it has become fossilised, i.e. it is now longer made anywhere on the continent.

Links with other zones:

At the continental level, links can only exist (and in fact do exist) with North America, via Mexico, with for example Baja California and the art of the North American Great Basin, the Hohokams along the border between Sonora and Arizona, and the shamanic art of the Pecos River.

On the other hand, inside the continent itself, there are many links and influences, and these may be created or exercised in opposite directions. For example, the Caribbean seems both to have been subject to influences from Mexico and Central America (Cuba) and – above all – from the Orinoco in Venezuela, which is considered to be the source of several cultural traditions, which seem to have been diffused to the north and west through the Lesser Antilles. Many other examples have been cited for Brazil (cf. Prous, in this volume).

But the problem is a long way from having been resolved. Its components are multiple. It is necessary to determine – with the indispensable chronological details – the characteristics, the components, and the geographic and cultural

Le seul endroit où l'art rupestre a été attribué au Paléolithique est la Serra da Capivara (Piauí, Brésil), avec des dates très anciennes, qui remontent parfois jusqu'à 30 000, ce qui pose le problème du premier peuplement de cette région – voire du sud des Amériques – et de l'évolution de son art. Ailleurs, l'art est post-glaciaire et date généralement de moins de 10 000 ans. *Mutatis mutandis*, en bien des régions (mais pas partout, cf. Baja California, par exemple), on constate en gros (très gros...) trois phases : celle des chasseurs « archaïques », celle des grandes cultures (Mayas, Incas) ou des cultures de peuples sédentaires (Céramique), qui peuvent être précédées ou suivies de phases diverses (Pré-Incas, Taïnos, etc.), enfin celle de l'art Colonial, au moment et après l'arrivée des occidentaux. Actuellement, bien que l'art rupestre puisse être vénéré par des populations locales (cf. ci-après), il est devenu fossile, c'est-à-dire qu'il ne s'en fait plus, nulle part sur le continent.

Liens avec d'autres zones :

À l'échelle continentale, les liens ne peuvent exister – et ils existent – qu'avec l'Amérique du Nord, par le Mexique, qu'il s'agisse de la Baja California et de l'art du Great Basin nord-américain, des Hohokam le long de la frontière entre le Sonora et l'Arizona, ou encore de l'art chamannique de la Pecos River.

En revanche, à l'intérieur du continent lui-même, les liens et influences sont multiples et ils peuvent se créer ou s'exercer dans des directions opposées. Par exemple, les Caraïbes semblent à la fois avoir subi des influences venues du Mexique et d'Amérique centrale (Cuba) et – surtout – celles de l'Orinoque au Venezuela, considéré comme la source de plusieurs traditions culturelles, qui se seraient diffusées vers le nord et l'ouest par les Petites Antilles. De nombreux autres exemples ont été cités pour le Brésil (cf. Prous, ce volume).

Le problème, cependant, est loin d'être résolu. Ses composantes sont multiples. Il faut déterminer – avec les précisions chronologiques indispensables – les caractéristiques, les composantes, l'étendue géographique et

extent of more or less distinct artistic traditions, and their place of origin, depending on the dates obtained. Only afterwards does it become possible to make comparisons at lesser or greater distances with other regions or other cultures. As can be observed from the reports supplied, a great deal of work clearly remains to be done in this area.

Known sites:

In total, Latin America and the Caribbean are believed to contain at least 15,000 rock art sites, based on the information gathered. It is quite possible and indeed likely that this number is a minimum, as there has been little prospecting in many regions, and knowledge about them is therefore extremely limited. The current assessments are therefore approximate and give only a rough idea of the richness of the rock art of a region (in the widest sense of the term) in which the number of sites is at least one-third greater than in Europe. By site we mean an isolated decorated place (cave, shelter, rock), or an ensemble or a group of engraved or painted rock faces or rocks. It may be therefore that this term covers realities which differ considerably from one country to another.

Subject to these reserves, *Zone 1* (Mexico (2839 sites) and Central America) may perhaps contain in all 3500 sites, *Zone 2* (Caribbean, Venezuela (650), Colombia) some 2500, *Zone 3* (Brazil) at least 2000 (of which 1000 are recorded), *Zone 4* (Ecuador, Peru, Bolivia, Paraguay) around 3000 sites, with about 4000 in *Zone 5* (Argentina, Chile, Uruguay).

Of this number, only one isolated site (Cueva de las Manos, Argentina) is inscribed on the **World Heritage List (WHL)** under the heading of rock art. The List also includes under this heading three vast ensembles of geographically located sites (Sierra de San Francisco in Mexico, Lignes Nasca in Peru and Serra da Capivara in Brazil).

This is a very small number, even though a minimum of 12 sites on the WHL, classified on the basis of their natural or archaeological heritage, include rock art in varying quantities: *Zone 1* (7 sites): Cocos Island and Guanacaste

culturelle de traditions artistiques plus ou moins distinctes et leur lieu d'origine, en fonction des dates obtenues. Ce n'est qu'après qu'il deviendra possible d'opérer des comparaisons à plus ou moins longue distance avec d'autres régions et d'autres cultures. Comme on peut le constater d'après les rapports fournis, un gros travail reste de toute évidence à faire dans ce domaine.

Sites connus :

Dans l'ensemble, l'Amérique latine et les Caraïbes doivent compter au moins 15 000 sites d'art rupestre, d'après ce qui ressort des renseignements recueillis. Il est fort possible et même probable que ce nombre soit un minimum, car de nombreuses régions ont été peu prospectées et restent très mal connues. Les évaluations actuelles sont donc approximatives et ne donnent qu'un ordre d'idée de la richesse en art rupestre d'une région (au sens le plus large du terme) dont le nombre de sites dépasse d'au moins un tiers celui de l'Europe. On entend par site soit un lieu orné isolé (grotte, abri, roche) soit un ensemble ou un groupement de parois ou de roches gravées ou peintes. Il n'est pas impossible, en conséquence, que ce terme recouvre parfois des réalités assez différentes d'un pays à un autre.

Ces réserves étant faites, la *Zone 1* (Mexique (2839 sites) et Amérique centrale) comprendrait peut-être en tout 3500 sites, la *Zone 2* (Caraïbes, Venezuela (650), Colombie) environ 2500, la *Zone 3* (Brésil) au moins 2000 (dont 1000 enregistrés), La *Zone 4* (Équateur, Pérou, Bolivie, Paraguay) dans les 3000 sites et il y en aurait environ 4000 dans la *Zone 5* (Argentine, Chili, Uruguay).

Sur ce nombre, un seul site isolé (Cueva de las Manos, Argentine) se trouve sur la **Liste du Patrimoine mondial (LPM)** au titre de l'art rupestre. La Liste comprend également à ce titre trois vastes ensembles de sites géographiquement localisés (Sierra de San Francisco au Mexique, Lignes Nasca au Pérou et Serra da Capivara au Brésil).

(Costa Rica); Tikal (Guatemala); Copan and Rio Plátano (Honduras); Darién (Panama); Amistad (Costa Rica and Panama). *Zone 2* (1): San Agustín (Colombia). *Zone 4* (1): Fort of Samaipata (Bolivia). *Zone 5* (3): Quebrada de Humahuaca, National Park of Ischigualasto/Talampaya, and the Valdès Peninsula (Argentina).

It seems very likely that this number is an underestimate, and that other listed sites contain rock art sites that are not specifically mentioned in the reports. Note however that many rapporteurs point out that rock art, if present on a site which is inscribed on the List as a natural site, is given scant interest by the authorities in charge of the Parks.

The tentative lists of course contain far more sites (23 sites for Zones 1 and 5), despite the lack of detailed information about the other Zones. This fact, like the presence of several ensembles of decorated sites which are considered as such, reflects the growing interest shown in rock art, in Latin America and elsewhere in the world.

Zone 1 (14 sites): Boca de Poterillos and Pinal de Zamorano (Mexico); Plenitude under the Sky and region of San José Limón (Costa Rica); Naj Tunich, Sience del Lacandón, and Lake Atitlán (Guatemala); Coiba (Panama); Corra Sucia/El Imposible, Chalchapa, and Lake Guija (El Salvador); Granada, Bosawas, and Masaya Volcano (Nicaragua).

Zone 5 (9): Toconce-Ayquina, San Pedro de Atacama, Rock Art of Chilean Patagonia, Pali-Aike and the Fell caves (Chile); region of Las Parinas, Valle Calchaquí, Qhapaq Ñan (Argentina); Localidad rupestre Chamangá (Uruguay).

C'est peu, même si un minimum de 12 sites de la Liste du Patrimoine Mondial, classés au titre de leur patrimoine naturel ou archéologique, incluent de l'art rupestre en quantité variable :

Zone 1 (7 sites) : Cocos Island et Guanacaste (Costa Rica) ; Tikal (Guatemala) ; Copan et Rio Plátano (Honduras) ; Darién (Panama) ; La Amistad (Costa Rica et Panama). *Zone 2* (1) : San Agustín (Colombie). *Zone 4* (1) : Fort de Samaipata (Bolivie). *Zone 5* (3) : Quebrada de Humahuaca, Parc national d'Ischigualasto/Talampaya, et Presqu'île de Valdès (Argentine).

Il est très vraisemblable que ce nombre soit inférieur à la réalité et que d'autres sites classés incluent des sites d'art rupestre non mentionnés dans les rapports. Toujours est-il que plusieurs rapporteurs signalent que l'art rupestre, lorsqu'il est présent sur un site mis sur la Liste en tant que bien naturel, a la portion congrue dans l'intérêt que lui portent les autorités qui ont la charge des Parcs.

Les listes indicatives, naturellement, sont beaucoup plus fournies (23 sites pour les Zones 1 et 5), malgré l'absence de renseignements précis sur les autres Zones. Ce fait, comme la présence de plusieurs ensembles de sites ornés considérés en tant que tels, témoigne de l'intérêt grandissant porté à l'art rupestre, en Amérique latine comme ailleurs dans le monde.

Zone 1 (14 sites) : Boca de Poterillos et Pinal de Zamorano (Mexique) ; Plenitude under the Sky et région de San José Limón (Costa Rica) ; Naj Tunich, Sience del Lacandón, et Lac Atitlán (Guatemala) ; Coiba (Panama) ; Corra Sucia/El Imposible, Chalchapa, et Lac Guija (El Salvador) ; Granada, Bosawas, et Volcan Masaya (Nicaragua).

Zone 5 (9) : Toconce-Ayquina, San Pedro de Atacama, Art rupestre de la Patagonie chilienne, Pali-Aike et les grottes Fell (Chili) ; région de Las Parinas, Valle Calchaquí, Qhapaq Ñan (Argentine) ; Localidad rupestre Chamangá (Uruguay).

Significant sites:

Significant sites, i.e. those considered by the various rapporteurs as the most important for various reasons, are even more numerous, at 42 in all. These sites are likely to be eligible for future nomination to the World Heritage List. This number is not however excessive, when it is compared with the 15,000 decorated sites of the continent, each of which have specific individuality and interest.

Zone 1 (15 sites): San Rafaël de los Milagros, La Proveedora/La Calera, Las Plazuelas, Pila de los Monos, Juxlahuaca/Oxtotitlan, Chalcatzingo, Loltún and other Maya caves in the Yucatán, and Sierra de Guadalupe in Baja California (Mexico); Actun Dzib cave (Belize); Piedra de Ayarza (Guatemala); Cueva Pintada (Honduras); Igualtepeque-Lago Guija (El Salvador); Islas Ometepe, Zapatera and Islas El Muerto (Nicaragua).

Zone 2 (15): the Caribbean art ensemble deserves to be inscribed on the List. At a recent meeting of specialists in Guadeloupe, under the auspices of UNESCO, 15 sites have been selected as exceptional. They are: Parco nacional del Este (Dominican Republic); Caguana (Puerto Rico); Mountain River Cave (Jamaica); Reef Bay (Virgin Islands); Voûte-à-Minguet (Haïti); Cueva no. 1 of Punta del Este (Cuba); La Carapa (French Guyana); Punto Ayacucho (Venezuela), in addition to several other major sites in this country: engravings of Vigirima, and of Caicara; National Park Arikok (Aruba); Onima Site (Bonaire); Hato to Rooi Rincon (Curaçao); Parc des Trois-Rivières (Guadeloupe); Fountain Cavern (Anguila); Mount Rich (Granada); Yambou (Saint-Vincent). Furthermore, about twenty sites have been mentioned by the rapporteur for Colombia alone.

Zone 3 (7): Ferraz Igreja, Serra do Lajeado, Serra do Cipó, Rio Peruaçu, Montalvânia, Monte Alegre, Pedra Pintada/Pedra de Pereira (Brazil).

Zone 4 (2): Macusan/Corani (Bolivia); Toro Muerto (Peru).

Sites significatifs :

Les sites significatifs, c'est-à-dire ceux qui sont considérés par les divers rapporteurs comme les plus importants à divers titres, sont plus nombreux encore, 42 en tout. Ce sont des sites susceptibles d'être proposés à l'avenir pour la Liste du patrimoine mondial. Ce nombre n'est cependant pas exagéré, si on le compare aux 15 000 sites ornés du continent qui présentent chacun une individualité et un intérêt propres.

Zone 1 (15 sites) : San Rafaël de los Milagros, La Proveedora/La Calera, Las Plazuelas, Pila de los Monos, Juxlahuaca/Oxtotitlan, Chalcatzingo, Loltún et autres grottes mayas du Yucatán, et Sierra de Guadalupe en Baja California (Mexique) ; grotte d'Actun Dzib (Belize) ; Piedra de Ayarza (Guatemala) ; Cueva Pintada (Honduras) ; Igualtepeque-Lago Guija (El Salvador) ; Islas Ometepe, Zapatera et Islas El Muerto (Nicaragua).

Zone 2 (15) : L'ensemble de l'art des Caraïbes mérite d'être placé sur la Liste. Lors d'une récente réunion de spécialistes en Guadeloupe, sous l'égide de l'UNESCO, 15 sites ont été retenus comme exceptionnels. Ce sont : Parco nacional del Este (République Dominicaine) ; Caguana (Porto Rico) ; Mountain River Cave (La Jamaïque) ; Reef Bay (Virgin Islands) ; Voûte-à-Minguet (Haïti) ; Cueva n° 1 de Punta del Este (Cuba) ; La Carapa (Guyane française) ; Punto Ayacucho (Venezuela), outre plusieurs autres grands sites de ce pays : gravures de Vigirima, et de Caicara ; National Park Arikok (Aruba) ; Onima Site (Bonaire) ; Hato to Rooi Rincon (Curaçao) ; Parc des Trois-Rivières (Guadeloupe) ; Fountain Cavern (Anguila) ; Mount Rich (Granada) ; Yambou (Saint-Vincent). De plus, une vingtaine de sites ont été mentionnés par le rapporteur pour la seule Colombie.

Zone 3 (7) : Ferraz Igreja, Serra do Lajeado, Serra do Cipó, Rio Peruaçu, Montalvânia, Monte Alegre, Pedra Pintada/Pedra de Pereira (Brésil).

Zone 4 (2) : Macusan/Corani (Bolivie) ; Toro Muerto (Pérou).

Zone 5 (3): Guachipas, Sierra de Ancasti, Central Plateau of Santa Cruz Province (Argentina).

This set of sites, to which others may be added, is representative of the continent's rock art, including as it does geoglyphs, many shelters and open-air sites, and caves, with engravings and paintings of all types. It also includes isolated sites and ensembles of sites, which are sometimes very extensive, such as those of the Caribbean or Sierra de Guadalupe.

Documentation:

The existing documentation on the rock art of Latin America and the Caribbean is extremely disparate. It depends on the situation of research in each country, its traditions and its history.

Basically, there are three types of situation. In some cases, the documentation is sketchy or non-existent. Most of the states of Central America have no national register for rock art (except Costa Rica with the National Museum), and the same is true of countries in other Zones, such as Ecuador, Haiti, Colombia and Paraguay.

However, a number of countries do have registers. The following is a non-exhaustive list:

In Zone 1, Mexico (*Registro Público de Monumentos y Zonas Arqueológicas*) and the registrations of the INAH (*Instituto Nacional de Arqueología e Historia*); the *Instituto de Antropología e Historia* of Honduras; the *Instituto Nicaragüense de Cultura*; the *Instituto nacional de Cultura* of Panama.

In Zone 2, the *Instituto de Patrimonio Cultural* plays this role in Venezuela, and centralised registers also exist in the Dominican Republic, Guadeloupe and the Antilles, in Jamaica in Puerto Rico and in many other countries in this immense mosaic.

Zone 5 (3): Guachipas, Sierra de Ancasti, Plateau central de la Province de Santa Cruz (Argentine).

Cet ensemble de sites, susceptible d'être complété, est représentatif de l'art rupestre du continent. En effet, il comprend des géoglyphes, de nombreux abris et sites de plein air, ainsi que des grottes, avec des gravures et des peintures de tous types. Il comprend également des sites isolés et des ensembles de sites, parfois de très grande ampleur, comme ceux des Caraïbes ou de la Sierra de Guadalupe.

Documentation :

La documentation existante sur l'art rupestre de l'Amérique latine et des Caraïbes est extrêmement disparate. Elle dépend de la situation de la recherche dans chaque pays, de ses traditions et de son histoire.

On peut distinguer en gros trois types de situations. Parfois, la documentation se trouve à l'état d'ébauche ou n'existe pas. Ainsi, la majorité des états de l'Amérique centrale n'ont pas de registre national pour l'art rupestre (sauf le Costa Rica au Musée national), non plus que des pays d'autres Zones, comme l'Équateur, Haïti, la Colombie ou le Paraguay.

En revanche, nombre de pays possèdent de tels registres. Entre autres, on peut citer à cet égard (sans exhaustivité),

Dans la Zone 1, le Mexique (*Registro Público de Monumentos y Zonas Arqueológicas*) et le travail fait par l'INAH (*Instituto Nacional de Arqueología e Historia*); l'*Instituto de Antropología e Historia* du Honduras; l'*Instituto Nicaragüense de Cultura*; l'*Instituto nacional de Cultura* du Panama.

Dans la Zone 2, l'*Instituto de Patrimonio Cultural* joue ce rôle au Venezuela, et des registres centralisés existent également en République Dominicaine, en Guadeloupe et aux Antilles, à la Jamaïque, à Puerto Rico et dans bien d'autres pays de cette immense mosaïque.

In Zone 3, the Federal Heritage Institute (IPHAN) of Brazil contains data sheets but no comprehensive photographic archives; a data base is currently being compiled.

In Zone 4, in Peru the situation is reversed: the main source is photographs, but the compilation of more comprehensive documents is beginning.

In Zone 5, there are inventories both in Chile and in Argentina (in the latter country, the *Instituto Nacional de Arqueología y del Pensamiento Latino-Americano* has a digitised data base).

Lastly, private institutions, universities, associations and in some cases individual researchers, have over the last one or two decades begun to document the rock art of their country, whether or not an official register exists. Examples of this kind are the GIPRI in Colombia (which also runs a very active Web site) and the SIARB in Bolivia, the *Archivo nacional de Arte rupestre* in Venezuela and the *Fundação Museu do Homem Americano* in the Piauí (Brazil).

The extent of progress on these inventories is just as variable as their form. It is however clear that considerable progress has been made over recent years. Knowledge of rock art in Central America, the Caribbean and South America is taking giant steps forward.

Research into the importance of sites for indigenous peoples:

All the rapporteurs agree that rock art is no longer being created in any group whatsoever. Generally speaking, the indigenous peoples deny any precise knowledge and sometimes even any interest in rock art, which is attributed to spirits or to other peoples of the past. Even so, practices of a cultural nature are still attested today in all the different zones. They can be summed up briefly as follows:

Zone 1, In Mexico, visits, pilgrimages and ceremonies take place on rock art sites, by the Huichols in the states of Nayarit, Jalisco and Nuevo León and by various Maya groups in the Chiapas; several ritual sites, such as the Pinal de Zamorano, are associated with the Otomí

Dans la Zone 3, l'Institut Fédéral du Patrimoine (IPHAN) du Brésil comprend des fiches mais pas d'archives photographiques complètes ; une banque de données est en cours de réalisation.

Dans la Zone 4, au Pérou c'est l'inverse : surtout des photographies, mais on commence à élaborer des documents plus complets.

Dans la Zone 5, des inventaires existent tant au Chili qu'en Argentine (dans ce dernier pays, l'*Instituto Nacional de Arqueología y del Pensamiento Latino-Americano* possède une banque de données numérisée).

Enfin, des institutions privées, des universités, des associations, voire des chercheurs, ont entrepris depuis une ou deux décennies de documenter l'art rupestre de leur pays, qu'il existe ou non un registre officiel. On citera par exemple le GIPRI en Colombie (qui en outre anime un site web très actif) et le SIARB en Bolivie, ou encore l'*Archivo nacional de Arte rupestre* au Venezuela et la *Fundação Museu do Homem Americano* dans le Piauí (Brésil).

L'état d'avancement de ces inventaires est tout aussi variable que leur forme. Toutefois, il est évident que des progrès considérables ont été faits au cours des dernières années. Les connaissances sur l'art rupestre dans l'Amérique centrale, les Caraïbes et l'Amérique du Sud s'accroissent à pas de géants.

Recherches sur l'importance des sites pour les peuples indigènes :

Tous les rapporteurs s'accordent sur le fait que l'on ne crée plus d'art rupestre dans quelque groupe que ce soit. Généralement, les peuples indigènes nient toute connaissance précise et parfois même tout intérêt pour l'art rupestre, attribué à des esprits ou à d'autres peuples du passé. Néanmoins, des pratiques d'ordre culturel sont attestées encore aujourd'hui dans toutes les zones. Brièvement rappelées, ce sont :

Zone 1. Au Mexique, des visites, pèlerinages et cérémonies ont lieu sur des sites d'art rupestre, par les Huichols dans les états de Nayarit, Jalisco et Nuevo León et par divers groupes mayas du Chiapas ; plusieurs sites rituels, comme le Pinal de Zamorano sont associés à la

cultural tradition. In Guatemala, the Q'eqchi' consider the caves to be the point of entry into the supernatural world, and make offerings.

In Zone 2, many rituals take place in the decorated caves of Haiti, as part of voodoo ceremonies. Caves in Jamaica play a role in the creation myths of the Taínos. This same interpretation of the underground environment can be found in other places (Anguilla).

In Zone 3, some indigenous groups (Makuxi, Krenak, Xacriabá) claim an ancestral filiation linked to rock art. Furthermore, analogies have been noted between dance scenes in the decorated shelters of the Piaui and the practices of the Krahó Indians in the state of the Tocantins.

In Zone 4, offerings and rites continue occasionally, with sacrifices of llamas, whose blood is sometimes spattered over the paintings, or the depositing of chewed coca leaves (Bolivia).

The same applies to Zone 5, where depositions and burials have been carried out near some decorated sites, particularly in the Andes.

No thorough studies have up to now been carried out into this aspect of rock art. It clearly deserves to be given more consideration in future research, with contributions from ethnologists.

Legal protection:

Almost all the states concerned have an arsenal of laws which protect the archaeological, cultural or natural heritage to which such art is usually assimilated. There is no point listing them all (*cf.* the reports in this study). However, it is rare for rock art to be subject to specific legislative provisions (Mexico, Panama, Brazil, Argentina). In a certain number of cases, rock art sites form part of reserves or regional or national parks: they are thus legally protected by the laws which govern such parks but not necessarily protected for their cultural qualities.

tradition culturelle Otomí. Au Guatemala, les Q'eqchi' considèrent les grottes comme l'entrée du monde surnaturel et procèdent à des offrandes.

Dans la Zone 2, de nombreuses pratiques rituelles ont lieu dans les grottes ornées de Haiti, dans le cadre de cérémonies vaudou. Des grottes de la Jamaïque jouaient un rôle dans les mythes de la Création des Taínos. On retrouve cette même interprétation du milieu souterrain en d'autres lieux (Anguilla).

Dans la Zone 3, certains groupes indigènes (Makuxi, Krenak, Xacriabá) revendiquent une filiation ancestrale liée à l'art rupestre. En outre, des analogies ont été relevées entre des scènes de danse dans les abris ornés du Piaui et les pratiques des Indiens Krahó de l'État du Tocantins.

Dans la Zone 4, des offrandes et des rites continuent occasionnellement, avec sacrifices de lamas dont le sang éclabousse parfois les peintures, ou dépôt de feuilles de coca mâchées (Bolivie).

Il en va de même dans la Zone 5, où des dépôts et des enterrements ont été pratiqués près de certains sites ornés, surtout dans les Andes.

Cet aspect de l'art rupestre n'a pas - jusqu'à présent - fait l'objet d'études approfondies. Il mériterait sans aucun doute d'être mieux pris en compte dans les recherches à venir, avec la contribution d'ethnologues.

Protections légales :

Quasiment tous les États concernés possèdent un arsenal de lois qui protègent le patrimoine archéologique, culturel ou naturel, auquel l'art est le plus souvent assimilé. Il est inutile de les citer toutes (*cf.* rapports dans cette étude). Cependant, il est rare que l'art rupestre fasse l'objet de dispositions législatives spécifiques (Mexique, Panama, Brésil, Argentine). Dans un certain nombre de cas, des sites d'art rupestre font partie de réserves ou de Parcs naturels régionaux ou nationaux : ils sont ainsi légalement protégés par les lois régissant ces parcs mais pas nécessairement pour leurs valeurs culturelles.

This type of legal protection, which is generally speaking sufficient, is unfortunately not enforced as it should be. This is a major problem. The great majority of rapporteurs regret this state of affairs, and give examples of damage or destruction which, although reported, have never given rise to criminal proceedings. The laws exist but they are not applied, or only rarely applied, in most of the countries, either because of lack of interest on the part of the authorities or a lack of the human and material resources required to enforce them, or because they are too general.

Conservation:

Active conservation measures, although attested in all five zones, are still very rare, mainly because of a lack of resources and prior studies. The following may be mentioned:

In Zone 1, the project conducted by the *Getty Foundation*, in collaboration with the INAH, in the Ratón Cave (Baja California, Mexico).

In Zone 2, environmental studies have been conducted by the LRMH (Historic Monuments Research Laboratory) on the engraved rocks of La Carapa and Favard, but practical results have been inconclusive. Rock face cleaning has been carried out in Jamaica.

In Zone 3 (Brazil), graffiti have been removed at Lagoa Santa and alteration factors have been studied in the Peruaçu. Over the whole expanse of the Serra da Capivara National Park, painted shelters are regularly monitored and destructive biological agents removed (e.g. termites), while intrusive water has been diverted. These exemplary actions are carried out by specialist technicians, under the auspices of FUNDHAM (*Fundação Museu do Homem Americano*).

In Zone 4, in Bolivia, the SIARB collaborates with the municipal authorities to ensure the conservation of sites. Graffiti have been removed by specialists at Incamachay.

In Zone 5, a Canadian conservation specialist has worked with the INAPL, in Argentina, on several sites in this immense country. Surface cleanings have been carried out, but very few restorations (geoglyphs in northern Chile).

Ces protections légales, dans l'ensemble suffisantes, ne sont malheureusement pas mises en application comme elles le devraient. C'est là un problème majeur. La grande majorité des rapporteurs déplorent cet état de fait et citent des exemples de dégradations et de destructions qui, bien que signalées, n'ont jamais eu de suites pénales. Les lois existent mais elles sont peu ou pas appliquées dans la plupart des pays, que ce soit par manque d'intérêt des autorités ou par manque de moyens matériels et humains pour les mettre en œuvre, ou parce qu'elles sont trop générales.

Conservation :

Les mesures actives de conservation, bien qu'attestées dans les cinq Zones, sont encore très rares, essentiellement fautes de moyens et d'études préalables. On peut citer :

Dans la Zone 1, le projet mené par la *Getty Foundation*, en collaboration avec l'INAH, dans la grotte de Ratón (Baja California, Mexique).

Dans la Zone 2, des études environnementales ont été menées par le LRMH (Laboratoire de Recherche des Monuments Historiques) sur les roches gravées de la Carapa et de Favard, mais les résultats pratiques n'ont pas été concluants. Des nettoyages de parois ont été effectués à la Jamaïque.

Dans la Zone 3 (Brésil), des graffitis ont été enlevés à Lagoa Santa et les facteurs d'altération ont été étudiés dans le Peruaçu. Sur toute l'étendue du Parc national de la Serra da Capivara, les abris peints sont régulièrement suivis et débarrassés des agents biologiques destructeurs (termites, par exemple) et des dérivations d'eau intrusive ont été mises en œuvre. Ces travaux exemplaires sont menés par des techniciens spécialisés, dans le cadre de la FUNDHAM (*Fundação Museu do Homem Americano*).

Dans la Zone 4, en Bolivie, le SIARB collabore avec les municipalités pour assurer la conservation de sites. Des graffitis ont été enlevés par des spécialistes à Incamachay.

Although very inadequate at the scale of the continent, the work already carried out or in progress shows that an awareness of the interest of the decorated sites is beginning to emerge, mainly under the impulse of rock art associations and researchers.

Dans la Zone 5, un spécialiste canadien de la conservation a travaillé avec l'INAPL, en Argentine, sur plusieurs sites de cet immense pays. Des nettoyages de surface ont été opérés, mais très peu de restaurations (géoglyphes dans le nord du Chili).

Bien que très insuffisantes à l'échelle du continent, les travaux déjà effectués ou en cours montrent qu'une prise de conscience de l'intérêt des sites ornés commence à émerger, essentiellement sous l'effet d'associations et de chercheurs en art rupestre.

Management of sites:

From this viewpoint, the picture is one of sharp contrasts between the best and the worst, which depend on local situations.

All the rapporteurs deplore the small number of rock art parks or zones which are effectively managed. In most cases, even if such zones exist and are satisfactorily managed, the rest (that is, the majority of the decorated sites) is left unprotected.

In Zone 1, which includes a large number of countries, the projects are more numerous than ever, and this is stimulating the creation of parks throughout the zone. In Mexico, the vast Sierra de San Francisco is very well managed by the INAH, with control of visitor access and good local guides. The decorated ensemble of Boca de Potrerillos, over an area of 6 sq. km., is partially fenced and includes a museum. Rock art sites are included in 14 parks (3 in Belize, 1 in Costa Rica, 1 in Salvador, 3 in Guatemala, 1 in Honduras, 5 in Nicaragua) and 5 national monuments (1 in Costa Rica, 1 in Salvador, 1 in Nicaragua, and 2 in Panama).

In Zone 2, the following developed and protected sites should be mentioned: Parc des Roches Gravées in Guadeloupe; Pintado (with an interpretation centre) and Piedra Pintada in Venezuela; Parque nacional del Este in the Dominican Republic.

Gestion des sites :

Le paysage, dans ce domaine, est extrêmement contrasté et l'on constate le meilleur et le pire, en fonction des situations locales.

Tous les rapporteurs déplorent le petit nombre de parcs ou de zones efficacement gérés consacrés à l'art rupestre. Le plus souvent, même lorsque de telles zones existent et qu'elles sont convenablement administrées, le reste, c'est-à-dire la majeure partie des sites ornés, est laissé à l'abandon.

Dans la Zone 1, qui comprend de nombreux pays, les projets sont plus nombreux qu'ils ne le furent jamais et cela stimule un peu partout la création de parcs. Au Mexique, la vaste Sierra de San Francisco est très bien gérée par l'INAH, avec contrôle des visiteurs et guides locaux efficaces. L'ensemble orné de Boca de Potrerillos, sur 6 km², est partiellement clôturé et comprend un musée. Des sites d'art rupestre sont inclus dans 14 parcs (3 à Belize, 1 au Costa Rica, 1 au Salvador, 3 au Guatemala, 1 au Honduras, 5 au Nicaragua) et 5 monuments nationaux (1 au Costa Rica, 1 au Salvador, 1 au Nicaragua, 2 au Panama).

Dans la Zone 2, on citera les parcs aménagés et protégés suivants : Parc des Roches Gravées à la Guadeloupe ; Pintado (avec centre d'interprétation) et Piedra Pintada au Venezuela ; Parque nacional del Este en République Dominicaine.

In Zone 3 (Brazil), the Serra da Capivara National Park, which is entirely enclosed with fencing, is outstanding for its documentation centre and its particularly thorough and efficient management.

There are few parks in Zone 4. Several have been created (Nazca, Toro Muerto and Miculla in Peru; Calacala and Incamachay in Bolivia) but sometimes they face management problems.

In Zone 5, management plans exist for national parks and sites (for example, there are well-organised visits to Cueva de las Manos, in Argentina).

In some cases the opening up to the public of some decorated sites raises very substantial conservation problems, because of ignorance and/or a lack of resources. For example, in the Dominican Republic, the caves of Borbón and Las Maravillas have been developed, which involved very substantial and destructive development works, without a prior archaeological study. In several other countries, the lack of surveillance of sites open to the public has given rise to destruction as a result of uncontrolled tourist access. Some sites (Panama) are visited in the presence of guides, but the explanations given to visitors are often ridiculous.

The other most alarming shortcomings stressed by the rapporteurs concern the training of the guides, information for the public, effective protection of sites by walkways, fences or barriers, and the fact that all too often parks and other sites are of little advantage to the local communities in economic terms; as a result, these communities are not likely to be motivated to protect them.

Main threats to rock art:

Whatever the zone concerned, the main threats to rock art - which each year cause a great deal of destruction and damage - are broadly the same: there is therefore no point in listing them for each zone. The origin of such threats is either human or, more rarely, natural.

Dans la Zone 3 (Brésil), le Parc national de la Serra da Capivara, entièrement clôturé, sort de l'ordinaire, avec son centre de documentation et sa gestion particulièrement rigoureuse et efficace.

La Zone 4 comporte peu de parcs. Plusieurs ont été créés (Nazca, Toro Muerto et Miculla au Pérou ; Calacala et Incamachay en Bolivie) mais ils posent parfois des problèmes de gestion.

Dans la Zone 5, des plans de gestion existent pour des parcs nationaux et des sites (par exemple, la visite de la Cueva de las Manos, en Argentine, est bien organisée).

Il arrive que l'ouverture au public de certains sites ornés pose de très gros problèmes de conservation, par ignorance et/ou manque de moyens. Ainsi, en République Dominicaine, les grottes de Borbón et de Las Maravillas ont été aménagées, au prix de lourds travaux destructeurs, sans étude archéologique préalable. Dans plusieurs autres pays, le manque de surveillance de sites ouverts au public a entraîné des destructions dues à un tourisme incontrôlé. Certains sites (Panama) sont visités et guidés, mais les explications données aux visiteurs sont des plus farfelues.

Les autres manques les plus criants, soulignés par les rapporteurs, concernent la formation des guides, l'information du public, la protection efficace de sites par des passerelles et des clôtures ou barrières, ou encore le fait que, trop souvent, les parcs et autres sites ouverts ne profitent guère aux communautés locales sur le plan économique ; en conséquence, elles ne sont guère tentées de s'impliquer dans leur protection.

Les menaces principales sur l'art rupestre :

Quelles que soient les zones, les menaces principales qui pèsent sur l'art rupestre et qui causent chaque année de nombreuses destructions et dégradations, sont en gros les mêmes : elles ne seront donc pas détaillées par Zones. Leur origine est soit humaine soit, plus rarement, naturelle.

Natural destructive forces are sometimes biological (termites, wasps' nests, intrusive vegetation, micro-cryptogams and algae affecting the rock faces and the rocks) or may result from natural alteration processes (ageing and flaking of rock faces, intrusive water). It is often possible to prevent these processes from continuing. Others are the result of volcanic eruptions (Zone 2) or tornadoes which suddenly change the landscape, together with destructive flooding.

The most frequent causes of the disappearance of art however are human. They can be divided into various categories. One of those most often mentioned is the exponential growth of tourism – particularly adventure tourism -, which reflects the growing interest in rock art, but which is not accompanied by adequate protection measures by the authorities in charge. This results in visits to sites which were previously protected by their isolation, with uncontrolled fires in shelters, graffiti, engravings which are chalked over, or the wetting of paintings (which may also be the result of the action of local guides, site owners or even ill-informed researchers).

Agricultural work (deforestation, clearance by fire, grading, cattle parks) and the straying of animals into shelters also cause damage.

Large-scale projects are highly destructive, particularly as they are usually not preceded by prior studies or protection measures. Examples are road, quarry, pipeline or dam projects (mentioned in all the Zones), rapid urbanisation, movements of population in regions at risk, and work carried out for the relocation of the population.

Ignorance and therefore lack of interest in the conservation of rock art are causing damage in many cases. At Nancito, in Panama, locals destroyed all the engravings on a site when there was a move to create a rock art park there. Deliberate cases of destruction to prevent listing have also been observed in Brazil. In several places, uncontrolled excavations have destroyed sites believed to contain treasures. Engraved blocks are sometimes sold to tourists (Costa Rica). There have been cases in which some rock art has been removed to be placed in museums or parks, when measures of this type should only be considered as a last resort, for

Les destructions naturelles sont parfois biologiques (termites, nids de guêpes, végétation intrusive, micro-cryptogames et algues affectant les parois et les roches) ou dues à des processus d'altération naturels (vieillessement et desquamation des parois, coulées d'eau). Il est donc souvent possible d'y remédier. D'autres sont dues à des éruptions volcaniques (Zone 2) ou des ouragans qui bouleversent le paysage, ainsi qu'à des inondations destructrices.

Les plus fréquentes causes de la disparition de l'art, cependant, sont d'origine humaine. On peut les répartir sous plusieurs rubriques. L'une des plus citées est la croissance exponentielle du tourisme – en particulier du tourisme d'aventure -, qui témoigne d'un intérêt croissant pour l'art rupestre, mais qui ne s'accompagne pas de mesures de protection adéquates de la part des autorités qui en ont la charge. Cela entraîne des visites dans des sites que leur isolement protégeait jusqu'ici, avec des feux incontrôlés dans les abris, des graffitis, des repassages à la craie de gravures ou du mouillage de peintures (parfois dus également à l'action de guides locaux, de propriétaires de sites, voire de chercheurs mal informés).

Les travaux d'origine agricole (déforestation, incendies de nettoyage, nivellements, parcs à bétail) et les divagations des animaux dans les abris sont également responsables de dégâts.

Les grands projets sont particulièrement destructeurs, d'autant qu'ils ne sont généralement pas précédés d'études ou de mesures de protection préalables. On peut citer à cet égard les routes, les carrières, les pipelines, les barrages (mentionnés dans toutes les Zones), l'urbanisation galopante, les déplacements de population dans les régions à risque et les travaux afférents à leur relocation.

L'ignorance, et, par voie de conséquence, le désintérêt pour la conservation de l'art rupestre, cause de nombreux dégâts. À Nancito, au Panama, des individus locaux ont détruit toutes les gravures d'un site quand on a voulu y créer un parc d'art rupestre. Des destructions volontaires pour éviter un classement ont également été constatées au Brésil. En plusieurs lieux, des fouilles sauvages ont détruit des sites que l'on pensait renfermer des trésors. Des blocs gravés sont parfois vendus aux touristes

example if destruction is scheduled and certain, because of a dam or inevitable construction works.

Conclusions

Rock art is one of the major cultural riches of Latin America and the Caribbean. In its various forms, which are often spectacular, it is found in abundance in most of the countries of the continent. It is often the only concrete expression of the complexity of the thought, beliefs and cults of lost indigenous civilisations.

Ignored for too long, except in certain privileged regions, rock art is generating increasing interest amongst researchers and the public in general. Active associations have been formed, research in the field is becoming far more widespread, inventories are being constituted almost everywhere, so that discoveries and their documentation are advancing. On the other hand, all too often there is a lack of official support from states and their administrations. The teaching of rock art in Universities is non-existent or only embryonic. The enormous amount of work done by researchers to raise awareness of rock art must be encouraged in the international arena so that the continent's rock art is granted the place it deserves when it comes to official concerns and decisions.

From a practical viewpoint, the creation of specific university courses, and the intensification of the compiling (or creation) of detailed and specific inventories should be encouraged. It is also essential to effectively enforce laws for heritage protection, which remain unenforced in too many countries. More help must be provided for Parks that have already been created, as all too often their existence is threatened and they are merely surviving day by day. It is advisable to associate local populations in the commercial exploitation of the sites (if there is any) and in their conservation.

(Costa Rica). Il est arrivé que certains soient enlevés pour être mis dans des musées ou des parcs, alors que de telles mesures ne devraient être envisagées qu'en tout dernier ressort, par exemple en cas de destruction programmée certaine, par un barrage ou par des travaux de construction inévitables.

Conclusions

L'art rupestre constitue l'une des richesses culturelles majeures de l'Amérique latine et des Caraïbes. Sous ses diverses formes, fréquemment spectaculaires, il se trouve en abondance dans la plupart des pays du continent. C'est souvent le seul témoignage concret de la complexité de la pensée, des croyances et des cultes de civilisations indigènes disparues.

Trop longtemps ignoré, sauf dans quelques régions privilégiées, il suscite de plus en plus d'intérêt de la part des chercheurs et du public en général. Des associations actives se sont formées, les recherches de terrain se multiplient, des inventaires sont presque partout en voie de constitution, de sorte que les découvertes et leur documentation avancent. En revanche, on constate trop souvent un manque de support officiel de la part des États et de leurs administrations. L'enseignement de l'art rupestre dans les Universités est inexistant ou embryonnaire. Le gros travail de sensibilisation entrepris par les chercheurs doit être encouragé sur le plan international pour que l'art rupestre du continent ait la place qu'il mérite dans les préoccupations et les décisions officielles.

D'un point de vue pratique, il faudrait encourager la création d'enseignements spécifiques dans les universités, l'intensification de la réalisation (ou de la création) d'inventaires et de bases de données détaillées et précises. Il faudrait aussi appliquer effectivement les lois de protection du patrimoine, qui restent lettre morte dans de trop nombreux pays. Il conviendrait de mieux aider les Parcs déjà créés, qui ont trop souvent une existence menacée et qui survivent au jour le jour. L'association des populations locales à l'exploitation commerciale des sites lorsqu'elle existe, ainsi qu'à leur conservation, serait souhaitable.

All this requires considerable effort, particularly in the field of information, in order to raise awareness amongst decision makers about the importance of this heritage, and in order to attract funding (or possibly sponsorship?) to facilitate research, documentation and protection. International cooperation could also take the form of workshops or expert missions for the training of guides and site managers.

A relatively large number of sites (in the order of sixty) could without question apply for inclusion in the World Heritage List (WHL), provided that adequate legal protection, management, conservation and documentation were in place and appropriate arrangements to involve local communities had been considered. (*cf.* above). Rather than isolated sites, it would certainly be desirable to prefer ensembles with a strong thematic and/or geographic coherence. The following is a non-exclusive list of examples: transnational ensembles such as rock art of the Caribbean, geoglyphs of the northern part of the South American continent, sites of Chilean Patagonia or the Maya caves; or national ensembles on a very large scale, such as rock art of the Sierra de Guadalupe (Baja California), Toro Muerto in Peru, the paintings of Rio Peruaçu and the engravings of Montalvânia in Brazil.

Tout cela nécessite des efforts considérables, surtout dans le domaine de l'information, afin de sensibiliser les décideurs à l'importance de ce patrimoine et afin d'attirer des crédits (mécénat ?) pour faciliter la recherche, la documentation et la protection. Une coopération internationale pourrait également prendre la forme d'ateliers ou de missions d'experts pour la formation de guides et de gestionnaires de sites.

Un nombre assez élevé de sites, de l'ordre de la soixantaine, pourrait sans aucun doute prétendre à figurer sur la Liste du Patrimoine mondial, à la condition que la protection légale adéquate, la gestion, la conservation et la documentation soient en place et que des dispositions appropriées aient été envisagées pour impliquer les communautés locales (*cf. supra*). Plutôt que des sites isolés, il serait certainement souhaitable de choisir de préférence des ensembles à forte cohérence thématique et/ou géographique. On pourrait citer ainsi, à titre d'exemple et sans exclusive : de manière trans-nationale, l'Art rupestre de la Caraïbe, les Géoglyphes du nord du continent sud-américain, les sites de la Patagonie chilienne ou les Grottes Maya ; ou encore des ensembles nationaux de très grande envergure, comme l'art rupestre de la Sierra de Guadalupe (Baja California), Toro Muerto au Pérou, les peintures du Rio Peruaçu et les gravures de Montalvânia au Brésil.

ICOMOS

THEMATIC STUDY ON ROCK ART: LATIN AMERICA & CARIBBEAN:

Brief for Contributors

The proposed ICOMOS Thematic Study will divide Latin America and the Caribbean into five zones, as follows:

1. Mexico (including Baja California) and Central America.
2. The Caribbean, including Venezuela and Colombia.
3. Brazil
4. West-north-west South America (north of the Andes, Peru, Bolivia, Paraguay)
5. West-south-west and southern South America (Chile, Argentina, Uruguay)

For each zone, Consultants are asked to assemble the following information:

Profile of Zone

Based on defined rock art traditions in relation to distribution in space and time and to archaeological context.

Links with other zones

i.e. overlaps in rock art cultures.

Known sites

Including cultural and natural WHSs; sites on WH Tentative Lists (all these already identified and listed by ICOMOS).

Significant Rock Art Sites

Documentation

Analysis of the current situation including:

- Details of which sites have been inventoried;
- Type of records (eg standard data sheets, physical or digital);
- Photographic records;
- Location of documentation;
- What material is available to help with comparative studies.

Research

How far have rock art sites be researched for their associations to societies both past and present particularly significances which indigenous populations give (or have given) to the decorated sites.

Protection

Existing laws and other official protection systems and mechanisms.

Conservation

As complete and as correct picture as possible to include:

- Information on methods and materials used in practical conservation;
- preventative conservation methods;
- pros and cons of different conservation approaches.

Management: to include:

- Main agencies involved in management
- Management arrangements including a management of rock within sites protected for natural values; which sites have active management
- Do Management plans exist
- Traditional management arrangements
- Links with, and involvement of, local communities
- Contemporary use of rock art sites
- Access arrangements
- Limitations in resources

Main threats

For instance:

- Changes to surrounding vegetation
- Rock fissures/laminations/water ingress
- Climate change
- Limitations in funding
- Lack of management
- Inappropriate uses

Conclusions for the Zone:

Conclusions on:

- Scope and extent of evidence
- Documentation
- Problems with management and conservation as well as good practice
- Threats
- What Pre-Nomination support might be needed
- Potential of Zone to contribute sites to the WH list
- Recommendations for the future

ANNEX II

Zone 2: Colombia

Guillermo Muñoz
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Colombia

Desde el período colonial (siglo XVI-XIX) existen referencias imprecisas sobre la existencia de sitios rupestres precolombinos, donde las comunidades indígenas en el actual territorio colombiano dejaron pintados o grabados sus pensamientos y con ello, sus lenguajes de representación. Sólo hasta el siglo XIX con la Comisión Corográfica-1850-59 se intentó documentar la república y algunos monumentos indígenas (arte rupestre) se incluyeron como un aspecto más del conocimiento del territorio, como un asunto expreso del interés oficial (*Acuarelas del Álbum Pintoresco de la Nueva Granada*) en conocer y valorar el territorio. Sin embargo, este primer esfuerzo de registro, estudio e interpretación se abandonó en el marco de la violencia y las disputas políticas, que continúan hasta hoy. Este contexto determinará en buena parte la clase y el grado de conocimientos y las escasas etapas de la actividad científica en el estudio de estas manifestaciones culturales precolombinas y con ello la precariedad en los estudios sobre el lenguaje, el pensamiento y los sistemas de representación precolombinos. Las referencias existentes a los estudios de arte rupestre corresponden esencialmente a individuos aislados (Isaacs 1883, Triana 1924, Cabrera Ortiz W 1942, Gipri 1970-2006) que en distintas etapas de la historia nacional se han interesado en los temas indígenas y con ello en el denunció y registro de algunas zonas con pinturas y grabados. Cuando se revisa la escasa bibliografía, se encuentran vacíos en algunas épocas o eventualmente la reiteración de los trabajos clásicos, muchos de los cuales tienen una documentación deficiente. Sin la formación adecuada, las gráficas y registros del siglo XIX y de los primeros años del siglo XX tienen descripciones incompletas, sin expresar un interés en las proporciones ni en las escalas, al tiempo que excluyen motivos o les geometrizan, produciendo de esta forma un documento de los motivos rupestres en lo relativo a sus trazos y en las formas, bastante distinto al original.

Aún con estas circunstancias el equipo de Gipri ha venido realizando investigaciones (1970-2006) en diversos territorios de los distintos departamentos, mostrando que existe una alta densidad de pinturas y grabados rupestres en la totalidad de las diversas áreas del actual territorio nacional. Los datos que aquí se presentan, sin embargo, corresponden como es comprensible a un conjunto amplio de referencias existentes de investigaciones de distintas épocas y con diferentes grados de calidad y rigor en el registro y estudio y en muchos casos corresponden a simples denuncios, eventualmente acompañados por algunas gráficas, pinturas (acuarelas) y fotos. Este informe, corresponde esencialmente a los datos del trabajo de Gipri-Colombia y a la búsqueda de fuentes diversas que ha podido coleccionar en los últimos 35 años.

En este proceso, el equipo estable no solo ha venido registrando sistemáticamente algunas regiones sino que simultáneamente ha podido lentamente generar criterios y estructuras metodologías para el registro y estudio de las alteraciones como propuesta -modelo para los trabajos futuros en conservación y administración de yacimientos rupestres. Basados en criterios cartesianos y con el objetivo de corregir las inadvertencias de los trabajos precedentes, el equipo ha venido construyendo en sus diferentes etapas sistemas de organización de los documentos y ha construido un conjunto importante de formatos que se interesan en

documentar los motivos, sus contextos, tanto en los grupos pictóricos como en sus características en el contexto. La documentación que ha venido efectuando debe entenderse entonces como un modelo metodológico complejo, como una estructura teórico práctica que contiene una intención gráfica (*cartographic system of recording*), que incluye una descripción de los motivos rupestres (ficha de roca) y una ficha paralela que se ocupa de registrar las alteraciones, en las que se discriminan gráficamente los temas (abrasión, fractura descamación, entre otros) con colores porcentajes y tabla de color (CMYK y RGB). Este formato de registro incluye las características del petroglifo en relación a trazos, pero también complementa su descripción con información sobre otras condiciones relativas al conjunto de alteraciones (Bednarik 2001) del panel de la roca, tales como: áreas de exfoliación, presencia de líquenes, marcas de deterioros, intemperie de la roca, patina, minerales, sales). *(Include also information on other features of the rock panel, such as areas of exfoliation, lichen presence, taphonomic rock markings, patination, mineral accretions and salt efflorescence)*. El objetivo es poder determinar simultáneamente con el conjunto de trazos una evaluación sobre las condiciones de alteración y agentes de deterioro.

La investigación y las zonas:

La experiencia de trabajo en la búsqueda y registro de estos últimos años permite asegurar que existen zonas aún no estudiadas con densidades semejantes a aquellas que fueron ubicadas en el municipio de El Colegio- Cundinamarca en el proyecto municipal de 1996-2005. En este municipio fueron encontradas y registradas 2000 rocas en el 50% revisado de la totalidad de las 44 veredas. Si esta tendencia es la misma para zonas aledañas y relativas al conjunto de municipios de los alrededores del altiplano (Anolaima, Viota, Cachipay, Nilo, San Antonio de Tequendama, Tibacuy) por lo menos en lo relativo exclusivamente al departamento de Cundinamarca, es posible que el número ahora denunciado se multiplique por lo menos por cuatro o cinco.

Es esencial informar que los datos presentes en departamentos, municipios y su discriminación en veredas corresponden a ciertas regiones donde existe una malla vial, y una alta concentración poblacional, mientras que otros territorios aun no visitados no tienen en este informe la misma densidad en petroglifos y pictografías. Eventualmente estas zonas aun no estudiadas tienen un número de yacimientos semejante, derivado de algunos escasos informes y expediciones, lo que parecería mostrar que esta actividad debió diseminarse en amplios territorios y ser el producto de distintas etapas del poblamiento como un asunto bastante usual de un número de etnias aun no estudiado. Es probable entonces que en el conjunto de departamentos no reseñados aquí, exista un número desconocido de estaciones rupestres, tal y como lo ha venido confirmando algunos denuncios de los últimos años (chiribiquete-). Para explicar este tipo de características del territorio es necesario entender la historia del poblamiento.

Períodos amplios de poblamiento determinados por los estudios de las comunidades de cazadores recolectores (Correal, Van der Hamenn-1970) permiten construir una imagen compleja de etnias que desde el año 12.000. A.P. vivieron en el territorio. La arqueología colombiana ha generado en el proceso de estudio algunas distribuciones de áreas (zonas arqueológicas) y ha producido relativos avances en las descripciones de la historia del clima (flora y fauna) y con ello las condiciones en las cuales vivieron los grupos étnicos, algunos de los cuales posiblemente hicieron arte rupestre. Sin embargo, los nexos entre los trabajos arqueológicos y los documentos que se han venido produciendo en arte rupestre no tienen aún nexos que permitan ampliar los caminos de su estudio y de su interpretación.

En resumen se han podido ubicar datos diversos sobre un número importante de yacimientos (5.899 rocas), y simultáneamente se han podido establecer algunos temas de investigación relativos a la historia de este proceso, con lo cual se ha podido reflexionar sobre la historia del registro y las etapas que el país ha vivido, contexto en el cual se han producido algunas de las interpretaciones relativas a su sentido y función.

Desafortunadamente también es importante reseñar que muchos de los sitios que fueron registrados en los primeros años del trabajo de registro (1970) se encuentran ahora amenazados, y algunos han sido destruidos por el avance de la urbanización (Suacha-Facatativa, Bojacá), cuyo crecimiento acelerado coincide con el proceso de desplazamiento de la población rural hacia los centros urbanos. La situación de la violencia en Colombia ha marcado sin duda el deterioro de zonas en las cuales las poblaciones desplazadas invaden territorios y con ello han venido desapareciendo o deteriorándose severamente algunos sitios rupestres. La situación actual de los sitios enunciados aquí como simple ejemplo entre otros hace muy difícil el manejo y genera severos problemas para garantizar su cuidado mucho mas cuando su manejo se hace actualmente con meras iniciativas pedagógicas cursos sueltos, poco planificados, a pesar de que exista una normatividad legal que usualmente no se cumple. Así las razones de la destrucción o del deterioro son mas complejas en su manejo que una estrategia simplemente educativa. Al lado de estas circunstancias existen otras que también generan cambios en la perspectiva de lo que significaría un trabajo científico y riguroso. Después de la constitución de 1991 el país volvió nuevamente a tener una iniciativa moderna relativa a la necesidad de reconocer que el territorio tiene una historia amplia de diversos grupos étnicos, de etapas de poblamiento que modelaron sus sistemas de percepción (períodos precolombinos), y que fueron construyendo sus peculiaridades esenciales como país. Este ambiente permitió nuevamente reflexionar sobre la cultura nacional y puso de manifiesto que esta no esta simplemente constituida por la influencia colonial. A pesar de estas iniciativas, la tendencia parece hoy simular el proyecto de estudio riguroso, abriendo campo a actividades con tendencias exclusivamente comerciales. Ahora el patrimonio de las culturas precolombinas y con ello el arte rupestre no parece ser un tema vinculado esencialmente a la investigación y la ciencia, sino más bien impulsado a los proyectos turísticos, tendencia que parece coincidir con otras latitudes.

Finalmente, en lo relativo a las posibles propuestas para Unesco, con el propósito de convertir alguno de estos lugares en patrimonio de la humanidad y generar sitios que sean apoyados como patrimonio, es necesario informar que aún no existen las condiciones para que este país tome en serio lo que significaría dedicar fondos y actividades civiles para cuidar debidamente los sitios rupestres. La situación política y la violencia en aumento hacen que durante muchos años los territorios, eventualmente sean sólo pensados para realizar en ellos algunas temporadas de trabajo de registro riguroso, que nunca realmente se ha hecho. Para realizar este tipo de actividades, se requeriría de un apoyo internacional para realizar dichas labores. Habría que solicitar a los grupos en conflicto que permitan acceder a los territorios para realizar por lo menos las primeras labores de registro y documentación sistemática. Finalmente, es política de Gipi impedir masivamente la información de los lugares mientras estos no estén debidamente cuidados como resultado de posibilidades múltiples, tanto de aquellas que abre el estado como de las condiciones reales de los territorios donde se encuentran los yacimientos rupestres, en donde debe estar involucrada esencialmente la comunidad. Primero seria fundamental impulsar la necesidad de la creación en las universidades y en los institutos de cultura, oficiales y privados del tema de la cátedra de arte rupestre, con lo cual se podrían generar diversos ambientes académicos científicos, que aun no existen. Proponer las zonas que están en conflicto como sitios patrimoniales, nacionales o internacionales es hoy apresurado.

1 Perfil de la zona:

En Colombia existen tres de las cuatro modalidades en arte rupestre (pinturas, grabados y arte mobiliario con tradición rupestre). Las referencias sobre arte rupestre corresponden fundamentalmente a aquellas que se encuentran en la zona centro oriental, y a algunas excepciones en la Sierra Nevada (Isaacs J.-1883) en Antioquia (Arcila G.1950), o en la amazonia colombiana. Desde hace algunos años se denunció la presencia de pinturas en algunos sitios del sur oriente del país y estos se han venido ampliando en los últimos diez años (Guayaquerío- Depto. de Guaviare, Chiribiquete—Depto. de Guaviare y Caquetá. También han aparecido nuevas referencias en otros departamentos sobre la presencia de pinturas y grabados (Huila, Tolima Putumayo y Nariño) Aún así, la mayoría de los datos existentes y de los registros rigurosos corresponden al sector centro oriental (Cundinamarca y Boyacá) y estos se han hecho en los últimos treinta años. En general para todo el país no existen trabajos arqueológicos que permitan tener fechas sobre estas manifestaciones rupestres, ni tampoco es posible asignar una etnia o etnias que hayan realizado dichos sistemas de representación, ni existe información sobre el período de poblamiento en el cual dichos motivos rupestres fueron realizados, ni la duración y diseminación de estos en el tiempo como costumbre cultural.

La complejidad de los motivos, las diferencias en sus representaciones permite imaginar la presencia de diversas etnias y de procesos extensos de esta costumbre en el tiempo de su permanencia en el territorio. Lo cierto es que la mayoría de los motivos rupestres denunciados hasta el momento son simplificaciones formales, y muy rara vez aparecen representados animales o formas humanas identificables. Son en todos los casos, estructuras sintéticas, algunas de las cuales, se reiteran en amplios territorios del norte al sur del país (figura cabeza triangular, manos con espirales, espirales).

2 Acoplamiento con otras zonas:

No existen realmente estudios que vinculen las representaciones rupestres con las diversas áreas del país. Sin embargo, se han presentado algunas conjeturas derivadas de analogías formales, que podrían eventualmente derivar en algunos conocimientos sobre arte rupestre. Algunas zonas parecen tener estructuras formales que se divulgaron en amplios territorios. Monos encorvados, cabezas triangulares, figuras raniformes y lagartiformes (ranas y lagartos), manos pintadas, con espirales en las palmas y las cabezas con plumas pintadas, grabadas o presentes en la orfebrería (Reichell Dolmatoff- “Vuelos shamánicos”) y espirales. Lo más factible es que los grupos étnicos precolombinos se trasladaban en amplias regiones y realizaban sus trabajos en roca (pinturas y grabados) en territorios de otras etnias (Ann Osborn) un número de grupos que guardaban relaciones diversas, en un ambiente cultural y ritual desconocido hasta ahora. En el oriente del país (Santander) existen mitos (Uwa-macro-familia lingüística Chibcha) que incluyen amplias áreas del altiplano cundiboyacense (El vuelo de las Tijeretas). Las familias por razones rituales, se desplazan aún hoy, a zonas sagradas a grandes distancias (Sierra Nevada de Santa Marta hasta la laguna de Guatavita en el altiplano cundiboyacense). En general, se podría decir que la etnohistoria, las tradiciones orales investigadas, permiten tener algunas conjeturas que quizás en unos años puedan confirmarse con los trabajos de registro y contextos arqueológicos. Pero aún no se ha hecho un registro riguroso, que permita iniciar el trabajo comparado de las diferentes áreas de Colombia.

3 Sitios conocidos:

Actualmente se tienen referencias de 5899 rocas en 26 departamentos del país, y en lo relativo a los documentos, existen en diversos archivos un número aproximado de 16912 materiales dispersos en diferentes fuentes documentales (dibujos, acuarelas, fotos, gráficas) con distinta calidad y valor documental. La mayoría de estos registros corresponden a zonas en las que se ha trabajado en los últimos 30 años (Caquetá y Cundinamarca).

Los trabajos de Gipri han ampliado significativamente el número de sitios, en los cuales se han ubicado estaciones rupestres. Desde 1970 hasta hoy ha trabajado en el altiplano cundiboyacense, ubicando más de 2500 rocas (42% del total referenciado) con pinturas y grabados en distintos municipios, tanto en lo alrededores de la sabana de Bogotá como en las áreas de tierra caliente. En 1996-2005 se ubicaron y registraron en el municipio de El Colegio 2000 rocas con grabados, talleres de herramientas, cúpulas y metates. Se trata de uno de los sitios mejor documentados del país (fichas de zona, de roca, de conservación, GIS-Arc-View). Estos datos explican porque se incluyen hoy provisionalmente la presencia de 5151 rocas con petroglifos y solamente 712 rocas con pinturas rupestres. Estos datos corresponden únicamente a los archivos actuales y se piensa que si existieran investigaciones habituales en los próximos años, la cantidad de sitios podría aumentar significativamente, tanto en pinturas como en grabados en sólo el departamento de Cundinamarca. Esta situación parece no ser privativa de esta región, sino que también incluye otras zonas que al parecer tienen densidades y concentraciones de yacimientos rupestres semejantes, que aún no han sido investigados.

Es necesario aclarar la diferencia entre sitios conocidos y sitios estudiados. En el primer caso se trata de denuncios sobre su existencia y eventualmente pueden incluir algunas fotos o gráficos de los motivos. Este nivel se contrasta con los trabajos rigurosos y con la descripción detallada de los motivos y su condición actual. En este último nivel, el equipo de Gipri ha desarrollado en años un conjunto de fichas y estrategias metodológicas para realizar una documentación que reconstruye la totalidad de las características del yacimiento. Fichas de salida, formatos para registrar las zonas, fichas de roca, discriminación por grupos pictóricos, detalles de los motivos, fichas de corrección digital, formatos para determinar el estado de conservación de los yacimientos, son parte fundamental del trabajo de registro (Modelo Metodológico- Muñoz, et al -1998 Beca Ministerio de Cultura).

4 Sitios de arte rupestre significativos:

Ante la variedad de etnias y las calidades de los yacimientos rupestres podría ser interesante escoger algunos sitios de diversas regiones y con ello acceder a sistemas de representación variados que permitan entender las calidades de los lenguajes humanos y la variedad en los procedimientos de representación. Así que la propuesta debería ser la de organizar hacia el futuro sitios distintos en Colombia que representen variaciones en los sistemas de representar y con ello, se acceda a pensamientos y lenguajes disímiles, como aporte al estudio de las variaciones del mundo intelectual humano. Muchos sitios podrían ser nominados dentro de un proyecto de herencia mundial. Todos y cada uno de ellos tienen unas características y unas particulares condiciones que deberían ser expuestas. Sin embargo, es posible ahora enunciar algunos sitios que podrían eventualmente convertirse en lugares patrimoniales:

La roca de Sasaima-Cundinamarca; la Piedra de Aipe- Huila; los murales de Pandi-Cundinamarca; algunos yacimientos en El Colegio-Cundinamarca; las pinturas del Guayabero, y Chiribiquete-Guaviare y Caquetá; la Piedra de Saboya y Gámeza en Boyacá; el parque de

Poma en Suacha Cundinamarca, las pinturas del Vínculo y de Panamá en Suacha; los petroglifos del Putumayo; los petroglifos de la Pedrera en Caquetá; las pinturas de Uney-Cundinamarca; los petroglifos de Itagüí- Antioquia, la Piedra de la Risa en San Antonio de Tequendama –Cundinamarca, los talleres de herramientas en Anapoima, El colegio, Viota, los murales de Ramiriquí, las pinturas de Sáchica-Boyacá, entre otros.

5 Documentación:

En 1970 Gipri inicia los trabajos de estudio del arte rupestre. Desde esta misma época se organizaron diversos formatos para sistematizar la información, que lentamente fue creciendo con los hallazgos que mes a mes se producían en el trabajo de campo. Corregir las inadvertencias de los estudios anteriores, organizar bases de datos, registrar sistemáticamente condujo a la formulación de diversas estructuras metodológicas para el registro de las estaciones rupestres. Cartografiar, fotografiar, dibujar sus particularidades y condiciones. En los últimos años no solamente se hacen descripciones de los motivos, sino que igualmente se han diseñado algunas formas para registrar las características y el estado de los murales y su contexto. Con los sistemas de registro usados por el equipo de Colombia los cuales se han venido ajustando (Gipri) se ha podido estabilizar una documentación rigurosa en el proceso de descripción de los yacimientos rupestres

Las zonas trabajadas por GIPRI tienen en resumen los siguientes materiales:

- Cartografía del lugar-(eventualmente aerofotografía de sector)
- Fotografía y material digital de los yacimientos en diferentes épocas
- Fichas de zona y fichas de roca (discriminando los grupos pictóricos)
- Dibujos del yacimiento
- Historia de la investigación (diversas versiones)
- Digitalización de los materiales
- Bases de datos de los municipios y sitios rupestres
- Archivo fotográfico 70.000 fotos.
- Publicación de la revista Rupestre y de modelo metodológico. (Biblioteca Luis Angel Arango Colombia) y publicaciones internacionales.
- Ponencias nacionales e internacionales sobre el tema del registro y los informes sobre zonas estudiadas (altiplano y valles hacia el río Magdalena). Todos estos materiales se encuentran organizados en la sede de Gipri- Bogota
- Estudios sobre arqueoastronomía y alineamientos rupestres en relación a la localización espacial del sitio

6 Investigación:

Desafortunadamente la poca atención al tema no ha permitido que la comunidad universitaria dedique el tiempo al estudio del lenguaje, el pensamiento y los sistemas de representación precolombinos presentes en los murales rupestres. Esto explica porque no existen trabajos de arqueólogos que se ocupen de diversos aspectos. En la actualidad una buena parte del tiempo se dedica al trabajo de búsqueda y documentación. Las investigaciones actuales que realiza GIPRI se hacen en una zona fundamentalmente, en la cual ya no existen comunidades indígenas, como tal (altiplano-Cundinamarca-Boyacá). Son zonas de campesinos que poseen aun algunos elementos en sus sistemas de percepción relativos a los sitios sagrados, historias de miedo, recetas de cocina autóctonas, practicas médicas tradicionales, objetos y prácticas antiguas, algunas que parecen tener sus raíces en las tradiciones precolombinas Muisca,

Panches y Pijaos (altiplano, departamento de Cundinamarca, Huila y Tolima). En este aspecto el equipo de Gipri ha diseñado unas fichas de tradición oral, con el propósito de rodear con estas tradiciones estéticas y abordar el pensamiento y el lenguaje.

Existen otras investigaciones en áreas donde aun existen grupos étnicos. Allí se han realizado algunos trabajos con las comunidades en relación al tema de rito, mito y petroglifo (Urbina).

Los estudios de arte rupestre en general en Colombia intentan encontrar en los archivos (AGN) y en los trabajos publicados de los cronistas algunos elementos para ubicar su sentido y función cultural. Sin embargo, estas investigaciones de estos materiales resultan problemáticas por la visión implícita de los autores (cronistas españoles) y por la censura que estos documentos siempre tuvieron. Con los elementos de estos materiales problemáticos el equipo realiza una reflexión sobre la historia del tema en Colombia.

7 Protección:

Existe una ley general de patrimonio, pero fundamentalmente incluye excavaciones y estatuaría. No tiene aplicación para los documentos rupestres pues el estado no ha dedicado en los últimos años más que algunas expediciones al reconocimiento superficial de sitios que ya en la historia del tema habían sido denunciados. No existen disposiciones legales para el arte rupestre con las precisiones necesarias, y ni el estado tiene la experiencia necesaria sobre el tema y los organismos asesores no tienen la formación adecuada. Bastaría con ver el arte rupestre de San Agustín en el Huila para entender la formulación aquí expuesta. A pesar de que este sector del país ha sido determinado como patrimonio de la humanidad, la presencia de los petroglifos en el lugar no tiene la misma atención que la estatuaría y los materiales arqueológicos asociados a esta. Hasta la fecha no existen planes de manejo sobre zonas de arte rupestre. Lo que si parece promoverse es un conjunto de proyectos de ecoturismo, que en la mayoría de los casos se adelantan sin investigación.

8 Conservación:

No existen experiencias en la conservación del arte rupestre. El único procedimiento usado es impedir que la comunidad tenga información precisa para acceder a los sitios, mientras no se planifiquen políticas de cuidado de los yacimientos rupestres. Sin embargo algunos organismos del estado han venido promoviendo la necesidad de que el país conozca los sitios. Este conflicto entre los grupos de investigación y las políticas estatales han generado algunas reservas por los métodos utilizados por el ICANH (tizado de petroglifos) y por la publicación para el acceso a los sitios rupestres, sin que existe previamente una forma estudiada de protegerlos.

En los aspectos científicos relativos a los estudios que permitan realizar estrategias de conservación Gipri ha desarrollado unas fichas de evaluación del deterioro y alteraciones, con las cuales puede describir gráficamente las condiciones actuales de los murales y de sus contextos (Bednarik 2001- Rock Art Science) *"The principle of micro-geomorphic mapping of rock art panels is simple: whereas traditional recordings are almost universally limited to the perceived rock art motifs, Soleilhac and Muñoz include also information on other features of the rock panel, such as areas of exfoliation, lichen presence, taphonomic rock markings, patination, mineral accretions and salt efflorescence"* (Bednarik 2001)

Estas fichas permiten visualizar el estado de los yacimientos y además de describir los motivos rupestres permiten observar discriminados aspectos diversos de sus condiciones. Trabajos de

digitalización y manipulación digital han permitido observar diversos temas y problemas de descripción de las condiciones del arte rupestre en algunas zonas de estudio. *"The benefits of this cartography are not limited to those for the scientist, who is likely to refer to such micro-topographical information for a variety of analytical reasons, they are also of great significance to issues of rock art conservation. Indeed, in the latter area it seems self evident that this form of recording is essential. The neglect hitherto of such an important tool of rock art research is symptomatic of a field dominated by nonscientific, humanistic preoccupations, such as what is depicted and why. It is part of the general pattern that has led to the shortage of empirical information about rock art, and the abundance of meaningless claims about meaning".* (Bednarik 2001).

9 Manejo:

No existen experiencias, ni políticas de manejo sobre las zonas rupestres. En los últimos tres años se han realizado algunos trabajos de limpieza de graffitis en el parque arqueológico de Facatativa (Icanh). Sin embargo, resulta complicado el manejo de dicho parque pues hasta hoy es un sitio de diversiones (camping) y no se tienen los fondos ni las ideas claras para evitar su deterioro. Todos los demás sitios en las cercanías de las poblaciones han sido dejados allí sin protección y han sido alterados y algunos dañados definitivamente (Bojacá, Suacha, Suesca, Aipe). Los mismos organismos del estado Icanh han sido criticados por el uso de técnicas invasivas, inadecuadas en el registro (uso de tiza) y resaltar los trazos de los petroglifos.

Muchos sitios de arte rupestre están amenazados o destruidos por la invasión de la población desplazada que ha venido llegando a los sitios periféricos de las ciudades, allí donde eventualmente habían zonas rupestres y que estaban relativamente protegidas. Huecos en las rocas y en el piso, letreros con esmalte y con vinilos, son entre otras las alteraciones, que sufren dichos yacimientos, cuando no su destrucción total.

Una de las razones por las cuales estos daños son severos se debe al desconocimiento del tema en la historia nacional. Por muchos años las políticas coloniales demonizaron los sitios y en la época de la república se continuaron estas ideas que querían que lo indígena se olvidara. No existen en las universidades y centros de cultura oficiales y privados ni idea del número de sitios y la importancia cultural del tema: no existe una cátedra de arte rupestre que permita educar a los profesionales de la arqueología en el tema y tampoco se han acompañado a los investigadores para que continúen habitualmente con este trabajo y se genere una tradición.

Conclusiones:

El trabajo presentado en este informe puede considerarse como una información relativa al **diez por ciento (10%)** del conjunto complejo de zonas y una muestra mínima de las diferencias formales del arte rupestre en todo el país. El esfuerzo privado de Gipri en la colección de diversos materiales por más de 35 años resulta interesante pero no suficiente si se pudieran impulsar aun más las labores de registro. Al buscar zonas rupestres el equipo ha venido encontrando además un conjunto de sitios arqueológicos que corresponden a talleres de artefactos. Sitios donde las comunidades precolombinas y probablemente campesinas del periodo colonial construían diversas herramientas. Algunas prospecciones en otros sitios (departamentos) han demostrado una altísima densidad de sitios en pinturas, grabados y talleres que no han sido aun reseñados rigurosamente.

Los intentos por descubrir el estado de conservación de los sitios y realizar una descripción rigurosa es contrastado por el olvido y el descuido en que estas zonas se encuentran. Hasta hace unos pocos años los organismos del estado se han percatado del tema y, derivado de algunas presiones, se han visto en la tarea de iniciar algunos trabajos. Sus inexperiencias han dado como resultado un conjunto de debates internacionales (Icanh y Gipri Colombia –Rock Art Research 2005) lo que muestra que el tema del arte rupestre es aún ajeno a los organismos oficiales.

Algunas zonas deterioradas deberían tener la colaboración de asesores internacionales que permitieran salvar o disminuir el impacto de la destrucción definitiva.

Es urgente sensibilizar a la comunidad internacional y demandar a los organismos de la cultura nacional que:

- Se impulse la cátedra de arte rupestre en las universidades organizada por las autoridades académico científicas, con apoyo internacional
- Se generen políticas para el registro y estudio riguroso del arte rupestre.
- Se realicen evaluaciones rigurosas sobre el estado de conservación de las zonas en peligro.
- Se organicen secciones del territorio (parques –zonas de reserva) y se busque organizar diversas estrategias con la comunidad, para la administración de los sitios rupestres.
- Se trabaje conjuntamente con las universidades para estudiar la arqueología de los sitios y así se puedan completar los estudios con el acceso a fechas por la datación directa de los pigmentos en las pictografías (C.14 Plasma)
- Se organicen equipos internacionales (Icomos Car (Comite Arte Rupestre), Ifrao) de investigación que den apoyo y cooperación para continuar con los trabajos realizados hasta hoy.
- Se organice la cátedra de arte rupestre con el objetivo de formar universitariamente a los estudiantes para formar investigadores del tema.
- Se organicen fondos para apoyar equipos que estén entrenados e interesados en el estudio del arte rupestre colombiano.
- Se organicen lentamente en las universidades y en las casas de la cultura de la provincia (municipios), museos y exposiciones sobre las particularidades del arte rupestre de cada región. El proyecto sería introducir el tema, formar investigadores y generar investigaciones y trabajos de divulgación sobre la variedad del arte rupestre colombiano. Este manejo podría llevarse hacia la creación de espacios que al futuro se puedan convertir eventualmente en sitios patrimoniales para la Humanidad.

La mayor amenaza que sufre el arte rupestre es la relativa al deterioro que producen los mismos habitantes y ocasionalmente algunos investigadores, cuando realizan pruebas que deterioran los sitios. Sin embargo, existen ejemplos de empresas mineras que han venido deteriorando algunos sitios (Tunja-Boyacá, Suacha- Cundinamarca, Sáchica-Boyacá). Otra de las mayores amenazas actuales es la tendencia a convertir las zonas en sitios turísticos con el apoyo de diversas entidades que no parecen entender la necesidad de cuidar los sitios, de realizar investigaciones rigurosas y de realizar un manejo discreto para proteger hacia el futuro la presencia en las diversas provincias que tienen arte rupestre. Este tema es visto como una curiosidad de cada zona y convertido en lugar de visitas, sin que exista administración de los yacimientos ni ninguna idea sobre la necesidad de su protección.

Recomendaciones para futuro

Se recomienda que los institutos y las organizaciones internacionales estén atentos a los desarrollos del tema en Colombia y puedan apoyar y cooperar con iniciativas que estén interesadas en hacer un trabajo científico sobre este objeto patrimonial.

Facilitar en lo posible las publicaciones, exposiciones y trabajos producidos para que se sensibilice nacional e internacionalmente el tema. La revista *Rupestre: arte rupestre en Colombia* estaría interesada en recibir apoyo para continuar con sus trabajos, ya que lo hace con fondos propios bastante escasos.

Potencial de la zona para inscribir sitios en la lista del Patrimonio Mundial

Todos los sitios podrían eventualmente convertirse en lugares de la lista del Patrimonio Mundial, pero existen algunos preferenciales que podrían ser enunciados. La roca de Sasaima, la Piedra de Aipe, los murales de Pandi, algunos yacimientos en El Colegio Cundinamarca, las pinturas del Guayabero, y Chiribiquete, la Piedra de Saboya y Gámeza, el parque de Poma en Suacha, los petroglifos del Putumayo, los Petroglifos de la Pedrera en Caquetá, las pinturas de Une, los petroglifos de Itagui- Antioquia, la Piedra de la Risa en San Antonio de Tequendama – Cundinamarca, los talleres de herramientas en Anapoima, El colegio, Viota, los murales de Ramiriquí, las pinturas de Sáchica-Boyacá, entre otros.

Sin embargo, tendrían que tenerse en cuenta las condiciones actuales de un país en guerra que fundamentalmente destina sus fondos para estos oficios y que muy poco valor le da a los yacimientos precolombinos rupestres, que difícilmente aparecen en la historia y que escasamente son mostrados por algunos investigadores en un ambiente excéntrico de la universidad y la discusión cultural.

Bibliografía

ARCILA VÉLEZ, Graciliano. *Estudio Preliminar de la Cultura Rupestre en Antioquia: Támesis*. En: Boletín de Instituto de Antropología. Universidad de Antioquia. Medellín, Vol 2, No 5, p 5-23, Septiembre de 1956.

Introducción al estudio arqueológico de los Titiribies y Sinufanas. En: Boletín de Antropología, Vol. III, No 11, 1969, Medellín. Págs. 13 — 42.

Valparaiso y sus aspectos étnicos. Repertorio Histórico de la Academia Antioqueña de Historia. Vol. XIX, No 175 — 177, Junio 1953, Medellín. Págs. 573 – 579

La silla del cacique en el santuario del Cerro Tusa. En: Revista Universidad de Antioquia. Tomo II, No 8, abril 1936.

"*El coloso de Cerro Tusa*". En: Revista Universidad de Antioquia. Tomo II, No 7. Marzo de 1936. Página 57 de 59 arte rupestre petroglifos Támesis Antioquia Colombia

El ara o altar de los sacrificios en Cerro Tusa. En: Revista Universidad de Antioquia, No 5 — 6. Octubre — Noviembre de 1935.

BECERRA, José Virgilio, 1990. *Arte rupestre precolombino. Pinturas rupestres del departamento de Boyacá, Colombia*. Municipios de Turmequé, Ventaquemada, Samacá y Nuevo Colón. Fundación de investigaciones arqueológicas del banco de la república. Bogotá.

BISCHLER, Helena & PINTO, Polidoro, 1959, "Pinturas y grabados rupestres en la Serranía de la Macarena", en Revista Lámpara, vol. VI, #31, Págs. 14-15, Esso Colombiana, Bogotá.

CABRERA ORTIZ, Wenceslao. *Monumentos Rupestres de Colombia*. Cuaderno Primero: Generalidades. *Algunos Conjuntos Pictóricos de Cundinamarca*. Bogotá, Revista Colombiana de Antropología. Imprenta Nacional. Vol. 14.

-*Pictógrafos y Petroglifos*. Tomo II. Boletín de Arqueología. Bogotá, 1946.

CASTAÑO, Carlos y VAN Der HAMMEN, Thomas. *Parque Nacional: Chiribiquete, La peregrinación de los jaguares*. Ministerio del Medio Ambiente, Bogotá, 1998.

CHONTO (Lleras y Vargas), 1976. *Las piedras pintadas de Facatativa: Estudio detallado de dos zonas*. Museo arqueológico del banco popular: Casa del marques de San Jorge. Concurso público para estudio sobre arqueología colombiana. Sin publicar. Bogotá.

GIPRI, Grupo de Investigación de la Pintura Rupestre Indígena:

GONZÁLEZ, Yaneth. *Zona del Tequendama. Transición entre pictografías y petroglifos. Avances de la investigación*. Revista Rupestre, Arte Rupestre en Colombia, No. 3, julio, 2000.

RODRIGUEZ, Carlos. -Los Petroglifos Del Municipio Del Colegio: Modelo Sistemático De Registro. Rupestre, Arte Rupestre en Colombia, No. 2, agosto, 1998.

TRUJILLO, Judith. *Aportes De La Tradición Oral En El Estudio Del Arte Rupestre Del Altiplano Cundiboyacense Colombianos*. Rupestre, Arte Rupestre en Colombia, No. 2, agosto, 1998.

MARRINER, Harry. Rock Artists and skywatchers in ancient Colombia. Bogotá, septiembre 1998.

Petroglifos: Una Breve Comparación De Tres Sitios. Revista Rupestre, Arte Rupestre en Colombia, Año 2, No 2, agosto, 1998.

Sitios con arte rupestre en el Valle de Subachoque. Revista Rupestre, Arte Rupestre en Colombia, No. 3, julio, 2000.

GIRÓN, Lázaro Maria. *Las piedras grabadas de Chinauta y Anacutá. Informe del Auxiliar de la Subcomisión 3a de las Exposiciones de Madrid y Chicago*, Imprenta de Antonio Silvestre, Bogotá, 1892.

ISAACS, Jorge. *Las Tribus Indígenas del Magdalena*. Sol y Luna, Bogotá, 1967.

KOCH-GRÜNBERG, Theodor. *Anfänge der Kunst im Urwald (Comienzos del arte en la selva)*, Berlín. 1905.

–1907, *Südamerikanische Feizeichnungen (Petroglifos suramericanos)*, Berlín.

–1995, *Dos años entre los indios*, 2 vols., Universidad Nacional de Colombia, Bogotá.

MASON J. Alden: *Archaeology of Santa Marta Colombia The Tairona Culture*. Part I and II. Field Museum of Natural History de Chicago U.S.A, 1931.

MONTOYA, Inés Elvira. *El Arte Rupestre en la Zona de Suacha y su relación con la Cerámica y la Orfebrería Muisca*. Tesis .Uniandes, Bogotá, 1974.

MUÑOZ, Guillermo. *Rescatan 1.000 Dibujos Chibchas*. Rev. Cromos 1980.

-*Historia de la Investigación del Arte Rupestre en Colombia* (Altiplano Cundiboyacense 1a. versión), Congreso de Americanistas, Bogotá, 1985.

-*GIPRI y la Investigación del Arte Rupestre* (Propuesta Metodológica), Congreso de Americanistas, Bogotá, 1985.

-*El Petroglifo en el Altiplano Cundiboyacense* 46 Congreso Internacional de Americanistas, Holanda Amsterdam, 1988.

-*Estado Actual de las Investigaciones en el Altiplano Cundiboyacense*. Simposio Administración del Patrimonio Arqueológico, Tema V. WAC 2, Venezuela, 1990

-*Estructura Cultural de Conservación del Arte Rupestre en el Altiplano Cundiboyacense*. Tercer Simposio Internacional de Arte Rupestre. Santa Cruz de la Sierra Bolivia, 1991.

-*La Piedra de la Risa, la fiesta y las ofrendas*. Rupestre, Arte Rupestre en Colombia, No. 2, agosto, 1998.

-*Covadonga: Primera Expedición Colombo-Francesa*. Revista Rupestre, Arte Rupestre en Colombia, No. 3, julio, 2000.

MURIEL, Carlos. "Zona arqueológica y zona antropológica del río Vides", en |Revista Putumayo, No 1, pp. 50-3, Ed. Gobernación Departamental, Mocoa. 1993.

OÆNEIL, Mary Sills Alice. *The Cultural Context of Prehistoric Rock Art in Western. Cundinamarca Colombia*. Tesis California University, E.U. 1973.

ORTIZ, Francisco. *Rocas y petroglifos del guainía*. Revista Rupestre, Arte Rupestre en Colombia, No. 3, julio, 2000.

PRADILLA, Helena. *Moyas y Piedras Pintadas Tras del Alto, Tunja Boyacá*. Proyecto Arte Rupestre en Boyacá: Río la Vega-Farfacá- Sectorización e inventario de 62 pictografías y moyas, 1995; Registro Gráfico, 1997; Registro Gráfico y fotográfico del sector E, 1998. Revista Rupestre, Arte Rupestre en Colombia, No. 3, julio, 2000.

PÉREZ de BARRADAS José. -*El Arte Rupestre en Colombia*. Instituto Bernardino de Sahagún, Consejo Superior de Investigaciones Científicas, Madrid, 1941.

PINTO T, Héctor; ACEVEDO T, Álvaro y PINTO M. Oscar. *Arte rupestre Guane en la mesa de los Santos*. Alcaldía Municipal de Floridablanca, Bucaramanga, 1994.

REICHEL, Elizabeth, 1977, "Levantamiento de los petroglifos del río Caquetá entre La Pedrera y Aracuará, en Revista Colombiana de Antropología, Vol. XIX, Instituto Colombiano de Antropología, Bogotá.

- REICHEL-DOLMATOFF, Gerardo. "Rock-Paintings of the Vaupes: An Essay of Interpretation", en Folklore Americas, Separata, Vol. XX VIII, No. 2, junio, Los Ángeles. 1967.
Desana. Simbolismo de los Indios Tukano del Vaupés, Ed. Universidad de los Andes, Bogotá 1968.
Beyond the milky way. Hallucinatory Imagery of the Tukano Indians, Ed. University of California, Los Angeles. 1978a.
Orfebrería y Chamanismo. Museo del Oro. Editorial Colina, Primera edición, Medellín, 1988.
- RENDÓN, Guillermo, GELEMUR DE RENDÓN. Anielka. *Tunebia, Reserva Ecológica y Cultural*. Universidad Pedagógica y Tecnológica de Colombia, 1972.
-Samoga. Enigma y desciframiento. Centro Editorial Universidad de Caldas, julio, 1998.
- RIVET PAUL. *Pétroglyphes et Antiquités Colombiennes*. Journal de la Société des Americanistes Tome XXI París, 1929.
- SCHINDLER, HELMUT, "Petroglifos en el río Apaporis, Colombia", Actas del Congreso Internacional de Americanistas, 42 (IXB): 271-275. 1976
- SILVA CELIS, Eliécer. *Pintura Rupestre Precolombina de Sáchica*. Valle del Leiva. Bogotá, Revista Colombiana de Antropología, Vol. 10, 1961.
Arqueología y Prehistoria de Colombia, Ed. Prensas de la Universidad Pedagógica y Tecnológica de Colombia, Tunja. 1968.
- SOTOMAYOR CAMACHO, María Lucia; URIBE ALARCON, María Victoria 1987 *Estatuaria del macizo colombiano*. Bogotá. Instituto Colombiano de Antropología. ARQUEOLOGIA. ESTATUARIA GRUPO PREHISPANICO. MACIZO
- TASTELVIN. *Les petroglyphes de la Pedrera, Río Caquetá, Colombia*. Journal de la Société des Americanistes Tome XV, Paris, 1923.
- TOVAR Arnold. Et al. *Petroglifos del Huila*. En Opa. Instituto Huilense de Cultura. Neiva 1994.
- TRIANA, Miguel. *La Civilización Chibcha*. Escuela Tipográfica. Primera edición, Bogotá. 1922.
-EL Jeroglífico Chibcha., Banco. Popular Bogotá, 1970.
- URBINA RANGEL Fernando. *Amazonia: naturaleza y cultura*, Ed. Banco de Occidente, Bogotá. 1986.
La serpiente y el hombre. Mitos y petroglifos en el río Caquetá, en *Arte indígena en Colombia*, pp. 124-45, Bitzoc, Palma de Mallorca. 1992.
Mitos y petroglifos en el río Caquetá. en *Boletín del Museo del Oro* No. 30, pp. 2-40, Banco de la República, Bogotá, 1993.
Mito, Rito y Petroglifo a propósito del arte rupestre en el río Caquetá, Amazonía Colombiana. Revista Rupestre, Arte Rupestre en Colombia, No. 3, julio, 2000.
Arte rupestre en Colombia. Exposición itinerante, Banco de la República, Seccional Pereira. 1992
- URBINA Rafael A. y DUARTE Herminia. *Las mesitas del Colegio de nuestra Señora del Rosario de Calandaima*. Fotomecánica industrial Ltda. 1989.

Ilustraciones

01. Mapa Arte rupestre Colombia

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ANNEX III

Zona 5: Oeste y suroeste de Sudamérica: Chile, Argentina y Uruguay

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1 Perfil de la Zona:

La zona 5 es extremadamente rica en sitios con arte rupestre en sus distintas manifestaciones: pinturas o pictografías, grabados o petroglifos, grabados-pinturas, estructuras de piedra de colores y geoglifos (estos últimos registrados en el Norte Grande chileno y excepcionalmente en el Noroeste argentino). La gran mayoría son sitios al aire libre y utilizan principalmente como soporte aleros rocosos de poco reparo, bloques, basamentos rocosos, laderas de montañas (geoglifos chilenos). Los sitios en cuevas son menos numerosos y, a pesar de ser sitios bajo roca, estos son poco profundos y sólo en casos excepcionales dejan de recibir luz solar.

Apuntando a los fines de un informe muy general- que tiene como objetivo elaborar un panorama sintético del arte rupestre de América Latina y el Caribe- la Zona 5 (oeste y suroeste de Sudamérica; Chile, Argentina, Uruguay) puede ser seccionada en tres grandes áreas: a- Área Andina, b- Área Pampa-Patagonia y c- Área Cuenca del Río de la Plata. Estas amplias divisiones presentan condiciones geográficas y aspectos culturales semejantes a muy grandes rasgos. Estas similitudes se traducen en componentes de arte rupestre con características comunes y específicas para cada área que se expresan en los tipos de representaciones, temas abordados, técnicas utilizadas y soportes seleccionados, entre otros aspectos.

La práctica del arte rupestre por parte de los pueblos originarios en esta porción del Cono Sur sudamericano es una tradición de gran antigüedad. La secuencia temporal arranca más allá de los 10.000 años antes del presente, continúa prácticamente sin interrupciones hasta que tiene una abrupta decadencia a partir del período de contacto hispano-indígena que se produce a comienzos del siglo XVI. A pesar de este colapso, la expresión de arte rupestre continúa en algunas subáreas hasta tiempos recientes si bien con largos períodos de abandono. En las áreas Pampa-Patagonia y Andina la producción de pinturas y grabados prosigue hasta los siglos XVIII-XIX y mediados del XX, respectivamente. A pesar de los cambios producidos el arte rupestre mantiene hasta el final su raigambre indígena, si bien son notables los aportes de los grupos criollos durante la última etapa. Actualmente algunas comunidades indígenas y no indígenas que habitan la Zona 5 se vinculan levemente con los sitios con arte rupestre. Las ofrendas depositadas en algunos de los soportes rocosos o los enterratorios modernos de seres humanos y animales en las proximidades de algunos sitios manifiestan que muchos de éstos continúan siendo percibidos como lugares sagrados por miembros de las comunidades locales.

Las características generales de las áreas de la Zona 5 son: (fig. 1)

a-el *Área Andina*: corresponde al sector de los Andes Centro-Sur que comprende la mitad norte de Chile (Norte Grande, Norte Chico y Chile Central) y el Noroeste. Se incluye también la región Centro-Oeste de la Argentina. Las investigaciones arqueológicas, que sustentan la posibilidad de asignar cronológica y culturalmente a las manifestaciones de arte rupestre, han permitido reconstruir diez milenios de creación de esta manifestación. Se reconoce un primer momento durante el cual los grupos de cazadores y recolectores que se movilizaban a lo largo y ancho de la Cordillera de los Andes, entre la desértica costa chilena hasta las yungas o selva tucumano-salteña hacia el oriente del Área, ejecutaron las primeras pinturas de tipo geométrico simple en pequeños aleros y cuevas. Milenios más tarde, los grupos de agropastoriles andinos, con énfasis en la cría de llamas, continúan con la tradición rupestre incorporando la figura de este animal en sus repertorios temáticos. En los momentos más tardíos se ejecutan los grandes geoglifos a lo largo de los principales valles del Norte Grande chileno como una manifestación de los circuitos caravaneros realizados con el apoyo de la llama como animal de carga. Hacia mediados del siglo XV se expande el imperio incaico por el Área cuyo centro geopolítico se localizaba en el Cuzco (Perú). A partir de este ingreso se produce una disminución considerable en la producción de las manifestaciones rupestres. Esta decadencia se acentúa durante el período inmediatamente posterior que se corresponde con la conquista y colonización del Área por parte de la cultura hispana. La producción del arte rupestre tiene un breve resurgimiento (fines del siglo XIX hasta mediados del XX) relacionada con la actividad del arreo de vacunos en el Noroeste y Centro-Oeste de la Argentina y, tal vez, en el Norte de Chile. Existe información etnohistórica acerca de la producción de arte rupestre (informe García, en Podestá 2003). Posteriormente se produce el cese de la producción de esta expresión simbólica.

En varias regiones del Área Andina se han definido secuencias de arte rupestre que cubren amplios periodos. Como ejemplos notables se encuentran: la secuencia de arte rupestre de Inca Cueva (Quebrada de Humahuaca, Jujuy, Argentina), de Antofagasta de la Sierra (Las Parinas, Catamarca, Argentina), de las Sierras de Arica, del Alto río Loa (Chile), entre otras (Podestá et al. 2005a, Berenguer 2004, Mostny y Niemeyer 1983, Schobinger y Gradin 1985, Schobinger y Strecker 2001).

b-el *Área Pampa-Patagonia*: en esta se incluyen la Patagonia y la Pampa. La primera comprende la porción sur de la Argentina y de Chile, al sur de los ríos Colorado y Bío Bío y las amplias llanuras (“pampas”) de la Argentina. La Patagonia tiene como eje la Cordillera de los Andes con ambientes lacustres rodeados de bosques (Bosque Andino Patagónico) y selvas (Selva Valdiviana). Hacia el oriente de la cordillera se extiende una amplia meseta semidesértica con vegetación de estepa que alcanza las costas del Océano Atlántico. Por el Oeste la Patagonia está delimitada por el Océano Pacífico. En la Isla de Tierra del Fuego (Chile y Argentina), último confín del continente americano, no se han registrado expresiones de arte rupestre. La región pampeana (Pampa Húmeda y Pampa Seca), por su parte, abarca principalmente las provincias de La Pampa y Buenos Aires (Argentina). Se trata de un ambiente de llanuras que se encuentra surcado por algunos cordones montañosos de baja altura. Comprende un sector amplio del litoral atlántico.

Las primeras evidencias del poblamiento humano del área superan los 12.000 años y la producción del arte rupestre se remonta a más de 10.000 en la Meseta Central santacruceña (s/Paunero) (Podestá et al. 2005b). La subsistencia durante ese largo período está basada en la caza y la recolección, siendo el guanaco la presa principal de estos grupos.

Al igual que en el Área Andina, se han definido varias secuencias de arte rupestre bien sustentadas científicamente. Entre ellas se encuentran la secuencia del río Pinturas (provincia de Santa Cruz, Argentina) que tiene a Cueva de las Manos (sitio declarado Patrimonio Mundial por la UNESCO) como el más importante exponente, la secuencia de La María (meseta central santacruceña, Argentina), la de río Chico (Chile), entre otras.

c- *Cuenca del Río de la Plata*¹: incluye el Uruguay en su totalidad y el área del Nordeste de la Argentina. Se extiende hacia el norte por territorio brasileño. El Área comprende las zonas bajas bañadas por la gran red de afluentes del Río de la Plata, entre ellos los más importantes son los ríos Paraná y Uruguay. Mientras que la zona al oriente del río Uruguay (corresponde al territorio de Uruguay) concentra una cantidad relevante de sitios con arte rupestre, la situada al occidente del mismo río (región del Nordeste argentino), salvando contadas excepciones, no posee sitios con expresiones rupestres. Esta ausencia se explica por la falta de soportes rocosos para su ejecución. La antigüedad reconocida para la ejecución de los primeros conjuntos de grabados de tipo geométrico en el área del Noroeste de Uruguay, es de 8 o 9,000 años antes del presente. Para las pinturas se reconoce una antigüedad entre 3, 000 y 600 años (Consens 2000 y 2002). Parte de esta cronología está basada en estimaciones y debería ser sustentada en trabajos arqueológicos sistemáticos.

Otros: La isla de Rapa Nui (Isla de Pascua), aislada en el Océano Pacífico, a 3,850 kilómetros de la costa de Chile (jurisdicción chilena), posee un importante acervo de arte rupestre.

1.1- Relaciones con otras áreas:

Las tres áreas se hallan estrechamente conectadas con áreas vecinas. El Área Andina está íntimamente relacionada con la Zona 4 que comprende gran parte de la denominada Área Andina Central. Por su parte el arte rupestre de Uruguay (Área Cuenca del Río de la Plata) se enlaza con sitios del sur del Brasil (Zona 3).

Rapa Nui (Isla de Pascua) tiene una clara conexión con el arte rupestre de la Polinesia (Lee 1992).

2 Sitios conocidos:

Según se adelantó, la Zona 5, conserva un patrimonio sumamente rico y variado de arte rupestre. Un trabajo de documentación realizado en la Argentina contabiliza 1.500 sitios en 1985 (Renard 1988) (ver más detalles en acápite 3). De las tres áreas, la Andina y Pampa-Patagonia se destacan en cuanto a la cantidad de sitios con arte rupestre.

A continuación se presenta una lista de las principales regiones con concentración de sitios con arte rupestre según su localización en las áreas propuestas y país correspondiente. Debe considerarse que en cada una de estas regiones pueden existir desde decenas hasta cientos de sitios con pinturas o grabados sobre roca. Se citan, además, algunos de los sitios más destacados de cada región así como también algunos de los estilos definidos dentro de ellas.

En el listado se indica, además, si los sitios se hallan nominados por alguna/s de las siguientes categorías:

- 1: si es un sitio incluido en la Lista del Patrimonio Mundial/UNESCO (WHS).

¹ Esta denominación ha sido tomada de Consens 1998 con modificaciones ya que no se incluye en ella la región pampeana.

- 2: si se trata de sitios de gran importancia que ya han sido propuestos para integrar la Lista del Patrimonio Mundial, es decir que ya se encuentran en la Lista Indicativa (WHTLa), o que pueden ser considerados en un futuro próximo para ser declarados sitios del Patrimonio Mundial, es decir que ya se encuentran en la Lista Indicativa. En otras palabras son sitios con potencial para justificar un valor “excepcional” (OUV) en términos del Patrimonio Mundial) (WHTLb).
- 3: si son sitios que probablemente no serán considerados para la Lista del Patrimonio Mundial pero que han sido declarados Patrimonio Nacional (NHa) o que pueden ser registrados de esta manera en un futuro próximo (NHb) (Loubser 2001, ver informe Zona 4 de M. Strecker).

2. a- *Area Andina*: (las regiones y los sitios se mencionan de norte a sur)

CHILE:

Regiones y Sitios con arte rupestre del Norte Grande: (desde el límite con Perú, 17° - 27° latitud sur)

Valle del río Lluta

Valle del Río Azapa

Valle del Río Camarones

Quebrada de Tiliviche

Quebrada de Tarapacá: se destaca geoglifo de Cerro Unitas.

Quebrada de Guatacondo (oasis de Tamentica) y Quebrada de Mani.

Pampa del Tamarugal. Se destaca el conjunto de sitios denominado “Pintados” o “Cerros Pintados” (NH)

Valle del río Loa y río Salado (región de Antofagasta). Se destaca la localidad “Taira”. En 2005 se ha propuesto la región Toconce-Ayquina (cuenca del río Salado) para su inclusión a WHTLa que comprende una gran cantidad de sitios con arte rupestre (informe de Gallardo y Castro en Museo de Arte Precolombino 1999).

San Pedro de Atacama (WHTLa)

Quebrada del Médano

Localidad Las Lizas

Regiones con arte rupestre del Norte Chico (entre 27° y 32° latitud sur):

Quebrada El Encanto (se destaca Estilo Limarí)

Río Elqui

Río Grande y Río Limarí (incluye el estilo Limarí). Se destaca el conjunto de arte rupestre de Mialqui

Región de Combarbalá

Valle del Río Hurtado

Río Illapel.

Río Choapa

Regiones con arte rupestre en Chile Central: (32° -39° latitud sur)

Río Aconcagua- Valle del Putaendo (Estilo Río Aconcagua).

Valle río Guaiquivilo (Estilo Guaiquivilo)

Río Achibueno

ARGENTINA:

Regiones y Sitios con arte rupestre del Noroeste y Centro-Oeste de la Argentina:

Yavi

Quebrada de Humahuaca (WHS), en la zona de influencia se destaca la secuencia estilística de la quebrada de Inca Cueva. Otros sitios: región Pintosca: Abrigo de los Emplumados y Alero de las Circunferencias; Coctaca, Cerro Negro; Los Pintados de Sapagua; Hornaditas, otros.

Parque Nacional Los Cardones

Valle del Cajón.

Antofagasta de la Sierra y Laguna Blanca. Se destaca la secuencia estilística de Antofagasta de la Sierra. Uno de los sitios, Campo de las Tobas, se categoriza (NHa). Ambas regiones se encuentran dentro del área Las Parinas (WHTLa).

Cerro Pintado (localidad de Las Juntas, Guachipas) (NHa) (WHTLb)

Quebrada del Toro. Se destaca el arte rupestre de Tastil.

Valle Calchaquí (WHTLa):

Región de Fiambalá: se destaca sitio Guanchincito

Área Villa Castelli-Vinchina.

Palancho o Paluque (NHb)

Ischigualasto/Talampaya National Park (NHa) (both WHS) (nominated under “natural criteria” with many rock art sites).

Sierra de Ancasti (WHTLb) (Estilo La Tunita)

Área Famatina-Campana

Cerro Colorado (NHa)

Guasapampa

Sierra de Comechingones

El Tundúqueral

Cordillera de Ansilta

Payunia

Chile/Argentina: “Qhapaq Ñan” (WHTLa), incluye sitios con arte rupestre tanto en su área de influencia directa como en su área de amortiguación.

2. b- Área Pampa-Patagonia:

CHILE:

corresponde a la Patagonia chilena (entre 39° y 55° latitud sur)

El “Arte Rupestre de la Patagonia Chilena” se halla incluido en la Lista Indicativa (WHTLa). Comprende dos regiones principales con una gran concentración de sitios: Región de Aysén (incluye el Estilo Río Chico) y Región de Magallanes: abarca los sectores Última Esperanza y Pali-Aike. La Cueva Fell con ocupaciones humanas datadas en 11.000 años de antigüedad presenta pinturas en rojo. Esta cueva junto con la de Pali Aike ha sido incluida en la Lista Indicativa (WHTLa).

ARGENTINA:

Sierras de Tandilia y Ventania

Sierra de Lihue Calel

Quehue

Chosmalal

Área Piedra del Águila
 Colomichicó
 Lagos Aluminé, Lacar, Traful, Nahuel Huapi
 Región Pilcaniyeu
 Río Manso inferior
 Comarca Andina del Paralelo 42°
 Parque Nacional Lago Puelo
 Parque Nacional Los Alerces
 Piedra Parada (río Chubut) (NHb)
 Península de Valdés y litoral atlántico provincia del Chubut
 Parque Nacional Perito Moreno
 Lago Posadas-Pueyrredón
 Cuenca del Río Pinturas, incluye el sitio Cueva de las Manos (NHa-WHS)
 Meseta Central santacruceña: Los Toldos, Piedra Museo, Cerro Tres Tetas, Estancia La María, El Ceibo (NHb).
 Lago Strobel y Lago Cardiel
 Río Santa Cruz.

2. c- *Area Cuenca del Rio de la Plata:*

Como se mencionó el Nordeste de la Argentina, una de las regiones más extensas de esta área, posee sólo tres sitios con arte rupestre. Por el contrario, sobre la margen oriental del río Uruguay, en territorio de la República Oriental del Uruguay se han definido dos importantes zonas con sitios con arte rupestre.

Noroeste del Uruguay:

Ñandubay (departamento de Artigas)
 Túmulo
 Colonia Rubio (Arroyo Tangarupá) e Itapebí
 Arapey: sobresalen los sitios con grabados La Soledad y Las Piedritas.
 Cuchilla del Fuego
 Departamento de Salto (NHa).

Centro-Sur del Uruguay:

Arroyo Chamangá, Arroyo Porongos, Arroyo Grande, Puntas del A° San José, Arroyo Pinto (todos en el departamento de Flores) Se destacan 41 soportes con pinturas de la “Localidad Rupestre Chamangá” (NH) aproximadamente 15 de estos sitios han sido propuestos a la Lista Tentativa (WHTLa).
 Sauce Vullanueva, Arroyo Pajar, Cerro Copotón, Arroyo del Pescado (todos en el departamento Florida).
 Arroyo Maestre Campo (departamento Durazno)
 Arroyo de la Virgen, Sierra Mahoma (departamento San José)
 Cerro Pan de Azúcar, Cerro Cortéz (departamento Maldonado).
 Colonia Quevedo (departamento Colonia).

Nota: un tercio de los sitios mencionados de esta última región están nominados NHa.

2.d- *Otros:* Rapa Nui National Park (Easter Island) (WHS)

2.1 Sitios con arte rupestre más significativos:

Se identifica a continuación los sitios que poseen, según mi criterio y el de los representantes de los países que integran la Zona 5, una especial significación que los destaca de los demás sitios listados en el ítem 2. Esta consideración justificaría priorizar su tratamiento como sitios de características excepcionales para una futura inclusión en la Lista de Patrimonio Mundial.

2.1. 1 Area Andina:

CHILE:

Geoglifos de los valles de Lluta, Azapa, Camarones, Tiliviche, Tarapacá, Pampa del Tamarugal con el sitio “Pintados”, entre otros. Justificación del valor excepcional: los geoglifos del desierto chileno constituyen una manifestación del arte rupestre que se destaca por su magnificencia, valor estético y técnica constructiva. Son una muestra peculiar del arte rupestre a escala mundial ya que son muy poco frecuentes. En Sudamérica sólo aparecen en la zona de Nazca, Perú (zona 4) y han sido incluidos en la Lista del Patrimonio Mundial con el nombre de “Líneas y Geoglifos de Nazca y Pampas de Jumana”. Son una expresión de los pobladores prehispánicos que se desplazaban reiteradamente a través de los valles que atravesaban el desierto llevando sus llamas cargadas de bienes. Los geoglifos son testigos de este antiguo sistema de caravaneo en el desierto y posiblemente tuvieron un significado ritual. (Nota: ver en conclusiones, ítem 7, la propuesta de considerar estos sitios integrándolos con “Líneas y Geoglifos de Nazca”, Perú, un sitio del Patrimonio Mundial).

Arte rupestre de los ríos Loa y Salado (Desierto de Atacama). Justificación del valor excepcional: en el río Loa y su afluente el río Salado, en el Desierto de Atacama, se ha definido una de las secuencias de arte rupestre más prolongadas y representativas del Área Andina. Los sitios con arte grabado y pintado enclavados en estos cursos de agua son excelentes ejemplos de cómo el arte rupestre opera como un acto de “apropiación simbólica del territorio” (Gallardo *et al.* 1999:61). Se destaca el sitio “Taira” con manifestaciones grabadas-pintadas de gran valor estético. Parte de los sitios se encuentran dentro de la propuesta chilena “Región Toconce-Ayquina” (WHTLa) definida como un paisaje cultural. En esta región las comunidades se integran al medio ambiente de una manera ancestral, de la forma en que lo viene haciendo el hombre andino desde hace 9.000 años (Castro 2002, Gallardo *et al.* 1999, Museo Chileno de Arte Precolombino 1999)

ARGENTINA:

Cerro Pintado (localidad de Las Juntas, Guachipas) (WHTLb) Justificación: Es un conjunto de sitios emplazados en un cerro con pinturas de una calidad estética singular son la expresión simbólica de grupos agricultores y ganaderos que habitaron esta región andina en momentos previos a la llegada de los españoles y en el momento del contacto hispano-indígena. Se destacan los conjuntos policromos de representaciones de “hombres-escudos” de alto valor emblemático.

Sierra de Ancasti (Catamarca) Justificación: El conjunto de sitios con pinturas rupestres de la Sierra de Ancasti es una expresión de las prácticas ceremoniales de grupos humanos de la Cultura Aguada que habitaron la región aproximadamente entre los 900 y 1200 años DC. Las prácticas rituales que incluían el uso de sustancias alucinógenas se expresan a través de un

arte rupestre de excepcionales valores estéticos. Es posible que el emplazamiento de los sitios con arte rupestre represente enclaves de la Ruta del Cebil, una importante red que comunicaba grupos humanos de diversas regiones andinas.

2.1.2 Área Pampa-Patagonia

CHILE:

El Arte Rupestre de la Patagonia Chilena (WHTLa):

Justificación: Son las expresiones de los más antiguos habitantes del extremo continental sudamericano. Representan el modo de vida de los cazadores recolectores que ocuparon la Patagonia chilena desde hace miles de años.

ARGENTINA:

Meseta Central Santacruceña: Los Toldos, Piedra Museo, Cerro Tres Tetas, Estancia La María, El Ceibo, La Reconquista. Justificación: Los cientos de sitios con pinturas rupestres que se localizan en esta zona de la estepa patagónica argentina son la expresión de los primeros cazadores y recolectores que ocuparon los ambientes durante el inicio del poblamiento del área que ocurre hacia finales del Pleistoceno (antes de los 12.000 años). Son por lo tanto una de las manifestaciones de arte rupestre más antiguas de Sudamérica. Están emplazados en un paisaje casi prístino que permite imaginar el modo de vida del cazador, hoy desaparecido (Podestá 2002). Este arte pictórico posee un valor estético excepcional donde se destacan las representaciones de la fauna patagónica extinguida y también aquellas que aún están presente en el área (nota: como se aclara en el ítem 7 estos sitios podrían integrarse con “Cueva de las Manos, río Pinturas”).

2.1.3 Área Cuenca del Río de La Plata

URUGUAY:

Localidad Rupestre Chamangá (WHTLa): se trata de la mayor concentración de arte rupestre pintado del Uruguay, representativa de los grupos cazadores-recolectores-pescadores de momentos prehispánicos. Se conjugan en esta localidad distintas expresiones de arte rupestre del Centro-Sur del Uruguay además de ciertas peculiaridades como las manos pintadas.

3 Investigación y Documentación:

El interés por el arte rupestre en Argentina comenzó hacia finales del siglo XIX. Desde ese momento los estudios sobre el arte rupestre estuvieron incluidos en la investigación científica, específicamente dentro de los estudios arqueológicos. Un registro nacional contabiliza 1.500 sitios con arte rupestre en el país hasta 1986 (Renard 1988). Se han llevado a cabo muchos proyectos de documentación del arte rupestre en los años recientes. En 2001 se completó el “mapa arqueológico y el Catálogo de Arte Rupestre” que documenta los sitios con arte rupestre de la provincia de Jujuy (Área Andina) (Fernández Distel 2001). PAR (Programa de Arte Rupestre) (Universidad de Buenos Aires) ha organizado una base de datos computarizada que compila hasta el momento más de 2.000 sitios (Rolandi *et al.* 2004).

En el Área Andina, el Programa que desarrolla el Instituto de Antropología y Pensamiento Latinoamericano (INAPL) lleva registrados: más de 30 aleros con arte rupestre de Cerro

Pintado (localidad Las Juntas, Guachipas), Alvarez Rodríguez ha documentado 47 sitios con arte en Guasapampa; Rocchietti publicó una síntesis regional que incluye más de 30 sitios en Sierra de Comechingones; Lanza estuvo trabajando en la documentación de grabados localizados en el Valle Calchaquí, entre otros ejemplos que demuestran el ímpetu dedicado a este tipo de investigación en los últimos años (Rolandi *et al.* 2004). En el Área Pampa-Patagonia Oliva ha sintetizado la información de 21 sitios con pinturas en el Sistema Ventania, Paunero ha registrado más de 86 sitios en la Estancia La María, Podestá y Bellelli han documentado cerca de 30 sitios en la Comarca Andina 42° y en el río Manso. Trabajos se están llevando a cabo en los lagos Cardiel y Strobel (Goñi y Re) y en el río Santa Cruz (Franco y Fiore).

La Administración de Parques Nacionales (APN) está desarrollando un “Programa de Manejo de Recursos Culturales” que centra sus actividades en la investigación, conservación y difusión del patrimonio como una estrategia de conservación. Hasta 2002 se habían registrado 119 sitios con arte rupestre en diez parques nacionales. Algunos de ellos (25) están incluidos en proyectos de investigación arqueológica (informe de Ferraro). Es posible estimar que el número actual de sitios en Argentina puede estar cerca a los 4.000 que están distribuidos principalmente en la áreas Andina y Pampa-Patagonia (Podestá 2003, Rolandi *et al.* 2004 y Strecker & Podestá 2006).

En Argentina se está implementando un desarrollo en relación con nuevos métodos y técnicas aplicados a la investigación del tema. En el Área Andina se obtuvieron los primeros resultados de la aplicación de la datación directa de pinturas con AMS. Pigmentos minerales y materiales asociados provenientes de varios sitios con pinturas rupestres fueron analizados dentro del marco de una investigación llevada a cabo por Argentina y Canadá (Instituto de Conservación Canadiense-CCI- de Ottawa) que estudian sitios seleccionados en el país por su importancia arqueológica, su belleza estética o su potencial peligro de destrucción. Otros arqueólogos han publicado resultados sobre este tema (Podestá 2003, Wainwright *et al.* 2002).

Chile comparte con Argentina similar enfoque teórico-metodológico y la investigación del arte rupestre se enmarca dentro de la investigación arqueológica. Existen trabajos rigurosos de documentación en todo el territorio y numerosos especialistas universitarios dedicados al tema. Se destacan los trabajos realizados por el Museo Arqueológico San Miguel de Azapa (Arica) y la Universidad de Tarapacá con los geoglifos del Norte Grande, un patrimonio con características excepcionales comparables con los de la Zona 4 (Nazca, Perú un sitio declarado Patrimonio Mundial), los del río Loa y Salado (Berenguer 2004), entre muchos otros. Nuevas técnicas como la de la fotografía aérea a baja altura han sido implementadas en el Norte Grande chileno para el registro de geoglifos en la Quebrada de Guatacondo, Pintados y Honda con resultados excelentes (informe de Clarkson & Briones). En Rapa Nui (Isla de Pascua) se han realizado también trabajos intensivos y documentado alrededor de 4.000 representaciones de arte rupestre (Lee 1992).

En Uruguay (Área de la Cuenca del Río de la Plata) los progresos de la investigación arqueológica sobre arte rupestre han ocurrido a partir de la década del '70, si bien existen menciones desde fines del siglo XIX. Se destacan los trabajos realizados por Figueira, Figuerido Consens, Bespali, Femeninas, Peláez, Florines y Martínez, entre otros. Según algunos de estos investigadores extensas áreas del territorio nunca fueron abordadas en forma sistemática (Florines *et al.* 2004:1). Hace unos 10 años los relevamientos se intensificaron en el Norte del país y se descubrieron cientos de sitios con arte rupestre que aún no están

inventariados. En muchos casos las conclusiones relativas a la asignación cultural y a la cronología de los sitios con arte rupestre han sido tomadas en forma independiente a otro tipo de información arqueológica, es por esto que gran parte de estas deben ser tomadas como tentativas. Las características de los sitios, sumadas a la escasa investigación arqueológica relacionada, no han permitido establecer la debida correlación entre los sitios con arte y secuencias estratificadas de ocupación. Por ejemplo Consens (1995) informa sobre la ejecución de más de 30 sondeos arqueológicos con resultados estériles. Parte de estos problemas pueden explicarse también en la escasez de especialistas (profesionales) en arte rupestre debido fundamentalmente a la carencia de estos estudios en ámbitos universitarios (Consens 2000).

4 Protección:

Los sitios con arte rupestre- considerados como una parte integrante del registro arqueológico- están protegidos por leyes nacionales:

- Argentina: la ley de “Protección del Patrimonio Arqueológico y Paleontológico” N° 25.743 (2003) y su Decreto Reglamentario N° 10.22 (2004). Contacto: Dra. Diana Rolandi. Dirección: 3 de Febrero 1378. código postal: 1426, Ciudad de Buenos Aires. Argentina. Teléfono N°: (54+11) 4784.3371. www.inapl.gov.ar ONG: CIAR-SAA. Dirección : Av. Santa fe 983. Código postal: 1059. Ciudad de Buenos Aires. Argentina; Administración de Parques Nacionales (APN), www.parquesnacionales.gov.ar ; Comisión de Museos y de Monumentos y Lugares Históricos, Secretaría de Cultura de la Nación.
- Chile: Ley de Monumentos Nacionales, N° 17.288 (1970). Decreto Supremo N° 484 (1990) del Ministerio de Educación: “Reglamento sobre excavaciones y/o Prospecciones Arqueológicas, Antropológicas y Paleontológicas”.
- Uruguay: Ley Nacional N° 14.040. Decreto Reglamentario 10/1971. Otras leyes: Ley de Ordenamiento Territorial y Medio Ambiente, N° 16.466 y su Decreto reglamentario 435/1994. La Ley 17. 234 creó el Sistema Nacional de Áreas Naturales Protegidas que incluye la protección de sitios con arte rupestre (ejemplo: Localidad Rupestre Chamangá).

Algunos sitios con arte rupestre han recibido el estatus de patrimonio Nacional en sus respectivos países y se rigen bajo leyes específicas (ver Sitios del Patrimonio Nacional- **NH**- en el punto 2).

4.1- Instituciones nacionales a cargo de la protección de sitios con arte rupestre:

- *Argentina:* Instituto Nacional de Antropología y Pensamiento Latinoamericano (INAPL). Secretaría de Cultura de la Nación. Contacto: Dra. Diana Rolandi. Dirección: 3 de febrero 1379. (1426) Ciudad de Buenos Aires. Teléfonos: 54.11.47843371. www.inapl.gov.ar Otras organizaciones: CIAR-SAA. Dirección: Av. Santa Fe 983, 1059 Buenos Aires, Argentina; Administración de Parques Nacionales (APN) www.parquesnacionales.gov.ar, Comisión Nacional de Museos y de Monumentos y Lugares Históricos, Secretaría de Cultura de la Nación.

- *Chile*: Consejo de Monumentos Nacionales de Chile (CMN). Contacto: Nivia Palma, Sr. Oscar Acuña. Dirección: Av. Vicuña Mackenna n° 84. Providencia. Santiago, Chile. CP: 750.0910. N° teléfono: 56-2-665 15 16/ 56-2-665-15 18. Interviene también: Servicio Nacional de Turismo (SERNATUR). www.monumentos.cl/pu001.htm
- *Uruguay*: Comisión de Patrimonio Cultural de la Nación, a través del Departamento de Arqueología. Contacto: (a cargo de la Dirección) Elianne Martínez. Teléfono N°: (598+2) 9157681. Otros organismos no gubernamentales CIARU, Dirección: Casilla de Correo 18.007. Montevideo, Uruguay. Teléfono N°: (598+2) 5064313. Contacto: Mario Consens.

En los tres países existen también leyes y ordenanzas de protección del patrimonio a nivel provincial/departamental y municipal.

5 Conservación y Manejo de sitios:

Las instituciones nacionales relacionadas con la conservación y el manejo de los sitios se citan en el punto 4.1. Además existen organizaciones que actúan a nivel provincial/departamental como museos, agencias o secretarías de cultura y turismo y universidades. Las instituciones nacionales son las encargadas de llevar el registro nacional de sitios arqueológicos en el cual se incluyen los sitios con arte rupestre.

Como medida preventiva de conservación se considera prioritario la confección de registros detallados del arte rupestre a través de fichas de registro, fotografía, confección de base de datos computarizada y mapeos. El INAPL ha estado trabajando desde 1995 en el Programa “Documentación y Conservación del Arte Rupestre en la Argentina”. Muchas organizaciones han proveído asistencia así como también apoyo económico. Un especialista en conservación del CCI de Ottawa ha estado a cargo de los análisis de laboratorio para el procesamiento de las muestras (Wainwright *et al.* 2002). Los objetivos principales del Programa son: 1- documentación de sitios con arte rupestre, 2- registro de los procesos de deterioro, 3- organización de bases de datos computarizadas, entre otros. En Chile también se han llevado a cabo importantes registros de arte rupestre en las diferentes áreas del país.

En Argentina y Chile son notables los avances en la formulación y aplicación de planes de manejo en sitios con arte rupestre: en Argentina: Quebrada de Humahuaca, Palancho, Ischigualasto/Talampaya, Parque Nacional Lihue Calel, Parque Nacional Lanin, río Manso, Comarca Andina 42°, Parque Nacional Los Alerces, Cueva de las Manos, La María, Lago Roca; en Chile: Quebrada de Huatacondo, Calle de Codpa en Tarapacá, río Choapa, entre otros. Se informa sobre un proyecto formulado en Uruguay en 1998 en relación con el arte rupestre de Flores (arroyo Chamangá) pero que fue cancelado años después (informe de Florines).

Los planes de manejo por lo general incluyen los siguientes pasos: documentación del arte rupestre, diseño de senderos, interpretación para el público visitante a través de folletos y cartelería explicativa, construcción de pasarelas o vallados de protección, capacitación de guías, guarda del sitio, además de otras facilidades para el visitante en sitios de uso más intenso (Ischigualasto/ Talampaya, Parque Nacional Los Alerces, Cueva de las Manos). Existen pocos casos de cerramientos de sitios (Las Juntas, Cerro Pintado (localidad de Las Juntas, Guachipas), Cueva de las Manos, Argentina) pero los resultados buscados no han sido

efectivos. En Uruguay también se informa sobre cerramientos que han tenido efectos contrarios a los pretendidos (Florines, comunicación personal).

Poco antes del nuevo milenio comienza a notarse una preocupación por la incorporación de las comunidades locales en la toma de decisiones relacionada con la puesta en valor de sitios con arte rupestre. Se pretende, de esta manera, terminar con el manejo monopolizado de los recursos arqueológicos. Como uno de los objetivos de los planes de manejo se han conformado las primeras comisiones de sitios para preservar el bien patrimonial. Este tema está tomando un mayor desarrollo actualmente. Algunos emprendimientos dignos de citar son: Cueva de las Manos (Onetto 2001, Podestá & Onetto 2004), Cerro Pintado en la Comarca Andina 42° y Paredón Lanfré en el río Manso (Bellelli *et al.* 2005), (Argentina); Tamentica-1 en la Quebrada de Huatacondo, Valle de Codpa (Tarapacá) (Ajata y Briones 2004), San Pedro de Atacama (Chile). En Uruguay se reporta un caso en la Localidad Rupestre Chamangá para cuya preservación se ha organizado una comisión interinstitucional con la incorporación de propietarios del lugar del asentamiento (Martínez y Florines, comunicación personal).

Se han realizados pocos trabajos de restauración de arte rupestre debido a que, salvo casos excepcionales, no se consideran adecuados, o no se ha contado con suficiente presupuesto para hacerlos. El proyecto más importante en el Área fue el que involucró la restauración de geoglifos de los valles de Lluta, Azapa, Chiza y Tiliviche, Pampa del Tamarugal (incluyendo Pintados y Cerro Unitas) hace poco más de 25 años atrás, a cargo de Luis Briones (Universidad de Tarapacá y SERMATUR). Otro caso es el del sitio N° 19 de San Pedro de Atacama (Muñoz G *et al.* 2001). En la Argentina hay algunos antecedentes de limpieza de soportes con arte rupestre (Rolandi *et al.* 1998).

El uso contemporáneo del arte rupestre está concentrado en la actividad turística (en los tres países). Como se señaló en el punto 1 se han registrado pocos casos, principalmente en el Área Andina, donde los sitios continúan siendo valorizados por parte de las comunidades locales. Esto se expresa a través de las ofrendas depositadas en algunos de ellos, en los enterratorios efectuados en sus proximidades y en creencias populares relacionadas con lo “sagrado”.

6 Principales amenazas:

El arte rupestre es un recurso no renovable particularmente sensible al deterioro debido a su alta exposición y atracción. El *boom* turístico que explotó algunas décadas atrás ha facilitado el acceso de visitantes a lugares anteriormente protegidos debido a su emplazamiento aislado y poco accesible. Actualmente este fenómeno se ha acelerado alarmantemente y ha puesto en serio peligro a sitios que estuvieron naturalmente bien preservados por cientos y miles de años. Existe una preocupación creciente en relación con la preservación de los sitios con arte rupestre en Chile y en Argentina pero, lamentablemente, se han obtenido pocos resultados exitosos hasta el momento. Muchos de los proyectos están relacionados con desarrollos turísticos nuevos: Quebrada de Humahuaca que incluye el sitio Inca Cueva, Antofagasta de la Sierra, Cerro Tundqueral, Palancho e Ischigualasto/Talampaya son sólo algunos de los ejemplos dignos de ser citados en el Área Andina argentina. En Chile se destacan los proyectos relacionados con los geoglifos del Norte Grande y el del Río Choapa (éste último informado por Guerra). En el Área de Pampa-Patagonia (Argentina) se han desarrollado en las Sierras de Tandil, Colomichicó, Comarca Andina 42°, Cueva de las Manos, Estancia La María, etc. En algunos casos se han creado comisiones de manejo de sitios, por ejemplo en Cerro Pintado y Cueva de las Manos. En Uruguay el turismo no afecta aún demasiado a los

sitios con arte rupestre pues la oferta turística se concentra en otros atractivos (informe Nelsys Fusco, Comisión de Patrimonio Cultural, Uruguay).

Se han verificado daños en sitios causados por el auge de la construcción de grandes obras públicas que incluyen: gasoductos, electroductos, obras viales y represas hidroeléctricas, entre otros. Las evaluaciones de impacto ambiental (EIA) en muchas ocasiones han omitido las recomendaciones tendientes al resguardo del patrimonio arqueológico. En ocasiones la debilidad de las autoridades de control aumenta la gravedad del proceso de deterioro de los sitios: por ejemplo ver casos de Minera Alumbraera (Argentina), sitio arqueológico n° 19 de San Pedro de Atacama (Chile) (Muñoz G. *et al.* 2001). En Uruguay se ha informado sobre la gran destrucción ocasionada por la extracción de piedra, sobre todo de granito (que sirven como soportes para el arte rupestre). Los sitios del arroyo Chamangá (Localidad Rupestre Chamangá) del departamento de Flores han sido particularmente dañados. Se calcula una pérdida de alrededor de un 30% de las pinturas del departamento (Consens 1998, Florines 2004). Se han registrado amenazas del mismo tipo en el Área Andina, tanto en Chile como en Argentina. Como ejemplo pueden mencionarse la explotación de canteras en Guasamayo (Álvarez Rodríguez, comunicación personal). La producción ganadera constituye otra importante amenaza en Uruguay debido por ejemplo a la construcción de pircados para cercos, a la frotación de los animales sobre las rocas, etc. Lo mismo ocurre en Chile y Argentina donde a menudo se informa sobre la pérdida de pinturas debido no sólo a la acción directa de los rebaños sobre las rocas sino también a la “limpieza” de campos para la producción ganadera. La actividad agrícola puede señalarse como otro factor de destrucción del patrimonio rupestre debido al “despejado” de campos.

Otros aspectos que atentan con el buen desenvolvimiento de los estudios y protección del arte rupestre se desencadenan a partir de discordancias dentro de la esfera de los propios organismos estatales y entre estos y otros no gubernamentales. Estos últimos se han planteado en Uruguay (ver Consens 2000). Los primeros, de mayor gravedad aún, ocurren en las esferas de acción compartidas entre las áreas de turismo y cultura. Estas frecuentemente se contraponen en las decisiones relativas al uso público de los sitios con arte rupestre. Esta controversia se ha presentado en casos argentinos. Los magros presupuestos destinados a la protección de sitios arqueológicos se evaporan más aceleradamente cuando son administrados en forma no consensuada.

Conclusiones y recomendaciones para la Zona

En las últimas dos décadas se han llevado a cabo varios estudios de estudios regionales sobre el arte rupestre, sobre todo en Chile y en Argentina. Esto ha producido un sustancial incremento en el registro de sitios. Se deberían continuar con estos esfuerzos en ambos países. En Uruguay es necesario fortalecer la investigación para aumentar la documentación de los sitios. Además en este país habría que enfatizar los estudios del arte rupestre dentro del marco de la investigación arqueológica.

A pesar de los logros alcanzados hasta el momento, deberían hacerse nuevos esfuerzos en el manejo de visitantes, la interpretación y el cuidado del arte rupestre en el futuro. Muchos sitios, prematuramente abiertos a la visita turística están sufriendo actos de vandalismo que pueden conducir irreversiblemente a una destrucción completa. Estos sitios necesitan urgentemente de planes de manejos para establecer acciones que prevengan y frenen nuevos daños. Para ello es necesario contar con mayor presupuesto, especialmente en Uruguay.

En los tres países deberían implementarse controles más rígidos en las evaluaciones de impacto ambiental en relación con las grandes obras públicas. Muchas veces los sitios se ven sumamente afectados por las mismas. En Uruguay habría que poner mayor empeño en lograr convenios con las autoridades nacionales relacionadas con la minería a fin de amortiguar los daños que se producen sobre el arte rupestre a causa del trabajo de extracción de roca. En la región de Chamangá se han obtenido buenos resultados gracias a las gestiones realizadas.

Es fundamental continuar con la organización de “comisiones de sitios” para llevar a cabo el manejo de los sitios con arte rupestre con buen resultado. Estas comisiones deberían estar integradas por miembros de la comunidad local, además de los representantes de diferentes áreas interesadas. De lo contrario la experiencia indica que los planes de manejo no sólo no llegan a buenos resultados sino que muchas veces son abandonados con consecuencias nefastas para los sitios.

Los sitios con arte rupestre de Chile y Argentina están bien representados en la nómina de la Lista Indicativa ya que éstos se incluyen en varias de las propuestas generales ya realizadas, a pesar de que el arte rupestre no es el bien privilegiado específicamente (ejemplos: Las Parinas, Valles Calchaquies en Argentina, Toconce-Ayquina, San Pedro de Atacama y Pali Aike – Cueva Fell en Chile y Qhapaq Ñan en Zona 2, 4 y 5). Consecuentemente cabe suponer que en un futuro nuevos sitios podrían ser incluidos en la Lista del Patrimonio Mundial. No ocurre lo mismo con Uruguay que sólo posee un sitio recientemente inscripto en la Lista Indicativa por lo cual es recomendable que se realicen mayores esfuerzos en este país para revertir esta situación. Es importante resaltar también que de todas las nominaciones existentes en Chile y Argentina, sólo una “Cueva de las Manos. Río Pinturas” recae específicamente en un sitio por sus valores relativos a la expresión rupestre. “Talpampaya-Ischigualasto” un WHS nominado bajo criterios naturales, incluye también gran cantidad de sitios con arte rupestre ya documentados (Rolandi *et al.* 2004). Estos, además de otros bienes culturales, podrían justificar una consideración del bien como patrimonio mixto. Existen en la Zona 5 dos menciones en la Lista Indicativa justificadas a través de la presencia de arte rupestre: “Arte Rupestre de la Patagonia” y “Localidad Rupestre Chamangá” (Chile y Uruguay, respectivamente). Debería trabajarse en estas propuestas para acrecentar, de esta manera, la nómina del Patrimonio Mundial con sitios con arte rupestre. Es recomendable aunar esfuerzos para que estas nominaciones se concreten en los próximos años. Además sugiero que se incluyan los sitios con geoglifos del Norte Grande chileno en la Lista Indicativa. Estos conjuntamente con el sitio “Líneas y geoglifos de Nazca y pampas de Jumana” (Perú) constituyen un patrimonio de características excepcionales. Se podría trabajar conjuntamente con Perú (Zona 4 de este informe) para considerar una nominación compartida. La Argentina, por su parte, podría incluir otros sitios con arte rupestre como Sierra de Ancasti y Cerro Pintado (localidad Las Juntas, Guachipas) a la Lista Indicativa. Los sitios de la Meseta Central (Santa Cruz) deberían considerarse de la misma manera y tal vez unificarse al sitio WH de “Cueva de Las Manos, Río Pinturas”.

Agradecimientos

A Matthias Strecker (SIARB, Bolivia), Daniela Valenzuela (Universidad de Tarapacá, Chile), María Pía Falchi (INAPL, Buenos Aires), Diana Rolandi (INAPL), Lorena Ferraro (APN, Argentina), Nelsys Fusco y Elianne Martínez (Comisión de Patrimonio Cultural, Montevideo), Andrés Florines (Uruguay) por la generosa colaboración en la búsqueda de información.

Referencias bibliográficas

- Ajata López, R. y L. Briones Morales
2004 Puesta en valor y difusión de un yacimiento de arte rupestre en la Quebrada de Huatacondo: los petroglifos de Tamentica-1. Presentado a Actas del II Congreso Chileno de Conservación y Restauración
- Bellelli, C., V. Scheinsohn, M. M. Podestá, M. Carballido, P. Fernández, S. Caracotche 2005. Arqueología, arte rupestre y turismo. Comarca Andina del Paralelo 42°. Argentina. Estudios y perspectivas en Turismo 14 (1): 22-50.
- Berenguer Rodríguez, J.
2004 *Caravanas, Interacción y Cambio en el Desierto de Atacama*. Museo Chileno de Arte Precolombino. Santiago: SIRAWI ediciones.
- Castro Rojas, V.
2002 Ayquina y Toconce: Paisajes Culturales del Norte Árido de Chile. Editado por E. Mujica B. Paisajes Culturales en los Andes. UNESCO, CPM, Perú, pp.193-206.
Consens, M.
1995 Rock Art Sites of Southeastern South America. (Steinbring ed.) *Rock Art Studies in the Americas*. Oxbow Monograph 45 (pp. 151-163).
1998 Nueva aproximación al arte rupestre de la Cuenca del Río de la Plata. *Boletín SIARB* 12: 18-25.
2000 Report from the CAR-ICOMOS national co-ordinator for Uruguay. *INORA* 25: 27-29.
2002 New petroglyphs in North Western Uruguay. *INORA* 33:14-18.
- Aldunate, C., J. Berenguer & V. Castro (editores)
1985 Estudios en Arte Rupestre. Santiago: Museo Chileno de Arte Precolombino.
- Fernández Distel, A.
2001 Catálogo del Arte Rupestre de Jujuy y su Región. Buenos Aires: Dunken.
- Florines, A. M.
2004 Relevamiento arqueológico de la localidad rupestre del Arroyo Chamangá, Edited by Flores. Beovide, Barreto, Curbelo. *X Congreso Uruguayo de Arqueología: La Arqueología uruguaya ante los desafíos del nuevo siglo*, Montevideo. CD-ROM.
- Gallardo, F., C. Sinclair & C. Silva
1999 Arte rupestre, emplazamiento y paisaje en la Cordillera del Desierto de Atacama. Arte Rupestre en los Andes de Capricornio. Museo Chileno de Arte Precolombino, Chile, pp.57-96.
- Lee, G.
1992 *The Rock Art of Easter Island*. The Institute of Archaeology. University of California. Los Angeles. Monumenta Archaeologica 17.
- Loubser, J.
2001 Management Planning for Conservation. Edited by D. S. Whitley. *Handbook of Rock Art Research*, pp. 80-115. USA: Altamira Press.

- Mostny Glaser, G. & H. Niemeyer Fernández
1983 *Arte Rupestre Chileno*. Serie El Patrimonio Cultural Chileno. Colección Historia del Arte Chileno. Publicación del Departamento de Extensión Cultural del Ministerio de Educación.
- Muñoz G., E., P. Núñez & M- Bahamondez
2001 Conservación y restauración del sitio arqueológico n° 19 de San Pedro de Atacama. Consejo de Monumentos Nacionales. Ministerio de Educación. Gobierno de Chile.
- Museo Chileno de Arte Precolombino
1999 *Arte Rupestre en los Andes de Capricornio*. Santiago de Chile.
- Onetto, M.
2001 Conservación y Manejo de un sitio del Patrimonio Mundial: Cueva de las Manos, Río Pinturas, Argentina. *Arqueología* 11: 203-239.
- Ortiz Troncoso, A.
2001 Rock art in Central Chile: Forms and Style. *INORA* 28: 6-15.
- Podestá, M. M.
1996 Yesterday and Today in Argentina's Rock Art. Edited by P. Bahn & Fossati. *Rock Art Studies. News of the World* 1. Oxbow Monograph 72: 225-229.

2003 Rock Art research en Argentina at the End of the Millennium. Edited by P. Bahn & Fossati. *Rock Art Studies. News of the World* 2: 242-251. UK: Oxbow Books.
- Podestá, M.M.
2002 Cueva de las Manos as an example of cultural-natural heritage hybrids. Nature and Culture. Ambivalent Dimensions of our Heritage. Change and Perspective. German Comission for UNESCO. Brandenburg University of Technology at Cottbus. Germany, pp.119-137.
- Podestá, M. M. & M. de Hoyos (editoras)
2000 *Arte en las Rocas. Arte rupestre, menhires y piedras de colores en Argentina*. Buenos Aires: Sociedad Argentina de Antropología y Asociación Amigos del Instituto Nacional de Antropología.
- Podestá, M. M. & M. Onetto
2004 Role of Local Communities in the Management of World Heritage in Argentina: the case of Cueva de las Manos. Linking Universal and Local Values: Managing a Sustainable Future for World Heritage, pp. 159-164. The Netherlands National Commission for UNESCO. Amsterdam: UNESCO WH Center.
- Podestá, M. M., D. Rolandi & M. Sánchez Proaño
2005a *Arte Rupestre de Argentina Indígena. Noroeste*. Academia Nacional de la Historia & Union Academique International. Buenos Aires: GAC.
- Podestá, M. M., R. Paunero & D. Rolandi
2005b *Arte Rupestre de Argentina Indígena. Patagonia*. Academia Nacional de la Historia & Union Academique International. Buenos Aires: GAC.
- Renard de Coquet, S.
1988 *Sitios arqueológicos con arte rupestre en la República Argentina. Registro/Documentación*. Buenos Aires: FECIC.

- Rolandi, D., C. Gradín, C. Aschero, M. M. Podestá, M. Onetto, M. Sánchez, I. Wainwright y K. Helwig
1998. Documentación y preservación del arte rupestre argentino. Primeros resultados obtenidos en la Patagonia Centro-Meridional. *Chungara* 28 (1 y 2): 7-31.
- Rolandi, D, M. M. Podestá, M. Onetto, A. Re & M. I. Hernández Llosas.
2004 Current Rock Art Research in Argentina. (edited by U. Bertilsson and L. McDermott) *The Future of Rock Art-a World Review*. Rapport fran Riksantikvarieämbetet 7: 176-187.
- Schobinger, J.
1997 *Arte Prehistórico de América*. Cremona: Jaca Book & Consejo Nacional para la Cultura y las Artes.
- Schobinger, J & C. J. Gradín
1985 *Arte Rupestre de la Argentina. Cazadores de la Patagonia y Agricultores Andinos*. Madrid: Editorial Encuentro.
- Schobinger, J. & M. Strecker
2001 Andean South America. Edited by D. S. Whitley. Handbook of Rock Art Research, pp. 707-759. USA: Altamira Press.
- Strecker, M. & M. M. Podestá
2006 Rock Art Preservation in Bolivia and Argentina. *Coalition. CSIC Thematic Network on Cultural Heritage*. Electronic Newsletter: 11. January. Coalition@irnase.csic.es
- Wainwright, I. N. M. , K. Helwig, D. Rolandi, M. M. Podestá, M. Onetto & C. Aschero
2002 Rock paintings conservation and pigment analysis at Cueva de las Manos and Cerro de los Indios, Santa Cruz, Patagonia Argentina. 13th Triennial Meeting Río de Janeiro, 22-27 September. ICOM Committee for Conservation. Preprints, II: 582-589.

Ilustraciones:

Fig. 1. Mapa Zona 5.

Fig. 2. “El Ceibo”: El Ceibo cave. Santacruceña Central Plateau. Argentina. Pampa-Patagonia Area (WHTLb).

Fig. 3. “greca”: Piedra Parada. Argentina. Pampa-Patagonia Area.

Fig. 4. “Estampida”: Cueva de las Manos, río Pinturas. Argentina. Pampa-Patagonia Area. (WHS).

ANNEX IV - ILLUSTRATIONS

Zone 1: Mexico (including Baja California)

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Universidad de Monterrey
San Pedro Garza García, Nuevo León

Carlos Viramontes
Instituto Nacional de Antropología e Historia
Querétaro, Qro

Illustrations

Fig. 1. Map Zone 1– Mexico (including Baja California)

Fig. 2. Cueva del Cuervo Victoria

Fig. 3. San Rafael de los Milagros

Fig. 4. Boca de Potrerillos, monolith

Fig. 5. Boca de Potrerillos, alignment

Fig. 6. Pinal del Zamorano

Fig. 7. Pinal del Zamorano

Fig. 8. Plazuelas

Fig. 9. Cueva del Cuervo Victoria

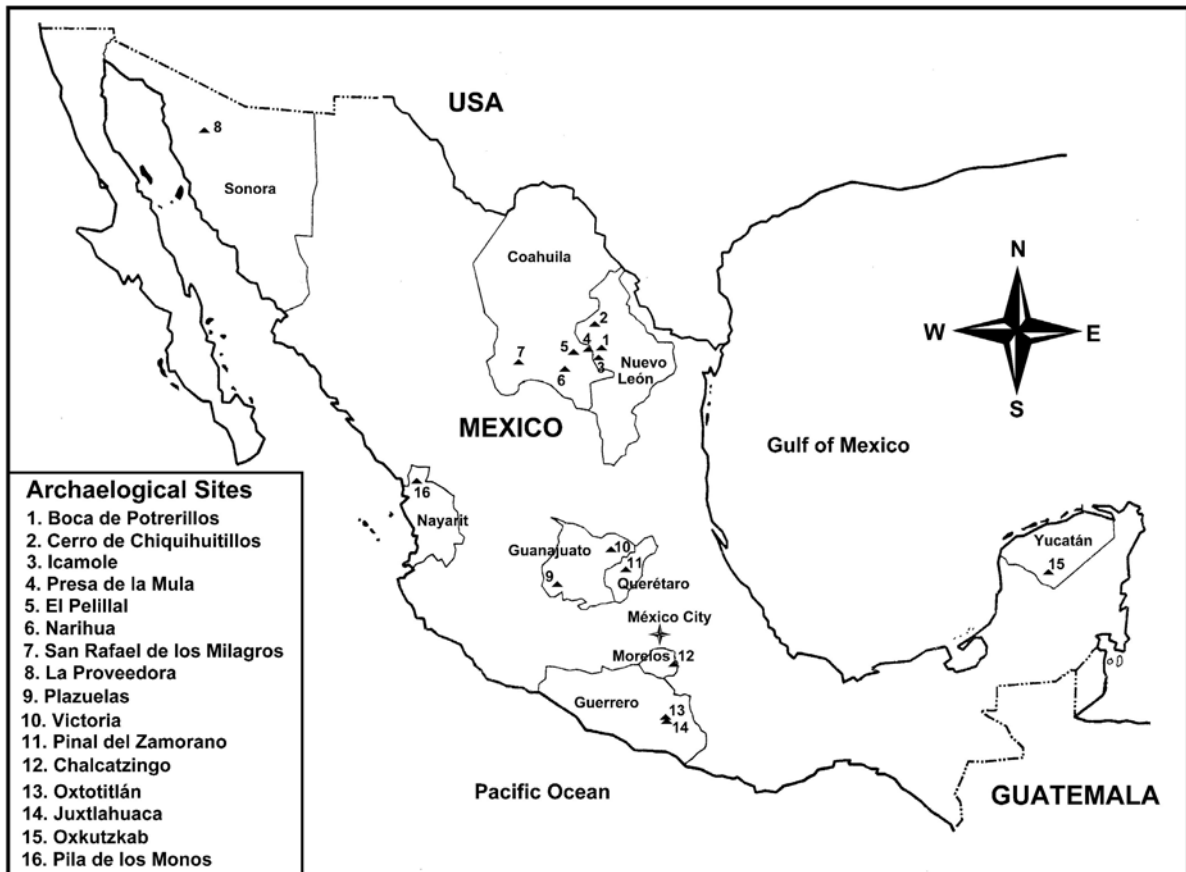


Fig. 1



Fig. 2



Fig. 3



Fig. 4



Fig. 5



Fig. 6



Fig. 7



Fig. 8



Fig. 9

Zone 1: Central America

Martin Künne
Ethnologisches Museum Berlin

Illustrations

Fig. 1. Central America: cultural zones, archaeological sites and rock art
(map by Künne und Strecker 2003)

Fig. 2. Rock Art Museum in Nancito (Panama): visitors' hall

Fig. 3. Rock Art Museum in Nancito (Panama): park

Fig. 4. Engraved stone sphere of the Río Diquís zone (Costa Rica)

Fig. 5. Abstract petroglyphs of the Chiriquí-culture at Finca Sonador (Costa Rica)

Fig. 6. Heavily weathered boulder with petroglyphs at Pedregal (Costa Rica)

Fig. 7. Semi-sculptured rock at Sonzapote, Isla Zapatera (Nicaragua)

Fig. 8. Zoomorphic petroglyphs at Ometepe island, peninsula Maderas (Nicaragua)

Fig. 9. Anthropomorphic petroglyphs at El Muerto island (Nicaragua)

Fig. 10 Anthropomorphic pictographs at Gruta del Espíritu Santo, El Salvador
(photo by Elisenda Coladan)

Fig. 11 . Part of a hieroglyphic inscription of the Naj Tunich cave, Guatemala. The text was heavily vandalized in 1989 (photo by Chip and Jennifer Clark).



Fig. 1



Fig. 2



Fig. 3



Fig. 4



Fig. 5



Fig. 6



Fig. 8



Fig. 7



Fig. 9



Fig. 10



Fig. 11

Zone 2: Caribbean Area and north-coastal South America

Jay B. Haviser
IACA President

Matthias Strecker
SIARB

Illustrations

Fig. 1. Distribution of Taino culture in the Caribbean

Fig. 2. Petroglyphs, Guadeloupe

Fig. 3. Rock Paintings, Bonaire

Fig. 4. Rock Paintings, Dominican Republic

Fig. 5. Petroglyphs and Taino plazas, Puerto Rico

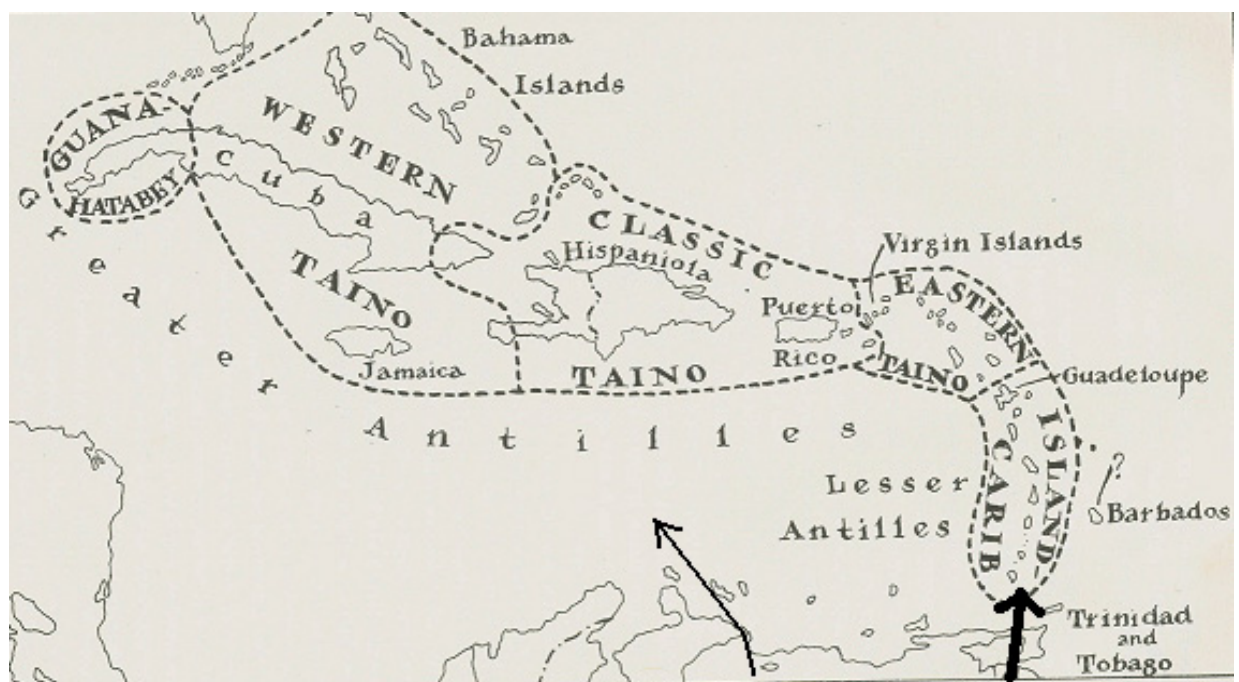


Fig. 1



Fig. 2



Fig. 3



Fig. 4

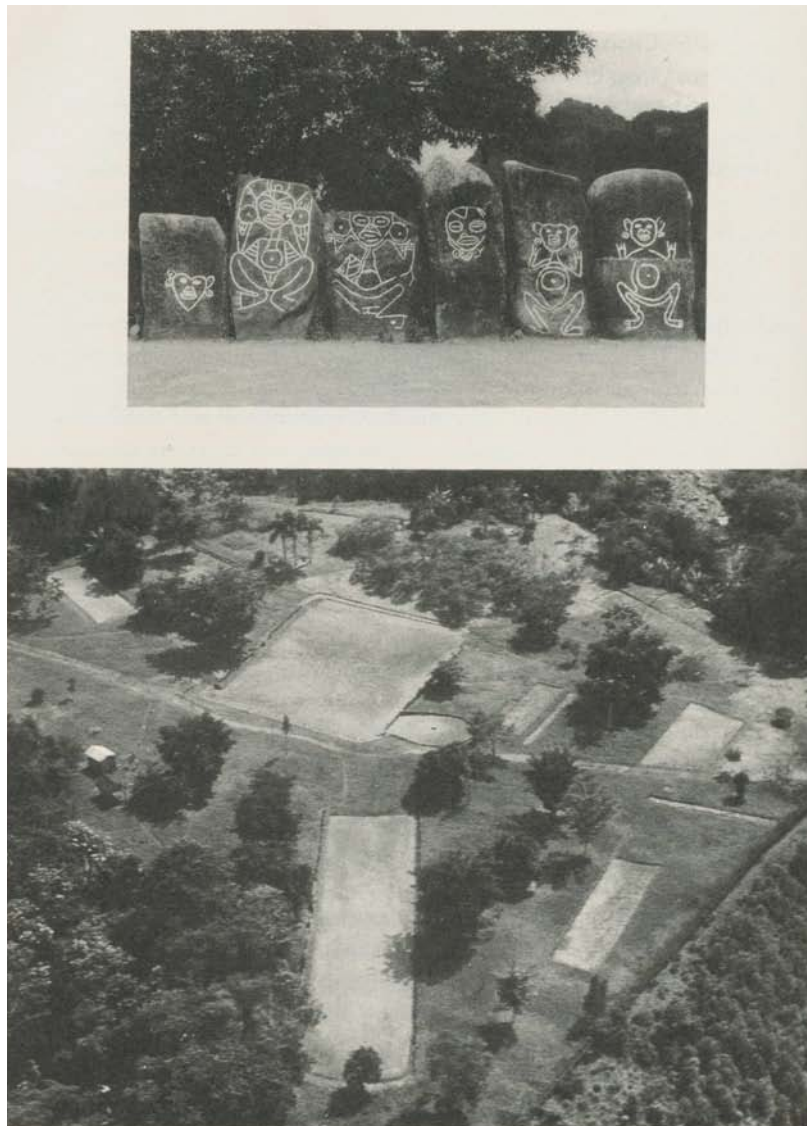


Fig. 28. The Caguana dance and ball courts. *Top*, row of stone slabs lining the central dance court, the petroglyphs marked with chalk to show more clearly. The second one from the left portrays Atabey, the mother goddess. *Bottom*, aerial view of the site. The large, square central dance court is left of center; the central ball court, just beneath it (top photograph courtesy of José R. Oliver; bottom photograph courtesy of A. Gus Pantel).

Fig. 5

Zone 2: Venezuela

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Centro de Antropología
Instituto Venezolano de Investigaciones Científicas

Kay L. Tarble
Departamento de Arqueología Etnohistoria y Ecología Cultural
Escuela de Antropología
Universidad Central de Venezuela

Illustrations

- Fig. 1. Petroglyphs (chalked) from Rancho 505, Zulia, Venezuela.
- Fig. 2. Cueva de Caño Ore
- Fig. 3 – 6. Cueva de Cerro Gravilan
- Fig. 7. Cueva Susude Inava
- Fig. 8. Petroglifos de Vigirima



Fig. 1



Fig. 2



Fig. 3



Fig. 4



Fig. 5



Fig. 6



Fig. 7



Fig. 8

Zone 2: Colombia

Guillermo Muñoz
Director GIPRI
Colombia

Illustrations

Fig. 01. Map Rock Art in Colombia.

Fig. 1. General panel - Painting – Ramiriquí Boyacá. Superimposing motives - Project Gipri 1985 – Photo Guillermo Muñoz C - Gipri.

Fig. 2. Engraving – Buenavista - Boyacá- Project Gipri 1985 -Photo Guillermo Muñoz C - Gipri.

Fig. 3. Cupules ; Ramiriquí-Boyacá - Project Gipri 1980 –Photo Guillermo Muñoz C - Gipri.

Fig. 4. General panel, sector 1 ; Pandi Cundinamarca - Project Gipri 1975 - Photo Guillermo Muñoz C - Gipri.

Fig. 5. Fragment of rock painting; Documentation cards - North Sector - Sutatausa – Cundinamarca - Project 1987-Photo Guillermo Muñoz C. - Gipri.

Fig. 6. Synthesis: historical process of documentation; process of digital reconstruction - Pandi Cundinamarca-Project Gipri 1975 - Guillermo Photo Muñoz C-Gipri-Photo Guillermo Muñoz C.- Albadán - Gipri.

Fig. 7. Documentation of engraving; Digital reconstruction and fragments - Sasaima Cundinamarca Project 1996-2000 Ministry of Culture -Photo Guillermo Muñoz C. – Gipri.

Fig. 8. Laboratory of digital photography. Manipulation of images Ramiriquí Boyacá - Project Gipri 1985-2006-Photo Guillermo Muñoz C. – Gipri.

Fig. 9. Workshop of artifacts El Colegio - Cundinamarca-Project Gipri 1996-2005-Photo Guillermo Muñoz C. – Gipri.

Fig. 10. Petroglyph with anthropomorphic figures Project Gipri 1983-Photo Guillermo Muñoz C. – Gipri.

Fig. 11. Painting showing triangular faces with hair. Fragment Project Gipri 1999-Photo Guillermo Muñoz C. – Gipri Bautista E.

Fig. 12. Paintings showing various motives: animals, hands and geometric lines; Bautista E.

Fig. 13. Painting- Zone plateau (Cuchi01pe001 Rock) Gipri Project 1997- Photo Guillermo Muñoz C. – Gipri.

Fig. 14. Engraving Amazonian zone Project Urbina 1999.

Fig. 15. Engraving Putumayo Project Urbina Fernando 2000.

Fig. 16. Engraving Caquetá Project Urbina Fernando 1996.

ARTE RUPESTRE COLOMBIA GIPRI 1970 2006



Fig. 01



1.



2.



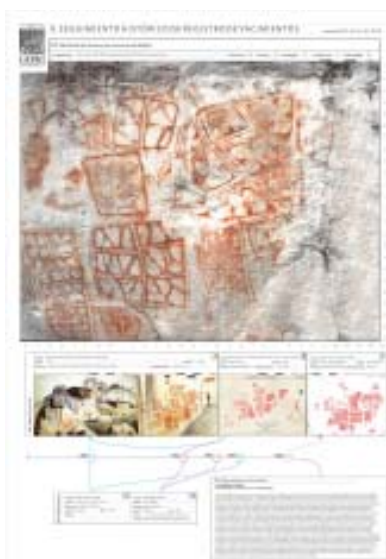
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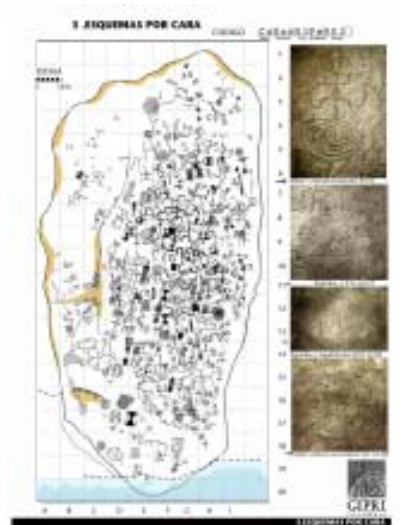
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11.



12



13



14



15



16

Zone 3 : Brésil (État du Piauí et sertão de Sertão exceptés)

André Prous
Universidade Federal de Minas Gerais

Loredana Ribeiro
Universidade Federal de Minas Gerais

Illustrations

Fig. 1. Carte du Brésil rupestre

Fig. 2. Sites de la Serra dos takrukkrak (Minas Gerais). Photographie A. Baeta.

Fig. 3. Peintures de Lagoa da Velha (Morro do Chapéu, Bahia). Animaux miniature. Photographie L. Ribeiro.

Fig. 4. Peintures du Lajedo de Soledade (Apodi, Rio Grande do Norte). Photographie Luiz Dutra.

Fig. 5. Site Pedra Pinta (Roraima). Photographie A. Prous.

Fig. 6. Peintures de l'abri Santa Elina (Mato Grosso). Photographie A. Prous.

Fig. 7. Gravures du site Lajinha, de Corumbá (Mato Grosso do Sul). Photographie A. Prous.

Fig. 8. Panneau peint et gravé de l'abri Ferraz Egreja (Mato Grosso). Photographie André Prous.

Fig. 9. Gravures de l'abri de Poséidon (Montalvânia, Minas Gerais). Photographie A. Prous.

Fig. 10. - Peintures de l'abri des Araras, Barreiro do Cedro, Serranópolis (Goiás). Photographie A. Prous.

Fig. 11. Peintures de Ventura (Morro do Chapéu, Bahia). Scène de combat. Photographie L. Ribeiro.

Fig. 12. Gravures de Itaquatiara de Ingá (Paraíba). Photographie L. Ribeiro.

Fig. 13. Peintures de la Serra da Lua, Monte Alegre (Para). Photographie A. Prous.

Fig. 14. Peintures du Rio Bonito, Palestina (Goiás). Photographie A. Prous.

Fig. 15. Peintures du site Vão Grande (Serra do Lajeado, Tocantins). Photographie A. Prous.

Fig. 16. Peintures du site Capao das Eguas, Lagoa Santa (Minas Gerais). Photographie E. Rubbioli.

Fig. 17. Peintures de l'abri de Santana do Riacho (Serra do Cipó, Minas Gerais). Photographie A. Prous.

Fig. 18. Peintures de la vallée du Peruaçu (site Lapa do Caboclo, Minas Gerais). Photographie A. Isnardis.

Fig. 19. Gravures de l'abri de Poséidon (Montalvânia, Minas Gerais). Photographie A. Prous.

Fig. 20. Peintures de la Pedra Pintada (Roraima). Photographie A. Prous.

BRÉSIL RUPESTRE

États et sites mentionnés dans le texte



Fig.1



Fig. 2



Fig. 3



Fig. 4

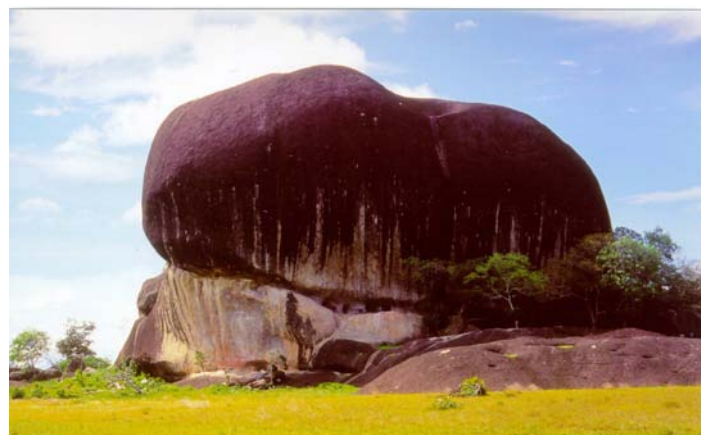


Fig. 5



Fig. 6

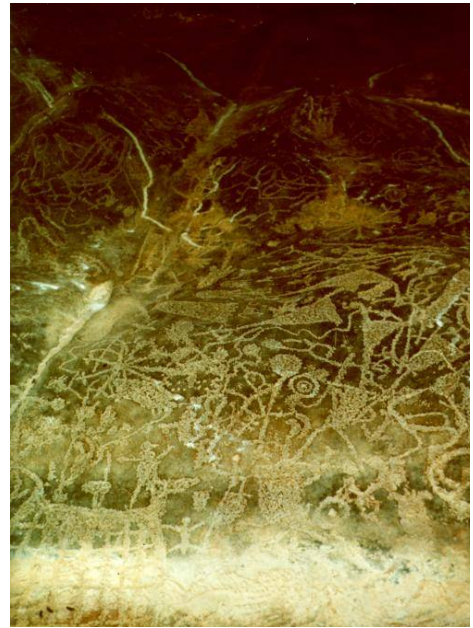


Fig. 9

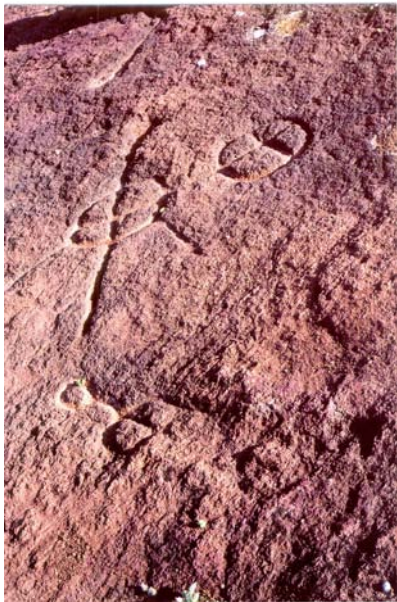


Fig. 7



Fig. 10



Fig. 8

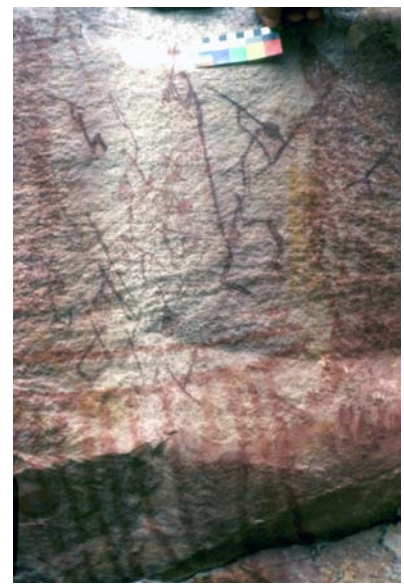


Fig. 11



Fig. 12



Fig. 14



Fig. 15

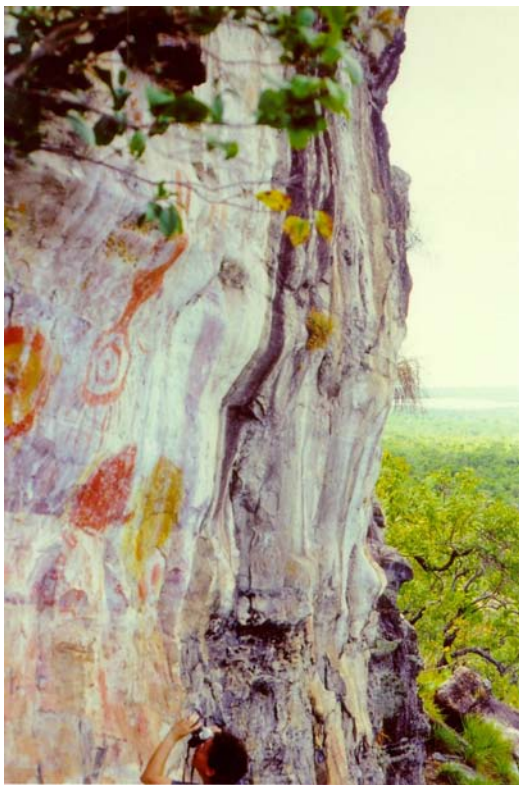


Fig. 13



Fig. 16



Fig. 17



Fig. 18



Fig. 19



Fig. 20

Zone 3 : Brésil – Nordeste – États du Piauí, Pernambuco, Rio Grande do Norte et Paraíba

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Ecole des Hautes Etudes en Sciences Sociales, Paris
Fundação Museu do Homem Americano

Cristiane A. Buco

Instituto do Patrimônio Histórico e Artístico Nacional
Fundação Museu do Homem Americano

Illustrations

Fig. 1. Carte de l'Amérique, avec le Parc National Serra da Capivara et les sites archéologiques.

Fig. 2. Vue aérienne de la *cuesta*, limite du Parc National Serra da Capivara – Piauí.

Fig. 3. Vue aérienne de la vallée da Serra Branca, couverte par la végétation typique, la *caatinga*, Parc National Serra da Capivara – Piauí.

Fig. 4. Puma peint en blanc, site Toca do Estevo III - Parc National Serra da Capivara – Piauí.

Fig. 5. Les peintures rupestres démontrent la persistance, pendant des millénaires, de certains mythes. Est-il possible que les indiens de la famille linguistique Gê, soient les héritiers de certaines pratiques des peuples préhistoriques qui ont vécu dans la Serra da Capivara ? Seraient-ils les descendants des peuples auteurs de la tradition Nordeste ?

Fig. 6. Figure typique de la Tradition Agreste, du site Toca da Bastiana, datée par plusieurs méthodes qui ont donné des résultats discordants.

Fig. 7. Vue du site Toca do Boqueirão do Puxa I - Parc National Serra da Capivara - Piauí - dans laquelle il est possible de voir les coulées d'eau qui abîment les peintures, les peintures sur la paroi ainsi que des fragments de roche, tombés sur le sol portant des figures peintes. Ce site a été habité par les premiers colons qui sont arrivés dans la région.

Fig. 8. Peintures du site Toca do Veados - Parc National Serra da Capivara - Piauí

Fig. 9. Peintures du site Toca da Passagem - Parc National Serra da Capivara - Piauí.

Fig. 10. Peintures du site Toca da Baixa das Europas I - Parc National Serra da Capivara - Piauí.

Fig. 11. Miniatures peintes sur des galets du conglomérat de la paroi du site Toca das Pedrinhas Pintadas - Parc National Serra da Capivara – Piauí.

Fig. 12. Peintures du site Toca do Morcego - Parc National Serra da Capivara – Piauí.

Fig. 13. Pointe de projectile trouvée lors des fouilles du site Toca do Pica Pau (- Parc National Serra da Capivara - Piauí) et datée de 9.000 ans.

Fig. 14. Figures zoomorphes des traditions Agreste et Nordeste. Site Toca do Boqueirão do Puxa I - Parc National Serra da Capivara – Piauí.

Fig. 15. Graphisme pur du site Toca do Labirinto - Parc National Serra da Capivara – Piauí.

Fig. 16. Objet gravé trouvé dans la Serra Branca - Parc National Serra da Capivara - Piauí.

Fig. 17. Gravures du site Toca do Buraco do Pajeu - région au nord du Parc National Serra da Capivara – Piauí.

Fig. 18. Le site Toca da Ema do Sítio do Bras I - Parc National Serra da Capivara - Piauí . Ce site a été préparé pour accueillir les touristes.

Fig. 19, 20, 21, 22. Le travail des techniciens en conservation de peintures rupestres dans les sites Tocas da Justa et Toca do Veado - Parc National Serra da Capivara - Piauí.

Fig. 23. Le site Casa Santa, tradition Nordeste, sous-tradition Seridó, Carnaúba dos Dantas – Rio Grande do Norte.

Parc National Serra da Capivara



Fig. 1



Fig. 2



Fig. 3



Fig. 4

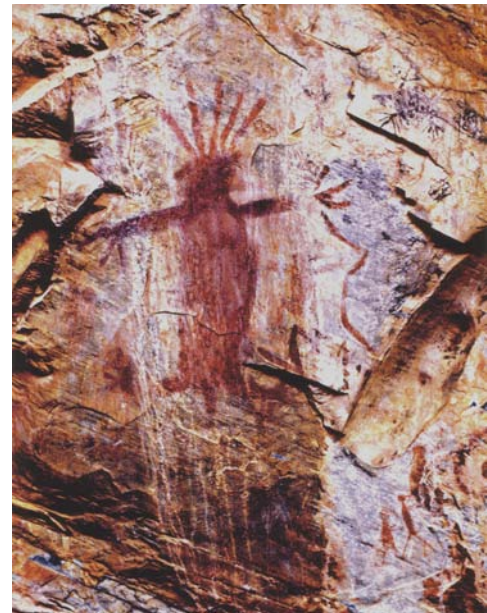
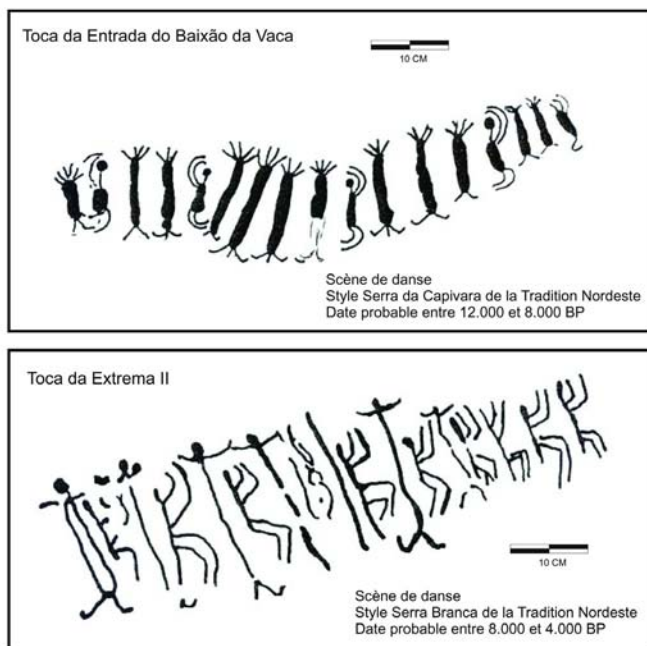


Fig. 6



Danse des adultes Krahô, Photo H.Schultz "Hombu", 1963

Fig. 5



Fig. 7

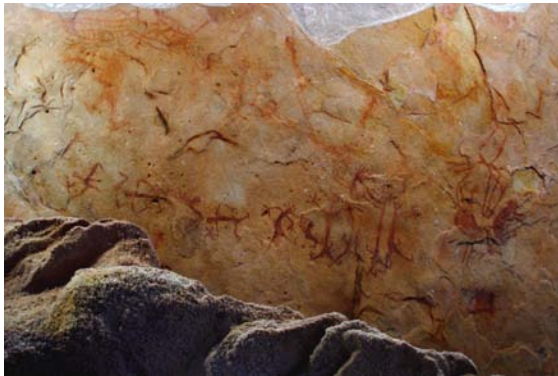


Fig 8



Fig. 11



Fig 9



Fig. 12

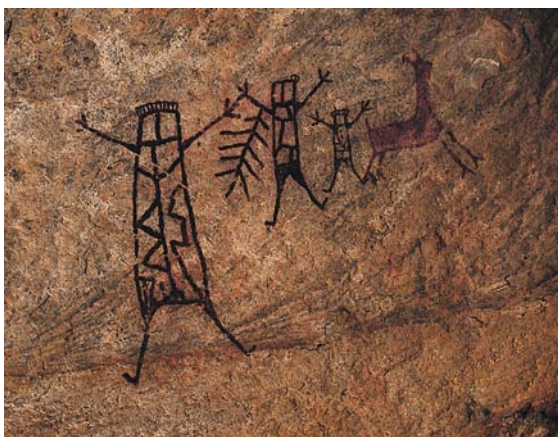


Fig. 10



Fig. 13

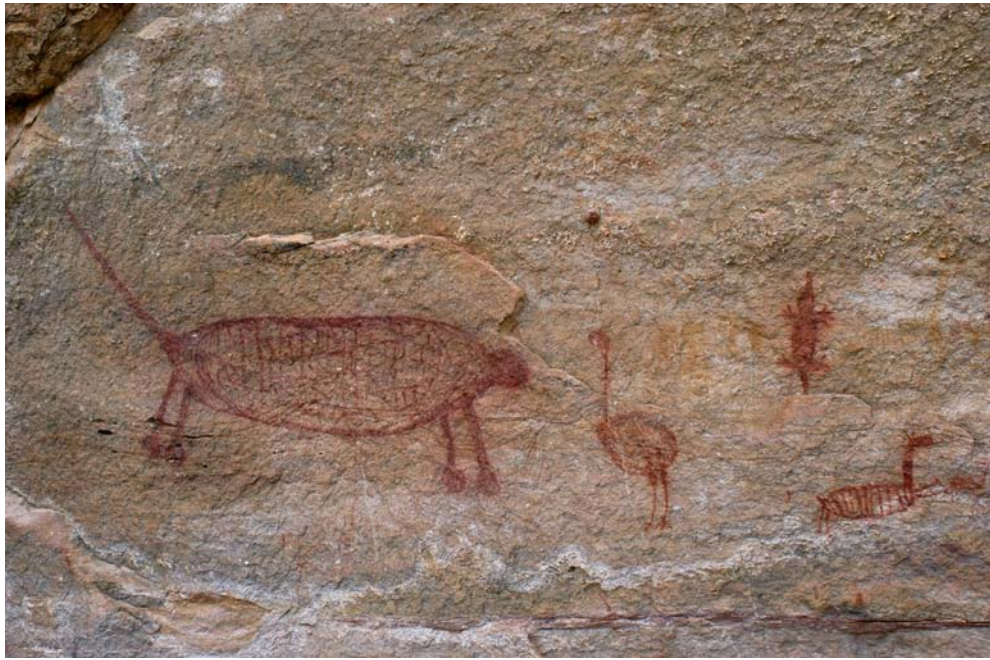


Fig. 14



Fig. 15



Fig. 17



Fig. 16



Fig. 18



Fig. 19



Fig. 20



Fig. 21



Fig. 22



Fig. 23

Zone 4: West-north-west South America (north of the Andes, Peru, Bolivia, Paraguay)

Matthias Strecker
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La Paz, Bolivia

Illustrations

Fig. 1. Distribution of rock art sites in Ecuador. (Map by Diego González Ojeda)

Fig. 2. Distribution of rock art sites in Bolivia.

Fig. 3. Distribution of petroglyph sites in Peru. (Map based on Hostnig 2003)

Fig. 4. Distribution of rock painting sites in Peru. (Map based on Hostnig 2003)

Fig. 5. Distribution of geoglyph sites in Peru. (Map based on Hostnig 2003)

Fig. 6. Colonial rock paintings in red colour, Morocaque, Espinar Province, Cusco / Peru.
Drawing by Rainer Hostnig

Fig. 7. Petroglyphs at the site Pusharo, Cusco / Peru. Photo by Rainer Hostnig.

Fig. 8. Rock paintings in the region of Corani, Puno / Peru. Photo by Rainer Hostnig.

Fig. 9. Paved path and information box at Incamachay, Chuquisaca / Bolivia. Photo by
Uli Malisius.

Fig. 10. Rock paintings at Calacala, Oruro / Bolivia. Photo by Matthias Strecker.

Fig. 11. Visitors' platform at Calacala, Oruro / Bolivia. Photo by Freddy Taboada.

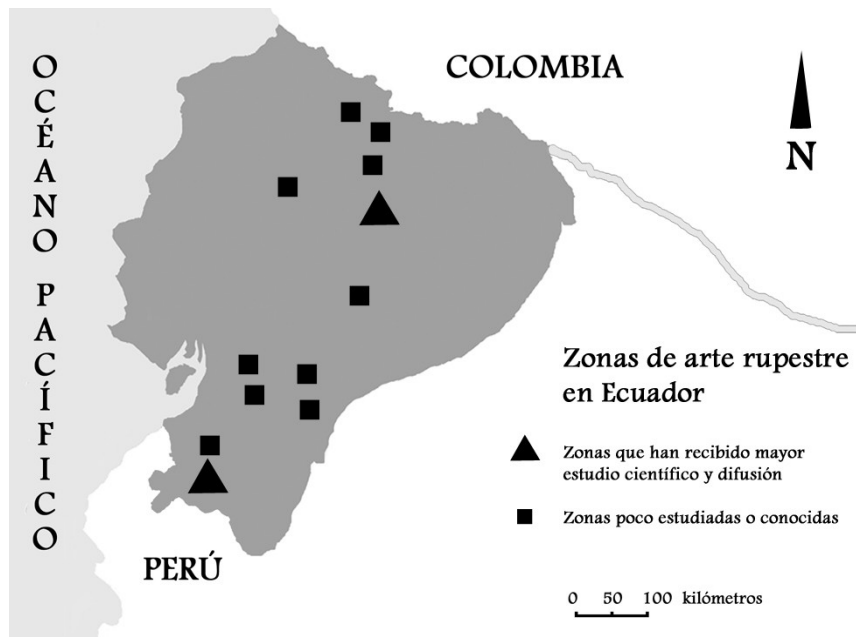


Fig. 1

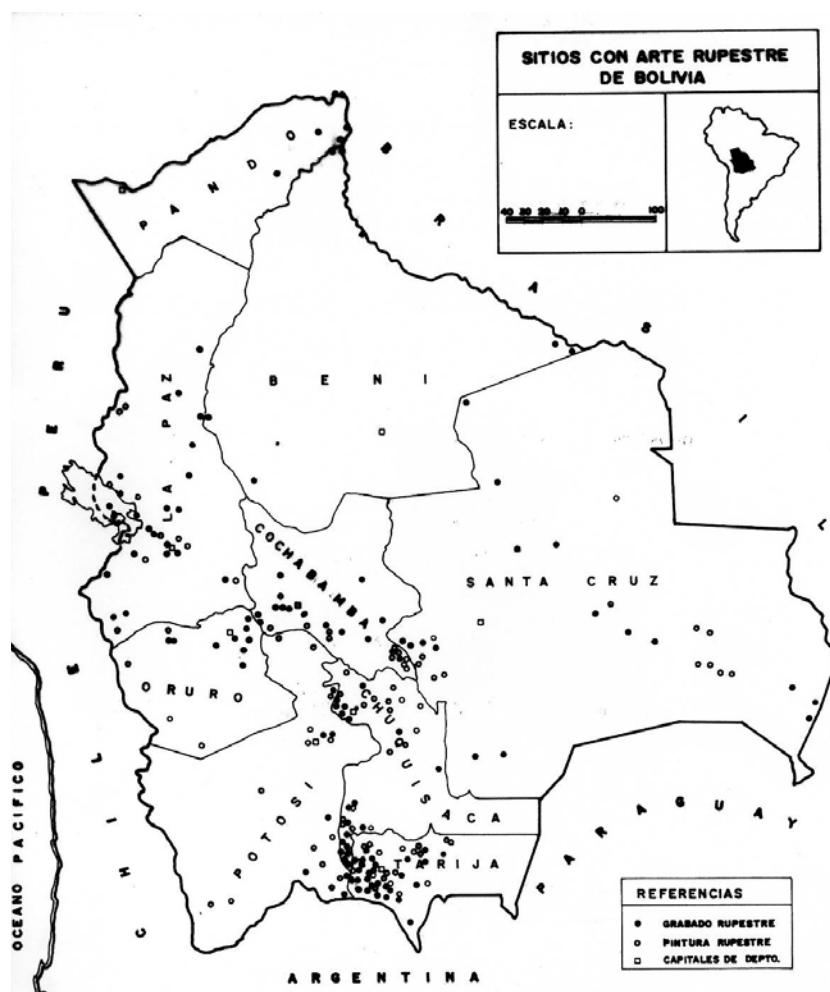


Fig. 2

PETROGLIFOS DEL PERÚ Mapa de distribución



Fig.3

PINTURAS RUPESTRES DEL PERÚ Mapa de distribución



Fig.4

GEOGLIFOS DEL PERÚ Mapa de distribución



Fig.5

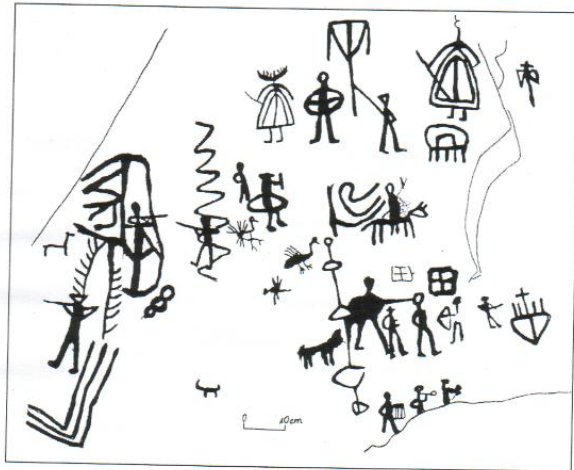


Fig. 6



Fig. 7



Fig. 8

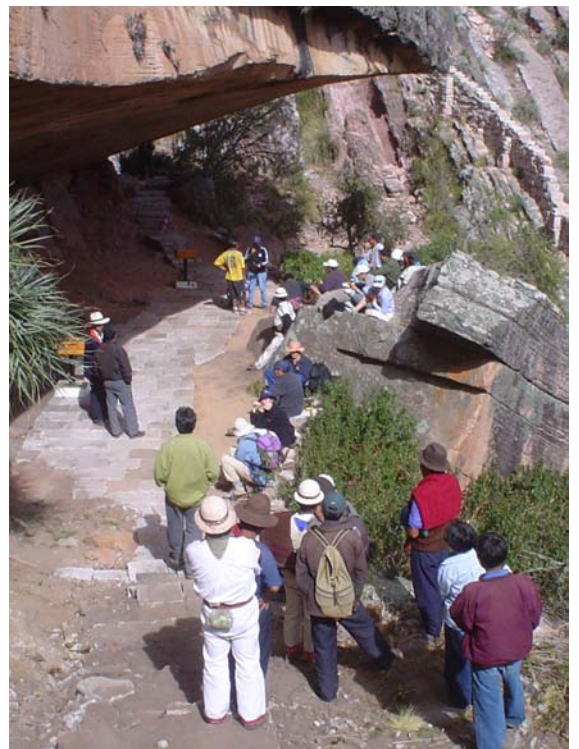


Fig. 9



Fig. 10



Fig. 11

Zone 5: West-south-west and southern South America: Chile, Argentina, Uruguay

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Illustrations

Fig. 1. Map Zone 5

Fig. 2. “El Ceibo”: El Ceibo cave. Santacruceña Central Plateau. Argentina. Pampa-Patagonia Area (WHTLb)

Fig. 3. “greca”: Piedra Parada. Argentina. Pampa-Patagonia Area

Fig. 4. “Estampida”: Cueva de las Manos, río Pinturas. Argentina. Pampa-Patagonia Area. (WHS)





Fig. 2



Fig. 3



Fig. 4

