Experience With the CUNA Indians of Panamá

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Abstract: The author had a wonderful opportunity to live with, learn about, and improve the lives of the Cuna (aka Kuna) Indians living on Caribbean islands off the coast of Panamá. A sanitary survey by the author resulted in the elimination of an epidemic of hepatitis. A missionary doctor with whom the author worked improved health and reduced deaths by employing and teaching about modern medical methods. Interesting aspects of the Cuna language, numbering system, personal names, government and family structure, art and mythology, and genetics were learned and are reported. The author's most important accomplishment was the design and construction of a water supply system which contributed in an important and surprising way to the economy of the Cuna people

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I. Introduction

The author served with the U.S. Army's 3rd Civil Affairs Group in Panamá during 1967-1969, where one of his most rewarding experiences was to design and then enable construction of a water supply system for the Cuna (aka Kuna) Indians on the island of Ailigandi. The Cuna are a Panamanian indigenous population who live on the San Blas islands off the Caribbean coast of Panamá. The Cuna live on the offshore islands of the San Blas Archipelago to be away from the malaria-transmitting mosquitoes which are prevalent on the mainland. The author spent many days on the San Blas islands, particularly on Ailigandi, and had the opportunity to work extensively with the Cuna people. The author also had the opportunity to learn about Cuna society and culture.

II. Results of Sanitary Survey

One of the author's successes was ending an epidemic of hepatitis on the San Blas island of Narganá. Indians would be discharged from the hospital after a bout of hepatitis, and then would be readmitted with hepatitis again. The Indians had deduced that the conchs which they ate would grow faster if their cages were put near the hospital's sewage outfall pipe. The conchs were concentrating the hepatitis A virus to which they were exposed. After completing a sanitary survey, the author recommended that the conch cages be relocated to clean water. That was done, and the author subsequently learned that the epidemic had been terminated.

III. Other Health Issues

A Baptist missionary doctor, Dr. Daniel Gruver, was working on Ailigandi, and the author got to know him well. Perhaps Dr. Gruver's greatest success was a substantial decrease in the high death rate of women during childbirth. The Cuna had no cow or goat milk in their diet, and the calcium in the bodies of pregnant women would migrate preferentially to their fetus leaving them dangerously calcium-deficient. By giving them calcium pills, the problem was greatly diminished. Speaking of childbirth, the author witnessed Dr. Gruver deliver a baby with a pet coatimundi (a raccoon-like animal) on his back. On another occasion, the author assisted by trying to comfort an Indian man with the terrible convulsions and locked jaw of tetanus, who died in the early morning. Not all the Indians were inoculated against tetanus, which would have prevented the disease. An unfortunate counterpart was that this Indian and his wife had started to use birth control, which was illogically blamed for his death and which set back attempts to encourage birth control among the Indians.

Although a general surgeon, Dr. Gruver took on the more specialized repair of cleft lips and palates. He considered that important in part because there were still vestiges of the Cuna practice of infanticide, in which infants with deformities were left on small islands or sand bars to die. In the case of the cleft lips or palates, the babies died because they could not take nourishment from the mothers or because they were left to die. For other limiting deformities, the rationale for infanticide was that everybody had to be able to contribute to their society.

On one occasion Dr. Gruver took the author into a large, thatched lodge in which the women were sitting around a boiling kettle, biting corn off the cob and grinding it with their teeth. They would spit the corn thus ground into the kettle, then let it ferment to make an alcoholic beverage called chicha. The author started to

drink a glass of water that he was offered, when Dr. Gruver slapped it out of his hand. He said the water could be contaminated, and gave him instead some chicha to drink. He said the fermentation process killed any pathogens in the chicha. This provided an incentive for the author to develop a safer water supply system discussed below.

IV. Language and Number System

The Cuna speak their own language, although Spanish is also spoken by many. The name of the country "Panamá" comes from a Cuna word, "panabá", which means *little farther* [1]. The author met on Ailigandi a visiting American anthropologist who had learned that the Cuna word for "work" was "arbeit", the same as in German. That, coupled with the prevalence of albinos, led her to propose that the Cuna were descended from Germans. That theory did not get very far.

One of the real surprises to the author came when he asked Dr. Gruver to teach him how to count in the Cuna language. Dr. Gruver asked the author what it was that he wanted to count. The author said it did not matter, to which Dr. Gruver responded that it did matter and went on the explain that they have different counting numbers for different things, such as one for coconuts and another for lobsters. (Coconuts were actually used for currency at that time.) Years later, the author read a book which discussed how some of the earliest numbering systems used "counters...[that] corresponded directly with the things or goods they represented; from these systems, symbols for abstract numbers and quantities had eventually developed." [2] The Cuna apparently had not abstracted numbers in their native language!

V. Personal Names

The Cuna were very interested in North American names, and the author had multiple requests from the women to tell them his name. Dr. Gruver said that a baby might very well be named after me. He was personally familiar with that, because the first baby born in the hospital on Ailigandi was named Daniel Gruver Grimaldo [3]. Some of the more important Indian men adopted as second names the name of a famous American. To protect privacy, the author will not give names, but will only mention that he has signatures giving both their Cuna and adopted names. (A Cuna chief on the island of Mulatupo was called "Winston Churchill" [4]). Dr. Gruver worked from 1963 until 1978 on Ailigandi. His work is highlighted in Panama Canal Review [3]. Dr. Gruver died on April 10, 2011 at the age of 78. His ashes were spread over the ocean near Ailigandi. Just before his death, in 2010, his book *White Witch Doctor* [5] was published telling of his experiences working among the Cuna Indians.

VI. Existing Water Supplies

Shallow dug wells on Ailigandi provided water for laundering and limited bathing, but that water was too salty for drinking because the island had little elevation above sea level. The women made trips every day from their island to the mainland and back with their dugout canoes called cayucos loaded with gourds which they filled with water in a mainland river. The cayuco is a dugout canoe, made from a log by burning with hot coals and chopping with an axe. The women spent many hours each day, travelling by cayuco from Ailigandi to a mainland river, where they would collect fresh water in gourds from a location upstream of where they bathed. It had become a major social event for the women.

VII. Government and Family Structure

The author wanted to meet with village leaders about certain sanitary issues, and was invited to accompany Dr. Gruver into one of the men's council meetings. Dr. Gruver explained that the author would be only the second white person to attend a council meeting on Ailigandi – quite an honor. Dr. Gruver explained that not too many years earlier, any white man who attempted to sleep on a San Blas island would be slain. The first thing the author noticed was the largest United States of America flag he ever saw mounted upside down on the back wall of the thatch Congress House, which was the largest structure on the island. Dr. Gruver explained that Panamanians had tried to invade the San Blas islands around 1925 to steal gold, etc., and the U.S. government provided assistance in the form of aggressive diplomacy and a naval cruiser which, together with the Cuna uprising, ended the incursions [4]. The Cuna mounted the flag as a show of gratitude, but mounted it upside down as a way of expressing their independence of the U.S.

It was interesting to observe how the cacique (chief) was very courteous in moderating the debates that took place, and that he was chosen because of his ability to play that role rather than being dictatorial. This is similar to certain other American Indian tribes in earlier times: "...[T]he Tuscaroras, Nottoways, and Meherrins...[of southern Virginia and northern North Carolina] were essentially egalitarian,... their decisions arrived at by consensus....Unlike the [dictatorial] Powhatan [Virginia Indian confederation of tribes] chieftains, the Iroquois village chiefs lacked coercive power; they were chosen for their negotiating skill and oratorical powers as well as for their personal stature and influence." [6].

Although the men hold the council meetings, the Cuna have a matrilineal family structure, in which the bridegroom moves in with the bride's family and takes the surname of the bride's family. Unmarried Cuna women have full-length hair, whereas married women have their hair cut short.

VIII. Art and Mythology

The Cuna women are known for their beautiful molas, which are artistic sewn panels made by appliqué and reverse appliqué. The molas are used to make the blouses worn by Cuna women, and are also a major export product. The author asked Dr. Gruver one day to tell him how to purchase some molas while on Ailigandi. Dr. Gruver took him to the center of the village, yelled "Mola, mola, mola," then ran away leaving the author alone. A mob of women quickly converged on the author, jostling and shoving and saying "Buy mine". The author purchased some beautiful ones for only \$3.50 each (the asked price), each of which represented many hours of work. The author had some mounted on special frames by a carpenter in Panamá City, and the author's wife made others into pillows. We treasure them to this day. The author recently learned that vintage Cuna molas of the quality shown below, are selling in the \$300 price range.

All religions have a creation myth, and that of the Cuna is particularly interesting. Theirs is depicted on a mola which the author bought during one of numerous trips he made to the Cuna island of Ailigandi around the year 1968. This mola, a photograph of which is shown below, depicts people-like creatures in a spaceship, wearing beanies with propellers on them. We often contemplated what that represented. Then we recently learned that according to legends passed down through the generations the Cuna came down to Earth from a spaceship! Snow [9] discusses the Cuna mythology about their celestial origins and Gómez [7] discusses their mythological descriptions of space vehicles The spaceship motif figures in the iconography of various cultures [8,9].

Another interesting manifestation of Cuna religion was when they were asked for sand circa 1909 for cement to construct the Panama Canal. "In their initial search for sand of the proper quality, the engineers had gone as far as the San Blas Islands, ninety miles east of Colón, and found just what they wanted. But the San Blas Indians declared that the islands--land, water, and sand--were God's gift to them and that which God had given they would neither sell nor give to the white man. The engineers were permitted only to anchor overnight, and on the condition that they would leave at dawn and never return." [10].

IX. Genetics

Normally a dark-skinned people, it is readily noticed that they have a relatively high percentage of albinos in their population. The author was told of their superstition that a pregnant woman must avoid looking at a full moon or she will have an albino child. If she gave birth to an albino child it was assumed she had looked at the full Moon. The Cuna call albino children "moon children." The scientific explanation comes from the field of genetics and the role of inbreeding; the Cuna have strict cultural rules confining their marriages within the relatively small population of their tribal group. As a consequence, they have the highest percentage of albinism in the world, with an estimated frequency of 1:160 [11].

This is an interesting contrast to other indigenous cultures, who take measures to increase their genetic base, apparently realizing the importance of doing so. Such measures include the "regular adoption of war captives [in America which] led...to a genetic intermixing...." [6], the various means described by Marco Polo in his travels through Asia [12], and the sharing of wives by the western American Indians encountered during the Lewis & Clark expedition [13]. (Here "American" is used as an adjective pertaining to the United States of America.) The albinos did not appear to minimize sun exposure, probably explaining why they had a high incidence of skin cancer.

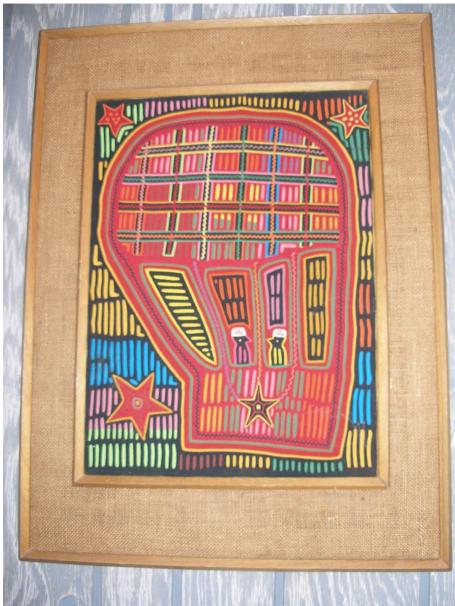


Figure 1. Cuna mola depicting spaceship

X. New Water Supply

With some apprehension about the effect it might have on their culture by changing the women's routine, the author helped develop two types of freshwater supplies on Ailigandi. For one, he arranged to have a large water tank transported by U.S. Army landing craft to the island and designed foundations for it. He planned to return to the island to supervise construction, but when he did he found that the Indians had constructed the foundation themselves according to the author's plans and placed the tank on the foundation. The author then arranged to have the rainwater diverted through gutters and downspouts from a large metal roof to the tank [14].

The author then designed a system to pipe water from the mainland river to an elevated water tank which the author arranged to have purchased with funds from the U.S. Agency for International Development. With another U.S. Army officer, the author tested the river water and decided on the intake position. The author arranged to have the assembled tank delivered to Ailigandi and set up by a large military cargo helicopter with tandem rotors (Boeing CH-47 Chinook). Another U.S. Army officer oversaw the construction of the pipeline from the mainland to the island [14] On a more recent trip to Ailigandi, that officer had a mola made for the author which depicts the water tank.

Subsequently a decision was made to enlarge the hospital and it was necessary to take down the water tank to make room. To compensate, the water intake was located further upstream to increase the water pressure coming to the island.

XI. Conclusions

Much later, in 2004, the author and his wife went on a tour of Costa Rica and Panamá which terminated, after passage through the Panama Canal, in Colón on the Caribbean side of Panamá. As we were having dinner on the ship, we saw Cuna Indian women on the dock setting up their wares and trying to get our attention through the ship windows. We went out after dinner, and the author surprised a Cuna woman by asking her name in the Cuna language. Igibanuga – what is your name? She responded by saying in Cuna "banuga" and her name. We switched to Spanish and, when she told the author that she was from Ailigandi, the author told her that he was the engineer who designed and arranged construction of the water system for Ailigandi. She gave the author a hug and thanked him profusely.

The author's concerns about cultural changes were allayed, when she explained that the women had been freed from their time-consuming trips to the mainland and were now able to devote much more time to making molas and other crafts for export, which has greatly helped their economy.

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