Featured in this issue:

The Ju/wasi and Us; 1951-1991
RICHARD LEE, Page 5

Decoding the Ju/wasi Past
ALISON BROOKS and JOHN YELLEN, Page 24
Ju/wasi: Bushmen of the Kalahari — the Curator’s View
Professor B. Irven DeVore

In the spring of 1991 the new director of the Peabody Museum, David Pilbeam, asked me if I would be the principal curator for an exhibition of Bushman artifacts to be displayed in the entry hall to the Hall of the North American Indian. Knowing that I would be simply advising the dozen or so highly capable museum staff involved in exhibitions, I quickly agreed. I had much to learn.

This seemed an auspicious year for such an exhibition. It would celebrate not only the 125th anniversary of the Peabody Museum, but also four decades of research on the Bushmen by scholars from the Peabody Museum and the Department of Anthropology. Laurence and Lorna Marshall, together with their children, John and Elizabeth, began their research in the Nyae Nyae area of Namibia in 1951, as described in the accompanying paper by Richard Lee. Together with the work begun in the Dobe area of Botswana in 1963 by Richard Lee and myself, documentation of the Ju/wasi has been almost continuous for forty years.

In those early days, none of us could imagine how rapidly events would overtake the Ju/wasi on both sides of the Namibia-Botswana border, but we were aware that we were privileged to be living among one of the few intact hunter-gatherer societies to survive into the mid-twentieth century. It was therefore natural that the earliest expeditions concentrated on groups who were still practicing full-time hunting and gathering and living independently of the Bantu herding peoples in the surrounding area.

Because it was the universal mode of human subsistence for perhaps 90 percent of the history of our species, anthropologists have always been fascinated by contemporary hunter-gatherer groups. Just prior to the development of agriculture and animal husbandry, some 12-15,000 years ago, the world’s population has been estimated at approximately ten million—all of them hunter-gatherers. By the beginning of the Christian era, somewhat more than half of the world’s people still lived by hunting and gathering. The world’s population by the sixteenth century was estimated at 350 million, and foraging people had been reduced to 1 percent of that total. In 1990, with the world population at some 3 billion, fewer than .001 percent of the people in the world still live primarily as hunter-gatherers. The small pockets of foraging peoples that have persisted into the twentieth century were all in “refuge habitats”: the high Arctic, the interior of rainforests, and desert fringes—in other words, habitats that could not be successfully exploited by herders and agriculturalists. Before they were displaced by herding and farming peoples, we know the ancestors of the Bushmen in southern Africa occupied the well-watered, game-rich savannas and high veldt. It is often surmised that the Bushmen of the Kalahari Desert are therefore late arrivals—refugees from these richer habitats. Our prehistory display case shows this notion to be erroneous: artifacts from excavations carried out by Alison Brooks and John Yellen show that the occupation of this area goes back at least 25,000 years (see accompanying article).

In our planning sessions it was obvious that we wanted to convey the essence of this traditional way of life, with its ingenious adaptations to the Kalahari Desert. On the other hand, we did not want to freeze the Ju/wasi in ethnographic time, presenting only their traditional lifeways as they were documented in the 1950s and 60s. Fortunately, we were able to draw on an unusually rich archive of photographs and films to illustrate their former lifeways and the very different realities they face in the 1990s. Traditional Ju/wasi life requires comparatively few material possessions—in fact, foraging in the semi-desert requires that they be highly mobile and able to carry everything important to their food quest with them. It is the photographs and films that have allowed us to contrast the richness of Ju/wasi life with the relative simplicity of their material culture.

This contrast is nowhere better illustrated than in the room where we created the healing “trance dance” of the Ju/wasi. This dramatic, intricately musical ceremony—during which healers enter a trance state and heal their fellow group members—lies at the heart of Ju/wasi social and symbolic life. From rock shelter art (reproduced in the exhibit) we know that such a ceremony has ancient roots in the Bushman cultures of southern Africa. Yet, the only ethnographic trace of this rich ceremony is the dance rattles worn by the men: hard-shell coconuts with bits of ostrich egg or pebbles in them, objects too fragile to be preserved in any archaeological site.

We were also able to take advantage of the fact that, unlike most museum collections, these Ju/wasi artifacts were mostly collected from friends and informants during the course of our studies. The pictures therefore not only show the objects as they were used, but in most cases the name of the individual from whom the item was collected. In the foyer of the Peabody we have highlighted a unique artistic experiment carried out by Marjorie Shostak. In the 1970s Marjorie offered quantities of colored trade beads to her Ju/wasi women friends (the Ju/wasi women cannot afford these beads themselves). The result is an exhibit of great beauty, including some quite subtle and intricate designs—a whole realm of...
artistic expression that ethnographers would otherwise have missed. Although one normally assumes that the oldest items in a museum collection are probably the most authentic and valuable, an irony of preparing this exhibit was the discovery that some of the oldest artifacts in the Peabody Museum collections were not intended for use, but made for the tourist trade. Some arrows collected in 1917 by Bene van Rippen, M.D., were almost surely made for the tourist trade. The arrowpoints are not only unlike any in use today, but seem quite impractical; furthermore, spots had been applied to them as a form of “antiquing”—a technique still used on items meant for sale to tourists. The arrows can be seen in the case on trade goods, along with other items made explicitly for sale to the European trade market, but also with traditional objects, such as the miniature, magical “love bows” that are an authentic part of Ju/wasi life, and eagerly sought by collectors.

The exhibit is also enriched by objects on loan from the Museum of Comparative Zoology. A stuffed guinea fowl, on loan from the MCZ, made it possible for us to recreate the cunning “egg snare” used by Ju/wasi hunters. David Firth loaned us a specimen of the beetle *Polyclada pectinicornus*; in the grub stage this beetle is processed to make the highly effective poison for their poisoned arrows. From Richard Schultes we learned that the robust grass *Phragmites*, which Ju/wasi men use for arrowshafts, has now spread to North America and grows wild in Massachusetts. The sample in our hunting technology display was collected by the Exhibits Designer, Richard Riccio, just north of Boston!

From the beginning we knew that we wanted to include excerpts from the film archive that John Marshall has accumulated since 1951. We were forced by constraints of time and space to reduce our original grand plan to two modest but very effective film presentations: musical instruments and the trance dance (mentioned earlier), and four vignettes

Continued on next page
Two Ju/wasi families go out to hunt and gather, 1960s.

Recent hunting scene in which a small antelope is transported on a bicycle, 1980s.
"Ju/wasi: Bushmen of the Kalahari," is that it brings together the two halves of these shattered perceptions and restores to the !Kung and their lives a coherence and unity, so severely shaken by the traumatic events of the last 30 years. For this the Museum and the exhibition's curators are to be commended.

As the !Kung people have come to political consciousness there is an emerging determination to take hold of their own destiny, to fight against their political stereotyping, both positive and negative, to assert their political rights, and to revitalize their communities. In this respect the !Kung of Botswana and Namibia. The !Kung call themselves "Ju/wasi" (Ju/hoansi)—real or genuine people. To acknowledge their new sense of empowerment it is appropriate that scholars adopt this term of self-appellation. At the same time, we recognize that this process of replacement will not happen overnight, and that in the interim older terms such as "!Kung" and "San," along with the new terms, will be acceptable.

The Ju/wasi-!Kung in the 1950s and 60s, were largely hunter-gatherers who foraged for game and wild vegetable foods with no domestic animals except the dog (and some groups lacked even these). About 900 lived in the Nyae Nyae of South West Africa (now Namibia) and about 500 in the Dobe area of Bechuanaland (now Botswana). In the Dobe area the Ju/wasi shared their large territory with some 300 Herero pastoralists and several thousand cattle. (Black cattle posts also existed in the Nyae Nyae until 1956-57, when the South African police expelled them back to Bechuanaland.) South West Africa, a former German colony, had been administered by South Africa since 1919; the British administered Bechuanaland. In neither area was there any direct governmental presence until about 1960.

The Ju/wasi of Namibia have been indeed fortunate to have had as benefactors and friends the Marshall family of Cambridge, Massachusetts. Laurence and Lorna, their son, John, and daughter, Elizabeth, began ethnographic research and filming in Nyae Nyae in 1951 and continued there for a decade (Marshall 1976). After a 20-year absence, John Marshall returned to Nyae Nyae in 1978 to film, and his work, along with the work of others, evolved over a period of years into the Nyae Nyae Development Foundation of Namibia (NNDFN). The Harvard project, led by Irven DeVore and Richard Lee, began work on the Bechuanaland side in 1963. By general consensus of the !Kung, our work has been at best a pale reflection of the Marshall project, and at worst a cruel caricature of the way white people ought to behave. Throughout the 1960s, !Kung loved to regale us with stories of "Marsharo nfanla: and his giant giveaways of blankets and pots without number, in pointed contrast with our meager offerings of a pinch of tobacco or a shabby head scarf. Since the size of the handouts increased with each retelling, we became convinced that a Laurence Marshall Cargo Cult was on the verge of breaking out in the Nyae Nyae area!

In spite of our inadequacies, we were able, nevertheless, to soldier on, do a few studies, and even managed to bring in a few graduate student collaborators. Occasionally, out of sheer hubris, we made the mistake of slaughtering a Christmas ox and distributing its emaciated haunches to a somber and grumbling group of !Kung. The !Kung quickly set us straight on that one! Despite our chronic stinginess and bad manners, the !Kung decided after a while that we weren't so bad after all, and they let us stick around the Dobe area, which some of us proceeded to do for unconscionably lengths of time, until finally our supervisors, families, and loved ones induced us to come home and write up.

Most of these collaborators confounded initial expectations and went on to develop rather distinguished careers of their own, both with !Kung research and beyond it. Most have maintained links with the !Kung into the 1980s and 90s, including Megan Biese, Alison Brooks, Patricia Draper, Henry Harpending, Nancy Howell, Richard Katz, Melvin Konner, Marjorie Shostak, and John Yellen.

The Dobe Area: A Hunter-Gatherer Stronghold or Coin Perdu?

In 1963 perhaps three quarters of the Dobe Ju/wasi were living in camps based primarily on hunting and gathering, while the rest were attached to Black cattle posts. It was the hunting and gathering camps that were the subject of sustained anthropological investigation in the 1960s (Lee and DeVore 1976). Ironically, among the first direct contacts between Dobe Ju/wasi and the colonial authorities (barring visits in the 1950s to inoculate against smallpox and the occasional district officer's tour) was the visit in March 1964 of the electoral commission to enumerate them for election runup to the granting of independence. After independence in September 1966, the pace of change accelerated and has continued to accelerate up to the present.

Some of the visible local signs of outside presence are indicated in the following dates.

1965. A fence is built along the Botswana/Namibia border.
1967. The first store opens at !Kangwa.
1970s. Most !Kung start to build semi-permanent mud-walled houses around cattle kraals.
Mid-1970s. First borehole drilled; for !Kangwa village.
1976. The second school opens at /Xai/Xai.

Continued on next page
1980. The first clinic opens at !Kangwa.
1980s. Game laws tightened; hunting declines; most !Kung become dependent on government rations with some herding, farming, and foraging.
Early 1980s. Formation of the Village Development Committees (VDC's).
1986. Craft marketing program begins through "!Kung San Works."
1987. Drought relief feeding program cut off; hunting increases in importance.
1988. Botswana government nixes plan for 5-8 !Kung boreholes in Dobe area; some !Kung migrate to Namibia.

The Dobe Ju/wasi Today

In the Dobe area of 1964 there had been a virtual absence of the institutions associated with the state and merchant capital; there were no stores, no schools, no clinics, no government feeding programs, no boreholes, no resident civil servants (apart from the Tribal Headman, his clerk, and the policeman).

By 1991 all these institutions were in place and the Dobe people were entering their third decade of rapid social change; they had been transformed in a generation from a society of foragers, some of whom herded and worked for others, to a society of small-holders who eked out a living by herding, farming, and craft production, along with some hunting and gathering. The Dobe Ju/wasi today sit around their fires and smoke their pipes as before, but they also listen to their transistor radios, cook their store-bought mealie meal, brew home brew...and worry about the future.

Settlement Patterns

!Kung villages now look like other Botswana villages. The beehive-shaped grass huts are gone, replaced by semi-permanent mud-walled houses behind makeshift stockades to keep out cattle. Villages ceased to be circular and tight-knit. Twenty-five people who lived in a space 20 by 20 meters now spread themselves out in a line several hundred meters long. Instead of looking across the central open space at each other the houses face the kraal where cattle and goats are kept, inscribing in their living arrangements a symbolic shift from reliance on each other to reliance on property in the form of herds.

Making a Living

Hunting and gathering, which provided Dobe !Kung with 85 percent of their calories as recently as 1964, now supplies perhaps 30 percent of their food. The rest is made up of milk and meat from domestic stock, store-bought mealie meal, and vast quantities of heavily sugared tea whitened with powdered milk. Foraged foods and occasional produce from gardens makes up the rest of the vegetable diet. For most of the 1980s government and foreign drought relief provided most of the food. There was so much available that surplus was often fed to dogs.

When the government cut off general food distributions, the Dobe people at first were shocked and angry but they quickly responded in creative ways. Mid-1987 saw a revival of hunting; men who hadn't hunted for years took it up again, and younger men, who had never become skilled with bow and arrow, hunted from horseback with spears. The revival of hunting was encouraged by the government. After years of strict enforcement of game laws, the powerful Wildlife Department, after conducting an aerial survey, decided that the Dobe area had plenty of game and issued liberal licenses to all !Kung who wanted them. Both women and men were issued licenses, so men were able to hunt their wives' quotas as well as their own. In a single week in July 1987 five eland were killed, more than had been taken in the previous year. The possession of horses was the key to hunting success. One old couple sold six of their cows to buy one horse and then sent young men out to hunt for them. Subsequently food distribution was resumed and, as of mid-1991, weekly government handouts were in place. (For this and other information about current conditions in the Dobe area, we thank Dr. Jeffrey Kurland.) The failure of the rains across Southern Africa in 1991-92 has brought serious drought yet again to the Dobe area.

Relations with Herero Neighbors

From as early as 1900 some !Kung had been involved in boarding cattle for wealthy Tswana in a loan cattle arrangement called mafisa, widespread in Botswana. By 1973 about 20 percent of !Kung families had become bitter about mafisa; they complained that cattle promised in payment for services rendered, usually one female calf per year, were not being paid, and without these beasts it was difficult to start one's own herd. Coupled with the withdrawal of government rations, the lack of mafisa had soured some Dobe Ju/wasi about their prospects in Botswana.

The people saw what was happening in Namibia, where a nonprofit development agency was helping !Kung to drill boreholes and obtain cattle. Dobe area !Kung wanted their own boreholes, and an overseas agency (Norwegian NORAD) was favorably disposed to financing the project. But an international proposal for 5 to 8 boreholes was stonewalled by the Botswana government, indicating that the government's once liberal policies toward the Remote Area Dwellers (read San) were assuming an increasingly regressive character, an attitude reflected in other areas as well. In 1990-91 three ranches in the Ghanzi District to the south, earmarked for San settlement, were taken by the government and turned over to private interests. After many protests, local and international, the status of these ranches remains in doubt. In 1987 some Dobe people started a movement to leave Botswana and cross the fence to their relatives in Namibia, and by 1991 some had actually made the move.

Craft Marketing

Some compensating developments...
have brightened this generally gloomy picture. From 1986 on, a small parastatal, the “Knng San Works” and its successor organizations, purchased increasing volumes of Dobe area crafts, primarily from Ju/wa but also from Herero. This has had the effect of pumping considerable cash into the Knng economy, from a level of 400-500 Pula per month ($200-250 US) before the marketing scheme, to P5000-7000 ($2500-3500 US) per month at the peak of the scheme.

Unfortunately there were not many opportunities for productive investment of the proceeds in infrastructure such as plows, bicycles, cattle, or horses. While some large stock were purchased, a distressing amount of cash was absorbed in buying beer, brandy, home brew materials, bags of candies, and the ubiquitous sugar, tea, and Nespray.

Schooling and the Problems of Youth

When the first school opened, at !Kangwa, some !Kung parents responded quickly, registering their children and scraping together the money for fees and the obligatory school uniforms. Most !Kung, however, ignored the school or withdrew their children when the latter objected to being forbidden to speak their own language on school grounds or to the (mild) corporal punishment that is standard practice in the Botswana school system. Despite the efforts of parents, teachers, and the school board, absenteeism at the !Kangwa school continues in the 60 percent range.

In spite of these obstacles at least four of the Dobe area students did go on to secondary school in the 1980s. But even for these students, the first to get even this far in the educational system, the road has not been easy. Today two hold teaching jobs in Namibia, while the fourth, the only woman, after being turned down by a number of senior secondary schools, is now enrolled in a Botswana teachers’ college. For the large majority of Ju/wasi, with little or no schooling, the job prospects are poor, and a life of odd jobs combined with heavy drinking was not uncommon. It was a bitter irony of underdevelopment that, in the mid-1980s, many youths were attracted to Namibia, where jobs in the South African army were the only ones available.

Far more successful was the second and smaller of the two schools, at /Xai/Xai, where a progressive headmaster wisely incorporated many elements of Ju/wasi culture into the curriculum, and was rewarded with strong parental and community support for the school and a low absentee rate.

In the long run Dobe area Ju/wasi face serious difficulties. Since 1975, when wealthy Tswana have wanted to expand cattle production they have formed borehole syndicates to stake out ranches in remote areas. With 99-year leases, which can be bought and sold, ownership is tantamount to private tenure. By 1987 the borehole drilling was approaching the Dobe area. If the Dobe !Kung do not form borehole syndicates soon, with overseas help, their traditional foraging areas may be permanently cut off from them by commercial ranching.

Nyae Nyae: A Struggle for Survival

While the Dobe people had to meet the challenges of declining foraging, sedentarization, and the cold bath of immersion in the market economy, the Ju/wasi of adjacent Nyae Nyae had to deal with much more: massive resettlement, the imposition of Apartheid, the loss of most of their land base, militarization, and, finally, the triumph and trauma of independence and post-independence Namibia.

After the Marshall expeditions of 1951-58, this story begins on Christmas Day 1959, when a South African civil servant arrived in Nyae Nyae to “civilize” the “wild” Bushman. Lured by promises of wage work, agricultural training, and medical care, the great majority of the foragers were assembled in the town of Tjum!kui (Tsumkwe). The settlement had been mandated after the South African administration of the territory had ceded 70 percent of the traditional foraging areas of the Nyae Nyae Ju/wasi to other ethnic groups, 30,000 sq. km. of southern Nyae Nyae to Hereroland, and 13,000 sq. km. of the

Continued on next page
north to Kavango and to the Kaudum Game Reserve.

For two decades 900-1000 Ju/wasi were herded together under the watchful eye of South African authorities and missionaries, while weekly shipments of government rations supported the settlement, supplemented by some wage work and occasional trips out for bush foods. The enforced idleness and unaccustomed crowding took a heavy toll; social problems, family violence, and home brew parties became a regular feature of life at Tjum!kui. Ironically, it was after decades of forced settlement, rising alcohol consumption, and government paternalism that the South African filmmaker Jamie Uys came to Tjum!kui to film "The Gods Must Be Crazy," which portrays the Ju/wasi as pristine hunter-gatherers so "untouched" that the mere appearance of a Coke bottle upsets the equilibrium of the society.

John Marshall's excellent film "N!ai: The Story of a !Kung Woman" is a useful antidote to "The Gods Must Be Crazy." It documents the militarization, anomie, and Saturday-night brawling that characterized !Kung life at Tjum!kui at this time; it even contains a sequence of the filming of "The Gods Must Be Crazy."

Sudden Wealth and Sudden Death

In 1978 the South African army began to recruit Nyae Nyae men into the South African Defense Forces (SADF). Ultimately, the 201st Battalion had about 700 Ju/wasi soldiers (some of whom were Angolan !Kung, not from Nyae Nyae or the Dobe area), making the Ju/wasi one of the most heavily militarized peoples in Africa. The SADF recruitment campaign brought contradictory responses: on the positive side, the men were happy to finally have "work" (if you could call it that) and good pay; thousands of Rand poured into Tjum!kui and other communities. On the negative side, the people were sharply divided on the morality of the war and which side to support (many !Kung quietly supported SWAPO, and some soldiers even tried to warn SWAPO units of impending attacks). Also of interest were the reactions of anthropologists to this militarization of the !Kung. Some saw it as a terrible injustice to manipulate a politically unsophisticated group to serve the ends of Apartheid. Others saw the recruitment as a perfectly acceptable way of bringing the !Kung into the "modern world," with the army providing good pay, technical training, and even specially downsized uniforms for the diminutive !Kung, according to one anthropologist. Since engagements with "the enemy" were infrequent (but they did occur; see Bieselex and Weinberg 1990:3-4, for a firsthand account), far more destructive was the sudden wealth in the hands of so many young men away from their families. Alcohol consumption increased further, and drunken fights became more deadly. In a two-year period, in 1978-80, Marshall recorded six homicides, compared to an estimated four cases for the previous decade.

Even while the war was going on, with all its dislocations, a new threat was emerging in the 1980s. The Department of Nature Conservation, within the South West African administration, was pushing strongly to have the Nyae Nyae area declared a game reserve from which all development, including livestock, was to be excluded. For their part a few Ju/wasi were to dress up in traditional clothes and dance and sell curios to the wealthy tourists who were to flock in droves to the spectacle.

The Ju/wasi were appalled by this scheme and opposed it vehemently. What an ironic about-face! First the government had done everything it could to wean them away from bush life; now they were pushing them back into it! But the people were well aware that their traditional way of life had been seriously compromised, and their future lay not in being props in what John Marshall called a "Plastic Stone Age" but in building up their herds and fields to establish themselves as small-holders with a mixed economy of foraging, farming, and wage labor. Happily, after years of protests, both local and international, the scheme was dropped.

The Ju/wasi won this victory in part because by 1988 the tide was turning in Namibia against South Africa; they had suffered a military defeat in Angola, and the momentum was gathering for a U.N.-sponsored plan for Namibian independence. In the September 1989 elections SWAPO won a majority, and the independent nation of Namibia came into being in April 1990.

Despite the rejoicing at the end of 75 years of South African rule, independence for the Ju/wasi was not an unmixed blessing. To all intents the new nation was broke, without developed energy sources, its minerals systematically extracted, and its former patron, South Africa, disappearing over the horizon. The hasty retreat was thrown into relief by the hundreds of demobilized Ju/wasi soldiers, their livelihood vanished, lounging around their home communities suddenly with a great deal of time on their hands. Of the several thousand San soldiers in the SADF, hundreds accompanied the departing South African units to permanent bases in South Africa proper, while hundreds more were resettled in the barren and hitherto unoccupied Western Bushmanlands. The Nyae Nyae Ju/wasi at least had communities suddenly with a great deal of time on their hands. Of the several thousand San soldiers in the SADF, hundreds accompanied the departing South African units to permanent bases in South Africa proper, while hundreds more were resettled in the barren and hitherto unoccupied Western Bushmanlands. The Nyae Nyae Ju/wasi at least had communities suddenly with a great deal of time on their hands.

With all these forces arrayed against them, the Nyae Nyae Ju/wasi have had a major ally in the form of the Windhoek-based Nyae Nyae Development Foundation of Namibia (formerly the Ju/wa Bushman Development Foundation of Namibia). Founded by John Marshall and Claire Ritchie in 1981, and formally chartered in 1986, the foundation has lobbied hard in Namibia and internationally to preserve the Ju/wasi land rights and community organization. The foundation arose in response to a move by the Ju/wasi to cut loose from the squalor of welfare capitalism...
that had been created for them. In the early 1980s, tired of the incessant squabbling, hunger, and uncertainty at Tjum'i kui, small groups of Ju/wasi had begun to move away to reestablish themselves on their traditional lands, called n'lores. By 1986 eight such groups had formed; by November 1991 30 of these “outstations” had established themselves. Drawing upon private donations and, later, international agencies, the NNDFN was able to provide funds to the newly formed Ju/wa Farmers’ Union (now known as the Nyae Nyae Farmers’ Cooperative, or NNFC) to drill boreholes and purchase small herds of cattle for these re-formed n'lores groups.

Even with the foundation’s aid, the road to a semblance of self-reliance for the Nyae Nyae Ju/wasi has not been easy. First the NNFC had to fight interference from the South African bureaucracy that still controlled Namibia. Their small boreholes and cattle posts still existed in the middle of what the administration still regarded as a vast game reserve. Between 1983 and 1986 lions decimated the herds of cattle; and elephants, seeking water, broke down several borehole pumps. At one village the elephants were so destructive that the community had to erect an electrified fence to keep them away from the windpump and dam.

In the last year, and despite the uncertainties, the future of the Nyae Nyae people and their land took a significant step forward with the convening of the national Land Conference in Windhoek in June-July 1991. The NNFC and the NNDFN came to the conference armed with legal opinions, maps and surveys of the 200 traditional n'lores (territories) into which the Nyae Nyae was divided, a complete set of by-laws and constitution for the NNFC in Ju/wasi and English, position papers, and other documents. The delegation was accompanied by lawyers, interpreters, a press kit, and two television documentaries about the Nyae Nyae people and their plight. One of the most effective components of the NNFC presentation was a detailed discussion of the traditional n'lore tenure system and how it was being adapted creatively to the tasks of economic development. It urged that any land law that came into force should acknowledge these forms of tenure and their legitimacy.

In the end the conference adopted most of the recommendations put forward by the NNFC, a major victory for the Ju/wasi. As of this writing the effects continue to unfold: in August 1991, Sam Nujoma, the head of SWAPO and president of Namibia, visited Eastern Bushmanland and instructed local authorities to respect Ju/wasi land rights. Edicts were issued for the peaceful removal of neighboring pastoralists who, with their large herds of cattle, had illegally occupied Southern Bushmanland in the euphoria and confusion following independence. The removal orders were successfully carried out in the closing weeks of 1991.

In setting up the NNFC, the Ju/wasi have had to face several internal as well as external challenges. Through their elected leaders they have had to act collectively to speak with one voice, not as members of a kin group or band. The leadership of the cooperative has crisscrossed Nyae Nyae dozens of times by truck and on foot, holding interminable meetings. Becoming successful or even viable pastoralists and farmers, given the area’s perennial problems of drought, would be difficult enough. But to be suddenly thrust into this brave new world after 30 years of colonial paternalism compounds the problem. The atmosphere of struggle and uncertainty is conveyed forcefully in John Marshall’s film “Pull Ourselves Up or Die” (1986) and Biesele and Weinberg’s book Shaken Roots (1990).

The Nyae Nyae are struggling against long odds to establish themselves as herder-foragers and as citizens in a modernizing state. But the legacy of decades of colonialism and forced acculturation is a bitter one: chronic drinking bouts and anomie are manifest; in the SADF days soldiers would think nothing of hiring a truck to drive them 300 miles to Grootfontein for cases of beer and brandy. Today such easy money is long gone, so the ex-soldiers hitchhike on passing vehicles for the same purpose. Their 30 outstation communities vary widely in their economic well-being and sense of identity, from bustling villages of 50 to rural slums on the edge of hunger. It is too early

Continued on next page
to tell whether the battle for self-reliance will be won by the Ju/wasi of Nyae Nyae. However, if empowerment is the key to survival, then the Land Conference and its aftermath do offer a modest basis for optimism.

Effects on Anthropological Practice

They have changed, and so have we. How have anthropologists responded to the dramatic changes in Ju/wasi life? The responses have varied widely, from the business as usual of the traditionalists to the dark visions of the revisionists. Happily, the members of the Marshall and Lee–DeVore group have avoided both these extremes.

First we can note that most of the original researchers continued to remain active in San research and advocacy into the 1980s and 90s. Lorna Marshall, at 94, recently completed her second monograph, *For Food and Health: Beliefs of the Nyae Nyae !Kung*. After an enforced absence of many years, John Marshall returned to Namibia in 1978 to film “N!ai.” He stayed on to co-found the NNDFN and has spent much of the last 13 years there.

Many of the Harvard group, with Lee and DeVore, have continued research in the Dobe area, along with their students. Biesele, Brooks, Draper, Harpending, Katz, Lee, Shostak, and Yellen all made trips in the 1980s. And they have attempted to document the pace of change and its impacts.

For some anthropologists, however, the magnitude of the trauma experienced by the Ju/wasi has made it morally impossible to continue as before; some researchers have become actively involved in shaping the future of the San, in expanding the narrow (and dismal) range of options open to them in the 1960s and 70s. The formation of the NNDFN has brought anthropologists into a very different relationship with the San, one not envisioned by the premises of anthropological research current in the 1960s. The move to adopt the intervener role has had a precedent in the formation almost 20 years ago of the Kalahari Peoples’ Fund, a non-profit foundation to support development projects for Botswana San. The !Kung San Foundation, the American counterpart of the NNDFN, affiliated to Cultural Survival, Inc., serves a similar function in Namibia. Yet many of the traditional ethnographic field methods—genealogy, land-use survey, and analysis of political processes—remain vital to the work of NNDFN.

The NNDFN’s basic approach has been to provide strategic support to a peoples’ movement, the Nyae Nyae Farmers’ Cooperative. The anthropologists concerned have made a significant contribution to Ju/wasi survival. They have made available to development workers, government bodies, and the people themselves all the social and cultural ecological understandings built up by research since the time of the Marshall expeditions (1951ff). Clearly this involved more than publishing and photocopying; it has involved a radically new communication process pursued over years, built upon the unique foundation of friendly acquaintance between the Marshall family and the Nyae Nyae groups, now over 40 years’ duration.

Megan Biesele’s work with the foundation since 1987 illustrates the changing role of the anthropologist. Drawing on her skills as a folklorist and student of Ju/wasi traditional ideology, she sought to creatively expand further their already rich and nuanced traditional concepts of land use and social organization, to apply them to new settings and new challenges. While other researchers have carried out the censuses and land-use surveys, much of Biesele’s work has consisted of attending the frequent Farmers’ Cooperative meetings and transcribing and translating recordings of these meetings. These transcripts have documented the growth of political self-awareness and the establishment of a Ju/wasi voice in Namibia’s national politics. The Ju/wasi in these accounts do not appear as uniformly heroic; along with frequent calls to action, there are notes of despair, confusion, and “false consciousness,” reflecting the complex cross-currents in Ju/wasi life in the 1990s.

The point at which science and reflexivity meet is perhaps the most compelling current feature of this striking example of advocacy anthropology. Becoming an “advocate” or “intervener” clearly alters the work of anthropologists; but to the anticipated charge of conventional science that such intervention creates epistemological distortion, we would argue that knowledge produced in a situation where people are fully involved is different, perhaps, but no less important. If anything, it is clearer and more vital.
Some Lessons of the Ju/wasi

In recent years anthropologists have watched with dismay as their traditional subjects, the world's so-called "primitive" societies, have been disappearing with the speed of light, as group after group is settled, censused, inoculated, administered, and put to work in the fields, farms, sweatshops, and factories of the New World Order.

The very idea that anthropologists, as recently as the 1950s or 60s, could have spent their time with people who dressed in skin clothing and hunted and gathered for a living has become a serious embarrassment for many of our colleagues. Parenthetically, we might add, for others it is a source of astonishment and delight that any people could have resisted the steamroller of modernity for so long. It is these divergent views that underlie the schism in perceptions of the Ju/wasi mentioned at the outset, what I have called the crisis in hunter-gatherer studies (Lee 1992). For partisans in these often heated debates there seem to be only two alternatives: either the people are totally pristine, or, if not, they must be totally dominated. But why does living in the present mean that a people must be totally divorced from their past? Modernity and the market are powerful and pervasive; but they are not that powerful or that pervasive. The Ju/wasi are enduring but not unchanging; they are adapting to the world system as fast as they can. Their new-found political and technical skills augment a formidable array of knowledge and practices inherited from their foremothers and fathers: language, kinship and naming systems, rituals and mythology, subsistence practices, and, above all, their ironic sense of humor are the firm bases on which they are constructing their future.

Fortunately in the wider world there are signs of convergence between the Ju/wasi agenda and changing perspectives among development agencies, aid workers, and scholars. The recent growth of interest in the notions of "tribal wisdom," biodiversity, and theories of common property management as evidenced on the cover of Time magazine (Sept. 23, 1991), in the pages of Cultural Survival Quarterly (Fall 1991), and in the Millennium television series on PBS (May 1992ff), offers some indication that the wheel may be turning in favor of the preservation of "small peoples," not as museum specimens, but in the recognition that these peoples have rights to land as well as being repositories of invaluable knowledge regarding plants, animals, and localities and as living embodiments of alternative ways of being.

All of these emerging discourses challenge the current banalities of the New World Order and offer hope that ecological and cultural diversity still have a place on this planet.

If hyper-consumerism is the dominant ideology in the world today in both East and West, at the same time the fruits of hyper-consumerism are everywhere: poisoned air and waters, overflowing garbage dumps, extinction of thousands of species of plants and animals. Many thoughtful people worldwide are seeking solutions to the multiple crises of modernity. In the search of alternatives the Ju/wasi do have a few suggestions. First of all, they live lightly on the land. Second, they show how to live with low rates of population growth. Unlike the folks in Boston, Toronto, Tokyo, and Moscow, they know how to entertain themselves without Disney, Nintendo, and "Married with Children"; how to maintain a reasonably peaceful life without police, courts, and prisons; how to eat well and avoid coronaries on the original natural food diet. With so much to offer, surely a space can be found in the global village for the original affluent society. With their own determination (and a little help from their friends at places like Harvard) there is therefore reason to hope that the Ju/wasi-Kung will be around to greet not only the 21st century, but the 22nd and 23rd as well.

Continued on next page
Selected References


*Cited in text.
Ellison to Chair Department

Professor Peter Ellison was appointed Chair of the Department of Anthropology for 1992-1995. A human biologist, he holds the B.A. in Zoology, University of Vermont (1975), M.S. in Wildlife Biology, University of Massachusetts (1980), and Ph.D. in Biological Anthropology, Harvard (1983). Before joining the Anthropology faculty as Assistant Professor in 1983, he was Assistant to the Director, Laboratory of Human Reproduction and Reproductive Biology at the Harvard Medical School. He was appointed Thomas D. Cabot Associate Professor of Anthropology in 1988 and Professor of Anthropology and Curator of Human Biology in Harvard’s Peabody Museum in 1990. He is the Director of the Reproductive Ecology Laboratory in the Museum.

Prof. Ellison’s research interests focus on the evolution and ecology of human reproduction. As a principal investigator of the Ituri Project, a multidisciplinary study of Efe Pygmies and Lese horticulturalists in Zaire’s Ituri Forest, he introduced new methods for monitoring the reproductive physiology of human subjects under remote field conditions. Using these techniques he and his colleagues in the Reproductive Laboratory have expanded their research agenda to include field studies on four continents (in Zaire, Nepal, Poland, Bolivia and Paraguay) as well as controlled studies in Cambridge, Mass. Their results have illuminated several factors that influence ovarian function, including age, nutrition, and workload, and the way these factors contribute to both inter-individual and inter-population differences in fecundity and fertility. He has also collaborated with Prof. Jerome Kagan of Harvard on the biological determinants of temperament in infants and children.


New Faculty Appointments

William F. Fisher has been appointed Assistant Professor of Anthropology and Social Studies. A 1973 graduate of Bucknell University in Lewisburg, Pennsylvania, he earned the M.A. (1982), M.Phil. (1982) and Ph.D. (with Distinction, 1987) degrees from Columbia University. He also holds the M.I.A. degree (1979) from the School of International and Public Affairs, Columbia University. A social anthropologist, Prof. Fisher’s areas of expertise are South and Southeast Asia. His dissertation, The Re-Creation of Tradition: Ethnicity, Migration, and Social Change Among the Thakali of Central Nepal, focused on the influence of entrepreneurs and traditional traders on economic and social development in central Nepal.

Before coming to Harvard Prof. Fisher was a Lecturer (1986) and Visiting Assistant Professor (1989-90) in the Dept. of Anthropology at Barnard College, Columbia Univer-

Continued on next page
New Faculty Appointments

Fisher, continued

...city. He was appointed Assistant Professor in the Dept. of Anthropology at Columbia in 1987. In 1991 he was Visiting Assistant Professor at Princeton.

Prof. Fisher was a consultant for the U.S. Agency for International Development (1983-4) in Katmandu, where he conducted a field study of community responses to the Resource Conservation and Utilization Project. From 1985-87 he was the Assistant Director of the Center for South Asian Studies and Southern Asian Institute at Columbia. He returned to central Nepal in 1987 to conduct a field study analyzing the effects of the process of decentralization on the roles of non-governmental organizations in stimulating community participation in natural resource development initiatives. Part of the study included determining why various sections within communities react or fail to react to development initiatives. From 1986-91 Prof. Fisher was the co-editor of the Himalayan Research Bulletin, an international journal published for the Nepal Studies Association. Other foreign research experience included work in Jamaica, India, Afghanistan, Israel, and Greece.


Marc David Hauser has been appointed Assistant Professor in Biological Anthropology. A graduate of Bucknell University in Lewisburg, Pennsylvania (1981), he received the Ph.D. in Biological Anthropology from the University of Michigan, Ann Arbor (1987). The title of his dissertation was Behavioral Ecology of Free-Ranging Vervet Monkeys: Proximate and Ultimate Levels of Explanation. Prof. Hauser held post-doctoral fellowships at the University of Michigan, Ann Arbor, Rockefeller University, and the University of California, Davis. Prior to joining the Harvard faculty he was a Lecturer in the Department of Psychology at the University of California, Davis. He has also held teaching positions in the Biology and Zoology departments of that university, and in the Zoology Department at Makerere University, Kampala, Uganda.

Prof. Hauser has done research on a number of nonhuman primates. Among captive groups of macaques he has studied male infant interaction, social and reproductive behavior of females, and neuronal responses to vocal and visual stimuli. Among captive chimpanzees he has done

Continued on page 18

Marc David Hauser

Michael Herzfeld

Continued on page 18
James Lorand Matory was appointed Assistant Professor in the Departments of Anthropology and Afro-American Studies in 1991. He graduated from Harvard College, magna cum laude, in 1982, and received the Ph.D. degree in Anthropology from the University of Chicago in 1991. A Dean’s List student for four years, he was awarded the John Harvard Scholarship for Academic Performance of the Highest Distinction in his junior and senior years. Prof. Matory was the recipient of numerous honors and awards after graduating from Harvard, including: a Rotary Scholarship for Graduate Study Abroad (Nigeria), 1982-83; Committee on Institutional Cooperation (CIC) Graduate Fellowship for Minorities, 1984-85; CIC International Studies Fellowship (Nigeria), 1986; Roy D. Albert Prize for Excellence in Graduate Study of Anthropology, Univ. of Chicago Faculty of Social Sciences, 1986; CIC International Studies Fellowship (Brazil), 1987; National Science Foundation Fellowship for Graduate Study, 1985-89; Fulbright-Hays Fellowship for pre-dissertation research (Nigeria); and Fulbright-Hays Fellowship for post-dissertation research (Nigeria); and Shidler Fellowship (Kenya), 1986; Study Abroad (Nigeria), 1982-83; a Rotary Scholarship for Graduate Study, 1985-89; Committee on Institutional Cooperation (CIC) Graduate Fellowship for post-doctoral studies, 1987-88; Fulbright-Hays Scholarship for post-doctoral studies, 1987-88; Visiting Lecturer, Department of Religious Studies, King’s College London, University of London; Visiting Professor, Department of Anthropology, Zhongshan University, People’s Republic of China; and Visiting Associate Professor, Department of Anthropology, Boston University. She joined the faculty at the University of Pittsburgh in 1983 and received tenure there in 1987.

A social anthropologist whose expertise is China, Prof. Watson has done field research in San Tin Village and Ha Tsuen Village, Hong Kong New Territories, and in Panyu Xian, Zhongshan, and Xinhui Xian, Guangdong Province, P.R.C. In 1988 she did research on the transition to Communist rule in Hong Kong.


Prof. Watson is currently writing a book entitled Dutiful Daughters and Loyal Wives, based on field data collected in rural Hong Kong.
New Faculty Appointments

Hauser, continued from page 16

experiments on food calling behavior. Field research on free-ranging animals includes: observations and experiments on the development of vocal, social and feeding behavior of vervet monkeys at Amboseli National Park, Kenya; a pilot study on the communication and behavioral ecology of chimpanzees in Kibale and Budongo Forest reserves, Uganda; and experiments with rhesus macaques on deception in the context of food and sex, in Cayo Santiago, Puerto Rico. Other field research included observation and experimentation on the vocal communication and demography of white-crowned sparrows living in Twin Peaks and Presidio Park, California.


Herzfeld, continued from page 16

relationships between local-level identity and nationalism. His year as a student at a Greek university fired a long-sustained interest in the nationalistic uses of scholarship, and this led to the writing of his first book, Ours Once More: Folklore, Ideology, and the Making of Modern Greece (Austin: Univ. of Texas Press, 1982). At the same time, he continued his research on local-level ethnography, and the result was The Poetics of Manhood: Contest and Identity in a Cretan Mountain Village (Princeton University Press, 1985). In this study, he analyzed the narratives and practices associated with various idioms of male contest, especially the reciprocal theft of livestock and the vendetta, and examined the social processes whereby male as well as local, regional, and national identity is created through the playful deformation of cultural norms. In subsequent work, he has also explored female identity and the complex connections between gender and nationalism.

During the period of this research in the Cretan mountain country, Prof. Herzfeld became interested in the social problems attendant on historic conservation efforts in the prefecture capital of Rethimno, and saw in this an especially fine opportunity to examine the ideological interplay of national and local politics. The resulting new fieldwork is the basis of A Place in History: Social and Monumental Time in a Cretan Town (Princeton Univ. Press, 1991). Meanwhile, he had begun to extend his critique of nationalism to the practices of anthropology itself, finding in Greece—an often contested ideological and cultural borderland between East and West—appropriate materials for an exploration of possible historical and conceptual parallels between nationalism and anthropology, and this led to the writing of Anthropology through the Looking-Glass: Critical Ethnography in the Margins of Europe (Cambridge Univ. Press, 1987). These interests, more explicitly concentrated on the popular reception of bureaucratic practices, also generated The Social Production of Indifference: Exploring the Symbolic Roots of Western Bureaucracy (Oxford: Berg, 1992). In this study, Prof. Herzfeld addresses specific dilemmas of modernity: why are some of the most insensitive bureaucracies to be found in countries with especially generous traditions of hospitality, and how do people deal with the fact that the democratic ideals and intentions of government often seem to provide little protection against petty bureaucratic harassment in practice?

Prof. Herzfeld’s other publications include several co-edited and guest-edited works and numerous articles and reviews. The work in which he is currently engaged concerns the transmission of political relationships through craft apprenticeship in Crete. He also plans new research on the transmission of technical and political knowledge as well as on social aspects of historic conservation in northern Italy.

While Prof. Herzfeld is an enthusiastic and active participant in the current surge of interest in the ethnography of Europe, he insists that this trend can only be maintained through careful attention to the theoretical and comparative implications of such research for anthropologists and others working in different parts of the world. Indeed, he has been highly critical of the tendency to conflate widely differing regional and national cultures under such blanket terms as “the Mediterranean.” He believes instead that such terms can only become useful if they themselves become the object of critical scrutiny: one should, he suggests, examine the role these terms play in the lives of ordinary people as well as in the discourses of national and local identity and of anthropology itself, thus deploying what he calls “productive discomfort” against the use of convenient classifications as a substitute for thought about where the categories come from and whose interests they serve.
It is with deep regret that we announce the untimely death of Academician Valeri P. Alexeev, past Director of the Moscow Institute of Archaeology of the Academy of Sciences of Russia. Prof. Alexeev was a Visiting Professor of Anthropology in the Summer School at Harvard in July and August 1991. Following his return to the Commonwealth of Independent States he entered the hospital where he died unexpectedly while undergoing routine surgery. He was 62. Prof. Alexeev was the most distinguished physical anthropologist in the territory of the ex-U.S.S.R. An indefatigable field worker, his research involved the study of numerous ethnic groups of Siberia, Central Asia, the Caucasus, and Russia. He will be remembered not only for the importance of his scientific contributions, but also for his personal commitment, well prior to the emergence of glasnost and perestroika, to the goals of international collaboration and democracy in the behavior of both science and nation states. He leaves his wife, Professor Tatiana Alexeeva, who teaches at the University of Moscow.

— C.C. L-K.

Faculty

Ofer Bar-Yosef, George Grant MacCurdy and Janet G.B. MacCurdy Professor of Prehistoric Archaeology, participated in the symposium on the “Early Aurignacian of Europe and the Near East,” at the 12th Congress of the Union of International Pre- and Proto-Historic Sciences held in Bratislava, Czech and Slovak Federated Republics, September 1992. He gave a lecture entitled “Origins of Modern Humans in the Near East” in the Dil ve Tarih Cografya Facultesi, Ankara Univ., in January 1992. The lecture was in conjunction with the activities of an international team (including scholars from Turkey, France, Belgium, and Poland) excavating at Karain Cave, near Antalya in southwest Turkey. Recent publications by Prof. Bar-Yosef include: “The Early Neolithic of the Levant: Recent Advances,” in Review of Archaeology 12, 1991; Le squelette mo sternier de Kebra 2, edited with B. Vandermeersch, C.N.R.S., Paris, 1992; The Natufian Culture in the Levant, edited with F. R. Valla, International Monographs in Prehistory, Ann Arbor, 1992; Pastoralism in the Levant: Archaeological Materials in Anthropological Perspective, edited with A. Khazanov, Prehistory Press, Madison, 1992. This summer Prof. Bar-Yosef will begin new excavations at Hayonim Cave, Western Galilee, Israel, a cave he excavated, with Prof. B. Arensburg, Tel Aviv Univ., and Prof. E. Tchernov, Hebrew Univ., from 1965 to 1979. By adding information about spatial distribution of hearths, bones, and artifacts, by separating humanly accumulated bones from those of denning hyenas, and by uncovering patterns of tool use, raw material procurement, and the use of colorants, the project will contribute to the study of behavior of anatomically modern humans and settle important archaeological questions raised by the debate concerning their origins.

Assistant Professor Kenneth M. George delivered a paper on “Genre and Authority,” as an invited partici-
the keynote address at the Society of Behavioral Medicine annual meetings, Washington, D.C., in March, was "Culture, Narrative and Experience: Challenges for the Study of Illness Behavior." Other invited lectures were delivered at the Dept. of Psychiatry, Cleveland Clinic, and with Dr. Mary-Jo DelVecchio Good at the Institute for Psychological Rehabilitation, Freiburg Univ., Germany, and at the Univ. of Dar es Salaam, Tanzania. Prof. Good organized a panel on "Schizophrenia: Culture, Politics and Experience" at the Society for Psychological Anthropology, Chicago. He and Dr. Mary-Jo DelVecchio Good will deliver a lecture on "The Fascination of Medical Power: A Critical Appraisal of the Cultural Critique of Medicine," to the Seminar "Pouvoir, Pouvoirs: Anthropologie du Pouvoir," organized by L'Ecole Francaise de Rome and the Univ. of Rome.

Associate Professor Rosemary A. Joyce presented a paper entitled "Discourse and History in Comparative Perspective" at a symposium on "New Approaches to Maya History," at the annual meeting of the A.A.A., Chicago, November 1991. "Labor, Class, and Gender Images in Classic Maya Society" was the title of an invited lecture, Anthropology Dept. Colloquium, New York Univ., December 1991. Prof. Joyce participated in the Conference on Maya Ceramic Analysis held in Belize, July 1991. She is the author of Cerro Palenque: Power and Identity on the Maya Periphery, published by the Univ. of Texas Press, August 1991. This summer Prof. Joyce will undertake extensive excavations in Department of Yoro, Honduras, and direct salvage excavations in the Ulua Valley. Prof. Joyce is the Curator of "Encounters with the Americas," a new permanent exhibition which will open in December at the Peabody Museum.


Richard H. Meadow, Director, Zooarchaeology Laboratory, Peabody Museum, and Senior Lecturer on Anthropology, gave a paper entitled "Urban Renewal and Faunal Remains at Harappa," at the 11th International Conference of the Assoc. of South Asian Archaeologists in Western Europe, Berlin, July 1991. At a conference on "Ethnicity in Ancient South Asia" held in Toronto, October 1991, Dr. Meadow and Dr. Fredrik Hiebert gave a paper on "Late Prehistoric Interactions between Central and South Asia." "Animals in Urban Third Millennium Subir and Meluhha" was the title of a paper presented at the A.A.A. annual meeting in Chicago, November 1991. "The Past, Present, and Future of Bioarchaeological Studies in Pakistan with Specific Reference to Mohenjodaro and the Indus Civilization" was the title of a paper delivered at the International Symposium on Mohenjodaro, Karachi, February 1992. "Faunal Exploitation Practices during the Third Millennium in the Lower Town of Tell Leilah (Syria)" was the title of a paper presented, with Anna Curnow, at the annual meeting of the Society for American Archaeology, Pittsburgh, April 1992. Dr. Meadow wrote the preface for and edited a volume entitled Harappa Excavations 1986-1990: A Multidisciplinary Approach to Third Millennium Urbanism, Prehistory Press, Madison, 1991. "The Biology of Cementum Increments (with an archaeological application)," with Daniel Leiberman, was the title of an article in Mammal Review 22(2), June 1992. Dr. Meadow's field research included the excavation of Scythian burials at Ykok in the Altai Autonomous Region of Russia, and work on faunal collections in Novosibirsk, Siberia, August 1991; and fieldwork at Pakistan at the Indus Civilization urban site of Harappa, March 1992. With the death (April 18th, 1992) of Professor George F. Dales, Univ. of California, Berkeley, Dr. Meadow has assumed project directorship of the Harappa Archaeological Project based at Harappa. The institutional base for the project will shift from Berkeley to the Peabody Museum, Harvard.

David Pilbeam, Henry Ford II Professor of the the Social Sciences, is Chair of the Science Committee for the Board of the National Museum of Natural History, Smithsonian Institution. Recent publications by Prof. Pilbeam include: with J. Kappelman, et al., "The Earliest Occurrence of Sinapispecus from the Middle Miocene Chinji Formation of Pakistan," in the

Assistant Professor Robert Preucel was awarded a grant from the American Philosophical Society to conduct preliminary archival research on Tecolote Pueblo, New Mexico. In January, he coauthored a paper with Steven Pendery entitled the “Utopian Landscapes of Brook Farm” which was presented at the Annual Meeting of the Society for Historical Archaeology, Kingston, Jamaica. In the same month, he presented a paper “Social Reproduction and Transformation Among the Hohokam” at the Third Annual Southwest Symposium, Univ. of Arizona, Tucson. In February, he participated in the Santa Fe Institute Workshop on “Resource Stress, Economic Uncertainty, and Human Responses in the Prehistoric Southwest,” and gave a paper entitled “Farmers on the Move: Mobility and Settlement Among Subsistence Agriculturalists.” In April, he presented a paper entitled “The Mobility Transition: Assessing Mobility and Sedentism in the Epipaleolithic Levant and the Archaic Southwest” at the 57th Annual Meeting of the Society for American Archaeology in Pittsburgh. With Mark Leone, he is the author of “Archaeology in a Democratic Society: A Critical Theory Approach” in Americanist Archaeology Goals and Practice, edited by LuAnn Wandsnider, Center for Archaeological Investigations Occasional Paper 20, Southern Illinois Univ., Carbondale, 1992. He is currently codirecting (with Steven Pendery) archaeological fieldwork at the Brook Farm site in West Roxbury, Mass.


Subscription to SYMBOLS

Symbols is published once a year by the Peabody Museum and Department of Anthropology at Harvard. Subscription rate is $4.50.
Museum curators and staff


Clemency Chase Coggins, Research Associate, and Adjunct Professor in the Dept. of Anthropology at Boston University, directed a project in Mexico entitled "The Siting and Function of Monuments at Dzibilchaltun, Yucatan," in the spring of 1991. The work will be published in a report by the Middle American Research Institute at Tulane. She is an editor of the new International Journal of Cultural Property and vice president of the International Cultural Property Society. Artifacts from the Cerneate of Sacrifice: Textiles, Basketry, Stone, Bone, Shell, Ceramics, Wood, Copal, Rubber, Other Organic Materials, and Mammalian Remains, Peabody Museum Memoir X:3, will be published in June 1992 by the Peabody Museum. The volume was edited and partially written by Dr. Coggins, and includes contributions by members of the Peabody Museum faculty, staff, and affiliates of the past 80 years.


Dr. Lawrence J. Flynn, Assistant Director, and Research Associate, presented a paper on "New bats and insectivores from the Pliocene of North China," at the annual conference of the Society of Vertebrate Paleontology, San Diego, October 1991. Recent publications by Dr. Flynn include: "Enrichment and stability in the Pliocene mammalian fauna of North China," Paleobiology 17(3); and with R.H. Tedford, et al., "Yushe Basin China; Paleomagnetically calibrated mammalian biostratigraphic standard from the late Neogene of eastern Asia," Journal of Vertebrate Paleontology 11(4). Dr. Flynn's field research concerns the terrestrial fossil record of the last eight million years of northern China. He continues to study the 20 million year terrestrial record of the Indian subcontinent.

Barbara Isaac, Assistant Director, and Coordinator of the Photographic Archives, was an invited speaker at a symposium at Smith College entitled "Behind Glass: Native American Representation in the Year of Columbus," in March 1992. She gave a paper on "The Peabody Museum, Harvard: Realizing Repatriation" as the invited speaker at the session on "The Reality of Repatriation: Issues in Implementation," Society for American Archaeology, Pittsburgh, April 1992. In August 1992 Mrs. Isaac joined a team of archaeologists from the U.S. and Georgia (former U.S.S.R.) to search for early Paleolithic sites in Georgia. The project is under the auspices of the International Program for Archaeological Research in the Caucasus (IPAC), directed by Prof. Philip Kohl of Wellesley College.


Diane Zorich, Documentation Administrator, presented a paper, co-authored with Dr. Lane Back, entitled "Museum Information Exchange and Repatriation," at the annual meeting of the Museum Computer Network,

• Symbols • September • 1992

---

**Visiting Lecturers**

Throughout the academic year a number of scholars from the U.S. and abroad gave lectures in the Department of Anthropology and at meetings of the Peabody Museum Association.

**Dr. Anne Cohen,** Archaeometry Laboratory, Univ. of Cape Town, lectured on “Holocene Climatic Changes Recorded in Archaeological Midden Shells from the South African Coast.” Prof. Richard S. MacNeish, Director, Andover Foundation for Archaeological Research, Andover, Mass., spoke on “Early Man in the New World: A Possible Pre-Clovis Site at Pendejo Cave, New Mexico.”

“Picturing the Past: Archaeology in Exhibitions and Film” was the title of a lecture by Dr. George F. MacDonald, Director, Canadian Museum of Civilization, Ottawa. Prof. George Rapp, Archaeology Dept., Boston Univ., spoke on “Geological Investigations into the Location of the First Capital of the Shang Dynasty.”

Prof. Nicola Stern, Archaeology Dept., LaTrobe Univ., Australia, lectured on “The Southern Forests Archaeological Project: Investigations into the Prehistory of Southwest Tasmania,” and “The Structure of the Lower Pleistocene Archaeological Record: Implications for Reconstructing Early Hominid Behavior.” “Historical Archaeology at the Spencer-Pierce-Little Farm, Newbury, Massachusetts,” was the title of a lecture by Prof. Mary Beaudry, Archaeology Dept., Boston Univ.

A series of lectures by Native Americans was presented at the Peabody Museum. Joe Dishta, Head Councilman, Pueblo of Zuni, gave a lecture entitled “Repatriating the War Gods.” Gerald McMaster, Curator of Contemporary Art, Canada’s Museum of Civilization, gave a lecture on “New Directions in Contemporary Native Canadian Art.” George P. Horse Capture, Founder, Tribal Museum, Fort Billings, Montana, lectured on “The Concept of American Indian Sacred Material and Repatriation.”

“From Foragers to Citizens: The Changing Life of the Kalahari Bushmen” was the title of the keynote address delivered by Prof. Richard Lee, Dept. of Anthropology, Univ. of Toronto, at a symposium in conjunction with the exhibition “Ju/wasi: Bushmen of the Kalahari.” Other lectures given in conjunction with the opening of the exhibition were: “Filming Reality in Nyae Nyae,” by filmmaker John Marshall; “My Leader Is My Land: Contemporary Ju/wasi Bushman Land Rights and Leadership,” a lecture by Dr. Megan Biesele, Director of the Nyae Nyae Development Foundation of Namibia; and “A Truce Is Broken: The New Practice of Cattle-keeping Erodes the Respectful Relationship between Ju/Wasi Bushmen and Lions,” a lecture by author and naturalist Elizabeth Marshall Thomas.


Dr. Stefania Pandolfo, Research Associate, Dept. of Anthropology, Rice Univ., lectured on “Voices in the ‘Other Scene’: The Cultural Imagina- tion of a Moroccan Healing Technique.” Prof. Karen Brison, Dept. of Anthropology, Washington Univ., St. Louis, spoke on “Cultural Identity of Hegemony in the Pacific.”

Prof. Creighton Gabel, Archaeology Dept., Boston Univ., Editor, The Journal of Field Archaeology, spoke on “Publishing in Archaeology: An Editor’s Perspective.” Dr. Nicholas Conard, Univ. of Connecticut, Storrs, lectured on “Current Research on Wallertheim, a Paleolithic Site in the Rhine Valley, Germany.”

Prof. Joan Gero, Dept. of Anthropology, Univ. of South Carolina, gave a lecture on “Gender, Power and Practice in the Construction of Early Man.” Prof. George Zarur, National Research Council of Brazil and Univ. of Brazil, lectured on “Chaos in Culture: The Case for the Mathematical Metaphor.”

Dr. Mark Lehner, Univ. of Chicago, Oriental Institute, spoke on “Bakers, Brewers and Builders: Recent Excavations at the Pyramids of Giza, Egypt.” Lectures given by Prof. Eliezer Oren, Dept. of Archaeology, Ben Gurion Univ. of the Negev, were: “The Early Interconnections between Egypt and Canaan: A Perspective from the Sinai Landbridge,” and “The First of Conventional and Isotopic Techniques.”

Prof. R. Barry Scott, Federal Univ. of Pernambuco Brazil, Recife, lectured on “Households, Ethnographic Prejudice and Comparative Studies.”

Prof. Michael Laguerre, Univ. of California, Berkeley, lectured on “The Structure of Informal Urban Practices.” Prof. Ruth Whitehouse, Univ. of London, spoke on “Recent Approaches to Italian Prehistory: Religious Ritual and Gender Construction.”

Dr. Bruce Bourque, Curator, Maine State Museum, and Lecturer, Bates College, Lewiston, Maine, spoke on “Reconstruction of Prehistoric Diet among Maritime Peoples: A Comparison of Conventional and Isotopic Techniques.”

Prof. Julia Lee-Thorp, Archaeometry Laboratory, Univ. of Cape Town, lectured on “The Carbon Isotope Signal in Fossil Bone and Teeth as a Dietary and Environmental Indicator.”

---

Symbols • September • 1992 • 23
Decoding the Ju/wasi Past

ALISON S. BROOKS and JOHN E. YELLEN

Alison Brooks (A.B. 1965, M.A. 1967, Ph.D. 1979) is Professor of Anthropology and Chair of the Department at George Washington University. She is also a research associate at the Smithsonian Institution and a Visiting Scientist at the Carnegie Institution of Washington. She is an author (with H. M. Bricker, N. C. David, R. B. Clay and W. Farrand) of Les Fouilles Mouvius a l'Abri Pataud, Les Eyzies (Dordogne) (1992) and of over 100 additional publications. Her current research projects focus on the excavation of early modern human sites in Central Africa and on the use of ostrich eggshells in dating Pleistocene sites. She is married to John E. Yellen (A.M. 1966, Ph.D. 1974), an original member of the Harvard Kalahari Project, now program director for Archaeology at the National Science Foundation. Dr. Yellen's publications include Archaeological Approaches to the Present: Models for Interpreting the Past (1977) and many articles and edited volumes.

To what is now an entire generation of introductory anthropology students, the !Kung San or Ju/wasi of northwest Ngamiland, Botswana, and eastern Bushmanland, Namibia, exemplify the hunting and gathering way of life. Central elements of this way of life as it was described from ethnographic work in the 1950s and 1960s include:

1. A self-sufficient technology augmented with a few traded or commercially manufactured items—iron or clay pots, metal knives, metal arrow tips made from fence wire, and trade beads. Many arrows, however, were still made of bone, most clothing was leather, most containers were of skin, wood, or twine, and most beads were of ostrich eggshell;

2. A mobile pattern of settlement in which both individuals and groups changed residence several times over the course of each year. During the dry season, people aggregated in large groups around permanent water holes in the !Kungwa and /Xai/Xai valleys for several months at a time. When the rains began, individuals and small groups spread out, some to visit distant relatives, others to a series of short-term camps of a few nights in the nut groves north of Dobe, or south of /Xai/Xai; and

3. Subsistence based on utilization of wild plants and hunted or collected meat.

Many other aspects of Ju/wasi culture—lxaro or formalized gift-giving networks, talking and joking, division of labor by sex, long-term infant dependency—have been linked to the importance of this individually mobile way of life and to the uncertainty of dependence on wild food sources in an unpredictable environment.

The hunter-gatherer status of the Dobe-/Xai/Xai San, however, and their relevance to human evolutionary studies have recently been challenged from two directions:

1. A critical ethnohistory based on explorers' journals and oral tradition, which argues that the !Kung, or at least many of them, have long been eager participants in a world economic system. In this view, the Ju/wasi are best regarded as either specialized producers or procurers, or as a marginalized servant underclass in a larger society, rather than as relatively isolated and self-sufficient foragers. One author even suggests that the ethnic identity of these people is based on social isolation as an underclass, rather than vice versa.

2. A direct archaeological challenge to the ideal of !Kung isolation stemming from the discovery of Early Iron Age settlements in and around the Okavango swamps ca. 100 miles to the east of the Dobe area. These date to as early as 550 A.D. Contact between these people and the prehistoric inhabitants of Dobe-/Xai/Xai is reflected in trade items found in the latter region. The excavators of these Iron Age sites argue that such contact would have fundamentally constrained and affected !Kung lifeways at Dobe. Accordingly, the Dobe-/Xai/Xai !Kung of the last 1500 years were no longer foragers in a world of foragers, but at the very least procurers of bush products for Iron Age pastoralists, and later, for Europeans. Possibly even pastoralists themselves, the Ju/wasi cannot be compared to hunter-gatherers of pre-Neolithic Africa or anywhere else.

Dobe: Island or Crossroads?

Several areas of inquiry bear directly or indirectly on the question of Ju/wasi isolation in the Dobe area in the past, and on the antiquity of the essential way of life observed in the 1960s. Isolation can be detected through the study of genetic evidence which suggests a significant degree of genetic isolation among the Dobe-/Xai/Xai population of Ju/wasi. Linguistic studies also suggest isolation or continuation of a distinctive Ju/wasi culture over a long period of time. The Ju/wasi or !Kung language shares few core elements or even grammatical structures with other Khoisan languages, and is as distinct from the southern African Bantu languages as English is from Japanese. A recent review of the
ethnohistoric sources, including both travelers’ diaries and oral histories, by Richard Lee and Max Guenther, indicates that this area was actually far from the nexus of trade routes envisioned in some publications. To the contrary, it appears to have remained a fiercely defended, marginally habitable “island in a sea of sand,” as John Marshall described it at the exhibit opening.

In the final analysis, however, the settlement, subsistence, and technological systems of the past inhabitants of the Dobe-/Xai/Xai area can only be resolved through excavation of the archaeological record of this region itself. This record has been investigated through ca. 20 years of archaeological survey and excavations by the authors and Edwin Wilmsen, together with students and collaborators.

Questions to be asked of this record, as presently known, include:

1. How ancient is the record of human settlement here?
2. What is the nature of the ethnographic past at Dobe “B.A.”—before anthropologists? Were the Ju/wasi who were observed hunting and gathering there in the 1960s heavily involved in pastoralist activities prior to this date, e.g., during the 1940s?
3. Can the archaeological past be tied to the ethnographic past? Does the archaeological pattern, at least in its most recent phases, conform to the patterns of habitation, land use, and debris disposal which were observed ethnographically in this area?
4. How far back into the past does the recent pattern extend? and
5. Conversely, if southern African foragers may be considered to have existed in a forager’s world only prior to 2000 years ago, is there evidence for contact with Iron Age peoples as this demarcation line is approached in time? And, does the contact appear to be associated with other changes in the subsistence, settlement, or technological pattern?

Geography of the Northwest Kalahari

The northwest Kalahari lies between the marshes of the Okavango delta and the Central Namibian highlands (Helgren and Brooks 1983, Yellen and Lee 1976; Figure 1). With the exception of bedrock projections such as the Tsodilo, Aha, and Twihabe hills, the entire region is covered with aeolian sands, often in the form of longitudinal dunes, oriented in a northwest-southeast direction. In the Aha hills, a southerly wind direction has banked the sands more heavily on the south side of the hills and more sparsely in the northern lee.

An unconformity in the Ahas between karstic limestones and underlying impermeable schists gives rise to underground springs which drain eastward toward the Okavango swamps. This has resulted in four river valleys: the !Kangwa to the north, the /Xai/Xai to the south, and two smaller valleys to the east of the Aha hills. Only in years of heaviest rainfall are these marked by surface flow. In both the !Kangwa and /Xai/Xai valleys, however, circular pans, or depressions, intersect the water table and provide year-round water sources. Due to the heavy concentration of carbonates in the groundwater, calcretes and other consolidated sediments underlie the sands of the valley floors and pan margins. Most archaeological sites are distributed within 1 km of these pans.

On vegetation maps of Botswana, the demarcation line between Okavango delta and northwest Kalahari sediments is paralleled by a vegetation line corresponding to the limits of mopane tree savanna (Figure 2). This line swings west from the swamps to encompass the higher-rainfall region in the extreme north. The Tsodilo Hills with their associated Iron Age sites, 34 km southwest of the Okavango River, and 120 km east-northeast of Dobe are located in a mopane area, and associated with old overflow basins of the river, while the Dobe-/Xai/Xai area is not. The Dobe-/Xai/Xai area is also distinguished from the rest of the northwest Kalahari south of the mopane line, by a relatively higher proportion of trees, termed “northwest Kalahari tree savannah” rather than “northern Kalahari tree and bush savannah.”

Ethnoarchaeology in the Dobe-/Xai/Xai Area

Ethnoarchaeological studies which looked at where people were currently leaving debris on the landscape began with John Yellen’s work on short-term rainy-season camps in 1968-71, and continued with his study in 1975-83 of successive dry-season camps at Dobe. In the latter study, he walked middle-aged informants back over their earlier lives to each long-term dry-season camp occupied by that informant, to the point where the informant, as a boy, had first moved from his parents’ hut to a hut of adolescent boys. These camps were then selectively excavated to derive information both about prior subsistence patterns and long-term survival of faunal and other remains.

Faunal remains from the oldest ethnoarchaeological sites, dating to the early 1940s, clearly demonstrate that “B.A.” subsistence was based entirely on hunting, and, by inference, on gathering. Moreover, dry-season camps are located in the same general area as today. Successive dry-season camps are spatially distinct over the short term. Rainy-season camps from the distant past which are not clustered in space do not appear to be detectable archaeologically. From this, we learned that the key concept in translating the ethnographic pattern of Ju life to the archaeological record is redundancy. Rainy-season camps are invisible archaeologically because they are occupied by few people, for only a few days, and almost never in the same location. Dry-season camps are recoverable archaeologically, although over a very long period the remains of dry-season camps, all located about 0.5 km from each permanent waterhole, tend to blend or smear into a single scatter of debris without distinguishable features.

Archaeological Survey

Beginning in 1968, and continuing through 1983, systematic programs of survey and excavation were carried out in the area. Within the region, archaeological sites were located through a variety of different strate-
Figure 1: Archaeological Sites in the Dobe-/Xai/Xai Region
gies including foot surveys of fossil drainageways, transect surveys across the region from south to north, interval surface and sub-surface sampling, examination of known exposures, and use of aerial photos to locate further exposures and likely archaeological site areas. All sectors of the 1968 range of the Ju/wasi band based at Dobe were surveyed, as well as the !Kangwa valley east to !Goshe, the northern sector of the Aha hills, the /Twihabi valley, and the /Xai/Xai area.

With the exception of a single artifact of indeterminate age, and one Later Stone Age artifact, no sites were located or found through subsurface sampling in the dw1e-molapo region north of Dobe. Nor were sites located in the Ahas, other than a very minimal culture scatter at /Dwichu rock shelter. Since these areas lack surface water today, the absence of past human occupation with enough redundancy to produce archaeological signatures is not surprising.

On the basis of the archaeological survey, thirteen sites were selected for more or less extensive excavation to depths between 20 cm and 3 meters. These included:

1. A few, very rich, stratified sites in consolidated pan-margin sediments (#Gi, !Kubi 1, Mahopa 2);
2. A larger number of relatively rich sites in unconsolidated sand within 1 km of pans (Mahopa 1, !Kubi 2, !Kangwa East, /Xai/Xai 1 and 2); and
3. Two rockshelter/cave sites—one in the Ahas (/Dwichu) and one in the /Twihabi valley near /Xai/Xai—each with a very limited archaeological inventory.

One of the central problems of this record was that the richest sites were on the margins of pans. No one today (1960 to present) lives at the margin of a pan—the insects will get you if the hyenas do not, and, in addition, human settlement scares away the game that might otherwise come down to drink there. Was this pattern different in the past?

In the course of our excavation of one pan site, #Gi, we accidentally discovered the answer. While we were away for a week getting supplies, our two students continued the excavation by living with the crew on the pan margin. Several Ju/wasi crew members built a hunting blind out of the backdirt, and, at night, lay in wait for kudu and other animals. Subsequent studies of this activity showed that for obtaining meat it was five times more efficient than stalking, that it was only feasible at certain times of year (early in the dry season), and that it was always carried out at dwindling water sources in exactly the same locations. Blinds and their buried hearths were rebuilt and reused over a period of centuries. Indeed, blinds currently in use contained Later Stone Age debris and hearths.

The results of the archaeological excavations suggest the following general conclusions about the past of this area:

1. The first occupations, known only from “derived” contexts (artifacts washed down into stream beds), were at least 200,000 years ago, while the first in situ or primary context occupations apparently congruent with the ethnographically documented Ju/wasi were established ca. 20,000 years ago.

Continued on next page

Figure 2: Geography of Northwest Botswana
3. This Later Stone Age continues possibly as late as the nineteenth century with little evidence of change in settlement pattern, subsistence strategy, or technological inventory, other than a few rare fragments of metal or ceramics; and

4. There is absolutely no evidence for Iron Age economies or pastoralist settlement at any time before the "ethnographic" present.

\textbf{≠Gi and the Evidence for Long-Term Continuity of LSA Technology and Land Use at Pan Margins}

Three sites in particular may serve to illustrate and elaborate these points. The first site is ≠Gi, a stratified pan-margin site with three main cultural units: \textit{Unit 4}, Middle Stone Age with finely made bifacial and unifacial points and scrapers, \textit{Unit 2C}, an intermediate industry with blades but few formal tools, and \textit{Units 2A and 1A-B}, at least two horizons of Later Stone Age materials of "Wilton" type with crescents, small scrapers, ostrich eggshell beads, and bone arrow foreshafts or points (Figure 3).

By a combination of radiocarbon, thermoluminescence, and amino acid racemization of ostrich eggshell (Brooks et al. 1990), the Middle Stone Age level has been dated to 65,000-85,000 years, the intermediate industry to 34,000 years, and the older of the two LSA units to 24,000 years at the very base. The younger LSA horizon falls within the last 800 years, and a hearth near the top dated to 110±50 bp, well within the time depth of residential stability claimed by present-day Ju/wasi in the region.

Shallow pit-hearth within this unit are comparable to hearths constructed in modern-day hunting blinds at the site, and are often stratified below hunting blinds still in use. At the base of the later LSA horizon are a series of deep pits containing kudu horns, a rhinoceros jaw, and numerous crescents and bone arrow foreshafts.

When our archaeological excavations had deepened to the point where they paralleled the ancient deep pits, the Ju used the archaeological pits as kudu traps, leaving behind only horns, skulls, and jaws after butchery on site. Other parallels between the Later Stone Age and the modern Ju, besides the particular use-patterns of the pan margin, include the arrow foreshafts themselves (Figure 4), and the size of the ostrich eggshell beads. The time interval...
between the age of the surface level and the memory of the oldest living Ju is small. #Gi thus provides some of the best evidence for continuity between the Ju and the Later Stone Age, as well as evidence for a long history of occupation in the area. Although the two Later Stone Age industries at #Gi certainly span but may not actually represent the initial contact period, almost no differences in typological composition exist between them (Figure 5), other than a few more thumbnail scrapers and crescent varieties in the earlier level, and a tiny sample of potsherds and metal objects in the later level (Figure 6). With the debitage, not tabulated here, each level contained about 10,000 artifacts.

Mahopa 1 and /Xai/Xai: Problems of Stratigraphic Integrity and Faunal Preservation in Unconsolidated Sand

After the pan-margin sites, the second category of archaeological occurrences in order of density are located in the area of present-day dry-season camps, generally about 0.5 km from the margins of permanent water holes. Yellen and Wilmsen excavated a series of these occurrences at Mahopa, !Kubi, and /Xai/Xai. A large series of radiocarbon dates shows that these sites span the period when Iron Age peoples were moving into the Okavango delta. Did life at Dobe or /Xai/Xai change in any way detectable in the archaeological records in response to these events? Unlike at #Gi, where the sediments were quite consolidated, the dry-season area camps were located in deep unconsolidated sands, so that before cultural conclusions can be discussed, one must first confront the problem of stratigraphic integrity.

The site of Mahopa 1 is located ca. 0.5 km northwest of Mahopa pan in a flat sandy area utilized today for aggregation camps and villages. Eight squares, each 5 feet by 5 feet, were excavated by 2-inch levels in unconsolidated sand, down to an impenetrable calcrete at depths varying from 28 to 48 inches. No stratigraphic or archaeological horizons were visible in this Kalahari sand, which elsewhere has been shown to permit vertical movement of artifacts over 1 meter of depth. All of the material was Later Stone Age, but one may well question whether there is any inherent stratification in these unconsolidated sands.

Eight charcoal samples from five of the squares which were contiguous were dated by radiocarbon. These suggest that the sequence extends from the present back to at least 3270 bp, and may be divided into three stratigraphic horizons. The top 16 inches (40 cm) yielded dates ranging from 0 to 600 bp, the next 4 inches (10 cm) yielded two dates which were about 2000 bp, and the lowest levels from 20 down to 28 to 48 inches provided one date of ca. 3270 bp. The topmost level in particular appeared to represent a significant time span with some churning and admixture through its 40 cm depth. The tripartite chronological division corresponds in the contiguous squares to a patterning of artifacts with depth which is not replicated in the other three noncontiguous squares. This implies that stratigraphic correlations between noncontiguous squares cannot be assumed a priori.

Out of 1587 numbered (i.e., secondarily retouched) pieces from Mahopa 1, less than 1 percent (three metal fragments and ten tiny thumbnail-sized potsherds), might represent contact, whether direct or indirect, with Iron Age pastoralists to the east. Only two of these sherds were of early Iron Age type. In addition, all of the identifiable animal remains (thirteen teeth) were of wild, not domesticated, animals. Most of the 25,400 faunal remains consisted of tiny unidentifiable fragments. Ethnoarchaeological work on bone taphonomy in unconsolidated Kalahari sand (Yellen 1987, 1991a, b) has shown that bone does not preserve in this environment. It disappears after only about 40 years unless it is either burned or located in the more calcareous pan-margin sediments. Since burning causes bone to break down into small rectangular

Continued on next page
fragments, the fragmentary nature of faunal remains in this assemblage is not surprising. In fact, it is the recovery of large, relatively complete specimens which would be unusual, and would lead to questions of provenience for the specimens involved.

The final site to be discussed here is /Xai/Xai. Yellen excavated two areas at /Xai/Xai, which is located about 50 km south of Mahopa. /Xai/Xai 1 is southeast of the pan consisting of three contiguous 5-foot squares, and /Xai/Xai 2 is west of the pan consisting of a single 5-foot square.

Fifteen samples of burned bone and charcoal were dated by radiocarbon. As at Mahopa, the charcoal dates cluster into three units of which the upper two exhibit internal stratigraphic mixing.

Unit I, the top 16 inches (40 cm) includes dates back to 635 bp.

Unit II, the next 20 inches (50 cm) to a total depth of 36 inches dates to between 1765 and 2260 bp, just prior to the appearance of Iron Age peoples at Tsodilo; and

Unit III (below 36 inches) dates to between 3205 and 3645 bp.

The patterning of artifact concentration by depth in the two site areas does not correspond, although a rise in artifact percentage is noted in each site at around Level 18, near the interface between Units II and III. Nor do bone and lithic concentrations for the same squares parallel each other. Concentrations toward the base of each unit may reflect patterns of downward transport of artifacts, with bones and stones differentially transported due to density variation.

As at Mahopa 1, less than 2 percent of the numbered artifacts were sherds or metal fragments—only twelve of the former and one of the latter turned up. As many as seven of the sherds may be of Early Iron Age type, referable to Unit II and thus a little less than 1765 years old. A metal bead may also derive from this level.

Faunal remains from /Xai/Xai are all burned and fragmentary. None of the 1342 specimens from /Xai/Xai 1 and only two isolated teeth from /Xai/Xai 2, out of 11,173 faunal

<table>
<thead>
<tr>
<th>Type</th>
<th>Recent Levels (1A, 1B)</th>
<th>Later Pleistocene Level (2A)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Backed bladelet</td>
<td>1.5%</td>
<td>3.5%</td>
</tr>
<tr>
<td>Pointed bladelet</td>
<td>0.4</td>
<td>0.5</td>
</tr>
<tr>
<td>Crescents</td>
<td>7.0</td>
<td>10.0</td>
</tr>
<tr>
<td>Backed blades</td>
<td>1.4</td>
<td>2.3</td>
</tr>
<tr>
<td>scrapers</td>
<td>11.3</td>
<td>15.3</td>
</tr>
<tr>
<td>perforators</td>
<td>3.1</td>
<td>2.2</td>
</tr>
<tr>
<td>cores</td>
<td>14.3</td>
<td>19.2</td>
</tr>
<tr>
<td>retouched blades</td>
<td>3.8</td>
<td>4.0</td>
</tr>
<tr>
<td>retouched flakes</td>
<td>14.1</td>
<td>9.6</td>
</tr>
<tr>
<td>notched/dentic. piece</td>
<td>6.9</td>
<td>2.8</td>
</tr>
<tr>
<td>misc. points, burins</td>
<td>1.5</td>
<td>0.9</td>
</tr>
<tr>
<td>outils ecaillles</td>
<td>1.1</td>
<td>0.6</td>
</tr>
<tr>
<td>bifacial pieces</td>
<td>5.2</td>
<td>5.7</td>
</tr>
<tr>
<td>Iron, Pottery, buttons</td>
<td>0.8</td>
<td>&lt;0.1</td>
</tr>
<tr>
<td>Total Number of Pieces (without debitage)</td>
<td>910</td>
<td>1025</td>
</tr>
</tbody>
</table>

Figure 5: Frequencies of selected artifact types at /Gi

Figure 6: Crescents from /Gi older (top) and younger level.
specimens from the latter site area, could be identified.

Wilmsen conducted excavations at /Xai/Xai in 1975 (Wilmsen 1978, 1989a, b). The various 1-meter-diameter pits which he excavated to depths of about 1 meter also exhibit different concentrations with depth in each unit. This differential concentration suggests that correlation by depth across widely separated units would be unwise. His results also reflect in general the overwhelming dominance of lithics, the rare and fragmentary occurrence of pottery and metal, and the poor preservation of faunal remains. Curiously, in light of the latter, he later reports a large piece of a maxilla with several teeth which he attributes to domesticated cow. Although this piece is 60 cm below the surface, its excellent preservation suggests a recent intrusion. In Yellen's excavations, an extremely recent (post-bomb) radiocarbon sample of charcoal was recovered from a depth of 16 inches (40 cm). Wilmsen, however, correlates this “cow” (the identification is also questionable) with a charcoal date from the same depth in a noncontiguous unit 8 meters away. The resultant age of ca. 600 A.D. forms the basis of Wilmsen’s claim for the existence of cattle pastoralism and direct and overwhelming Iron Age contact in the /Xai/Xai area from the early Iron Age on. We feel that this claim is not justified on either taphonomic or stratigraphic grounds. (Yellen and Brooks, 1989, 1990). No other direct evidence of domesticated livestock in antiquity has been recovered from any site in the Dobe-/Xai/Xai area. Nor is there any evidence of old pastoralist settlement—these settlements are readily visible on the surface owing to the vegetation changes engendered by the distinctive soil chemistry of old cattle kraals. The evidence of contact in the form of tiny amounts of pottery and metal suggests, rather, that it was minimal and probably not direct, and had little effect on daily subsistence or settlement patterns.

Despite the unconsolidated nature of the sediments at dry-season area camps, the radiocarbon dates suggest that mixing of levels only occurred to within 40 to 60 cm below a past or present land surface. Most excavations recovered remains from three distinct periods of occupation, each with internal mixing. The oldest of these dated to the mid-Holocene (3000-5000 bp), another to just before and during the advent of Iron Age peoples, and a final level to the last 600 or so years. Throughout these occupations, all the fauna which could be identified represent the remains of wild animals. Percentages of identifiable remains were small, however, as burned bone breaks down rapidly in these sands to nonidentifiable fragments, and unburned bone does not survive. The settlement locations were congruent with those of the Ju/wasi observed as hunters and gatherers in the 1960s. While crossing the “Stone Age/Iron Age” chronological boundary reflected in the Okavango sequence, the Dobe-area sequence remained “Stone Age” in the basic orientation of its technology down to the historical period. There was little or no change in lithic type frequencies across the sequence from pre-600 A.D. to the present. Furthermore, only a tiny fraction of the material from the most recent levels—one half of 1 percent of the retouched pieces, or 0.005 percent of the total assemblage—consisted of tiny fragments of pottery (fifteen sherds) or iron (four pieces).

**Summary and Conclusions**

To summarize the results of archaeological investigations conducted to date in the Dobe and /Xai/Xai regions:

1. There is more stratigraphic integrity to the sandy sites than we originally assumed, although admixture within and between units does occur. One cannot assume a priori that nonadjacent pits have equivalent stratigraphic horizons.
2. The poor preservation of bone in these sediments implies that relatively complete specimens are probably intrusive from recent levels unless otherwise demonstrated. There is not evidence, however, for domesticated stock.
3. In neither /Xai/Xai do lithic type frequencies change across the pre-Iron Age to Iron Age boundary of ca. 600 A.D., suggesting that whatever functions were being carried out at these sites did not change over the 3000 to 20,000 years of intermittent occupation.
4. Although pottery and metal indicate contact with Iron Age pastoralists beginning at least as early as the Tsodilo hills sites, these items continue to be very rare and fragmentary.
5. As we have agreed elsewhere (Brooks and Yellen 1987), the site patterning is congruent with the patterning of ethnographically documented hunter-gatherer land use in the Dobe region, viewed in long-term perspective. Pan-margin ambush sites, used redundantly, are most prominent in the archaeological record, while the other major group of archaeological sites is located in areas used today for dry-season aggregation camps.

In conclusion, the archaeological record of the Dobe-/Xai/Xai region suggests that the ancient inhabitants of this area were little affected by the advent of iron-using and cattle-keeping peoples on their eastern periphery. While the absence of archaeological evidence for change might not prove the absence of change, it certainly cautions against the too-easy assumption that Iron Age pastoralists in the Okavango-Tsodilo region profoundly affected the lives of foragers at Dobe of /Xai/Xai.

**References (selected)**


Denbow, J. and E. Wilmsen, 1986, “The advent and course of pastoralism in the Kalahari” Science 234:1509-1515

Wilmsen, E.N., 1978, “Prehistoric and historic antecedents of a contemporary Ngamiland community” Botswana Notes and Records 10:5-18


---

A SYMPOSIUM IN CONJUNCTION WITH THE EXHIBITION

“ENCOUNTERS WITH THE AMERICAS”

Keynote speaker: Professor Rosemary Joyce

“The Uses of History: Mesoamerican Examples”

Moderator: Professor Gordon R. Willey

Discussants: Professors K-C. Chang, Michael Herzfeld, and C.C. Lamberg-Karlovsky

December 10, 1992
2:30-4:30 PM, Harvard–Yenching Institute
2 Divinity Avenue, Cambridge