

The Sheltering Sky

The goat poked its head between two hanging cloths in the doorway and bleated. It seemed to say that this house was its own, and that I was the interloper. He had free rein of the place and proved it by trotting from the living room where I was sitting on a padded sofa, through the dining room, into the kitchen, and back to the outside again. The entire community seemed to be ruled by goats. The goats made their point over four decades of occupation by the indigenous Congolese living in the buildings. The buildings were only on this equatorial plain because westerners had built a school for their children and homes for their teachers.

As a teacher myself, I had volunteered as a hand surgeon in 2009 at a Presbyterian hospital in the middle of the Democratic Republic of the Congo. It was during this three months of service that I had the opportunity to visit Lubondai, previously home to a missionary school with brick buildings that were once structurally sound.

One would have thought that in the Congo torrential rains would have loosened the bricks of these buildings. But it was the goats who were more destructive, for they liked to rub themselves on building structures, especially on corner edges. The concrete mortar was just a half inch thick, and behind that fragile layer, simple mud had been used to separate and hold the bricks in place.

When a goat had loosened one brick, its neighbors were at risk, and an entire section near ground level, would be unable to support those bricks above it. It was only a matter of time, and time is indolent in the tropics. A generation of humans can come and go, but the goats multiply and remain. And with shifting of the ground underneath, large cracks would appear in otherwise intact brick walls. The process of entropy inexorably continues.

These were houses built in the western style, with glass windows with wood framing, doors with knobs and latches, roofed with corrugated iron over wooden rafters. But several episodes of revolution threatened that violence would come to the teachers, many of them women, and if married, to their children as well. There was no known way to defend the women and children, and when the order by mission officials was given to leave, only portable belongings could be taken. The houses remained, with utensils, stoves, and plumbing intact. Church elders decided among themselves who would have which house.

The indigenous people were agrarian, pre-industrial revolution in experience. Latrines they had been taught to use, but a flushing toilet was an unknown novelty. A deluge ruined not only a reservoir's earth dam, but also the water powered turbine used to generate electricity. The community reverted to its prior state, 12 hours of darkness and 12 hours of light, year round near the equator. More importantly, there was no electrical water pump for water pressure in the plumbing of the buildings. Water had to be carried, one container at a time, on the top of women's heads from a stream a half mile away. Why waste it in a toilet? It was hard enough to carry sufficient water for cooking and drinking.

Where once the foreigners' school had an open assembly room, the concrete floor was littered with broken glass and goat droppings, and goats stood on sites of prior window sills. The goats would jump either inside the space, or as their instincts willed, outside to the ground. No doors, nor windows hampered their movements for these building structures had long since disappeared.

One classroom had poetry in French written on a blackboard. Could it have amazingly remained, not erased or washed away for forty years! The poem was by the Senghalese poet and first African member of the *Academie Francaise*, Leopold Sedar Senghor, "Prayer of a Black Child." In the poem, the child stated he was very tired, and he wanted it made possible that he would not have to go to school. rather he wanted "to follow my path in the woods, where the night passes again in the mystery of the woods, which the dawn has chased away."

Our guide had been a student of this school, and was a member of its last class, that of 1972. Who has not had a wish to go back to one's childhood, correct all ills and wrongs from that time, restore one's original home, restart the shuttered school, and atone for past sins of omission or commission? John M's goal was to rebuild the dam, reservoir and the turbine generator. With the electricity which would be created, ten micro-businesses, such as a tailor's sewing machine be electrically powered. Perhaps he could repair the roof of a school dormitory where wind had ripped off sections of galvanized metal roofing. That would allow current day students to board and stay at an improvised secondary school.

But John's own funds were used up, and only through the solicitation of additional gifts, could the restoration ever come to reality. If successful, would the occupiers of the homes argue over who would have priority for

use of the electricity? Would these same people be able to maintain the project over the long term? Or would the inevitable forces of nature regain the entire area so that one hundred years from now, it would have reverted to its original state prior to the coming of the Westerners? Simply a field, not a city on a hill?

We were now 130 kilometers or 80 miles away from our starting point in the morning. To get to Lubondai, we traveled with John in a Land Rover, too decrepit to be kept by the mission hospital, but after \$5000 in repairs, it was drivable. It had no working starter, and had to be parked on a slope and pushed by humans to get the engine going. There was no working fuel pump for the diesel engine. After every twenty minutes of driving, one person had to get out and pour more fuel into a container on top of the engine as a gravity feed. But we could live with that, for it was better than walking.

Along the way we passed multiple “semi-trailers” of the Congo, each a man pushing a bicycle, its two wheels loaded with two or three large sacks of grain, each weighing 100 kilograms or 220 pounds. Riding on the bicycle was impossible. The bicycle’s owner would push their loaded vehicle all day, and into the evening. Then they would stop to sleep under the starlit sky. After arriving in Kananga, provincial capital of a half million people, they would sell their wares. Occasionally, after all this work, their bicycle and their wares would be stolen in the big city. If they successfully got their goods to Kananga and sold, they would then buy other finished goods to carry back to their villages for resale. No “semi-trailer” should travel empty one way, if it can be prevented. That applies in our country as well.

The road was rough, really only dried mud, with occasional large holes filled with water, to either take a chance and splash through, or to divert around. At one point, we took a sharp left between two houses and left the one-lane road, and entered a field of tall Tshisuku grass. Our wheels straddled a dirt path, with the grass higher than our vehicle. Driving thirty miles per hour on this “short-cut,” was definitely risky and we could only hope that no one would possibly be driving in the opposite direction on this same path. I rolled the window almost fully up to avoid the grass whipping in through the window and scratching my face or arm. It was late afternoon when we had arrived in Lubondai, to stay at the “Guest House.”

The term “Guest House” did not mean there were many conveniences. There was a toilet, but it had to be flushed with a bucket of water from a barrel that had been filled, five gallons at a time with water carried from the

distant stream. The toilet door was “latched” by a bent nail that was turned each time.

The “bed” consisted of a wooden table with a thin pad, no wider than a patient examination table. A mosquito-net was the only refinement. The room’s windows had been long ago been painted shut. In the corner of one window frame, a hornet’s nest was not particularly reassuring. We used our flashlights to see our way around in the dark. On getting into bed one had no need to worry about covers, as there were none, and it was too hot for any cover in any event. To find a little more room, my wife, Marcia, and I slept “head to toe,” toes near noses! Turning over had to be done very slowly and carefully to avoid landing on the floor. But when it is dark in the tropics, without electricity, there is little to do but to try to sleep. That’s one way to get more hours in bed!

The hospital had closed during the upheavals of revolution. But now a Congolese doctor had returned. He gave us a tour. We saw the X-ray machine, no longer functional, even if there were electricity for it. I estimated its manufacture date to have been circa 1930. There were a half dozen patients on the ward. One had been delivered of a baby by Cesarean section the night before, with the doctor having only a flashlight to use for his operating room light. The doctor’s pharmacy had a very small supply of a few simple drugs, one of which was an anti-malarial. There was a refrigerator for the preservation of vaccines. But there was no outlet for electricity, and no electricity, and thus no vaccines. The refrigerator had been a gift of an international agency some two years previously. When I asked about the missing power supply, the physician said, “A solar panel is still on the way”

Now that evening at dinner, the living and dining rooms of the doctor’s home, the same rooms claimed by the goat I introduced you to at the beginning of this story, had electrical light from a solar panel. It seemed not unlikely that the power source for the medical refrigerator had been diverted to the home of the physician. The coincidences were too great to believe otherwise.

When I mentioned that day we had seen two patients with club feet that would benefit from surgery, the physician’s immediate reaction, “But they have *no* money.” Meaning he would not do surgery without a fee being paid. Everyone must make a living, including the doctor, but his attitude was harsh. I volunteered, to foot their bill, risking reinforcement of my

description as a “rich American.” Undoubtedly, I had already been labeled that, simply by my being able to afford two airline tickets to Africa.

When it came time to depart Lubondai, I stood and watched as the local doctor’s vehicle sped past me. The two patients who had been scheduled to return with him to our base hospital then came running, breathless and fearful of being left. For the doctor had told them he had no room in his vehicle, and to crowd into ours. In his vehicle he carried 100-kilogram sacks of grain which he would resell in Katanga. When we departed Lubondai our one Land Rover had fourteen people crowded into it!

On the way back, much of the trip in the moonlight, the Congolese driver led songs in Tshiluba that he had learned many years ago from the missionaries who had employed him. We knew no Tshiluba, and could only hum along. On arrival outside our house, we tumbled out of the packed vehicle, grateful that our vehicle kept working the entire trip. If it had not, we could always depend on sleeping under the Sheltering Sky.

The Leprosarium and Henrietta’s Hands

One woman sat there impassively staring directly at me. She had her right elbow resting on her right knee, and her head was supported by her hyper-extended wrist and hand. Her expression was inscrutable, but if anything it indicated boredom. Or perhaps “What can you do for me?” It was as though she communicated, “I don’t think you have anything for me.” I found out later that her name was Henrietta.

The gifted Congolese general surgeon, Blaise, and I, the American hand surgeon, had come to visit her institution. For she had leprosy, and she lived in a leprosarium that was supported by a group of nuns of the Sisters of Charity. The government provided no support. None. Henrietta was one of thirteen patients selected by the nuns for us to examine. Perhaps surgery would benefit some of their hands and feet.

Dr. Blaise, our assistants and I sat in what could be described as “wooden lawn chairs” arranged in a semi-circle under the open sky. One by one, the patients would come forward and sit on a low stool in front of us. Henrietta’s hands were deformed, with some fingers angling at the joints

laterally where they should have been straight. The “balls of her thumbs” were flattened, indicating atrophy from inflammation in the nerves near her wrists. The atrophy of the small muscles in her hands was secondary to her body’s attempt to contain millions of leprosy bacilli in nerves of her forearms. Leprosy bacilli prefer to multiply at sites where the nerves are closest to the cooler skin.

On Henrietta’s left palm was an ulcer, painted with some purple dye, perhaps Gentian Violet, in an attempt to clear surface infection. All patients in the leprosarium had to tend their own gardens and grow their own food. She had used a short but heavy metal hoe attached to a wooden handle. The harder she had worked tending her plants, the more irritated her thick palmar skin became....until it was shed where she grasped the handle, with raw flesh underneath. Her palms were insensitive to pain. It was more of a curse than a blessing that she had no pain. Her body could give no feedback warning messages to her brain that she was damaging her hands.

When Henrietta attempted to grasp objects her fingers would “curl up” the two joints nearest the tips first, in effect closing them, before she would be able to grasp with knuckle action a larger diameter object such as a glass of water.

We put her on the priority list of three patients to be brought by the nuns from the leprosarium to our mission hospital. The patients had no money at all, so again I said I would foot their bill for the hospital stay and surgery. Our hospital, like the leprosarium, would receive nothing from the government for their care.

As we left, the patients laughed, sang, trilled and danced. For they were extremely happy that someone was going to help them. Henrietta and three other women made bouncing dance steps with ululation as they did so. Ululation has a variable tone, a high-pitched shout of joy, changing pitch with the rapid movement of hands held in front of the mouth. It is unmistakable. They would sing and clap while simultaneously dancing. As we left we felt a warm feeling in our hearts, that this day, we had done something good, and given hope to those who had almost no hope.

I later found out that Henrietta had been married with children. But as her disease progressed, her husband had left her, and her children were given to others. She was brought to the leprosarium, because isolation was thought to be the only way to prevent others of her friends, family, and

contacts from getting leprosy. But leprosy is so difficult to pass from one person to another, that if surveillance of contacts were done, one would have to examine nearly 400 other people to find **one** new case. Because the Democratic Republic of the Congo has **no** money for such a survey, in the Congo, as in India, the disease is actually increasing in prevalence. The word was out that leprosy had been eradicated, but in the world as a whole, it has *not* been!

All was well as we waited several days for the patients to be brought from the leprosarium. One afternoon, the Mother Superior delivered them to our hospital. That same afternoon a telephone call came to my cell phone. It was from the British leprosy mission's representative in the Congolese capital, Kinshasa. His lieutenants in our part of the Congo had notified him of our leprosarium visit. The leprosy mission executive, himself originally from Nigeria, forbade me to do surgery. The patients had arrived at our hospital that very day, and he instructed his minions to return them untreated to the leprosarium. His reasoning was that after surgery, a therapist would have to be there to supervise their daily exercises. There was no such therapy unit in the entire Democratic Republic of the Congo, nor was there likely to be one in the foreseeable future. Further, he had previously had the Congolese Minister of Health pronounce an edict, that without a therapist, **no** surgery could be done on leprosy patients in the entire country.

The leprosy mission representative told me this on my cell phone. He said, if I wanted to challenge the Minister of Health, I could double check with him. I was livid. I said, "Do you mean to tell me that *no* treatment, is better than *some* treatment." To this, he had no reply.

The next morning, the patients were bundled into the leprosy mission's Land Rover, and returned to the leprosarium. In my practice in the United States I had worked closely with a legion of therapists. I was a thorough believer in therapists' value and their methods. I could have supervised therapy. But bureaucracy had already won the day!

When I remembered the patients' expressions of joy, and hope, I could only imagine their later desolation and despair, when they were taken back to their leprosarium.

I knew that surgery gave *hope* in leprosy. And at the National Leprosarium in Carville, LA, nearly 50 years previously, I had surgically assisted Dr. Daniel Riordan, a pioneer of such surgery, but only for four or five times.

My Ethiopian leprosy surgery was done in the 1960's, prior to my having a formal plastic surgery residency or a hand surgery fellowship. But I was a diligent student, studied the literature, and every anatomy book I could find, one of which was just a collection of drawings in a booklet by Dr. Frank Netter, a popular medical artist of the anatomy of the hand.

In those years an Ethiopian woman came to me with finger "clawing," the rolling up of the fingers before she could grasp a cylindrical shape. I did the operations I had read about. Not knowing how long to immobilize her in an arm cast, I kept her in my provincial hospital for six weeks. There were no utilization committees then!

After six weeks I removed her cast. I asked her to pick up a glass of water with her non-operated left hand. She could not, for it simply slipped away from her fingertips. I then asked her to grasp the water glass with her recently operated right hand. When she immediately picked up the glass, she was happily surprised, and so was I!

Before she departed for home, she bowed down to me, hitting her forehead hard on the ground and then remaining in that position. I was embarrassed that a human would seemingly revere me, another human being, for I was not God. In English, for I did not know her Amharic language, I begged her to get up, as I sheepishly looked around to make certain that no others had seen her do this. However, I was moved by her gratitude.

I suddenly had to leave Ethiopia for health needs of my newborn. But I had already told the patient to report in the capital of Addis Ababa, to be shown to other physicians at the first Leprosy Congress in East Africa. I turned her presentation over to another physician. The patient did show up. Because of her gratitude she had walked sixty miles "out of the bush!" In my subsequent decades of hand surgery practice, I never had a better result, nor a more grateful patient.

I *knew* that surgery gives *hope* in leprosy.

I realized my need for further training after winning a contest! Six years after I had to suddenly leave Ethiopia, I won first prize in a medical photography contest. The company that manufactured a cortisone skin ointment gave me a three-month trip around the world. On arriving a second time in Ethiopia, I was told that the Oxfam charity wanted to support a surgeon for the rehabilitation center in Addis Ababa, that was to be a training school for leprosy workers from all over Africa.

On my way back to the United States, I went to Oxfam in Oxford, England. The Oxfam charity's Secretary for East Africa told me, in a high pitched nasal tone, "We want a *real* surgeon." I said, "What do you mean, an Englishman or someone with more training?" He answered again with his high nasal intonation, "We want a *rea*l surgeon." In my mind I said to myself, "That does it, I can not even go to deepest Africa without more training. I will have to specialize." And that is what I did with residencies and fellowship in New York that qualified me to be a hand surgeon. In 1972 I came to Rush Medical Center in Chicago at the time of the reactivation of Rush Medical College. There, until 2008, I was the Director of the Section of Hand Surgery in the Department of Plastic Surgery for 36 years.

My wife said, "You can not suddenly stop completely," so we went to Africa as volunteers, I to teach hand surgery, and she English, in three sub-Saharan countries in Africa for a total of nine months.

That's how I met Henrietta, who was waiting, and who is even now still waiting, for surgery and for *hope*! All she has now is the Sheltering Sky!