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## PREHISTORIC FOOTPRINTS FROM EL SALVADOR

In the Central American Republic of El Salvador the Río Lempa divides the eastern third of the country from the rest. In its lower course it flows through a large coastal plain, built up in geologically recent times by river deposits and sediments from the volcanic chain in the north (San Vicente and the volcanic group of the east). From west (Balsam range) to east (Colinas de Jucuarán) this plain has a length of about 100 km. and a width of 20 km. Some 20 years ago the nearly flat land, which slopes only very slightly from the volcanic chain to the Pacific coast, was still heavily wooded, but since then most of the forest has been cleared away for cotton crops, only leaving tiny patches of the original vegetation. In this process a number of archaeological sites were revealed, especially east of the Río Lempa, in the department of Usulután.

During 1955, while working on geological and archaeological reconnaissance, the writers learned incidentally about the discovery of some "footprints in stone" on the hacienda La Carrera. They were found during the construction of a farm road in a territory locally called "La Rama," 10 km. southwest of the town Usulután, 4 km. northeast of the little harbor Puerto El Triunfo on the Bahía de Jiquilisco, and 2 to 3 km. north of the coastal mangrove swamps. Some of the slabs were saved out of curiosity by local workmen and brought to the hacienda while the rest were destroyed by tractors using the road. At the time of our visit to the hacienda the slabs deposited there were mostly heavily weathered,

but the imprints were still distiguishable. One of them was quite perfect and showed a human right foot 26 cm. long (Fig. 2). Besides these human signs there were 2 different animal tracks, the larger one, measuring 10 cm. in diameter, certainly belonging to the cat family.

After locating one of the workmen who originally found the tracks, we went with him to the spot and made cuts in the steep banks of the road. On the north side only one very poor imprint, indicating a southeasterly direction could be found (Fig. 1), while on the southern side eight of them were revealed, with certainly more to the north (Figs. 1 and 3). These imprints, showing 4 right and 4 left feet, belong at least to 5 persons walking in a northwesterly direction. They were deeper (up to 5 cm.) and not as clear as the ones seen at the hacienda, certainly due to softer soil. The largest of them had a length of 32 cm., the smallest, perhaps of a child, of 21 cm.

As regards the determination of age of the tracks, geological and archaeological considerations have to be combined. The footprints are 1.50 m. under the surface. The profile (Fig. 4 a) shows in the upper parts a darkish brown soil; 1.20 m. beneath the surface a layer 30 cm. thick consists of dark brown, partly consolidated sand, which is separated from the tracks by a layer of finegrained sand only a few centimeters thick. The imprints themselves are embedded in a light brown, partly greenish sandstone of unequally-grained consistency. Remains of plants and an imprint of an unidentifiable bone farther down than the tracks were found in it. This layer was examined to a depth of 30 cm.

Two kilometers to the west of La Rama and 2 km. north of Puerto El Triunfo another profile could be

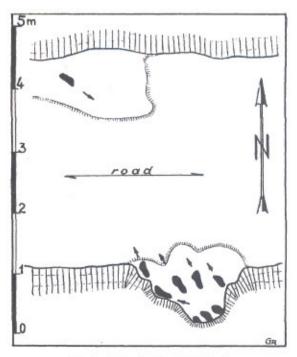


Fig. 1 [Haberland and Grebe].

established in the barranco of the Río Gualacho (Fig. 4 b). It reads as follows:

ca. 50 cm. Dark brown soil, the upper part probably reduced by flooding

5 cm. Lake deposits, very thin layers

50 cm. Reddish brown sands, possibly riverdeposited

Terrace

20 cm. Dark brown soil

5 cm. Lake deposits, very thin layers

250 cm. Coarse redeposited soil with some boulders

The 2 lake deposits are of special interest because they might belong to the same period as the lower terrace of the Río Lempa.

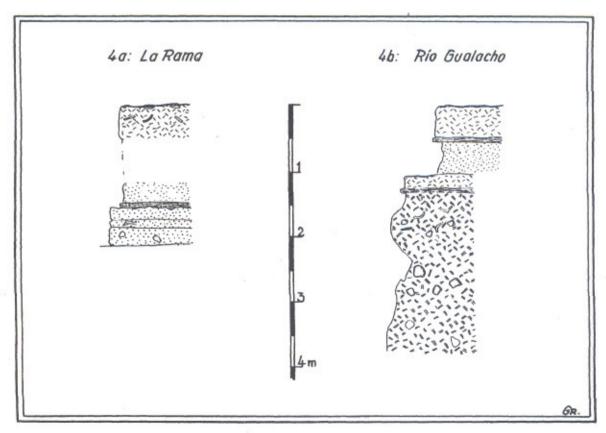
Although the profiles lay only 2 km. apart, they can scarcely be related, possibly due to the fact of belonging to 2 different river systems. Nevertheless, a certain relationship is given by the fact that both of them contain archaeological material, the profile of La Rama in the uppermost part, that of Rio Gualacho in the lowest layer. Only a few sherds were found in La Rama. Depending on fieldnotes only, because the archaeological

material still remains in El Salvador, awaiting government permission for export, the age of these sherds would be very difficult to ascertain. Fortunately there are 3 little mounds in the same part of the hacienda, not very far off. One of them was excavated in 1953 by the hacienda owner, and the writers were able to survey the little collection obtained during this work. Besides the usual obsidian implements and figurine heads, it consists of some complete pottery vessels indicating that the mound contained a grave or cache. Of the 7 vessels five belong to the usual types to be found in eastern El Salvador and, therefore, due to the very difficult relationships in this area, are not sufficiently datable. The remaining 2 vessels are outstanding for this area. Both of them are pear-shaped and tripodal. The larger one is whitish in color, with 2 stylized bird wings painted in red and orange. The same colors form a checkerboard band under the rim. One of the legs is missing, while one of the others is round and painted red. The third leg of the vessel is formed like a bird's tail. The modeled head on the front part of the vase is missing, but it certainly was a bird head. By all indications this vessel belongs to the Nicoya Polychrome



Fig. 2 [Haberland and Grebe].





Figs. 3 AND 4 [Haberland and Grebe].

ware, of which a closely related piece has been published by Lothrop (1926, Pl. 14). The other pear-shaped vase has red fine-line geometric ornament on a grayish surface. On the front is a very interesting modeled jaguar head. Out of its open mouth emerges another head, not very distinguishable due to weathering, but possibly of a turtle. Very similar motifs have been seen on Nicoya Polychrome ware in Managua and San José de Costa Rica.

So both vessels show, at least, a strong southern tendency. We are aware of the fact that the time question in southern Central America is by no means settled; nevertheless, we are inclined to assume that Nicoya Polychrome is not much older than A.D. 1200 and we should therefore like to date the archaeological remains of La Rama to that date, giving hereby a "datum antequem" for the footprints.

In the lowest layer of the Río Gualacho sequence parts of 2 vessels have been found besides sherd material. One vessel has a globular body with restricted neck. It is unpainted, showing the darkish gray color of the clay. The other is a bowl with convex sides and a sharp break towards the lower part of the body. On the neck are some horizontal grooves. The 4 little feet are conical. The interior of the bowl is cream colored, its upper part polished, while the outside is red-orange and highly polished. More than 90% of the sherd material belongs to an orange ware, the color ranging through all shades. The remaining pieces are brown, with the exception of a very few red sherds. Feet are mostly small and conical. Among vessel forms bowls and cuplike shapes are predominant; only a very few sherds can be attributed to globular vessels with restricted neck. No polychrome wares could be found and the only bichrome one is negative painted in the wellknown Usulután technique, but this ware is rare too. All these factors seem to indicate that the Río Gualacho complex belongs to a considerable older time than La Rama and most of the other sites found in eastern El Salvador, where polychrome wares generally appear. Because no time sequence has been constructed for this part of Middle America, it is very difficult to give even an approximate dating for this material. From all clues a date of A.D. 500 is the earliest reasonable, and a more recent one would be preferable. Geologically there are some indications that the lowest level of the Rio Gualacho sequence is roughly contemporaneous with the imprint-bearing level of La Rama. Therefore, we are inclined to date these footprints between A.D. 200 and 800. With this dating they are very much younger than the only known other example of fossil footprints in Central America, those of Acahualinca near Managua, Nicaragua, excellently described and discussed by Howel Williams in 1953.

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## DENTATE AND DENTATE ROCKER STAMPING FROM TABASCO

Heinrich Berlin, in 1953 and 1954, conducted an archaeological survey of eastern Tabasco, Mexico, for the Department of Archaeology of the Carnegie Institution of Washington (Berlin 1954: 293-5). The pottery recovered was brought to the Institution's ceramic laboratory in Mérida, Yucatán, Mexico, for analysis and storage. Early in 1955, while Berlin was in Mérida preparing his final report on the Tabasco survey, I had opportunity to examine the material and note the occurrence of dentate and dentate rocker stamping on a ware called Fine Gray. Berlin found Fine Gray in abundance at the sites of Jonuta and Tecolpan on the Usumacinta River associated with untempered "Z" Fine Orange and a tempered Thin Black. The 3 pottery types are of special interest in southern Mesoamerica because of their wide distribution through trade in Late Classic times and serve as chronological markers in many sites of the western and northern half of the Peninsula of Yucatan.

Fine Gray characteristically has very fine textured, untempered paste of a color ranging from Munsell's Light Gray (7.5YR 8/0, 7/0; 10YR 7/2; 5Y 7/1, 2), through Gray (5Y 6/1, 2, 5/1), to Dark Gray (5Y 4/1). The well-smoothed and low polished surface has the same color range as the paste or the surface may be a slightly darker gray as a result of polishing. Due to lack of color contrast between paste and surface, it is uncertain whether Fine Gray bears a slip. The use of dentate and dentate rocker stamping on Fine Gray is not common and never occurs alone as a decorative technique. Invariably it is used only to fill the background around an incised central motif within a panel or framed band. Two Late Classic Period examples from the Tabasco sites are illustrated, one from Jonuta, Figure 1 a, and the other from Tecolpan, Figure 1 b, c. The first example is a fragment of a cylindrical vase decorated on the exterior with an incised central element and dentate stamping. The stamping tool had at least 17 teeth in a single straight row and had been pressed lightly into the surface before firing while the clay was still in the leather hard stage. Subsequent polishing partly obliterated the punctations. The second example is a tripod rattle bowl with a double bottom. The exterior wall has horizontal, encircling shallow grooves framing the upper and lower limits of a panel, the sides of which are incised lines. A seated monkey, cursively drawn with incised lines, occupies the center of the panel and dentate rocker