



**Figure 2.** The author's niece wearing a *pangeh*. This is a posed photo; she would neither wear the cotton cap nor the beads "for real."

wearing beads!" DB Sepan explains, "and how can you talk to them if you don't see them?"

Conversely, if a person saw spirits inadvertently, and was not wearing beads, she might find the experience too overwhelming. Beads can strengthen her soul so she can stand her ground and carry out her function as mediatrix between the human and the spirit world successfully.

### Endnotes

1. The *tuai gawai* is an official who knows the necessary procedures, chants, etc., for the festivals; he may also be a *dukun* (shamanistic healer). The *dayung baris* is a necessary accessory to the healing rites; she does not usually undertake them on her own.
2. The *likis* beads, or blue, green, amber, or clear glass, are extremely hard to date. Large numbers of them must have been available throughout the Victorian

age and well into this century. See P. Francis, Jr., on "Peking Glass."

3. For a fuller discussion of blue beads, see Munan (1981).
4. This opinion seems to be confined to Bidayuh (Land Dayak) groups (Munan 1981).
5. Mainly Islam and Christianity; or the latter, some groups are more tolerant than others of heathen vestiges.
6. The yellow "doughnut" bead is common throughout the Insulindies (Lamb 1961). It was kiln-baked of glass powder made from imported beads in Tanjong Selor on the East Kalimantan coast, specially for the Central Borneo trade, as recently as the 1930s (Tillema 1938).

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### 66. BEADS LINK SAN SALVADOR TO A COLUMBUS TRIP, by *The New York Times* (1983, 3:7-8)

NASSAU (Reuters) - Beads and other ancient European-made items found by American archaeologists could be the long-awaited proof that Columbus made his 1492 landing in the New World on the Bahamian island of San Salvador. In a recent report to the Bahamian Government, the archaeologists said that last July they found four green and yellow glass beads, two brass buckles, metal spikes, and a fragment of Spanish crockery mixed with native Arawak Indian pottery and shell beads. Although Indian pottery dating to the ninth century has been dug up along San Salvador's coastline, no European artifacts of the Columbus period were previously

found. The artifacts linked to Columbus were found eight inches beneath the surface, said Charles Hoffman of Northern Arizona University, who helped supervise the excavation. "I knew that if this was where Columbus landed we should unearth some evidence of Spanish contact," Mr. Hoffman said in his report. "Needless to say, the entire crew is elated with the finds." Marvin Smith, an archaeologist of the University of Florida, said he dated the beads from 1490 to 1560. "They are the type of beads Columbus was using, according to his journals," Mr. Smith said in an interview. "It looks very possible that they were his." Columbus's log relates that his crewmen traded beads, buckles, and rings with Indians they met on the island the Indians called "Guanahani," believed to be San Salvador.... (*The New York Times*, September 15, 1983, p. A12)

## **67. SUMMARY OF AN ARCHAEOLOGICAL RESEARCH MISSION TO EASTERN SENEGAL, by Marie-José Oppert (1990, 16:13-15)**

A grant from The Bead Society of Los Angeles allowed me to travel to extreme eastern Senegal in February, 1990, in order to co-organize and participate in an archaeological research project in collaboration with the Prehistory and Protohistory Department of the Institut Fondamental d'Afrique Noire (IFAN) headquartered in Dakar, the capital of Senegal.

Several sites were investigated during the 20-day mission. Dating from the neolithic period to the 20th century, they yielded a number of beads, adornments, and fetishes. For the most part, these sites are located in a region that is sparsely inhabited and far from "civilization." The work was often accomplished under very harsh conditions due to the lack of roads or tracks, unavailability of potable water, extremely high daytime temperatures, and the presence of potentially dangerous animals such as "dog-headed" baboons and lions. Confirmed reports of lions attacking cow herds in the area forced the investigators to abandon their outdoor camp on the banks of the Falemé River.

One of the sites yielded a particularly interesting number of artifacts including 23 beads made of bone, shell, carnelian, stone, copper, ceramic, and glass; spindle whorls; a fishnet weight; two complete ceramic bracelets and pieces of others; two zoomorphic ceramic statuettes; a ceramic statuette with a phallic symbol at one extremity and the head of a female at the other (apparently a fertility fetish); and several polished tools including a millstone, pestles, and hand axes. Numerous potsherds were found on the surface. Measuring approximately one kilometer by 400 meters, the site was utilized during the Neolithic period

(when it was an important stone-working center) and the subsequent Iron Age.

The beads, along with one bone pendant, were discovered at opposite ends of the site. At locus no. 1, situated at the summit of a small butte, the beads, the bone pendant, and several spindle whorls were found within a 100 m diameter, either on the surface or just below it (not deeper than 1 cm). The protohistoric layer did not go any deeper than 5 cm. Below this, the Neolithic layer did not exceed 10 cm. Mixed material from the different layers was found in the gullies along the butte's slope.

Similarly, at locus no. 2, the Iron-Age layer did not exceed 5 cm in depth and the beads were discovered either on the surface or just below it. A Neolithic layer was not discovered, despite the presence of a polished hematite hand axe and a solitary carnelian bead of Neolithic workmanship. Also discovered at locus no. 2 were the three fetishes, the earthenware bracelets, a fragmentary bronze bead, as well as a splendid polished millstone. The bracelets, the bronze fragment, and one cylindrical blue-glass bead were found near the remains of a stone foundation which was thoroughly investigated by the mission team. Test trenches dug to a depth of 5 cm proved to be sterile. On the surface, however, abundant pottery sherds were found, examples of which are currently being studied at the IFAN laboratories in Dakar.

Unfortunately, the lack of meaningful archaeological layers, frequent brush fires, and the presence of wild animals at the site did not allow for the establishment of precise dating procedures in the field. However, two carnelian beads were found which, unlike the one of Neolithic manufacture, resemble similar beads found in Senegalese tumuli dating to the 11th century.

Six of the eight glass beads found at the site are drawn cylinders displaying a cobalt blue color at first glance. When held up to the light, however, several of these beads appear to be greenish yellow, like the dichroic beads discussed by Davison, Giauque, and Clark (*Two Chemical Groups of Dichroic Glass Beads from West Africa*, 1971, *Man*, vol. 6, no. 4). At IFAN, similar beads are recorded as having been found at the ruins of the medieval town of Koumbi-Saleh, believed to be the capital of the ancient Ghana Empire, as well as at the Djenne and Gao sites in what is now Mali. A fragment of one of the glass beads found in Senegal will be analyzed to see if it can be attributed to the Medieval period of Arab trade in the area.

The two other glass beads represent different types altogether. One is a small annular form emerald green in color. The other is pyramidal and opaque black. The latter bead was apparently decorated with a single raised spot of opaque white on one side. The two extremities of the