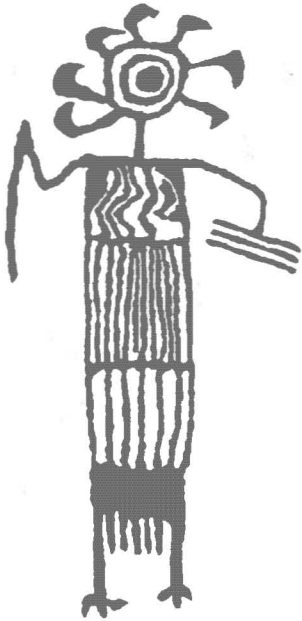




*Peggy Whitehead
William Whitehead
Lawrence Loendorf
Editors
William Breen Murray
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Petroglyphs in the General Valley, Costa Rica. Problems in Their Interpretation

Martin Künne

The project to catalogue the petroglyphs in the General Valley began in 1993. The scientific documentation is realized by an interdisciplinary team of archeologists and anthropologists from Germany and Switzerland. The project is supported by the Museo Regional del Sur. The General Valley is situated in southwest Costa Rica and stretches about 115 km. This paper describes a petroglyph area, under investigation, in the northern part of the territory. All documented stones revealed an abundance of abstract geometric motives, such as single and double spirals, circles of many kinds, and small round depressions, connected by various lines. The contribution introduces different levels of natural, cultural and mythic landscape organization and tries to find out possible meanings within the superimposition of various rooms of analysis. Special attention is paid to the traditional use and knowledge of abstract symbols on wooden materials by the indigenous groups of the investigation area. The relative indetermination of meanings is not understood as a deficit but is seen as richness of the investigated object.

Although Costa Rica and Panama are like two barrels full of petroglyphs there are only a few scientific studies about these objects. Most of them carry descriptive characters. However, in Costa Rica, exists an unbroken tradition of petroglyphs investigation from the beginning of the late 50's (cp. F. Ernesto 1959; M. Snarkis et al. 1975, V. Acuña 1985 a, b, c; J. Quilter/ A. Blanco 1992). Panamanian petroglyphs today represent a nearly forgotten field of exploration (N. Harte 1960, 1961).

Since 1993, an interdisciplinary team of archaeologists, anthropologists and archaeometrists from Germany and Switzerland have been dedicated to the scientific documentation of petroglyphs in the Costa Rican zone of Pacifico Sur and in the Panamanian province of Chiriquí.

The core area of our work is situated in southwestern Costa Rica in the General Valley. In collaboration with the Museo Regional del Sur and with the Museo Nacional de Costa Rica, a systematic recording has been done in the northern part of the General Valley between the rivers Convento and Sonador (P-144-FS). The recorded petroglyphs are located in an open landscape below the 800 m line. With orientation towards natural features, our research team divided the open territories into four search areas,

each two hectare in size. There we found 49 rocks with petroglyphs. To make comparisons with other engraved stones, we documented selected petroglyphs sites in different altitudes (from 31 m to 1417 m), ecological environments and archaeological areas in the Great Chiriqui region. Within the General Valley and the Diquis we documented 72 additional stones in 15 sites. In the province of Chiriquí we investigated two partial areas near the volcano Barú and one area in the coastal lowlands around Remedios. Altogether we located seven petroglyph sites and documented 50 engraved stones.

Based on the documentation results, we try to find interpretive approximations. A dissertation/study currently being undertaken in the Latin American Institute of the Free University Berlin deals with these topics.

Petroglyphs in the investigation areas

According to my information, Costa Rica is the only country in Central America that has created a database of registered archaeological sites. In 1998, there existed 2383 registered archaeological sites. Petroglyphs were associated with 171 of those sites.

The highest concentration of documented petroglyphs is situated in the central Costa Rican highlands in the upper Rio Reventazon territories. There were 42 places known at this time. Other important sites exist near the volcanoes Orosi and Miravalles in the northern Costa Rican province of Guanacaste. According to the Panamanian National Institute of Culture, the entire Panamanian territory contains 45 officially known petroglyphs places, 22 of them belong to the province of Chiriquí. In both countries, no pictographs are officially reported in scientific sources.

The Costa Rican areas investigated by our team, revealed an abundance of abstract geometric motifs, such as single and double spirals, circles of many kinds, and small round depressions, connected by various lines. In the General Valley region and in the areas of the western volcano Barú, which already form a part of Panama, the majority of these symbols are arranged into groups of complex pictures. They rarely appear as isolated engravings. In general, there seems to have been a preference for rounded forms. All compositions of the General Valley usually appear on the rocks upper surface. The representations of the western Barú region are also found on other sides of the stones. Orientation in a distinctive direction is not clearly discernible.

In the eastern areas of volcano Barú and in the chiriquian lowlands around Remedios, we often found very deeply engraved isolated abstract symbols. Spirals and circles no longer predominant. In addition to the abstract symbols in the Remedios region there are rayed semicircles, arcs, triangle forms, and right angel forms. Complex representations are not unusual. The motifs can be observed everywhere on the stone.

Anthropomorphic and zoomorphic depictions are not as frequent in all investigated areas. They appear as stylized and as naturalistic forms in side view and in upper view. The most common anthropomorphic and zoomorphic engravings are alligators and human faces as well as human bodies. We also found left hands, human footsteps and pictures that could be deer and birds. In the neighborhood of Remedios, we documented depictions that look like phytomorphic engravings. Anthropomorphic and zoomorphic engravings are normally surrounded by abstract motifs. Only in two cases do they appear as isolated images.

In southwestern Costa Rica the engravings consist of grooves of 2 cm depth at the most and no more than 3,5 cm in width. An overlapping of motifs was not observed. We theorize, that the manufacture of engravings began with carved lines on the rock. Later, dots were added on the lines. The resulting rows of dots were connected to grooves by pecking. The lines follow and use the natural perforations on the stone. It can be presumed, that the stone operated as a partner during the decoration process. Engraving a stone was probably different from drawing on paper, according to an already existing idea.

Methods of analysis

The cultural, chronological and ethnic origins of the investigated petroglyphs are complicated to determine and difficult to classify. Our interpretive approximations follow three paths. First, they attempt to reconstruct the position of the engraved stones in natural, archaeological and in ethnic landscapes. Different kinds of organization and perception allow an understanding of the petroglyphs with objective and subjective concepts. Second, they mean an iconographic study of the quantity (figure) and quality (form, dimension, position, manufacture) of the documented symbols. The documentation of motives and representations was carried out with photographs, drawings and folia. The aim was, to achieve as precise a copy of the original engraving and its bearer as possible. The most exact recording was made using a 3-D digitizer (trigomat), which allows three-dimensional drawings on a computer screen. All measured data are available in a database, which contains precise descriptions and categorizations of the documented petroglyphs and stones.

Third, our interpretive approximations scrutinize traditional decorative practices and oral literatures of the indigenous populations. We try to find out remembered everyday functions and religious connotations of abstract motives by semi structured interviews. Overwhelming obstacles are the widespread disappearance of decorative practices, the reduction of present religious knowledge and the universality of the profound symbols on stone. Using historic analogies, we try to transfer the investigated results to the engravings.

Because of the limitations, set up by the objects

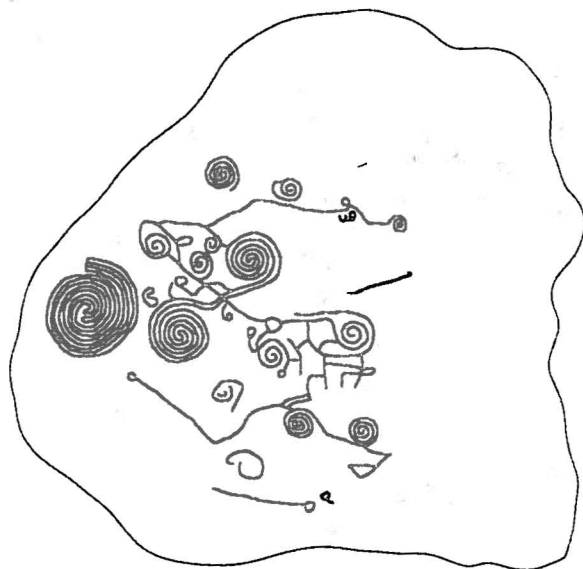


Figure 1: Casa de la Luna.

and methods of investigation, we use various strategies for interpreting the petroglyphs. The manifold ways of reading thus enable an overlapping of different meanings. By following an iconographic, archaeological and ethno-graphical focus of inquiry, the areas under study can be examined in their prehistoric context, rendering a diachronic and multi sided view. Although seemingly indeterminate, the obscurity of the depictions should enhance their multifaceted aspects, rather than be regarded as a deficit.

Natural Landscape

The General Valley reaches a length of approximately 125 km and a breadth of up to 30 km. The northern part is nourished by the river system of the Rio del General, while the southern part lies within the drainage system of the Rio Coto Brus. The greater part of the valley lies between 300 and 700 m and displays a gently undulating surface. The valley is surrounded by the pacific mountain range und the talamanca peaks. Well into the 19th century, the extension of the valley lying below 700 m was an expansive savanna, which represented the only open countryside in a region of tropical rainforest.

Petroglyphs occur either in groups or alone, and usually on pastures and fields in wide depressions of streams or rivers. The positions of the engraved

stones in the Convento/ Sonador area were measured in a polygonal network, which in turn are connected by GPS to the global map system (Lambert) of Costa Rica. Using CAD-software, a plan of location spots was set up for one sector as well as a point raster, which serves as the basis for a topographical model and for a plan with contour lines. Besides concentration of finds, the latter also marks possible affinities with the location itself.

The stones mostly consist of granodiorite. Their size can be small or reach great dimensions. Although today the figure of the officially known petroglyphs sites in the Costa Rican region of Pacifico Sur is greater than in the Panamanian province of Chiriqui, their quantity and density in the latter is obviously higher.

Archaeological landscape

Two factors responsible for this situation are a denser precolumbian population and a weaker present intervention in natural landscape. In archaeology the Costa Rican Pacifico Sur forms the sub-region Diquís. With the Panamanian provinces of Chiriqui and Bocas del Toro it becomes the region of Gran Chiriqui.

From 452 archaeological sites in the Diquís region, 59 are correlated with petroglyphs. Of these, 40 places consist of only petroglyphs concentrations. Ten more petroglyphs sites are correlated with cemetery zones. Three others are inside or nearby habitation sites. Three more are within the context of both, habitation and cemetery sites. Three petroglyphs sites are correlated at the same time with architecture features and grave findings (database of archaeological sites in Costa Rica, National Museum of Costa Rica, 1998). Petroglyphs in an architecture complex consisting of stone statues and barrel like formed stones, have also been found near Barriles in the Panamanian province of Chiriqui (Haberland 1984).

Most petroglyphs sites in the Diquís do not have any dateable features. From the registered petroglyph sites, 28 concentrations do not have any dateable features. Twenty-two concentrations correlate with ceramics of the pre-contact period (700 A.D. – 1520 A.D.). Nine sites are correlated with ceramics of the Formative Period (1000 B.C. – 700 A.D.). The preceding aceramic period was dateable with certainty only in western parts of Panama. However, in the

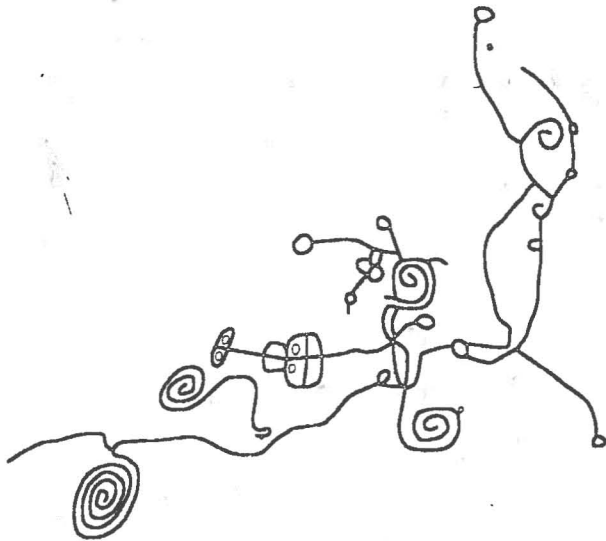


Figure 2: El Limon (Nördl. Teil), 4.11.98 (Nr. 12)

General Valley location spots from this period are presumed in three abris (Drolet 1988).

In the Convento/ Sonador area of systematic survey we recorded, in two places, surface finds of ceramics. They include fragments of clay pottery which came to the surface after farmers had plowed pasture land for the first time. Reddish brown and unpainted they belong to the so-called biscuit-ware of the phases after 700 A.D.

Ethnic Landscape

There is no reliable background information or documentation pertaining to pre-Columbian times in the General Valley. Some authors surmise, that there was a culturally uniform ancient population in Central America (Stone 1948) which spoke aruakan languages (Fonseca 1995, Krickeberg 1949). Changes of ceramic forms and styles, the appearance of works in gold, and shaft- and chamber graves, point to a radical cultural change between 600 A.D. and 800 A.D. in the region of Gran Chiriqui. This culture break is often connected with the immigration of chibcha speaking populations. The first written documents about the inhabitants of the General Valley stem from the Spanish conquistador Juan Vázquez de Coronado in 1563. As later reports, they employed names of localities and caziquen as ethnonyms and don't tell anything about stone engraving traditions.[sic]

According to the Spanish reports the central and southern parts of the General Valley (until the river Ceibo) to the pacific coast (until the river Barú) and the talamanca slopes were inhabited by the *Turucaca* or *Borucaca*. Information about the northern valleys ethnic situation doesn't exist. Today's indigenous populations are concentrated in eleven territories in the southern parts of the General Valley. They consist of groups of the *Cabécares*, *Bribri*, *Boruca*, *Ngöbe* and *Teribe*. Only the *Boruca* group is formed of descendents of original valley residents.

The meaning of engravings

Rock engravings depict, represent and pursue a purpose. They are of iconographical, symbolical as well as social significance (Dubelaar 1986 a). The importance of abstract motives is only little known by the present day indigenous population in the General Valley. However, legends and myths about engraved stones are widespread.

Well into the 1950's, *Cabécares* and *Bribri* inhabitants of the General Valley carved abstract motifs on the wooden posts of their traditional houses. Mythological beings like the culture heros *Sibö*, the worm *Sitaba* or a mythical snake were depicted. The forks of the supportive posts were reportedly carved with motifs as well. The manufactured images served to ward off evil, illness and water (Gonzalez 1989).

Today shamans of the *Cabécares* carve and paint (red and black) wooden healing staffs (*urú*). They embody the central posts of traditional indigenous houses and a mythical world axis, upon all upper and lower levels of mythical worlds. They are arranged in a row – like beads on a string. On the *urú* are represented anthropomorphic (*sibö*), zoomorphic (monkeys, crocodiles, snakes, scorpions, birds) and phytomorphic (palm trees, corn stalks) figures. They have as well stylized abstract forms that serve in invoking transcendental beings. Some motifs stand for shamans assistants, while others signify the spirits of illnesses (Gonzalez 1989, García 1996).

According to the mythical concept of the *Bribri*, human beings can only see the traces of spirits. Spirals, circles, points and lines don't have any significance independent of the material they are carved on. The same spiral, situated on different materials signifies different things. Thus, comparisons between

Figure 3: "Piedras Vivas"

Projekt zur inventarisierung der Petroglyphen im Valle de El General, Costa Rica [sic] P-330-F.S.



similar motifs on engraved stones and carved wooden materials are limited in their interpretation potential.

In the mythical narratives of *Cabécares* and *Bribri*, mountains, boulders and rocks are inhabited by invisible living beings. The *Bribri* believe that rocks are the primeval material from which the creator god *Sibö* made all living beings (Stone, Melendez 1964). In mythical times the rocks were as soft as clay (Stone 1964). Obviously large rocks are small in size in the mythical world. Stones, small in reality, are large boulders in transcendental spheres. During the night, shamans can speak with supernatural beings, inhabiting oracle stones. Concentric circles and spirals can signify the various levels of the world. In their descriptions of these levels the *Cabécares* and the *Bribri* made use of metaphorical speech in the past.

Narrations and legends about stones are also widespread among the non indigenous population of the General Valley. According to them, there are dead stones and living stones. Under or nearby engraved stones you can find golden treasures. Circles, spirals and lines form geographical maps, which indicate the location of settlements, trails, gold mines, volcanoes and cemeteries. About natural perforations looking like a stone comb, is said to represent mountain ranges. One of these stones near Rivas, called "*pedra del indio*", was fenced in by administrative authorities. Great depressions and holes, connected with grooves, are also in literature often interpreted as testimonies of bloodletting ceremonies in the pre-columbian indian past (Stone 1966, Bonilla 1974).

Seen in this way, the rocks and the engraved stones of the General Valley and the whole Great

Chiriqui region are not only an expression of prehistoric beliefs. To the same extent, they are also present sources of fantasy, legend building and more worldly activities, like treasure hunting and advertising.

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