

Boletim do Museu Paraense Emílio Goeldi. Ciências Humanas

ISSN: 1981-8122 ISSN: 2178-2547

MCTI/Museu Paraense Emílio Goeldi

Scaramelli, Kay; Scaramelli, Franz
Anchoring the landscape: human utilization of the Cerro Gavilán 2 rockshelter, Middle Orinoco, from the Early Holocene to the present Boletim do Museu Paraense Emílio Goeldi. Ciências Humanas, vol. 12, no. 2, 2017, May-August, pp. 429-452
MCTI/Museu Paraense Emílio Goeldi

DOI: 10.1590/1981.81222017000200010

Available in: http://www.redalyc.org/articulo.oa?id=394056427010



Complete issue

More information about this article

Journal's webpage in redalyc.org



Scientific Information System Redalyc

Network of Scientific Journals from Latin America and the Caribbean, Spain and Portugal

Project academic non-profit, developed under the open access initiative

Anchoring the landscape: human utilization of the Cerro Gavilán 2 rockshelter, Middle Orinoco, from the Early Holocene to the present

Moldando a paisagem: utilização humana do abrigo Cerro Gavilán 2, Orinoco Médio, do Holoceno antigo ao presente

Kay Scaramelli^I, Franz Scaramelli^{II}

^IUniversidad Central de Venezuela. Caracas, Venezuela

^{II}Pesquisador independente. Pittsburg, California, USA

Abstract: Initial archaeological investigations at Cerro Gavilán 2, a rockshelter located in the Bolívar State of Venezuela, reveal evidence for human activity that spans the Early Holocene to the present. This report summarizes the information obtained through surface collection, limited excavation, and documentation of the surface features and rock art in the cave. Accelerator mass spectrometry (AMS) ¹⁴C analysis established dates from excavated strata that range between 9250 ± 60 BP to 3440 ± 40 BP, and are associated with a unifacial flake technology and charred faunal and floral remains, whereas surface remains span the known ceramic sequence for the area. Rock art corresponds to distinctive superimposed styles that indicate continual repainting of the cave through time, serving to anchor the site to the landscape for multiple societies inhabiting the region. It is suggested that the shelter may have fulfilled different functions over time and a sequence of seasonal residential, ritual, and funerary activities is proposed. The rich cultural context found in Cerro Gavilán 2 contributes to advances in Amazonian archaeology that are redefining our knowledge of early developments and the complexity of human/environmental interactions in tropical America.

Keywords: Venezuela. Rock art. Early Holocene occupation. Orinoco Rockshelter. Landscape Archaeology.

Resumo: Pesquisas arqueológicas preliminares realizadas no Cerro Gavilán 2, um abrigo rochoso localizado no estado de Bolívar, na Venezuela, revelaram indícios da atividade humana que vão desde o Holoceno inicial até o presente. Este artigo resume as informações obtidas através de coletas de superfície, escavação limitada e documentação da arte rupestre existente no abrigo. As datas obtidas através de análise utilizando ¹⁴C AMS a partir das camadas escavadas revelaram um período de ocupação entre 9250 ± 60 AP a 3440 ± 40 AP e estão associadas a uma tecnologia de lascas unifaciais, restos carbonizados de fauna e restos botânicos, enquanto os materiais de superfície abarcam toda a sequência de cerâmica conhecida para a região. Diferentes estilos de pinturas rupestres se sobrepõem no abrigo, indicando que essa atividade foi contínua ao longo do tempo. Este aspecto serviu para fixar o sítio à paisagem, utilizado que foi por vários grupos que habitaram a região. A utilização variada sugere que houve uso como moradia temporária e para visitas esporádicas com fins de realização de rituais e de atividades funerárias. O rico contexto cultural identificado em Cerro Gavilán 2 representa avanços para a arqueologia amazônica ao redefinir o entendimento acerca da ocupação inicial na região e da complexidade das interações humanas e ambientais na América tropical.

Palavras-chave: Venezuela. Arte rupestre. Ocupação do Holoceno inicial. Abrigo sob rocha no Orinoco. Arqueologia da paisagem.

Recebido em 23/11/2016 Aprovado em 10/04/2017

_

SCARAMELLI, Kay; SCARAMELLI, Franz. Anchoring the landscape: human utilization of the Cerro Gavilán 2 Rockshelter, Middle Orinoco, from the Early Holocene to the present. **Boletim do Museu Paraense Emílio Goeldi. Ciências Humanas**, v. 12, n. 2, p. 429-452, maio-ago. 2017. DOI: http://dx.doi.org/10.1590/1981.81222017000200010.

Autora para correspondência: Kay Scaramelli. Universidad Central de Venezuela. Departamento de Arqueología y Antropología Histórica. Escuela de Antropología. FaCES Residencias Vargas Piso 1. Caracas, 1050, Venezuela (katasca@gmail.com). ORCID: http://orcid.org/0000-0002-6255-9518.

INTRODUCTION

The nature, direction and influence of cultural processes as they played out in the Orinoco basin have long intrigued naturalists, linguists, ethnographers, and archaeologists alike. Although it has been claimed that several widespread cultural and linguistic traditions found throughout the Caribbean, the Guyanas and other adjacent geographic areas may have ancient connections to the Upper and Middle Orinoco (Lathrap, 1970), very little is actually known about the early preceramic inhabitants of the region and the transition to agricultural modes of life. The limited research on the early occupations of the Orinoco contrasts sharply with neighboring regions of northwestern South America and Southern Central America where recent investigations have substantially advanced our knowledge of the archaic populations and the key role of humans in the modification of forest resources through selective use and manipulation (Aceituno Bocanegra, 2010; Balée, 2013; Castillo Espitia; Aceituno Bocanegra, 2006).

Although limited, in recent decades, archaeological research has begun to reveal evidence for preceramic occupations in the Orinoco region. Pioneering investigations in the vicinity of Puerto Ayacucho, the capital of the Venezuelan Amazon State, have yielded dates that go back to the 9th millennia BP (Barse, 1990, 1995, 2002), but have provided little information beyond the lithic technology of those peoples. Greer, whose excellent chronology of rock paintings in the region has also extended our knowledge of preceramic occupations, reports that the two earliest periods are most likely preceramic, and, although he did not excavate any of the sites, he estimates that several of the caves with pictographs may have had preceramic occupations (Greer, 1995).

In contrast with previously described sites in the area, Cerro Gavilán 2 provides a rich context that expands our knowledge of the early archaic populations in the Middle Orinoco and their later transition to agriculture and ceramic manufacture. The large rockshelter, located near the confluence of the Orinoco and Parguaza rivers, offers a variety of evidence for the occupation and utilization of

the site by different populations through time. It is one of the few rockshelters in the area that has well-preserved stratigraphic contexts, as well as surface features. Excavations exposed a preceramic occupation characterized by a simple, unifacial flaked crystalline quartz industry, associated with well-preserved botanical and faunal remains. AMS ¹⁴C dates obtained on charred materials ranging between 9250 \pm 60 BP (Beta-252625, charcoal, corrected for isotopic fractionation) to 3440 \pm 40 BP (Beta-252621, charcoal, corrected for isotopic fractionation) support the presence of an early to middle archaic occupation with a wide spectrum economy that included hunting, fishing, and plant collection. Numerous grinding facets found on the floor of the shelter, and on other large slabs of rock, may have been used in the processing of vegetal resources. Surface lithics include ground-stone tools and other expedient artifacts, such as manos (grinding stones) and nutting stones. Diverse ceramic materials, recovered only in surface collections, indicate the continued use of the cave throughout the Neo-Indian period (\pm 2500 BP to \pm 500 BP) and possibly beyond (Cruxent; Rouse, 1958; Tarble; Zucchi, 1984; Zucchi; Tarble, 1984; Zucchi et al., 1984; Scaramelli, K., 2006). Evidence for human burials, exposed by looters, appears to be more recent. Several panels of rock paintings, showing a diversity of technique, color, and content, cover large areas of the back wall and ceiling of the cave and provide an excellent index of the changing symbolic world of the peoples who occupied or visited the site over time. It is argued that rock paintings in this and other similar contexts served to mark and create the cultural landscape early in the occupational history of the region, with continued use through the present.

REGIONAL BACKGROUND

The cave of Cerro Gavilán 2 is found at the southeast base of the northern cliff of Cerro Gavilán (known on topographical maps as Cerro Las Iguanitas, but referred to locally as Cerro Gavilán), a colossal granitic hill located south of the Parguaza River, 6 km inland from the right bank of the Orinoco (Figure 1). The cave is flanked by rolling plains,

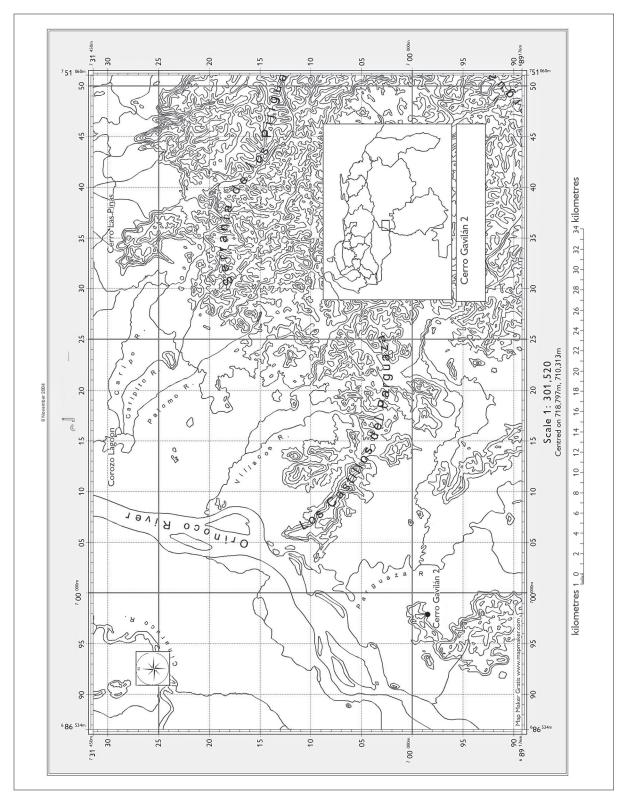


Figure 1. Location of the Cerro Gavilán 2 archaeological site (Bolívar State, Venezuela). Map by Franz Scaramelli.

rivers, and very diverse neotropical niches, including dense forest vegetation, gallery forests, savanna grass, and scrub woodlands. The valley is drained by the Parguaza River and by a number of smaller intermittent streams, lined with gallery forests. These creeks and rivers carry fresh, clear, tea-colored waters from the Sierra del Parguaza's highlands to the silt-laden Orinoco. Although high temperatures and humidity are constant throughout the year, the savanna climate is highly seasonal, with a rainy season (May through November) and a dry season (December through April). The landscape changes noticeably with this cycle, as does its utilization for hunting, fishing, foraging, and horticultural practices. Both aquatic and terrestrial fauna are abundant along the rivers and in the gallery forests that offer a variety of resources including fruits, nuts, wood, resins, honey, palm leaves, fibers, and, of course, fish and wild animals. The banks of the Orinoco were famous for the huge numbers of river turtles that came to nest during the dry season. In the savanna, resources are more limited in number and variety, but still provide several species of game and useful plants.

The Orinoco landscape is dominated by huge dome-shape granite hills, of Mesoproterozoic origin, technically called inselbergs (Urbani; Szczerban, 1975). These huge outcrops, referred to in the literature as forming part of the Parguaza Granites, belong to a large batholith protruding through the Amazon Terciary plains (Bonilla-Pérez; Frantz, 2013). The granite exhibits a typical Wiborgite and Pyterlite rapakivi texture, and, as such, the rock formations in the region are often called rapakivi granite. Concentrated in the Eastern highlands, but also scattered throughout the margins of the Orinoco and its tributaries, these huge, black, dome-shaped hills are characterized by nearly vertical cliffs and include fractures, boulder concentrations and rockshelters used even today by local indigenous populations for ceremonial and/or funerary purposes. Dozens of rockshelters have been found in the area

and a number of them may have provided refuge for human groups since the initial peopling of the region. As a testimony to this long-term occupation, the walls of these rockshelters frequently exhibit lavish, superimposed panels of rock paintings in different styles, corresponding to different chronological periods (Greer, 1995; Perera, 1991). Nonetheless, rockshelters with deep, well-stratified, cultural contexts are relatively rare in the area, perhaps due to the exposure of most of these to the constant action of wind and water. A notable exception is the cave at Cerro Gavilán 2, where, in addition to rock paintings, a deep mound of sediment is present in the central area of the cave. The clearly stratified accumulations of soil with relatively well-preserved cultural accumulations provide evidence of past human occupations previously unknown in the archaeological record of the Parguaza/Orinoco region.

DESCRIPTION OF THE ROCKSHELTER

Cerro Gavilán is a conspicuous element of the Lower Parguaza landscape. Its walls and cliffs have eroded through time, creating myriad spaces for shelter, ritual, and contemplation. The site of Cerro Gavilán 2 is one of four rockshelters located so far on the same hill: local residents attest to the presence of others. Perhaps the most spectacular of the sites found so far is located on the top of the hill, facing nearly directly south. Cerro Gavilán 1, a large rockshelter, spanning some 60 m, and adjacent to an overhang of approximately 20 m, contains a variety of superimposed rock paintings, that indicates the persistent use of the cave for several millennia (Greer, 1995, 1997; Scaramelli, F.; Tarble, 1996). The local indigenous population used this as a funerary cave in recent times. The ceramic materials collected on the surface of the site pertain to a variety of styles and series, indicating a prolonged period of visitation, but no stratified deposits are present. Mortar holes are found in the bedrock floor of the cave. Cerro Gavilán 3 is a very shallow rockshelter to the east of Cerro Gavilán 2, with a large

panel of rock art, but no other cultural features. Cerro Gavilán 4 is a small shelter found to the west and slightly uphill from Cerro Gavilán 2. It presents several large boulders in the middle sector of the cave and shelf-like formations along the rear wall with mortar holes and grinding facets on the upper surface, but no rock art was found. Surface finds include manos, quartz flakes, and a fragment of a green stone axe; ceramic materials are rare and are tempered with both sand and *caraipé*, a highly siliceous ash from burnt tree bark (*Licania* sp.). The shelter is no more than 2 m high and was used in the past to deposit funeral bundles, which later have been removed.

Cerro Gavilán 2 is a spacious, illuminated, and well-ventilated rockshelter that opens onto the savanna at the base of the northeastern face of Cerro Gavilán. The shelter is 52 m wide and 14 m deep near the center of the entrance, at which point the ceiling is approximately 16 m high; it has an area of about 550-600 square meters (0.06 ha) in which a large group of people could gather (Figure 2). The lower ceiling and much of the rear wall are covered with large clusters of rock paintings, with an estimated 300+ figures. Slabs of rocks have fallen from the roof and large, low boulders are found at the mouth of the cave and in the rear segment, where the roof adjoins the floor. The bedrock is exposed in the western section of the cave, where a number of mortar holes and shallow grinding facets are found (Figure 2A and 2B). Additional mortar holes are found on the surface of two large slabs that have fallen from the roof. The eastern section of the cave is lower and the ground there is nearly flat. A large mound of sediment covers the central sector of the cave, with an estimated 2+ m of sediment made up of ashy soil in alternating layers of dark and light grey, brown, and dark orange, visible in potholes.

The entrance to the cave is found almost at the level of the savanna – about 50 m above sea level (asl), but a large stand of trees and shrubs block visibility from

the outside. Beyond the cave, the savanna extends from the foot of the hill to the nearby creek. The savanna is scattered with shrubs, isolated trees and gallery forests lining the waterways. The cave provides protection from the sun and the rains and, compared to the surrounding savanna, the temperature is significantly cooler. The cave is aligned East-West with its mouth pointing toward the south, which allows early morning sunlight to penetrate the cave.

In 1992, Roberto Colantoni and Lelia Delgado first reported this site and several photographs of the rock art were displayed at an exhibition at the Galería de Arte Nacional and included in the accompanying publication (Colantoni; Delgado, 1992). Greer (1995) surveyed and described the cave and the rock art (designated as JG-49 in his survey; we have designated it as BO-126 in our survey). At the time of his visit, looters had dug several potholes in the central mound, revealing ashy sediments and scattered remains of burials. Based on Greer's description, we located the site in 2007 during a survey of rock art sites in the region, and found four large circular looter pits approximately 2 m diameter each, associated with a few scattered basket fragments and human remains in the rear sector of the cave. We returned in 2008 to find further disturbance, including overturned and displaced slabs with grinding mortars in the rear sector.

The goals of our fieldwork were to survey and map the cave, collect surface remains, document the paintings, and carry out limited test excavations. We produced a plan of the site and documented the location of surface features and associated rock art panels (Figures 3A and 3B). This was a preliminary survey and future intensive excavations of undisturbed contexts will be necessary to expand knowledge on the nature and contents of the sediments, to determine activity areas and their variation through time. We are reporting the results of the initial campaign in order to provide a base line for future work.

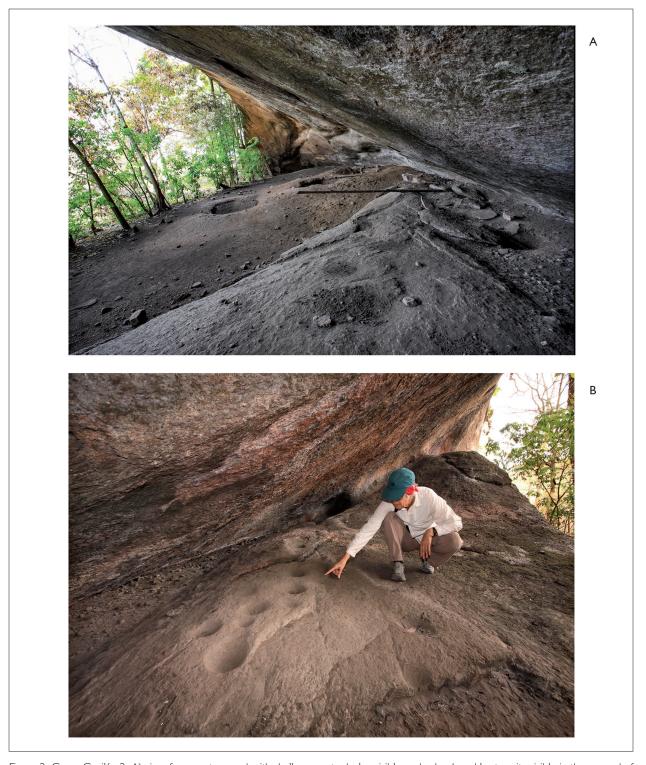


Figure 2. Cerro Gavilán 2: A) view from eastern end with shallow mortar holes visible on bedrock and looter pits visible in the mound of sediment in the center of the shelter; B) view of mortar holes near the eastern end of the shelter. Photos by Franz Scaramelli.

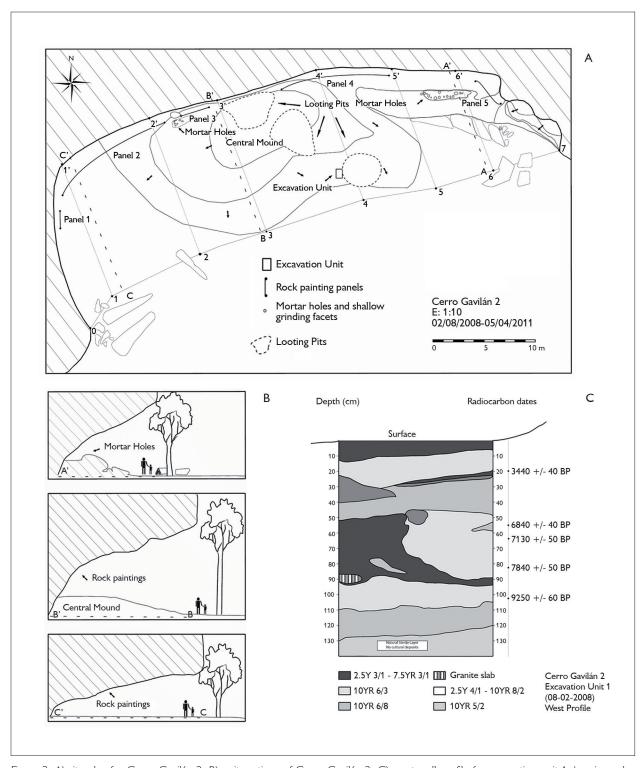


Figure 3. A) site plan for Cerro Gavilán 2; B) unit sections of Cerro Gavilán 2; C) west wall profile for excavation unit 1 showing color variation of sediment and depth of ¹⁴C samples. Drawings by Franz Scaramelli.

SURFACE COLLECTION

By 2008 large sectors of the mounded deposit had been looted and many surface items had been displaced or removed over time either by human or natural forces and offer very limited contextual information. Even so, we proceeded to carry out surface collection by sectors so as to guarantee that our collections would reflect broad variation in the distribution of these artifacts. We divided the cave into seven transects - perpendicular to the drip line - and collected the cultural material visible on the surface. Mortar holes were found on the upper surface of several large slabs that had become detached from the ceiling, located near the back wall of the shelter, as well as on the surface of the cave floor in the northeast corner of the shelter (Figures 2A and 2B). We counted a total of 37 round mortar holes, with an average diameter of 15 cm and 2 to 5 cm deep. One oval grinding facet (22 x 8 cm and 3.5 cm deep) may have served to polish stone tools such as axes. Human remains and fragments of baskets, possibly used to transport and deposit burials in the cave, were located in the rear central sector of the cave in the vicinity of several of the slabs with mortar holes that may have been moved to cover the burials.

EXCAVATION

A small exploratory test pit 0.5 m-by-1 m was placed adjacent to a looter's pit in the southern central sector of the cave (Figure 3A). We chose this location because the stratigraphy was visible in the adjacent pit, and we had recovered a ground stone pestle in the back-dirt removed by the looters. We excavated in 10 cm artificial levels, screening all the remains. Because ceramic materials formed a significant portion of the material recovered from the surface of the cave, we expected to find a rich ceramic sequence in the excavation. Contrary to our expectations, we found no ceramic materials beneath the surface; instead the excavation revealed evidence for an earlier preceramic occupation. The precise origin

and nature of the sediment has not yet been determined, but the stratigraphy was clearly defined, with marked differences in color and texture. The soil was extremely volatile, seemingly made up of a combination of soil and ash, making it easy to dig but difficult to contain and to prevent it from sifting down into the lower levels from above. We excavated twelve 10 cm levels until we reached the sterile level coincident with the soil at the base of the cave (1.20 m). In addition, we took soil samples at each level for flotation and analysis. Abundant faunal remains, charred wood, seeds, shell, and lithic material, were clearly associated with the areas of darker sediment, rich in charcoal. These lenses of charcoal rich soil were found throughout the strata, with layers of lighter soil, and reddish orange horizons that delimited distinct strata (Figure 3C). The charred seeds and bone fragments, associated with quartz flakes, and fragments of small rounded cobbles were present from the very first level. Throughout the pit, lenses of dark sediment with high concentrations of charred wood, seeds and bones, were interspersed between lighter sediment, some of which were delimited by dark grey and orange strata that suggest different episodes of burning and abandonment. By 80 cm the sediment became sandier and less ashy in the N corner. A granite slab appears in this level in the S corner, associated with very dark soil, both above and below. Charred organic remains continue to appear associated with the dark sediment. At 100 cm the organic remains become scarcer, the sediment in the N corner is yellowish and sandy and by 120 cm the sediment is sterile and coincides with the base of the cave.

We took carbon samples throughout the excavation, of which we selected five samples to be dated. The results of the ¹⁴C AMS dating are reported in Table 1. It should be noted that the dates are all in correct stratigraphic sequence, and indicate that the occupational strata correspond to the early to middle Holocene. We will further discuss the chronological sequence below.

Table 1. AMS Radiocarbon Dates from the Cerro Gavilán 2 Excavation.

Laboratory number	Material	Level	Conventional Radiocarbon Age	2 Sigma Calibrated Results (BC)	2 Sigma Calibrated Results (BP)
Beta-252621	Charcoal	10-20 cm	3440 ± 40 BP	1880-1650 cal. BC	3830 to 3600 cal. BP
Beta-252622	Charcoal	50-60 cm	6840 ± 40 BP	5780-5650 cal. BC	7730 to 7600 cal. BP
Beta-252623	Charcoal	60-70 cm	7130 ± 50 BP	6070-5970 cal. BC and 5950-5910 cal. BC	8020 to 7920 and 7900 to 7860 cal. BP
Beta-252624	Charcoal	80-90 cm	7840 ± 50 BP	6810-6590 cal. BC	8760 to 8540 cal. BP
Beta-252625	Charred material	100-110 cm	9250 ± 60 BP	8630-8300 cal. BC	10580 to 10250 cal. BP

CERAMIC MATERIALS

The highly fragmented ceramic materials were all recovered from the surface collection, with the highest concentration found in the rear of the cave, between transects 4 and 5 (Table 2). We classified them by paste characteristics (color, texture, inclusions, and hardness), shape (vessel part, rim, base, inflection modes) and decorative techniques (Figure 4). A total of 192 sherds were recovered, with a predominance of caraipé inclusions (41.7 percent), tentatively identified with the Nericagua style defined by Evans et al. (1959). Hemispherical bowls, with and without out-curving lips; direct, open bowls; plates; griddles; and bottle forms are found. Decoration includes incised dimples on a rim of a bowl, and basket impression on the base of a griddle

(Figure 4H). A ware with inclusions of freshwater sponge spicules, or *cauixí* (*Parmula* sp.), corresponding to the Arauquinoid series, was also popular (32.3 percent), and showed characteristic rim forms (hemispherical bowls, open direct bowls, griddle). Decoration included brown on cream paint, fine rectilinear incision, and basket impression on the base of one fragment (Figures 4D, 4E and 4G). Valloid ceramics (Tarble; Zucchi, 1984) are identified by the coarse sand inclusions and modeled, incised, and appliqué decoration on a lug that may have served as a handle (Figure 4F). Also present are Ronquín/Ronquín Sombra (Roosevelt, 1980, 1997) materials that include bowl forms, one of which has a flanged rim, diagnostic white on red paint (Figure 4A), and zoned red paint, as well as a modeled rim lug (Figure 4B);

Table 2. Ceramic Materials Located on Surface of Cerro Gavilán 2 According to Form and Paste (Series or Style)

Form	Fine/Medium sand (Ronquín/ Ronquín Sombra)	Coarse sand (Valloid)	Caraipé (Nericagua)	Sponge spicule (Arauquinoid)	Sponge spicule and crushed sherd (Arauquinoid)	Crushed Sherd (Cedeñoid)	Total
Modeled lug	1	1	-	-	-	-	2
Base	2	2	5	7	1	-	17
Base (with Basket Impression)	-	-	1	5	-	-	5
Rim	3	2	26	9	3	1	45
Disk	-	-	1	-	-	-	1
Inflection	3	1	2	-	-	-	6
Body Sherds	22	10	45	32	5	2	116
Grand total	29	16	80	53	9	3	192

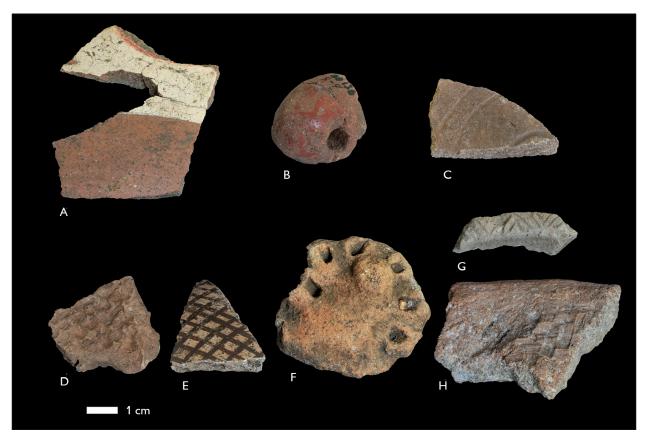


Figure 4. Ceramic materials from the surface collection of Cerro Gavilán 2: A) Ronquín/Ronquín Sombra style sherd with white on red paint; B) Ronquín/Ronquín Sombra modeled rim lug with red paint; C) Ronquín/Ronquín Sombra shallow fine incision; D) Arauquinoid basket impression on base; E) Arauquinoid brown on cream paint; F) Valloid modeled incised lug; G) Arauquinoid incised rim; H) Nericagua style caraipé-tempered base with basket impression. Photos by Franz Scaramelli.

shallow, fine incision is found on outer and inner surfaces of several sherds (Figure 4C). Three ceramic fragments with crushed sherd/clay pellet inclusions are tentatively assigned to the Cedeñoid series (Zucchi; Tarble, 1984).

LITHIC MATERIALS

We separated the lithic materials recovered in both the surface collection and from the excavated test pit by raw material, traces of use or wear (in the case of expedient artifacts), or by the manufacturing technique and evidence of use (in the case of manufactured items) (Figures 5A-5K). In the surface collection, the majority of the lithics were concentrated in sectors 4, 5 and 6. Cracked cobbles were among the more frequent finds. Expedient artifacts include

small manos, and hammer stones. We located three nutting stones with a small round depression on the upper surface to support the nut or seed (Figure 5F); these frequently present one edge showing wear as a hammer. Unifacial flake tools include small crystalline quartz scrapers, blades, and perforators. Two crystalline scrapers show incurving blade margins with retouched edges that may be have been used to shave twigs or canes (Barse, 1990). The artifacts were produced by bi-polar percussion. Debitage, in the form of chunks, cores, and waste flakes, suggests that some manufacturing occurred in the cave. No bi-facial tools or points were found. One flat fragment of friable sandstone shows two parallel 'u' shaped channels running across the surface (0.5 cm wide at the surface), and may

have been used as a shaft polisher (Figure 5J). In the back dirt extracted by looters near our test pit, we recovered a semi-conical ground stone pestle approximately 10 cm in length and 5.5 cm in diameter at the base (Figure 5K)¹. The identifiable lithic remains recovered in the excavation are listed in Table 3. These are similar to the surface finds, with a predominance of crystalline quartz flakes, unifacial blades, and scrapers, produced through bi-polar reduction

of small pebble cores (Figures 5A, 5B, 5D and 5E). Also present are cracked cobbles, waste flakes and chunks, and manos and hammerstones. A small fragment of a dark grey, polished celt was found in level 7, and another was located in level 1. Notable are two fragments of goethite in levels 2 and 5 (Figures 5H and 5I, respectively) that showed abrasion on two or three sides, suggesting they were used to produce pigment.

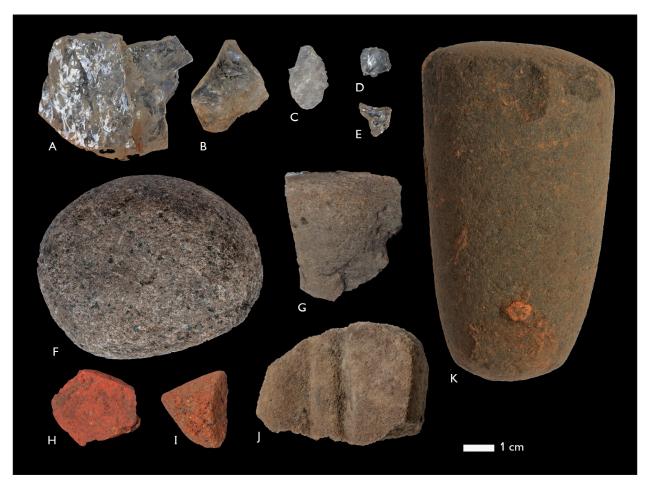


Figure 5. Lithic materials from Cerro Gavilán 2: A, B, D, E) crystalline quartz flakes, levels 4, 5, surface, 3, respectively; C) quartz flake, level 3; F) nutting stone, surface; G) fragment with signs of abrasion on one surface, level 9; H, I) goethite fragments with signs of abrasion, levels 2 and 5 respectively; J) stone with u-shaped grooves, surface; K) conical grinding stone, found in back dirt of looter's pit adjacent to excavation pit 1. Photos by Franz Scaramelli.

¹ No starch grain analysis has yet been carried out on the tools or grinding surfaces, although future fieldwork should be carried out with this in mind. This analysis would surely contribute to a better understanding of the timing of the introduction of farming into the array of subsistence strategies that were already present in the area, including foraging, hunting, fishing and some forms of forest management.

Table 3. Summary of Evidence Recovered in Test Pit 1 at Cerro Gavilán 2. Legend: ^a = unidentified, unless specified. Identification by Ascanio Rincón, Instituto Venezolano de Investigaciones Científicas.

	instituto i	CHEZOIGHO GE IHVE	sugaciones cicitineas.			(Continue)
Level	Level (cm)	Dates 14C BP	Lithic artifacts	Shell	Bone fragments ^a	Plant remains present
1	0-10		1 mano fragment; quartz fragment		4 bone fragments	Carbonized seeds
2	10-20	3440 ± 40 BP	1 goethite fragment abraded on two sides; 2 quartz fragments; 2 quartz scrapers	Small; shell fragments	24 bone fragments; 1 fish vertebra; 1 caiman osteoderm; 1 small mammal bone	
3	20-30		4 crystalline quartz blades; 1 fragment of lignite; 1 quartz core	2 shell fragments, bivalve	39 bone fragments; 2 crab chelae; 4 fish vertebrae; 1 turtle osteoderm; 3 fish bones; 2 fish spines (Order: Siluriformes, catfish); 3 small mammal vertebrae; 1 fish otolith (Scianidae)	Carbonized seeds
4	30-40		1 quartz mano fragment; 1 crystalline quartz blade		4 bone fragments; 1 fish tooth; 1 fish vertebrae	Carbonized seeds
5	50-60	6840 ± 40 BP	1 quartz chunk; 1 goethite fragment; abraded on 3 sides; 2 crystalline quartz blades; 1 perforator		44 bone fragments; 6 fish vertebrae	Carbonized seeds
6	60-70	7130 ± 50 BP	1 quartz mano; 2 quartz chips		2 bone fragments; 2 fish vertebrae; 1 turtle osteoderm	Carbonized seeds
7	70-80		1 quartz end scraper; 2 quartz flakes; 1 core; 1 possible ground axe fragment		2 turtle osteoderms (2 species); 4 fish spines (catfish); 13 fish vertebrae; 2 snake vertebrae (2 species); 2 caiman osteoderms	Carbonized seeds
8	80-90	7840 ± 50 BP	1 large mano fragment; 4 quartz flakes; hammer fragment		3 fish vertebrae; 1 snake vertebrae; 5 fish bones; 33 bone fragments; 2 small mammal mandibles; 1 tooth; 1 frog bone	

(Conclusion)

Level	Level (cm)	Dates ¹⁴ C BP	Lithic artifacts	Shell	Bone fragments ^a	Plant remains present
9	90-100		1 quartz knife or scraping tool; 1 granite mano fragment; 1 large granite fragment; 1 granite fragment; 1 quartz scraping tool; 1 quartz flake	1 large shell (bivalve)	74 bone fragments; 1 turtle osteoderm; 1 fish vertebrae; 2 fish bones; 1 small mammal mandible; 1 small armadillo (Dasypus) tibia; 1 fish thorn; 1 turtle osteoderm; 10 caiman osteoderm fragments (2 sp.); 1 armadillo bone fragments	
10	100-110	9250 ± 60 BP	1 quartz flake; 1 unidentified flake		3 fish bones; 1 fish vertebra; 10 bone fragments	Carbonized seeds
11	110-120		1 unidentified flake		1 turtle osteoderm; 2 bone fragments	Carbonized seeds
12	120-130					

BOTANICAL REMAINS

Preliminary analysis of the botanical remains, carried out by Prof. Gaspar Morcote, National University of Colombia, showed the presence of several species, mostly palms, throughout the different excavation levels (Table 3). Through the identification of endocarps and seeds it has been possible to determine the presence of *Acrocomia aculeata* (Corozo palm), *Mauritia flexuosa* (Moriche palm), *Maximiliana maripa* (Maripa o Cucurito), *Astrocaryum vulgare* (Cumare), *Astrocaryum* sp., and *Bactris* sp. (Gaspar Morcote, personal communication). The predominance of palm seeds may point to management and propagation of certain favored species, such as that suggested for the Peña Roja site in the Colombian Amazon region (Cavelier et al., 1995).

FAUNAL REMAINS

Most of the bone obtained in the excavation was very fragmented and burnt, making identification difficult (Figures 6A-6J). In addition to the bone, fragments of shell pertaining to fresh water bi-valves and snail were obtained on the surface

and in excavations (Figure 6A). The identifiable bones pertain to armadillo, fish, turtle, caiman, frog, and crab (probably *Pseudothelphusidae*) (Table 3). Surface remains were scarce, and found only in sector 5, where 2 fish vertebra and 4 unidentifiable bone fragments were recovered. Four otoliths were found (Figures 6D and 6E), one of which is tentatively identified as a species of South American Silver Croaker (*Plagioscion squamosissimus*), a freshwater fish commonly found in the Orinoco and the Amazon). This fish commonly reaches 80 cm in length and 4.5 kg. In sector three, near the rear of the cave, three human bones were identified, consisting of one male pelvis bone, a distal fragment of a right femur, and a fragment of mandible showing alveoli for I1 to 2; C1 and P3, with a large diastema behind P3, which indicates an older individual with loss of teeth.

ROCK PAINTINGS

Striking to the first-time visitor are the large clusters of multicolor, superimposed, rock paintings that cover the rear wall and part of the ceiling of the rockshelter. Five distinct clusters or panels of rock paintings, with empty spaces of variable width between the panels, extend horizontally for approximately 45 m. The paintings are mostly concentrated in panel 2, that covers 13.8 m in the western sector of the rear wall (Figure 7A). The surface of this panel is concentrated in an area where sections of the back wall had been exposed, thus offering a 'clean' surface for many of the paintings. Nonetheless, some of the paintings extend above the smoother exposed surface onto the rougher surface above. There is no clear interaction between the figures in the different panels, and these are only distinguished by the blank surface between them and the other panels. The figures extend up the walls and onto the ceiling at heights over 3 m

in some areas, suggesting the use of a ladder or platforms for their production. Conservation is generally good, with a few areas affected by wasp nests that have been deposited on the surface, ant trails, and some fading or loss of paint. The eastern-most cluster, panel 5, is exposed to more moisture and is partially covered by accretions that partially obscure the motifs. The biggest obstacle to the documentation of the rock art is the superposition of the most recent paintings; vast areas of earlier figures have been obliterated by the later art and by large smudges of white paint, apparently rubbed onto the wall by hand. The variety of superimposed styles of rock art on the ceiling and walls of the cave suggests its use by different groups over time.



Figure 6. Faunal remains from Cerro Gavilán 2: A) bivalve; B) fish vertebrae; C) fish spines (Doradidae); D, E) otolith (*Plagioscion*); F) fish vertebrae; G) turtle osteoderm; H) caiman osteoderm (possibly *Caiman crocodilus*); I) fish vertebrae; J) unidentified fish bones. Denise Debrot (Departamento de Biología de Organismos, Universidad Simón Bolívar) identified the otolith as Sciaenidae, perhaps of the genus Plagioscion, possibly a species of curvinata (*Plagioscion squamosissimus* (Heckel 1840) (Lasso Alcalá; Sánchez- Duarte, 2011, p. 365). Photos by Franz Scaramelli.

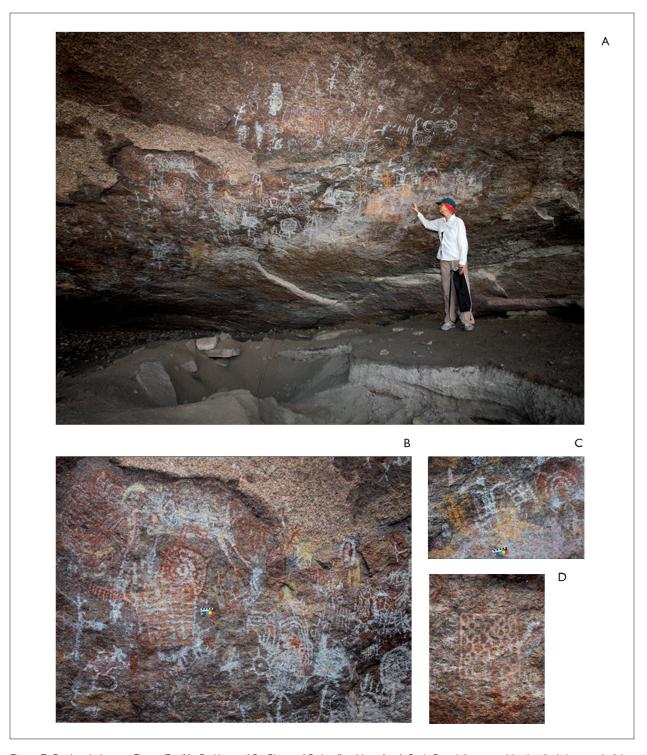


Figure 7. Rock paintings at Cerro Gavilán 2: A) panel 2; B) panel 2 detail, with styles 1, 2, 4, 5 and 6; note white-bodied deer underlying red and white motifs; C) panel 2 detail showing dual anthropomorphs in yellow and white; D) panel 2 detail showing red and white motif reminiscent of basketry designs. Photos by Franz Scaramelli.

The panels are made up of clusters of simple and superimposed figures in styles that vary in color, texture, width of line, type of pigment, painting technique, and motif. In sites such as Cerro Gavilán 2, where over 300 figures are present, the definition of styles that can be related to periods is an essential step to determine the chronology of the site, as well as its comparison with other documented sequences in the Parguaza region. The nearby Cerro Gavilán 1 cave, located near the summit of Cerro Gavilán, has even more elaborate paintings in a variety of styles, and has been key to the definition of the chronological periods for the rock paintings of the region (Greer, 1994, 1995, 1997; Scaramelli, F.; Tarble, 1996; Tarble; Scaramelli, F., 1999).

Another overhang with a large panel of rock paintings was found adjacent to Cerro Gavilán 2, to the northeast, which we have called Cerro Gavilán 3. The variety of painted styles in this overhang is much more limited, and the panel was not repainted with the more recent styles that characterize the uppermost layers in Gavilán 1 and 2. Toward the end of our stay in the field, we noticed very faint monochrome red paintings located on the ceiling, far above the panels that we had defined for the back wall; we photographed these but did not distinguish them as a separate panel (Figures 8A and 8C). For the purpose of description at this site, we have defined seven painting styles and will relate them to Greer's periods (Greer, 1995) where possible (Table 4).

Table 4. Painting styles found in Cerro Gavilán 2 and 3 with indication of period and characteristic motifs. Legend: ^a = periods based on Greer (1995).

Style	Color	Texture and pigment	Width of line	Period ^a	Motifs
1	Red monochrome (10R4/8, 10YR7/6)	Little or no texture on surface, sometimes very faint, mineral (?)	1.0-1.5 cm lines, some solid bodies	Period 2 or 4	Bird, small mammals, fish, reptile, turtle, geometric (rectangle, connected circles, open cross, outlined 'l' or 'H' form), outlined crosses, rayed concentric circle, connected circles
2	White/Red outline	Well adhered to surface	Solid white figures with 0.4-0.7 cm red outline	Period 3	Deer, fish, anthropomorph (solid body) (the latter only in Cerro Gavilán 1 and 3)
3	Dark red/maroon	Not observed up close	0.2-0.3 cm	Period 2	Reptiles (Cerro Gavilán 1 and Cerro Gavilán 3) not found in Cerro Gavilán 2
4	White and red; cream and red (bichrome), balanced use of both colors	Some surface texture	0.8-1.2 cm, finger width	Period 6	Circular and rectangular 'baskets', concentric circles, parallel arches, outlined crosses
5	Bright red (10YR4/8)	Similar to 5	0.5 cm – finger-width	Period 6	Small to medium undefined geometrics, connected open circles, rayed concentric circles
6	White, pink, light orange, and light and dark yellow (10YR7/1)	Some surface texture, clay-like	Finger-width or wider smears	Period 6	Lizards, bird, deer, humans (stick figure with striped interior, seated figure with splayed legs), 'mask', sequences of 4-5 parallel lines, cross (single, double, outlined), star, concentric circles, joined circles, circle with conjoining vertical line, concentric arches
7	Cream/light yellow	Clay-like		Very recent; painted after our first visit to the site	Written words (<i>comunidad</i> , <i>agua</i> , 'AH', 'Kiloin')

- Panel 1 is located in the SW part of the cave, 12.2 m from the datum point. The panel spans 1.8 m. Only a few motifs were present in this panel, including style 1 red, monochrome figures (10R5/8), painted with lines 1.0 to 1.5 cm wide. One of the figures is rectangular, with interior vertical divisions. In this sector there is a series of three faint figures, possibly anthropomorphs, made with faded white paint. No superimposition is noted for this panel.
- Panel 2 commences 2 m to the E of panel 1 and extends 13.8 m. (Figure 7). Most of the panel is painted on the more recently exposed 'clean' surface; nonetheless, the center sections extend at least 1.5 m above the 'clean' surface. There are several areas with superimposed motifs (Figure 7B), which permit the construction of a relative chronology.² The undermost figures are monochrome red, with a predominance of geometric (concentric circles, squares with inner divisions, rayed circles, and small zoomorphic and anthropomorphic figures). A white-bodied deer, outlined with red paint (style 2) is found adjacent to, and possibly on top of the red monochrome layer (style 1). Bichrome red and white figures (style 4), some of which appear to be representations of basketry trays, are superimposed on the white deer and monochrome red figures (Figure 7D). Nearby, to the upper right, another large bichrome triangular figure suggests the representation of a body mask. Several bright red (style 5) and red and white or cream figures (style 4) are also superimposed on the monochrome red layer. These seem to be contemporary with the white, yellow and pinkish figures (style 6) that are also superimposed on the monochrome red. A large sector of the lower eastern sector of the panel has been sloppily smeared with white paint, and white and yellow figures are at times painted on top of earlier figures of the same style (style 6).

It is interesting to note that the white and yellow figures sometimes are dual representations of the same design: reptiles, birds, human figures (Figure 7C), and series of parallel lines. This suggests that these figures were contemporary, and were deliberately painted in both colors. They may represent a concept of duality, be it gender or reference to the visible and invisible worlds, so frequent in the mythology of the area. At the very far right of the panel, the word 'comunidad' (community) is written in light yellow clay-like paint (style 7). This was written between our second and third visit to the cave, and may signify a sense of ownership by local visitors, possibly indigenous, who have taken recent interest in the political importance of ancient sites in the claim for land rights.

- Panel 3 is located 1.5 m E of panel 2. It includes a small cluster of figures in an area 3.3 m wide and no more than a meter high. Several yellow figures (style 6) have been painted over an indistinguishable monochrome red smear, including a stick figure reptile, and a circular motif. The initials AH (style 7) have been written in light yellow paint.
- Panel 4 is 11.9 m wide and is separated from panel 3 by a blank zone 8.10 m wide. A widespread smear of pink, white and yellow (style 6) is found on the lower western sector, just above several slabs of granite with mortars that were found near the human burial remains. The word 'Kiloin' or 'Kiloim' (style 7) is painted above this area. To the east, motifs painted in white clay-like paint can be discerned, including birds, and open cross, and a white, solid-bodied reptile (style 6). High above these, a motif made up of concentric circles, in white paint, and a red-and-white-rayed circle (style 5) are found.
- Panel 5 is located 10.3 m to the E of panel 4, this panel is made up of a very few paintings found on the wall above several mortars on the floor of the cave.

² See also Greer (1995).

The preservation is poor due to accretions, and various figures painted in red and white bichrome (style 3?) include a white-bodied fish with red outline and vertical middle line and a partitioned rectangle. A monochrome red motif (style 1) is made up of two opposing double flattened arches, painted nearly at floor level on the sloping roof of the cave where it intersects with the floor.

Also of interest are the figures found on the ceiling that are characterized by faint, monochrome red paint (style 1). These include a reptile in dorsal view with an open body filled with vertical fine lines, a turtle, and a human figure

in profile view, with phallus and what appears to be a spear thrower held over his head with both arms raised (Figure 8A and 8C).

CHRONOLOGY AND INTERPRETATION OF THE REMAINS

Multiple lines of evidence are used to propose a chronology for the occupation and use of Cerro Gavilán 2 over time. It is proposed that the archaeological record at Cerro Gavilán 2 is the product of a sporadic, multicomponent occupation that spans the preceramic, ceramic, and post-contact periods. Interpretation of the

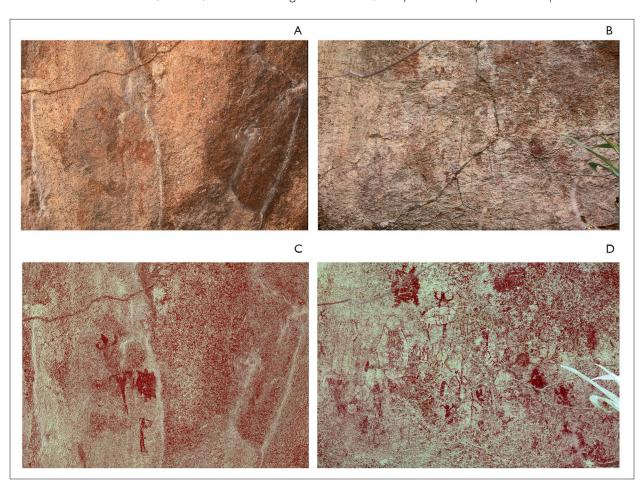


Figure 8. Style 1 monochrome red figures on ceiling of Cerro Gavilán 2: A) reptile, turtle and human with atlatl; C) same as above, enhanced with D-Stretch. Panel of rock paintings in Cerro Gavilán 3: B) style 1 monochrome red motifs (turtle, lizards, frogs, and others) underlying style 2 white with red outlined fish and anthropomorphs (fine lined maroon style 3 lizards overlie both styles 1 and 2); D) same as above, enhanced with D-Stretch. Photos by Franz Scaramelli; D-Stretch enhancement (C and D) by Kay Scaramelli.

site is based on the identification and dating of lithic and ceramic remains as they relate to the stylistic variation and superimposition of rock paintings, grinding features, organic remains (carbon, seeds, bones, and shell), and the stratigraphy obtained from undisturbed contexts. Where possible, we compare the evidence recovered at Cerro Gavilán 2 with that found at other sites, both in the Orinoco and in Colombia. Radiocarbon dates are useful for the dating of the initial occupation of the site, whereas relative dating of ceramic materials and rock art styles permit us to extend the chronology of the site to recent times.

PRECERAMIC OCCUPATION

Although limited to surface collections and a 1 m-by-.5 m test pit, the investigations conducted in the cave yield evidence of a prolonged preceramic occupation. The excavation yielded a total of 600 cubic cm of poorly compacted sediments containing stone artifacts, including crystalline quartz flakes, scrapers, blades, perforators, associated with cobbles with evidence of battering or grinding, a few ground celt fragments, and abraded goethite pieces. The presence of cores, chips, and debitage indicate the production of artifacts at the site. Carbonized bone fragments, seeds, and other charred material are abundant in the darker strata. Our test pit penetrated sediments of what can at least tentatively be described as a cooking-related or fire-related context, possible corresponding to an earth oven, as revealed in the deep deposit of alternating layers of white and dark grey ash and clear brown oxidized soils associated with cobbles and other rocks (Black; Thorns, 2014). Looter pits expose similar layers of charcoal and ash deposits associated with organic remains and artifacts throughout the mounded sediment that occupies nearly two thirds of the cave surface area, suggesting that extensive burning practices were frequent in the cave.

The AMS 14 C date 9250 \pm 60 BP for level 10 indicates initial occupations at the site date to the Early

Holocene. This date coincides with those presented by Barse for the archaic Atures I tradition in the vicinity of Puerto Ayacucho, associated with very similar artifacts (Barse, 1990, 1995). The Atures I assemblages found on deeply buried living floors are characterized by scattered fire-cracked rock; artifacts made of crystalline quartz, including scrapers and choppers; quartz cores, flakes, quartz shatter and chunks; and rare quartzite and chert flakes. Ground stone artifacts include a small celt, a pitted nutting stone, and a spherical bola stone. The flaked artifacts were produced through bi-polar reduction with unifacial flaking technology. No faunal remains were found, although charcoal and palm nuts are abundant on the living floors associated with the assemblage. Dates place Atures I occupations to at least 9000 BP (Barse, 1990). Hematite nodules that show faceted abrasion, similar to the two fragments of goethite found in our excavations at Cerro Gavilán, are associated with the Atures I assemblage and Barse proposes that they were likely used to produce red pigment (Barse, 1995). The evidence for a simple flake and pebble industry is consonant with early archaic sites in the Colombian Amazon, such as Guayabero (Correal et al., 1990), Peña Roja (Cavelier et al., 1995; Morcote et al., 1998), and Chiribiquete (van der Hammen; Castaño, 2006) with similar dates. It is noteworthy that both Guayabero and Chiribiquete are also associated with rock art sites and fragments of ochre are present in the associated assemblages (Aceituno Bocanegra, 2010). The later Atures II occupations defined by Barse (1990) continue the unifacial flake tradition, but are distinguished by the appearance of stemmed projectile points made out of non-local chert (Barse, 1990). So far, no projectile points have been recovered at the Cerro Gavilán 2 site.

The archaic occupation at Cerro Gavilán 2 suggests it served as a dwelling site by the first waves of foragers that colonized the lower Parguaza River bringing with them a generalized hunting, fishing and foraging technology adequate for the exploitation of a wide range

of resources. The lack of bi-facial projectile points in the tool kit may indicate the use of traps, nets, or bone or wooden-tipped projectiles for hunting and fishing. The scrapers and flakes may have been used to shape points and prepare shafts, as well as in food processing and other crafts. The most recent date of 3440 \pm 40 BP for level 2 of the excavation at Cerro Gavilán 2 indicates that the site was used sporadically for several millennia, with minimal change in the lithic industry. The presence throughout the excavated levels of fragments of charred bone, many of which were identified as aquatic or semi-aquatic animals, points to a riverine orientation, with minor use of terrestrial species. The nutting stones and mortar holes found on the surface of the site may have been used to process the palm nuts and other seeds found in the excavated levels.

As noted earlier, the presence of two mineral fragments identified as goethite (FeO (OH)) with abraded edges in levels 2 and 5 of the excavations may indicate pigment preparation. This finding supports the idea that the style 1 red pictographs could be associated with the preceramic occupations of the Orinoco, as is the case in other sites in Colombia (Aceituno Bocanegra, 2010, p. 19-20) and in Brazil (Morales Jr.; Quesenberry, 2005). The rock art in Cerro Gavilán 2 appears to span a long period, possibly dating to the preceramic occupations and continuing up to very recent times. The earliest images, corresponding to style 1, emphasize the fauna typical of the charred bones found in the excavation. The human figure with an apparent spear thrower also portrayed in this style on the ceiling of the cave, associated with a turtle and a lizard, suggest the importance of animal/ human relations and ritual activity related to them. We propose that the earliest monochrome red painting in Cerro Gavilán 2 is associated with the initial occupation

and ritual use of the cave by non-agricultural groups with a broad subsistence base that included hunting, fishing and foraging, with an emphasis on the species available in the nearby rivers and gallery forests. Evidence from the Cerro Gavilán 3 site supports this proposition. The earliest style of paintings at this site corresponds to the monochrome red paintings that virtually duplicate the figures on the ceiling of Gavilán 2, as seen in the depiction of a solid bodied turtle and open bodied lizard at both sites (Figures 8A-8D).

CERAMIC PERIOD

Following the lengthy archaic occupation, the cave continued to offer shelter and protection for different activities throughout the ceramic period, as supported by the multiple ceramic styles represented in the surface collection. There is still a great deal of controversy concerning the initial dates for ceramic making occupations in the Middle Orinoco (Barse, 2000). The Cedeñoid materials recovered on the surface of the cave are similar to those found in the earliest levels at several sites in the Middle Orinoco (Zucchi; Tarble, 1984; Zucchi et al., 1984), and may also be related to the early porous, organic-tempered ware identified by Howard (1943), Vargas Arenas (1981) and Roosevelt in their excavations at Parmana (Roosevelt, 1980, 1997), often in association with Saladoid ceramics. The presence of early ceramics at Cerro Gavilán 2 suggests that by approximately 500 years BC the cave was being visited and used by members of different semi-sedentary, agricultural, pottery-making populations³. The presence of more recent Arauquinoid, Valloid and Nericagua style ceramics (Tarble; Zucchi, 1984; Evans et al., 1959) testify to the later pre-Hispanic utilization of the cave, between 1000 years AD and the moment of regional contact in 1535 AD and beyond. Caraipé and cauixí tempered materials

³ The surface sherds are infrequent and no ceramic materials were recovered from excavated strata, nor were they visible in areas exposed by looter pits. It is impossible to determine the impact that looters and other visitors may have had on the surface remains found at the site. Widespread looting of better-known sites has been documented in the region to the south, especially at those sites where ceramic burial urns were present (Greer, 1995).

continue to be manufactured in the region well into the colonial and republican era (Scaramelli, K., 2006). The post-colonial ceramics have simplified decoration, compared to earlier styles. Basket impression on the base of vessels and simple incision on the rim (Figures 4D, 4G and 4H) are typical of the post-colonial period.

The earliest ceramic-bearing populations may have been cultivators who complemented their diet through hunting, fishing, foraging and the management of forest products; the later groups have been characterized as intensive maize or mixed maize/manioc cultivators, exploiting the alluvial soils of the rivers and inland resources (Roosevelt, 1980; Vargas Arenas, 1981). The shift to maize cultivation has been correlated to an important population increase in late precontact times, associated with larger and more sedentary occupations (Roosevelt, 1980).

The diversity of ceramic materials at Cueva Gavilán 2, their low frequency, and the absence of well-defined contexts, suggest that different pottery-making groups visited the shelter sporadically. At the same time, the absence of pottery in the excavated strata indicates that carriers of the ceramics did not occupy the shelter for extended periods. They appear to have continued to create rock art at the site and, at some point, began to use the site for funerary ritual. This points to a significant shift away from the use of the cave as a dwelling, even if only seasonal, that contributed to the formation of the mound of cultural strata during preceramic times. It appears that all subsequent pottery-making occupations had settlement alternatives, such as open-air, semipermanent villages, visible in the archaeological record in large and deep accumulations of pottery and other cultural materials common throughout the area. The human remains deposited in the rear sector of the cave in woven basket bundles, indicate the use of the cave for funerary rituals during the ceramic period. This was a common burial practice in the region among several indigenous groups (Greer, 1995). It should be noted that not all caves containing burials also have rock art, and vice

versa, and Greer reports that modern Huottöja (Piaroa) communities do not select caves for burial because they contain rock art, but he believes that in the past there may have been specific paintings created to accompany burials (Greer, 1995). Other heavily painted caves are actually avoided, since it is believed that they are spiritually dangerous (Boglar, 1978; Perera, 1983, 1991).

In the rock art in the cave, the balanced bichrome red and white figures (style 4) that are superimposed on earlier painted styles may be associated with early farming communities. A shift in subsistence base is suggested in the incorporation of images in this style that can be interpreted as paraphernalia related to agricultural groups: basketry designs, such as those used on flat baskets (guapas) and the depiction of a masked dancer similar to those still created and used by the Huottöja today (Mansutti Rodríguez, 2006; Overing; Kaplan, 1988). Later agricultural groups, associated with the Arauquinoid and Valloid, and caraipétempered ceramics, continued to visit the cave and create successive layers of rock art. The persistence of zoomorphic and anthropomorphic figures, alongside crosses, concentric circles and other motifs prevalent in the earlier styles, but now painted with less precision and detail, argues for some continuity in the symbolism expressed in the context of the cave. As noted earlier, duality expressed in different colored pairs is a common element in the later paintings. There also appears to be a deliberate copying of earlier motifs in the later styles, even while large areas of earlier motifs are obscured by the broad smearing of white and pink clay-based paint.

Rock painting continued in the shelter, and it is possible that the appearance of the superimposed style 2 may signify a new migration to the area "with new cultural traditions and new artistic expression" (Greer, 1995, p. 144). This new style, also found in superimposition at Cerro Gavilán 1 and 3, and at several other caves in the Parguaza basin (Greer, 1995; Scaramelli, F.; Tarble, 1996; Tarble; Scaramelli, F., 1999)

suggests a continuation of a worldview populated by human and animal forms. Caves, as the interface of the chtonian, celestial and terrestrial worlds, stand out as pivotal spaces in the Orinocan cosmogram of indigenous groups still found in the region (Boglar, 1978; Overing; Kaplan, 1988). We would like to suggest that Cerro Gavilán 2, as well as other similar hills and cave sites in the area, became anchored in the landscape through their use in the Early Holocene, and their walls served as a canvas for succeeding generations of visitors, who established their own ties to the landscape through continual additions to the painted walls. We suggest that it is through the continual act of painting and visitation that the sites retained their significance through time, both creating and recreating the topographic memory of the peoples who occupied the area. The hills containing these caves and their paintings came to play an active role in the landscape and cosmogram, acquiring agency of their own in their interactions with humans and animals alike in the different spiritual and natural realms. They figured both as the place of origin, as the abode of spiritual beings, and as players in their own right in accounts of ancient mythic battles across the landscape (Green, L.; Green, D., 2009; Santos-Granero, 1998).

CONCLUDING REMARKS

The Cerro Gavilán site is representative of a widespread utilization of rockshelters in the northern tropical South America, where early populations benefitted from the protection offered by these privileged spaces to practice a generalized foraging economy during the early Holocene. We argue that rock paintings in this and other similar contexts serve to mark and create the cultural landscape early in the occupational history of the region, five to six thousand years prior to the appearance of agriculture and ceramics. Through time, the shelters, and the hills in which they were found, continued to figure as topograms (Santos-Granero, 1998), consecrating features of the landscape through

continued use and as topographic references in oral tradition (Green, L.; Green, D., 2009). Changing styles of painting and the diverse ceramic materials found on the surface of the cave suggest ritual visitation by different agricultural populations. The eventual use of the cave as a burial site adds an additional element in the palimpsest of accumulated meaning. The more recent addition of new paintings in the form of names and allusions to the local community (comunidad) can be seen as the continuation of a millenary tradition of territorial claims and positioning in the landscape, with overtones of political action and display.

REFERENCES

ACEITUNO BOCANEGRA, Francisco J. El poblamiento temprano de la floresta húmeda de Colombia: una síntesis regional para un modelo de poblamiento de la cabecera noroccidental de la cuenca del Amazonas. In: PEREIRA, Edithe; GUAPINDAIA, Vera (Ed.). **Arqueologia amazônica**. Belém: MPEG/IPHAN/SECULT, 2010. p. 16-33.

BALÉE, William. **Cultural forests of the Amazon**: a historical ecology of people and their landscapes. Tuscaloosa: University of Alabama Press, 2013.

BARSE, William. Holocene climate and human occupation in the Orinoco. In: MERCADER, Julio (Ed.). **Under the canopy**: the archaeology of tropical rain forests. New Brunswick: Rutgers University Press, 2002. p. 249-270.

BARSE, William. Ronquín, AMS dates, and the Middle Orinoco sequence. **Interciencia**, Caracas, v. 25, n. 7, p. 337-341, 2000.

BARSE, William. El período Arcaico en el Orinoco y su contexto en el norte de Sudamérica. In: CAVALIER, Inés; MORA, Santiago (Ed.). **Ámbito y ocupaciones tempranas de la América tropical**. Santa Fé de Bogotá: Instituto Colombiano de Antropología/Fundación Erigaie, 1995. p. 1-9.

BARSE, William. Preceramic occupations in the Orinoco River Valley. **Science**, Washington, v. 250, n. 4986, p. 1388-1390, 1990. DOI: http://dx.doi.org/10.1126/science.250.4986.1388.

BLACK, S. L.; THORNS, A. V. Hunter-gatherer earth ovens in the Archaeological record: fundamental concepts. **American Antiquity**, Washington, v. 79, n. 2, p. 203-226, 2014. DOI: http://dx.doi.org/10.7183/0002-7316.79.2.204.

BOGLAR, Lajos. **Cuentos y mitos de los piaroa**. Caracas: Instituto de Investigaciones Históricas/Centro de Lenguas Indígenas/Universidad Católica Andrés Bello, 1978.

BONILLA-PÉREZ, Amed; FRANTZ, José Carlos. Petrografía, geoquímica y geocronología del granito de Parguaza en Colombia. **Boletín de Geología**, Caracas, v. 35, n. 2, p. 83-104, 2013.

CASTILLO ESPITIA, Neyla; ACEITUNO BOCANEGRA, Francisco J. El bosque domesticado, el bosque cultivado: un proceso milenario en el valle medio del río Porce en el noroccidente colombiano. Latin American Antiquity, Washington, v. 17, n. 4, p. 561-578, 2006. DOI: http://dx.doi.org/10.2307/25063072.

CAVELIER, Inés; RODRÍGUEZ, Camilo; MORA, Santiago; HERRERA, Luisa Fernanda; MORCOTE, Gaspar. No sólo de caza vive el hombre: Ocupación del bosque amazónico, Holoceno temprano. In: CAVELIER, Inés; MORA, Santiago (Ed.). Ambito y ocupaciones tempranas de la América tropical. Bogotá: ICAN/Fundación ERIGAIE, 1995. p. 27-44.

COLANTONI, Roberto; DELGADO, Lelia. Formas del inicio: la pintura rupestre en Venezuela. Caracas: Consejo Nacional de la Cultura/Fundación Galería de Arte Nacional, 1992. (Catálogo 123, Exposición 130).

CORREAL, Gonzalo; PIÑEROS, Fernando; VAN DER HAMMEN, Thomas. Guayabero I: un sitio precerámico de la localidad Angostura II, San José del Guaviare. **Caldasia**, Bogotá, v. 16, n. 77, p. 245-254, 1990.

CRUXENT, José M.; ROUSE, Irving. An archaeological chronology of Venezuela. Washington: Pan American Union, 1958. v. 1-2 (Social Science Monographs, 6).

EVANS, Clifford; MEGGERS, Betty J.; CRUXENT, José M. Preliminary results of archaeological investigations along the Orinoco and Ventuari Rivers, Venezuela. In: CONGRESO INTERNACIONAL DE AMERICANISTAS, 33., 1959, San José. Actas... San José: Société Américaine de France, 1959 v. 1, p. 359-369.

GREEN, Lesley J. R.; GREEN, David R. Space, time, and story tracks: contemporary practices of topographic memory in the Palikur territory of Arukwa, Amapá, Brazil. **Ethnohistory**, Durham, v. 56, n. 1, p. 163-185, 2009. DOI: http://dx.doi.org/10.1215/00141801-2008-039.

GREER, John W. El arte rupestre del sur de Venezuela: una síntesis. Boletín de la Sociedad de Investigación del Arte Rupestre de Bolivia (SIARB), v. 11, p. 38-52, 1997.

GREER, John W. Rock art chronology in the Middle Orinoco Basin of Southwestern Venezuela. 1995. Thesis (Doctorate in Philosophy) – University of Missouri, Columbia, 1995.

GREER, John W. The painted rock art of Southern Venezuela: context and chronology. In: BOCK, F. G. (Ed.). American Indian rock art. San Miguel: American Rock Art Research Association, 1994. p. 45-58. v. 20.

HOWARD, George. Excavations at Ronquín, Venezuela. New Haven: Yale University Press, 1943. (Yale University Publications in Anthropology, n. 28).

LASSO ALCALÁ, C. A.; SÁNCHEZ- DUARTE, P. Los peces del delta del Orinoco: diversidad, bioecología, uso y conservación. Caracas: Fundación La Salle de Ciencias Naturales y Chevron, 2011.

LATHRAP, Donald. **The Upper Amazon**. Southhampton: Thames and Hudson, 1970. (Ancient Peoples and Places, v. 70).

MANSUTTI RODRÍGUEZ, Alexander. Warime, la fiesta: flautas, trompas y poder en el noroeste amazónico. Guayana: Fondo Editorial UNEG, 2006. (Colección Investigación, Serie Antropológica).

MORALES JR., Reynaldo; QUESENBERRY, Melisa. A niche in time: JD-5, Caribbean Cave art, and the fourth dimension. In: SKLAR, Marilyn (Ed.). **American Indian rock art**. Glendale: American Rock Art Research Association, 2005. p. 34-56. v. 31.

MORCOTE-RIOS, Gaspar; CABRERA-BECERRA, Gabriel; MAHECHA-RUBIO, Dany: FRANKY-CALVO, Carlos Eduardo; CAVALIER-F., Inés. Las palmas entre los grupos cazadores-recolectores de la Amazonía colombiana. Caldasia, Bogotá, v. 20, n. 1, p. 57-74, 1998.

OVERING, J.; KAPLAN, M. R. Los Wóthuha (Piaroa). In: LIZOT, Jacques (Ed.). Los aborígenes de Venezuela: etnología contemporánea II. Caracas: Fundación La Salle de Ciencias Naturales/Instituto Caribe de Antropología y Sociología/Monte Ávila Editores, 1988. v. 3, p. 307-411. (Monografía, 35).

PERERA, Miguel Ángel. Cuevas y cerros en la tradición oral y ceremonial de los amerindios de Venezuela. **Revista de Indias**, Madrid, v. 51, n. 193, p. 607-630, 1991.

PERERA, Miguel Ángel. Sobre un cementerio Piaroa en el río Parguaza, Distrito Cedeño, Estado Bolívar. **Boletín de la Sociedad Venezolana de Espeleología**, Caracas, v. 20, p. 29-38, 1983.

ROOSEVELT, Anna C. The excavations at Corozal, Venezuela: stratigraphy and ceramic seriation. New Haven: Yale University Press, 1997. (Yale University Publications in Anthropology, n. 83).

ROOSEVELT, Anna C. **Parmana**: prehistoric maize and manioc subsistence along the Orinoco and Amazon. New York: Academic Press, 1980.

SANTOS-GRANERO, Fernando. Writing history into the landscape: space, myth and ritual in contemporary Amazonia. American Ethnologist, Malden, v. 25, n. 2, p. 128-148, 1998.

SCARAMELLI, Kay. **Picking up the pieces**: ceramic production and consumption on the Middle Orinoco frontier. 2006. Thesis (Doctorate in Anthropology) – University of Chicago, Ann Arbor, 2006.

SCARAMELLI, Franz; TARBLE, Kay. Contenido arqueológico y etnográfico de los sitios de interés espeleohistórico del Orinoco medio, Bolívar, Venezuela. **Boletín de la Sociedad Venezolana de Espeleología**, Caracas, v. 30, p. 20-32, 1996.

TARBLE, Kay; SCARAMELLI, Franz. Style, function, and context in the rock art of the Middle Orinoco Area. **Boletín de la Sociedad Venezolana de Espeleologia**, Caracas, v. 33, p. 17-33, 1999.

TARBLE, Kay; ZUCCHI, Alberta. Nuevos datos sobre la arqueología tardía del Orinoco: la serie Valloide. **Acta Científica Venezolana**, Caracas, v. 35, p. 434-445, 1984.

URBANI, Franco; SZCZERBAN, Eugenio. Formas pseudocársticas en granito rapakivi Precámbrico, Territorio Federal Amazonas. **Boletín de la Sociedad Venezolana de Espeleología**, v.6, n. 12, p. 57-70, 1975.

VAN DER HAMMEN, Thomas; CASTAÑO, Carlos. Chiribiquete: datos iniciales para una prehistoria del área. In: CASTAÑO, Carlos; VAN DER HAMMEN, Thomas (Ed.). Arqueología de visiones y alucinaciones del cosmos felino y chamanístico de Chiribiquete. Bogotá: Parques Nacionales de Colombia, 2006. p. 13-44.

VARGAS ARENAS, Iraida. **Investigaciones arqueológicas en Parmana**: los sitios de La Gruta y Ronquín, Estado Guárico, Venezuela. Caracas: Academia Nacional de la Historia, 1981. (Estudios Monografías y Ensayos, n. 20).

ZUCCHI, Alberta; TARBLE, Kay. Los cedeñoides: un nuevo grupo prehispánico del Orinoco Medio. Acta Científica Venezolana, Caracas, v. 35, p. 293-309, 1984.

ZUCCHI, Alberta; TARBLE, Kay; VAZ, Jesús Eduardo. The ceramic sequence and new TL and C14 dates for the Agüerito Site of the Middle Orinoco. **Journal of Field Archaeology**, Boston, v. 2, n. 2, p. 155-180, 1984.