## !Kung Bushmen Join South African Army

It was inevitable, of course, that the !Kung Bushmen would join the 20th century. They could not remain forever isolated as hunter-gatherers in the barren Kalahari Desert. But some anthropologists are disturbed by the way many of the !Kung are being introduced to the modern world. They are being hired as mercenaries, recruited by South Africa to fight in Namibia. Sixty-three anthropologists attending the Second International Conference on Hunter Gatherers, held in Quebec in September 1980, signed a resolution, organized by Richard Lee of the University of Toronto, protesting this recruitment. Other anthropologists view the resolution as paternalistic and strongly object to it.

The dilemma facing the anthropologists is a familiar one. How, if at all, should they try to intervene when primitive people are swept up by volatile political situations in developing countries? "This is the curse of anthropology," says Henry Harpending of the University of New Mexico. It is not at all clear that anthropologists have an objective view of cultural changes, he believes: "Cultures are like Rorschachs. You can see in them what you want." The opposing views of anthropologists on the !Kung's situation illustrate his view, Harpending says.

As one of the last remaining huntergatherer groups to avoid decimation by or assimilation into modern societies, the !Kung are the darlings of many U.S. anthropologists. Their life-style has become a textbook example of a way of life that was largely abandoned by other peoples 10,000 years ago with the widespread adoption of farming (*Science*, 13 September 1974).

One reason the !Kung remained, until recently, untainted by modern civilization is that they lived in isolation. Their territory, in the northern Kalahari Desert of Botswana and Namibia, is ringed by a belt of waterless, uninhabited country 50 to 150 kilometers wide. Most of the world was ignorant of the !Kung's existence until about 30 years ago.

In the early 1950's, Laurence, Lorna, and John Marshall filmed the !Kung. In the 1960's, Harvard's anthropology de-

Anthropologists are divided on whether to protect the Kung's involvement in the Namibian war!

partment began a 15-year study of them that focused on the Botswana !Kung, because until a few years ago South Africa did not allow anthropologists to study the 15,000 Namibian !Kung.

By the time the Harvard study was completed in the 1970's, many of the Botswana !Kung were forsaking the hunter-gatherer way of life in order to farm and tend cattle for their Bantu neighbors. Many of the Namibian !Kung were also settling down at Chum!Kwe, a reservation established by South Africa. There the !Kung first encountered alcohol, tobacco, and such consumer items



as hair straighteners, skin lighteners, transistor radios, and infant formulas.

Edwin Wilmsen of Boston University, who has spent 4 years with the !Kung since 1973, and has just returned from Namibia, says that Chum!Kwe "is not a very pleasant place" but, compared to the alternatives available to the !Kung, has come to seem attractive. In fact, according to Wilmsen, a cold look at the !Kung's situation in Namibia and Botswana does much to explain why they are eager to join the South African army.

About 700 !Kung live at Chum!Kwe and there are many squatters just outside the reservation. Most who live there are unemployed because only one or two dozen jobs are available, mostly as cattle tenders and freight handlers. But the !Kung at Chum!Kwe receive medical care from South Africans as well as food and clothing. There are big game on the reservation and guns are available, so the !Kung can hunt and eat meat. But, in general, the !Kung at Chum!Kwe do not have much to do. Consequently, according to Wilmsen, there is a great deal of drinking and fighting and some murders among these formerly nonviolent people.

The !Kung in Botswana and elsewhere in Namibia have equally little to do. Some of the Botswana !Kung are able to get jobs tending cattle, for which they are paid about \$12 a month and are given milk and produce, Wilmsen says. Those who have jobs share with relatives who have none, and the unemployed !Kung also collect food from the bush and hunt in order to survive. Wilmsen explains, "It's not the kind of life you would want to live if you had a choice and the !Kung don't want that life either. They want stability. They want to be fat."

In the past decade the !Kung have become increasingly involved in the war in Namibia, which has gone on for 14 years and seems capable of dragging on for years to come. South Africa ruled Namibia as a League of Nations mandate after World War I. When the United Nations was established after World War II and the other powers turned over their mandates to the United Nations, South Africa refused to give up Namibia. The area is rich in diamonds and minerals and its farmland has been settled by thousands of white South Africans.

In the 1960's, the South West Africa People's Organization (SWAPO) was formed. Armed by the Soviet Union, SWAPO began fighting a guerrilla war against South Africa for Namibian independence. The war has escalated in recent years and, according to Jennifer Davis of the American Committee on Africa, South Africa now has 70,000 troops in this area, total population of which is only 1 million. South Africa has not agreed to United Nations demands for Namibian self-determination, believing that the United Nations is set upon instituting the radical Marxist SWAPO as ruler of the area.

The !Kung's involvement in the war began around 1970, when South African police began using some !Kung as paramilitary trackers to monitor traffic across the border between Botswana and Namibia. SWAPO has bases in Angola and Zambia and South Africa is concerned that SWAPO militants will enter Namibia through Botswana. The 800-kilometer border area is a desert, but the South Africans drilled boreholes every 40 to 60 kilometers along about half the border to provide water. They then began to pay !Kung to live at the boreholes and walk along the border, reporting any tracks they see. Every 2 weeks a truck dumps off food and other supplies for the trackers.

John Yellen of the National Science Foundation, who studied the !Kung with the Harvard group and has since returned to visit them, says, "From what I've seen, the tracking job is a pretty good one for the Bushmen. They get food, tobacco, clothes, and blankets and they have a lot of time to hunt and gather." Lee, on the other hand, sees the trackers as "virtual prisoners of the army, dependent on them for their water, weekly rations, and other supplies."

The !Kung are good trackers, having been brought up in the bush, but, says Wilmsen, that was not the only reason they were recruited. "Everyone there can track," he remarks. "The !Kung were originally asked to be trackers because they were looked down on and tracking was not a prestigious job. Also, the !Kung were easily kept in isolated places."

A few years ago, the South African Defense Forces began to actively recruit !Kung as soldiers. They offered them \$120 a month-a salary, according to Wilmsen, "that is beyond their comprehension." Wilmsen says that the !Kung are also attracted to the army because they get a steady diet, prestige, and are treated, in their view, more like other Africans and less like lower class citizens. Patricia Draper of the University of New Mexico, who participated in the Harvard study and visited the Namibia !Kung in 1978, says she was particularly impressed that the South Africans had supplied the !Kung with fatigues that fit them. The !Kung men are very small, averaging only a little over 5 feet in height and weighing 100 to 140 pounds.

The army also offers the !Kung a chance to fight against black tribes who, besides being members of SWAPO, are age-old enemies of the brown-skinned !Kung. "Tribal divisions are still very strong," says Wilmsen. Bob Poos, executive editor of *Soldier of Fortune* magazine, traveled with a Bushman battalion and reports that the Bushmen like fighting SWAPO. One Bushman sergeant told Poos, "I like this work, fighting SWAPO, so much, the South Africans almost wouldn't have to pay me." Yet, says Poos, "The Bushmen view this [their life in the army] as little more than a job." They are free to leave the army at any time, but few do.

Lee is appalled by this recruitment of Bushmen. He says that the politically naïve Bushmen do not understand the realities of the situation. Now that so many of them have become dependent on life at Chum!Kwe, Lee says, "The South African army has become at once the government of the area, the main or sole source of health care and education, and the dominant source of ideology.' The !Kung, in other words, don't have a chance. A U.N. source agrees, saying, "The !Kung are half enticed and half compelled to join the army." A South African source at the United Nations, however, says that Lee's view "is totally wrong. It's the Bushmen's country too and if they want to defend it, that's their right."

SWAPO has also criticized South Africa's use of the Bushmen. Theo-Ben Gurirab, the SWAPO representative to the United Nations, says, "It is really tragic that South Africa has to go so low as to use these people, who are not conscious of what they are doing. Since they always walk in front of patrolling soldiers, in most cases they receive much of the punishment meant for the racist soldiers. Their population being small, our concern is that they may be eliminated."

The resolution signed by the 63 anthropologists expresses their dismay that the !Kung are taking part in the Namibian war. It says, "This recruitment of the San [Bushmen] into the army of a foreign country, South Africa, is a gross violation of their human rights and constitutes an action highly prejudicial to the future of the San as a distinct group."

Adrian Tanner, an anthropologist at Memorial St. John's University in Newfoundland who signed the resolution, says he has no personal experience with the !Kung but he relies on the word of those who have. He says, "What anthropologists have that the general public doesn't is insight into what really is going on. That gives them the right to speak out."

Yet other anthropologists disagree with the signing of the resolution. Harpending, for example, who studied the !Kung with the Harvard project and has since returned to Botswana, says, "It's



Bushman Soldiers !Kung mercenaries move through sparse Namibia bush. [Source: Bob Poos, Soldier of Fortune]

not clear that South Africa is any worse than any other country in Africa. I suspect that the difference between being a Kikuyu and being a Masai in Kenya, for example, is exactly the same as the difference between a white and a black in South Africa. The Bushmen are adults, they're ever so much more able to judge their own interests than we are. They're not poor helpless savages.''

Wilmsen also feels strongly that anthropologists who protest the !Kung's recruitment by South Africa are acting inappropriately. "My own view of anthropology is that it's still embedded in nineteenth century paternalism and colonialism," he says.

In Wilmsen's opinion, many of the anthropologists protesting the !Kung's situation are motivated by a romantic wish that the !Kung be protected from modern societies and go back to being huntergatherers. "I don't hold with keeping people in what amounts to a zoo," he says.

In any event, the !Kung are no longer noble savages, if indeed they ever were, and what Poos describes as the "dirty little war" in Namibia is likely to continue for some time. It remains to be seen whether the !Kung are better off for having aligned themselves with South Africa but, considering the lack of opportunities for them and their extreme poverty, their behavior is certainly explicable. Says Harpending, "If I were a !Kung, I'd be doing exactly the same thing as they are just to feed my family." As for whether anthropologists should try to intervene to help the !Kung, says Lee, "We're damned if we do and damned if we don't."—GINA BARI KOLATA

## Lake Bottoms Linked with Human Origins

The climatic backdrop to human origins in Africa is virtually blank. An adventurous project seeks to read climatic records trapped in lake bottom sediments

Duke University biologist Daniel Livingstone has been nurturing what some might consider a wild idea for many years now: he wants to take a core through several kilometers of sediments at the bottom of one of East Africa's deep rift valley lakes. It's a project with considerable practical risks attached to it, and could cost upward of \$10 million. Suddenly, following a sequence of events that has left him "surprised and a little breathless," Livingstone finds himself on the verge of fulfilling his dream. Backed by the National Science Foundation (NSF) and funds from a French oil company, a Duke University team will set out for Africa next month to do a preliminary seismic survey of three East African lakes. The results of the survey will determine which will be the chosen site for the coring program, supposing the required funds become available.

Why embark on such a risky and expensive venture? "We know in considerable detail the climatic history of Europe and North America over a period of several million years," Livingstone explains, "and yet equivalent records for Africa are very patchy indeed. Analysis of lake sediments is one of the best ways of reconstructing past climates, and the resolution is often good enough to be able to see season by season changes.' Work with lake bottom sediments in Africa so far goes back just 45,000 years. If Livingstone's project is eventually carried out, the climatic record will run back a continuous 5 or even 10 million vears.

In many ways the proposed lake core

program is a dry-land extension of the massive Deep Sea Drilling Project (DSDP) that over the past decade has cost more than \$160 million. And, like the DSDP, the lake project will be a rich source of information for geologists, geophysicists, and petrologists, in addition to providing a glimpse into the African continent's climatic history. But there are other bonuses too. For instance, biologists will be poring over the cores in search of clues to the mechanism of certain evolutionary processes. Strangest of all to relate, however, is the fact that perhaps the people most enthusiastic about the project are the paleoanthropologists, those who study human origins.

"In response to prompting from some prominent figures in the field," recalls John Yellen, director of NSF's anthropology program, "the Foundation organized a meeting in May 1978 to discuss major directions human origins work should take. Dan Livingstone was there. as an interested sympathetic outsider, and he mentioned his lake drilling idea as providing a way of sketching in the climatic and environmental background to human evolution." Livingstone has had a long interest in paleoecology and he appreciates the vital need for understanding the full environmental context of evolutionary change. He was, however, "pleasantly surprised at the enthusiasm with which the paleoanthropologists took up the idea.

A report of the meeting, drafted by Yale paleoanthropologist David Pilbeam, included a long list of recommendations, one of which was to increase the NSF human origins budget by \$0.5 million each year for the next 5 years; another was to seek ways of supporting a lake drilling project. "The diversity and antiquity of tropical African lakes provides unique opportunities for obtaining a long stratigraphic record from part of the early hominid homeland and interpreting that record in terms of changing vegetation and climate. . . . It may even open the possibility of understanding human origins within a context of changing climates and expansion of nonforest habitats," recorded the report.

"The proposed incremental increase in funding has yet to receive Foundation approval," says Yellen, "but the lake drilling project immediately excited a lot of interest." Livingstone and Columbia University geologist Neil Opdyke were encouraged to submit a proposal for a preliminary seismic survey of a number of potential drilling sites. "Neil and I drew up a plan for surveying eight lakes, and we were staggered at the cost: \$620,217; but this included funds for a planning meeting at which we would gather all kinds of specialists, including engineers and people from the Deep Sea Drilling Project.'

Impressed though the NSF was by this cross-disciplinary project, the extent of its blessing was just one-third of the support requested, \$217,000. "Most of the funds came from the directorate level, not out of the anthropology program," notes Yellen, an arrangement that reflects the unusual nature of the operation. "We had to trim the scale of the

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