SALADOID HOUSES AND FUNCTIONAL AREAS AROUND THEM: THE GOLDEN ROCK SITE ON ST. EUSTATIUS, NETHERLANDS ANTILLES

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Since 1984 excavations have been carried out every year on St. Eustatius in the months March and April. They form a part of the PREBONAproject, a joint enterprise of the Archaeological Centre of the Leiden State University and the Archaeological-Anthropological Institute of the Netherlands Antilles on Curaçao. The practical purpose of the project is to investigate as thoroughly as possible a number of archaeological sites in the Windward islands of the Netherlands Antilles, in particular on St. Eustatius and Saba (Fig. 1). Most of the sites on these islands are threatened with destruction in the near future. The scientific purpose is to gain an insight into the way of life and patterns of organization of the Indian inhabitants of the islands in the pre-Columbian period (Versteeg et al 1984, 1985, 1986).

The investigation of the most important site on St. Eustatius, the 'classic' Saladoid Golden Rock site in the central plain of the island (Fig. 2), is the first phase of the project. A paper of mine on the methods of this large-scale excavation was kindly read by our counterpart, Jay B. Haviser of the Archaeological-Anthropological Institute of the Netherlands Antilles, during the previous congress in Puerto Rico (Versteeg in press).

Since that time another 2000 m^2 of the site have been investigated during the final field campaign in 1986 (Fig. 3). Some of the major results of this research are presented in this contribution. It is in fact one of the most extensive excavations of a pre-Columbian site in the Lesser Antilles up to now. The three field campaigns took 8 months in total by, on the average, 2 staff members, 8 well-trained students, and one local fieldworker.

THE FINDS

Two circular posthole configurations are situated in the central area of the site (Figs. 4-6). They are to be interpreted as the foundations of two houses: a larger one consisting of 26 postholes varying in depth between 1.60 and 3.75 m (average 2.29 m), and a smaller one consisting of 9 postholes varying in depth between 1.30 and 1.68 m (average 1.48 m). Diameters of the houses are 19 and 7.5 m respectively; surface areas are 283 m^2 and 44 m^2 .

Half-oval rows of less deep (0.7-1.1 m) postholes are attached to both structures, in a north-south direction: two to the larger structure, and one to the smaller one. These postholes are the remains of walls that screened off compounds where special activities were carried out. A wind break function of the walls is suggested by the north-south orientation:

winds from eastern directions predominate in this part of the Caribbean (De Palm 1985). Concentrations of refuse were found at the south end of the two westernmost compounds.

Wide areas around both houses were investigated to make sure that no neighbouring or intersecting structures exist. The area of investigation was limited in the eastern direction by the present airport.

An oval-shaped midden of ca 30 x 20 m was excavated south of the houses. It is made up of all usual refuse as Saladoid pottery, shell, stone, and coral tools, zemis, animal bones, and concentrations of charcoal. More than 70% of the midden was excavated; the ca 5000 kg of refuse recovered from it are being studied now. The first radiocarbon datings yield ages in the 5th century A.D. Special finds from the midden area were a few coprolites, and a nearly complete, but decapitated Hawksbill seaturtle (*Eretmochelys imbricata*). Silica-containing sponge remains in its stomach lead to the identification of the species (Dr. A. Meylan, pers. comm.).

A grave of a 55-60 years old man was found in the east border area of the midden. Another burial in the same area is that of a female adult whose head was situated against one of the house-posts of the larger structure. The burial pit intersects the posthole. One grave contained two individuals on top of each other of which the upper individual was not complete. All five burials in this area are adults, all were buried in different postures. Three heads face north, one east, and one upwards. None of these graves contain burial gifts (Fig. 7).

One grave was encountered north of the houses: a ca 14 years old individual was buried there in a carefully made, circular grave. A floor had been made on the hard tuff subsoil. A burial gift was found here: a large bowl on top of the skeleton (Maat and Smits, in press). A pottery cache was situated near to this burial, with a similar tuff floor. This cache contained four beautiful round and oval bowls, white-and-red decorated, zoned-incised-crosshatched, and modelled-incised, in fact exactly vessel shapes and decoration modes characteristic of a 'classic' Saladoid West Indian site. A second cache was found north of the former with a comparable content. A third cache situated north of the smaller house had a different content: an oval well-polished stone in a vertical position.

INTERPRETATION

The excavated complex of finds and features--called Golden Rock 1--is part of a cluster of similar sites. A survey carried out by Dr. De Josselin de Jong in 1923 yielded 5 midden deposits, all with an identical style of Saladoid pottery, at distances 100-300 m apart (Fig. 3). Three of them are not accessible now because they are buried below the airfield and an agricultural station; the fourth is well protected now and will be preserved for future research. The fifth (GR-1) was excavated because of the planned airfield extension. There is little doubt that most--if not all--of the Golden Rock subsites functioned contemporaneously in the 5th century A.D. It is a site with one archaeological component. Only minor quantitative developments are registered in the ceramics (Steenvoorden, in press). The period of habitation was relatively short in view of these and other data: it has been estimated at 1-2 generations by Louwe Kooijmans (1987).

A clear intra-site spatial division characterises the excavated terrain: four functional areas are distinct within the subsite GR-1. The yard area that comprises both of the houses is situated in a central position (Fig. 4). The smaller house has the size of a typical one-nuclear-family-structure. The floor area of the larger one is more than six times that of the smaller one. Certainly it had a different function. *Malocas* of a similar size and floor plan are reported from historic and recent times from different areas of Amazonia, e.g., from the Yekuana (Venezuela), the Oajana (French Guyana), and the Yukuna (Colombian-Brazil ian border area) by Carmichael et al (1985). These data can be used with some caution, as Saladoid culture stems from Amazonia.

Different functions are ascribed to the large round-houses: houses for several families, men's houses and houses in which specific areas are used by men and women. Often cosmologic concepts and ceremonial functions are related to *malocas* (Wilbert 1981). It is interesting to note that a ceremonial area is situated north of the houses in St. Eustatius. It consists of the pottery and stone caches and the grave with a burial gift. If the houses had a front and a back side, the north side--facing the flattest part of the plain, the other GR-subsites, and the GR-1 ceremonial area--must have been the front.

Two distinct areas where dumping activities occurred are situated south of the houses. One is the midden which is situated next to the area where the burials were found. The different postures in which the dead had been buried, the carelessly made burial pits, and the location next to the midden suggest that not only the midden itself, but the whole of the terrain south of the houses was an area reserved for dumping activities. If this is true, we must consider the possibility that the people buried here are not representative of the inhabitants of GR-1. We are sure that in and around the houses no more than six dead have been buried, as the complete site was excavated. Six is a small number in relation to the population estimated at 25-40 individuals and 1-2 generations (Louwe Kooijmans 1987). Probably the majority of the dead was disposed of in a manner that is difficult to trace archaeologically in relation to the settlement where they lived.

EPILOGUE

The purpose of the Golden Rock investigations is providing insight into a Saladoid settlement and its social organization. I note with interest that the Maisabel project in Puerto Rico pursues the same purpose, as was clear from the paper presented during this congress by Peter Siegel (Siegel and Bernstein 1987).

The Leiden State University and its counterpart try to achieve this purpose by a method that has proven itself many times in Europe during the last decades: by excavating the midden and its surroundings (= complete site). The areas of concentrated finds are investigated by hand; the topsoil of the surroundings is stripped by a machine. In this way features such as postholes, burials, and caches show up in the light-coloured subsoil. Subsequently all features are sectioned vertically and excavated.

By using this method the floor plan of two different Saladoid houses and four functional areas related to them have been found. At present all artifact categories and the other direct information is studied at sitelevel. Relatively high levels of archaeological interpretation (Rouse 1977) can be reached in the West Indies by using these methods.

A presentation of the results of the Golden Rock investigations recently was set up in the museum of the St. Eustatius Historical Foundation. This organization has published a brochure on the pre-colonial history of the island (Versteeg and Effert 1987). The foundation of the *maloca* is indicated in the field by 26 short concrete plinths, thanks to the interest and financial support of the Island Government of St. Eustatius (Fig. 8). In this way the island itself benefits from the recently acquired insights.

Excavations on St. Eustatius will continue in 1988 at the coastal Godet site to bring the results on an intra-insular level of interpretation by comparing the excavation results of the two most important Indian settlements on the island. Recently a parallel project started on the neighbouring island of Saba. We expect that in this way an interpretation on interinsular level will become possible. However, in our opinion, it is essential that such intra- and inter-insular interpretations are based on thorough and extensive investigations at site/settlement level.

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Figure 3. Golden Rock site and surroundings. B C D E F archaeological zones indicated by De Josselin de Jong, 1947. GR-1 area investigated 1984-87. GR-2 area reserved for future investigations.



Figure 4. Map of Golden Rock site GR-1, excavations 1984-87. Four functional areas can be distinguished: a yard area around the structures; a ceremonial area north of the yard; and, south of the yard, a midden (discard) area and a burial area. (N.B. hoard = cache.)



Figure 5. Vertical section of one of the postholes of the outer circle of the large roundhouse (maloca). Depth below surface, 2.35 m. The original position of the house-post is still visible as 'post-shade'. Large stone and coral slabs were used to keep the house-post in an upright position, before the pit was filled back. One is still visible in the posthole-fill; the excavated ones are visible on the surface. They all were found just below the grey tuff layer.



Figure 6. Vertical section of one of the postholes of the outer circle of the large roundhouse (maloca). Depth 2.17 m (including ca 0.6 m of removed topsoil). This posthole was asymmetrically dug by the Indians in order to push the heavy post into it by way of the smoothed out surface in the tuff rock on the right.



Figure 7. Female adult skeleton found near one of the house-posts of the large roundhouse (maloca). The burial pit intersects the posthole.



Figure 8. The original position of the 26 house-posts of the large roundhouse (*maloca*) is indicated by short concrete plinths. The plinths of the inner circle are painted red. The two central plinths and the outer circle (16 plinths) are white.