America's Great Lost Expedition
LEA S. McCHESNEY

Until recently the largest and single most significant collection of Hopi Indian art lay buried amidst the dusty recesses of the Peabody Museum. The "Thomas V. Kearn Collection of Hopi Material Culture," consisting of approximately 4,500 ethnographic objects ranging from prehistoric pots, baskets, and textile fragments to nineteenth-century wooden tablitas and ceremonial art, was acquired through a pioneering scientific expedition. It currently constitutes the core of a major research project at the Peabody. Renovated storage and conservation of the collection have been accomplished through support provided by the National Science Foundation. A catalogue of some 1,500 of the historic ceramics has been prepared for the National Park Service. Through the

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Stylized stone serpent from Copan (Peabody Museum 92-49-20/C74) Photo: Hillel Burger. See page 16 for article.

Polacca polychrome effigy water bottle, ca. 1890 (Peabody Museum 43-39-10/25784) Photo: Hillel Burger

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RICHARD HUNTINGTON

The Lewis and Clark Expedition: American’s first great thrust into the unknown
JEFFREY P. BRAIN
Time and space in Madagascar: spatial indicators of social process

RICHARD HUNTINGTON

Richard Huntington has taught in Harvard’s Anthropology Department and has been a Curator with the Peabody since 1974. Additionally, he has taught anthropology at the University of Cape Town (1972-1974) and the University of Khartoum (1979-1980). Professor Huntington has done field research with two African pastoralist societies: the Bara of Madagascar and the Dinka of Sudan. With Peter Metcalf, he recently authored a monograph on the importance of funeral rituals in human society, *Celebration of Death: The Anthropology of Mortuary Ritual*, Cambridge University Press. Currently, Dr. Huntington is working with the Harvard Institute for International Development on a program to improve the design of development projects which affect traditional peoples.

Hamlet of Anosibe village.

Social anthropologists working in Africa have found that careful attention to spatial arrangements is particularly illuminating for the study of the dynamics of social processes. One thinks first of E. E. Evans-Pritchard’s famous study of the Nuer in which he uses a long chapter on concepts of time and space to link the seasonal variations in the environment with the structure of the segmentary political lineage system. One thinks of Derrick Stenning’s description of the spatial representation (in terms of house placement) of the expanding Fulani lineage. There is John Middleton’s discussion how careful attention to spatial arrangements often provide the researcher with clues and, finally, evidence of otherwise invisible processes. One cannot do participant-observation field research in any time period but the present. The most systematic present representation of processual dynamics — our research substitute for a time machine — is spatial arrangement.

Madagascar — universal system of spatial evaluation. I must confess that the anthropology of settlement patterns, architecture, and related aesthetics is not a strong professional interest of mine. But as so often happens for the anthropologist, I turn to such issues because one of the peoples with whom I studied, the Malagasy, has a profound and pervasive interest in spatial relations. A couple of years ago a number of us who had worked with various Malagasy peoples found that one common denominator was the primacy each of our peoples gives to the spatial representation of moral judgement, divination and curing, political power, and family relations. Notions of space provide an almost universal Malagasy conceptual framework.

I am speaking of the nearly 8 million Malagasy people who form 18 ethnic groups all living on the island of Madagascar off the east coast of Africa. One thing you should know and probably do know about Madagascar is that during the first millennium A.D. peoples of various cultures immigrated to the island. To a small population of Negritos were added several waves of Indonesian settlers, to which were added several waves of Arab and Afro-Arab settlers, to which were added waves of Bantu-speaking East Africans. All this happened a long time ago and has produced a variable cultural blend which in some ways seems very African and in others more Asian. The Malagasy language is clearly a Malayo-Polynesian language, in spite of the many Bantu and Arabic loan words.

The Bara people — Malagasy sedentary pastoralists. My own research is with the Bara, a group reputed to be the “most African” of the Malagasy peoples. That appellation is not very meaningful and has often had racist implications. The Bara are sedentary pastoralists, who tend ample herds of Zebu cattle on the dry and sparsely populated southern savannah, and who traditionally have had a rather fractured political system which earned them a great reputation as warriors and cattle thieves.

Let me devote the rest of this paper to the spatial organization of this one people. Obviously it is difficult to present a picture of social process and change without first presenting a normative description of the stable elements of moral/spatial evaluation. I begin by looking at the relatively stable ideal at the wider perspective on Bara social organization and move towards the smallest unit. We will quickly move from Bara society to Bara village to the arrangement of hamlets in the village to the setting of houses in the hamlet to the seating of individuals in the house.

To look at social processes I will expand back out again, looking first at the spatial representation of a crucial personal transformation — an individual’s death. Then I will look at group process — lineage fission and fusion — and finally at macrosocietal value changes in the modern world. So we shall rapidly contract and then expand, accordion fashion, our perspective on space among the Bara.

Hamlets in the village. A Bara village, and for that matter most of the vast expanse of Bara territory, is dotted with small hamlets whose core consists of close male agnates who share corporate rights over the hamlet, herd, rice fields, and tomb; and who generally manage affairs such as marriage, circumcision, curing, and funerals as group enterprises. The dispersal of these hamlets is one important aspect of Bara residence that does relate to practical ecological and economic factors. One village can serve as an example. It consists of fourteen hamlets spread out over several...
largely determined by the ecology of the area. The rice fields are spread out in a line approximately four kilometers to the west of the hamlets. The main river, with many of the gardens along the banks, is a kilometer to the east.

Important economic activities must be performed both in the rice fields and at the riverbank. Both of these areas are flooded during the rainy season (January-February) and the area by the rice fields is without adequate water in the dry season (August-November). It is essential, then, that hamlets be constructed on high ground, west of the river (in the direction of the rice fields) and not too far from a constant water supply. The general dispersal of hamlets is related to herding activities, since those living in an isolated hamlet can conveniently keep watch on the herd while performing tasks in the hamlet. The direction of dispersal is limited to a north-south line since hamlets built too far east or west would be flooded in the rains or without water in the dry season.

**Houses in the hamlet.** The system of patrilineal order is concretely expressed in the physical placement of houses within the hamlet. In general, the custom is for a person's house to be either west, south, or southwest, of the house of his immediate seniors. Usually one builds to the south of an older brother and to the west of a father so that the senior generation is most eastern with the patriarch to the northeast. People related to the hamlet through marriage are usually placed farthest south. This arrangement is explicit and is expressed through various taboos (*fady*). The distribution of houses is seldom a perfect replication of the hamlet's genealogy, for it is a custom pertaining more to the construction of new houses than to a village plan. Bara hamlets seem always in the process of almost achieving an arrangement coincident with their social relationships. The arrangement of each hamlet expresses its genealogy combined with historical factors such as who predeceased whom, who is divorced, or whose house has most recently tumbled down.

**The house — construction.** The Bara house is a lowly object for analysis. The dwellings of the Bara are generally small rectangular houses of one story and one room, with one door leading to the dark interior. These houses are constructed of mud and dung stuck upon a sapling and bamboo frame. The roof is thatched and the hardened mud-dung floor is covered with a straw mat. It takes a young man a month or so to cut the saplings and frame beams, construct the frame, and to cut and split the bamboo to be woven between the upright saplings. Then water must be hauled some distance bucket by bucket and the heavy earth and water must be turned and mixed over and over until smooth. After the mud is roughly in and over the frame, the exterior coat (mixed with the protective dung) must be smoothed over it. The interior walls need a smooth finishing coat. Thatching also requires cutting, hauling, and tedious skilled labor.

When new, the Bara house is solid and the surface is smooth, yet it is a fairly minimal achievement in human dwelling construction. In addition, virtually no effort is made to decorate the mud walls or the wooden frames and posts, the door or window, either inside or out. Nothing is painted, colored, or carved. Although the new house is sturdy, the annual rains take their inevitable toll. Little is done about preventative repairs or resurfacing as the seasons go by. In short, relatively little attention is given to house construction, even less to maintenance, and none to decoration.

It is reasonable nowadays for us to admire “vernacular architecture,” or what Bernard Rudofsky calls “architecture without architects,” for the way in which its form is reconciled with the nature of the available building materials, to the needs of the local climate, and to the human requirements of the particular culture. By contrast, the Bara house relates to a formal and almost mathematical abstraction rather than reflecting patterns of social intercourse, potentialities of building materials, or factors of the local climate.

**The house — orientation and seating pattern.** Bara houses are oriented north to south with the door at the southern end of the west wall. Often there are no windows, although occasionally there is a small window in the west wall; the east wall never has an opening. The direction east is associated with the ancestors and also with the particular ancestral origins of the Bara. There is a general trend of westward migration for most Bara clans and so this association of east with the ancestors has an historical as well as symbolic basis. The west is associated with women and affines, in contrast to the patrilineal ancestors. The north is seen as superior, light and warm; the south as inferior and cold. These symbolic associations also have their practical associations given the northerly trajectory of the sun and the southerly source of the rains and winds of the wet season.

These directional attributes guide the seating arrangements of people within the house, especially on important occasions. The most senior men sit along the east wall in order of seniority with the elder to the north. Younger men sit along the south wall with the elder to the east. The seating of women and children is less orderly. They are allotted the north and west walls, but since much of the space along these walls is taken up with the fire and doorway (as well as the storage of large objects) women must sit in an uncomfortable jumble in the middle of the house and in front of the door. They are generally in the way of anyone wishing to enter or leave. The older women do sit further north, but still, their seating is not ordered to the same extent as the men's

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*Figure 1. House locations and genealogy*

*Figure 2. Seating plan within Bara house*
Ice Age Art
ALEXANDER MARSHACK

The first body of human art and symbol to appear in the archaeological record comes from the last European Ice Age, the so-called Upper Paleolithic or Late Stone Age period, of about 35,000 to 10,000 B.C. When examples of this art began to be excavated from rock shelters and cave sites in France more than a century ago, including animal images and female figurines, it was the cause of great perplexity and surprise. The bone and stone tools with which the engravings and carvings were found indicated that the artists had been "primitive" stone-age hunters who had lived in Europe thousands of years before the beginning of history and long before the coming of agriculture and civilization. Many of the animals depicted in this early art were long since extinct, such as the mammoth, woolly rhinoceros and great Irish elk. Others, like the bison, had virtually disappeared from these areas of Europe or now were found only in the arctic and subarctic regions of Europe and America, like the reindeer and musk-ox. Since those Ice Age images first were found, about 1865, literally thousands of images and symbolic artifacts from the Ice Age have been discovered or excavated across Europe, from southern Spain to the Ukraine and the Russian plain, and examples have even come from across the Urals separating Europe from Asia, in mid-Siberia. Yet the surprise and awe continues after more than a century, for this first body of human art is not "primitive" and is, in fact, as complex and sophisticated as any art made by any people of historic times.

Before this period are only slight, single indications of symbolic activity. Neanderthal man buried his dead ritually and left a few tenuous examples of simple carving and engraving. With the appearance in Europe of modern human types, c. 38,000 B.C., the archaeological record documents the beginning of a veritable explosion of art, image, and symbol in every possible medium and form. There is carving and engraving in stone and bone, the firing of clay figurines, polychrome painting, and bas-relief carving on rock walls in caves. Images of animals, birds, fish, insects, snakes, and plants begin to appear, often indicating sexual differences and seasonal or maturational characteristics. There are images of fantastic creatures which never existed and imaginary anthropomorphic or mythical beings, as well as an extraordinary variety of female images, including the early, voluptuous "Venus" figurines. Amulets, bracelets, necklaces, rings, headbands, and beaded hats also appear. Evidence exists of elaborate coiffures on women and of bodies tattooed or painted. Men and women appear in realistic "portraits," both old and young, in a variety of robes and garments, some dancing or in prayer. Some women are clearly pregnant. Images of bearded and moustached males and of "shamans" or "sorcerers" in ritual dress occur. There are elaborate ritual burials with complex grave goods. The totality gives us a picture of Ice Age man's image of his real world, his cultural world, and himself. The images run a gamut of styles from extraordinary realism to abstraction and schematization and elaborate, detailed decoration.

Evidence of sophisticated music occurs, including a variety of percussion instruments and complex six-hole flutes. There is evidence for different types of record keeping or ritual marking, forms of symbol that are far more sophisticated than the making of recognizable images.

The first comprehensive exhibition to present this range of Ice Age artistic and symbolic production, with examples from both East and West Europe and Siberia, was organized in 1978 by the American Museum of Natural History in New York with Alexander Marshack of the Peabody Museum as curator. "Ice Age Art" was recently on exhibit at Boston's Museum of Science. The exhibition was not intended to be an anthology or collection of isolated masterpieces but to present a cross section of the variety and range of Ice Age symbolic production and to indicate the role that art and symbol played in Ice Age life and culture. It was intended to document early man's cognitive and symboling capacity. Marshack, as a Peabody researcher, has worked during the last 18 years in all the major collections and museums of East and West Europe and in many of the important caves, and has been able to select a few hundred examples out of many thousands which would best illustrate the quality and range of man's first art.

High quality casts were made specially for the exhibition; the American Museum of Natural History then reworked each of these on the basis of the hundreds of microphotographs which Marshack has made of these artifacts in Europe. Photomurals of cave walls, prepared for the exhibition by Jean Vertut

Balsi-Rossi Venus. (Peabody Museum 48-18-40/5826)

Spotted horses with signs and handprints.
of France, and a copy of the bison ceiling in Altamira, prepared in that cave by the Frobenius Institute in Frankfurt, are exhibited.

The impact of the exhibition on the press and public has been surprising, perhaps because the quality and complexity of this first art is still so little known. The exhibition has received some of the most favorable critical reviews to be given an archaeological exhibition and it has broken attendance records in museums in New York, San Francisco, Dallas, and Boston. It will travel in the United States for a few years, visiting Philadelphia, Los Angeles, Washington, D.C., and other cities, and then, probably will travel to Europe, the mid-East, and Africa.

A number of important unpublished artifacts and images are in the exhibition, including some original pieces from the Peabody Museum collection. One of these is of particular interest since it is the only known double-faced, two-sided amulet from the Ice Age. The amulet offers an unusual and rare insight into the complex symbolism involved in the well-known naked female images or “Venus” figurines, such as the Willendorf (Austria), Lespugue (France), Dolni Vestonice (Czechoslovakia), and Kostenki (USSR), which are in the exhibition and have long puzzled archaeologists.

The crude, tiny stone or steatite amulet from Baussé Roussés in Grimaldi, Italy, c. 28,000 B.C., comes from the same Perigordian period as the “Venus” figurines. It was studied and cleaned by Marshack when he prepared it for exhibition. Using a microscope, he removed the heavily encrusted and hardened soil and found that on one face of the amulet was a clearly pregnant, three-dimensional female and on the other a flat, nonpregnant female. There was a hole through the chest for a band and red ochre was found in the carving.

Some years before, Marshack had indicated that the female imagery of the Ice Age was extremely complex and included not only images of both pregnant and nonpregnant females, but also a separate symbol system involving the ritual, periodic marking of schematic, "nonpregnant" female images. Examples of these are in the exhibition. The Baussé Roussés amulet is the first artifact that definitely evidences a symbolic awareness of the separate, discrete concepts and processes involved in the states of pregnancy and nonpregnancy with a ritual or symbolic participation in both phases of the process. It is entirely probable that the crude amulet was made to be worn by a mature woman who had a ritual concern involving the pregnant and nonpregnant states and that the other, more formal female images of the culture were related to this more private expression.

Other similarly unpublished examples of Ice Age man’s awareness of nature and process are in the exhibition.

Alexander Marshack is a Research Associate at the Peabody Museum. For the past 15 years he has been studying Ice Age Art with the tools of modern science, including spectroscopy, microscopy, and infrared and ultraviolet photography. Marshack’s primary interest has been in those images and artifacts which shed light on the evolution of human symbol systems and language. He has published many technical articles in professional journals and is the author of The Roots of Civilization (McGraw-Hill, 1972). He has just completed a major review of Ice Age Art from the Ukraine and is now writing his second book, which will be published by Harcourt Brace Jovanovich.

Photos: Alexander Marshack

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Photos: Alexander Marshack

Bison licking his flanks.

A study of two subcultures of infant care

M. F. ELIAS

Do mothers take care of their babies the way they say they do and does it matter to the babies? This is the question addressed by a longitudinal research study getting underway at the Peabody Museum. The study, entitled "Infant Social Development in Two American Subcultures," was funded by the National Institute for Mental Health in a grant to Associate Professor Melvin J. Konner of Biological Anthropology and Dr. Marjorie F. Elias, Research Associate in the Peabody Museum. The study was planned (in Prof. Konner's phrase) to "bring the cross-cultural comparison back home." That is, to compare two subcultures of infant care within the broad framework of Western culture. Its objective is to identify differences in the social behavior and emotional expression of two-year-old children according to their experiences of care in infancy. The researchers are collecting a sample of suburban Boston middle-class families who have just had a second or later child and who subscribe to one of two styles of infant care. One style is that of the La Leche League, an organization for the promotion of breast feeding. The other is that of non-League families living in the same communities. The La Leche League advocates a style of infant care characterized by frequent nursing, late weaning, close physical contact between mother and baby, and immediate response by the parents to signs of distress in the baby. League mothers are encouraged to devote themselves to their families and are discouraged from spending time away from home. In recent years they have become a vocal force against the trend of women continuing to work during the infancy of their children. Non-League families in the sample say that they follow a style of infant care more common in western industrialized society. They tend to nurse at more widely spaced intervals, start solid food earlier, wean earlier, separate themselves more from physical contact with the baby, and leave the baby more with other caretakers. The central questions of the study are: first, whether the actual infant-care practices of the two groups differ as much as the mothers say they do; and second, whether the differing experiences of the babies produce measurable effects on their social and emotional development by the age of two years.

The study grew out of Konner's previous work with mothers and infants of the !Kung San in the Kalahari Desert in Botswana and Elias's work on primate parental care. Among the primates, only human mothers do not maintain continuous body contact with their
The Lewis and Clark Expedition: America's first great thrust into the unknown
JEFFREY P. BRAIN

Jeffrey P. Brain, Curator of Southeastern United States Archaeology, is a leading scholar of the early explorations among the Indians of North America. He has written many articles on the archaeological identification and ethnographic effects of various expeditions, and has recently published a book, *Tunica Treasure*, Vol. 71 in the Peabody Museum Papers series.

Figure 1. The famous painted buffalo robe which hung in Monticello for many years. The robe is identified as Mandan in origin (Ewers 1957) but a remarkably similar example, undoubtedly by the same artist, has been attributed to the Sioux (Viola 1976). (Peabody Museum 99-T-10/53121). Photo: Hillel Burger

When Captains Meriwether Lewis and William Clark set forth on their epic journey west from St. Louis in the spring of 1804, they held a specific commission from President Thomas Jefferson to explore and define the limits of the great new Louisiana purchase which the President had (with dubious constitutional authority) effectuated. The commission was as broad in scope as the exploration. Jefferson held a passionate interest in the natural sciences, and it was made clear that he expected specimens from the new territory: natural fauna (alive or stuffed), flora and foodstuffs, and ethnological items. As regards the latter, he specified to Lewis, "Make yourself acquainted . . . with . . . their ordinary occupations in . . . arts and the implements for these; their food, clothing, and domestic accommodations" (DeVoto 1953, pp. 482, 483). Many of these Jefferson wanted for his own personal display at Monticello. Others, as they came in, were distributed elsewhere, including the famous Charles Wilson Peale Museum in Philadelphia. Some of Jefferson's treasures also came to Peale's eventually, as did still other Lewis and Clark specimens through different hands. When Peale's Museum went defunct in the mid-nineteenth century, much of the collection ended up at the Boston Museum. When the latter suffered a fire in the winter of 1898, the trustees decided to get out of the museum business and concentrate on the primary function of theater (the specimens had originally been used as a display to legitimize theatrical performances which earlier in the century were considered disreputable). The collections were broken up in 1899 and the Peabody Museum was given its pick of the ethnology. The invaluable specimens gained at this time which can be ascribed to Lewis and Clark — remembering the somewhat uncertain history of many of the pieces collected by the expedition — are considered here.

It must be recalled that the Lewis and Clark expedition, styled the "Corps of North Western Discovery," was one of the great explorations for the fledgling American republic: they traversed the still largely unknown northern Plains and Rocky Mountains before finally descending the Columbia River Valley to the Pacific Coast. In the context of the times, their expedition was equal to the tradition which has led us to the moon and beyond. And so, too, the specimens sent back were awaited and studied with as great an interest as the moon rocks have excited more recently.

Since little attempt was made to collect or, more precisely, to preserve ethnological curiosities from the native Americans before the mid-nineteenth century, the few specimens from the expedition resident in the Peabody Museum are now nearly as rare and exotic as moon rocks. The probable rarities were acquired at two different times by Lewis and Clark. The first group, chronologically, was among those gathered while hibernating in winter quarters (1804-1805) at Fort Mandan on the Missouri River in central North Dakota. Unfortunately, the inactivity of hibernation did not seem to inspire the concerted collection of valued ethnography (despite their commission), as befriended by C. C. Willoughby in the only previous comprehensive publication of the Peabody's acquisition of these specimens:

It [Fort Mandan] was in the heart of the Indian country, and the members of the expedition were in communication not only with the Indians of that vicinity but with the Assiniboine, Cree, and other remote tribes. This afforded an unusual opportunity for collecting objects illustrating the ethnography of the region. It will always be a source of regret that such an opportunity was allowed to pass with so little accomplished (Willoughby 1905, p. 634).

Nevertheless, some important items came to them through dealings with various of these tribes and in April 1805 the collection was dutifully shipped back east to Jefferson at Monticello. Some stayed there, while others passed directly to the museum of his good friend Charles Wilson Peale.

Foremost among the prizes retained by Jefferson is a "buffalo robe representing a battle fought about 1797 between Sioux and Ricaras [Arikara] against the Mandans and Minetarees [Hidatsa] in which the combatants are represented on horseback" (*Lewis and Clark journals*, vol. 1, p. 240; Peabody Museum catalog no. 53121; the museum archives contain further information on the authentication of this piece which probably hung in Monticello for many years, before also finally being presented to Peale). The robe (Figure 1) is important as one of the few surviving examples of such painted robes which were both an art form as well as an historical document. The latter use is of particular interest. The significance of the battle depicted here has not been transmitted to us, but it was obviously of some importance to the Mandans who recorded it. The depiction is important to us, too. Here is one of the earliest representations of the classic horseback warfare of the Plains Indian dramatized so often in lore, literature, and film of the Wild West. But the scenario is different: it is not the Indian versus the settlers or the United States Cavalry, for it is before their time. It is Indian against Indian. Yet it is an Indian world already modified by the soon-to-come white man. There is the horse, of course, but note also the great number of guns represented (approximately one-third of the warriors are so armed, whether they are on horseback or foot). The Mandan procured guns from white traders to the east, and in turn were very important in their distribution to other tribes farther west. In
the reverse direction, the Mandan traded horses. At the turn of the nineteenth century they seem to have been relatively well endowed with both of these essential components of the famous nineteenth-century Plains Indian culture (Lewis and Clark Journals, vol. 1, pp. 169, 181, 195, 221). Whatever the reason for the altercation depicted here, the victory recorded may have been due to the combined horse and firearm technology which the Mandan largely controlled at this period and which is so vividly represented in our tableau. It was a brief supremacy, fortunately captured by Lewis and Clark, who ironically were themselves the heralds of the new age about to descend.

Another specimen from Fort Mandan may be a more traditional item of native warfare: namely, a bow of elk horn backed with sinew (Peabody Museum catalog no. 52946). This bow is identified as having been made by the Crow Indians of Montana, although the Lewis and Clark inventory labels it as being of Mandan origin. It is possible that there is a confusion of records which misrepresents the attribution of this item to Lewis and Clark, but in any case it is certainly a fine example of the standard native weapon before the introduction of the gun.

Artifacts of a less martial nature, although they were as important in councils of war as in other ceremonies and transactions, were the so-called “peace pipes” or calumets. There are thirteen examples in the collection of the Museum which probably were collected by Lewis and Clark. Two of these are identified as Mandan (Peabody Museum catalog nos. 53099, 53101) while the others collectively are attributed to the Sioux, Winnebago, Fox, Sauk, and Iowa (Peabody Museum catalog nos. 53104-53106, 53109-53112, 53115). These pipes mostly conform to the traditional types (Figure 2), but curiously Lewis and Clark do not mention them, nor their traditional usage, in their journals. It might be expected that such important items and the ceremonies in which they were used, including ritual greeting as must have occurred with the expedition, would have been noted by Lewis and Clark. Absence of such notation raises questions about either the attribution of these fine pipes to the expedition or the importance of these items to an expedition of this nature. Lewis and Clark were well armed and frequently resorted to displays of force. How, then, came they by this exceptional collection?

Pieces of clothing and other adornments, certainly identified as Lewis and Clark acquisitions from Fort Mandan, are more mundane but no less interesting. The latter include an otter skin tobacco pouch, which was purportedly “sent to Capt’s Lewis and Clark by the Sock [Sauk] Nation” (Peabody Museum catalog no. 53052). Rather than a tobacco pouch, the bag was probably a medicine bundle used in the ceremonies of the widespread Plains Indian Shell Society. It was meant to contain certain sacred objects (Willoughby 1905, p. 638), and the identification as a tobacco pouch may reflect the ignorance of Lewis and Clark or the insouciance of whoever presented it to them.

Of even greater interest are three raven feather ornaments from the Teton Oglala Sioux (Peabody Museum catalog nos. 53049-53051). These were actually badges of office worn by native constabulary officers who were appointed by the chief for designated terms. The wearing of these items, which consisted of two elbow ornaments and a bustle, conferred extraordinary police powers (more than equal to the “tin star” of our contemporary officiaaldom) in the society of the Sioux nation. As recounted by Lewis and Clark, who apparently witnessed a member of the peace office in action:

While on shore to-day we witnessed a quarrel between two squaws, which appeared to be growing every moment more boisterous, when a man came forward, at whose approach every one seemed terrified and ran. He took the squaws and without any ceremony whipped them severely. On inquiring into the nature of such summary justice we learned that this man was an officer well known to this and many other tribes. His duty is to keep the peace, and the whole interior police of the village is confided to two or three of these officers who are named by the chief and

Continued on page 12
Scholars, symposia, and seminars

The topics of the Department of Anthropology Seminar Series for the fall term were as diverse as the scholars presenting them — varying in the subfields of anthropology as well as the location of research. Starting off the series was Professor of Anthropology Hazel Weidman from the University of Miami. She discussed “The Miami Health Ecology Project: Cultural Factors in Health Care.”

Dr. Joseph Westermeyer, Professor of Psychiatry at the University of Minnesota, spoke on “Social Networks and Mental Illness in a Rural Asian Society.” Dr. Edward Folks, Professor of Psychiatry and Anthropology at the University of Pennsylvania Medical School, presented a lecture on “Social Change and Alcohol Use in an Arctic Community.”

Prof. Michael Silverstein of the University of Chicago spoke on “Naming Sets Among the Worora” of Northern Kimberley, Australia. Prof. Robert Netting, visiting from the University of Arizona, presented “Leveling with Egalitarian Peasants: Wealth Differences in a Swiss Alpine Community.” The next presentation, “Verbal Inflection in the Mayan Hieroglyphs,” was given by Prof. Victoria Bricker from the Department of Anthropology at Tulane University. Prof. Gary Gossen of the State University of New York at Albany spoke on “Time and History in the Mayan Civilization.”

Dr. Arthur Kleinman, Professor of Psychiatry at the University of Washington, presented a lecture on “Anthropological Studies of Illness and Treatment in Taiwan and the Peoples Republic of China.” Dr. Joan Silk of The Duke University Primate Center presented some results of her research on the “Differential Reproductive Success and Facilitative Adjustment of Sex Ratios among Captive Female Bonnet Macaques.” “Urban Primacy: The Informal Sector and Class Struggle in Central America” was presented by Prof. Carol Ann Smith of Duke University. Prof. Mark Teaford, Johns Hopkins University, presented “Circopithecine Toothwear: A Photogrammetric Perspective.”

Prof. Keith Hart, University of Michigan’s Department of Anthropology, lectured on the “Commodification of Domestic Life.” Prof. Michael Fisher of this Department lectured on “Interpretive Anthropology.”

Dr. Brian Shea of the Department of Anthropology at Duke University presented a lecture on “Growth and Size Allometry in the African Apes.” Dr. Montague Demment from Cornell University spoke on “Body Size, Herbivory and Implications for the Evolution of Body Size in Baboons.” “Colobine Niches and Social Structure: Some Insights from Feeding Studies” was presented by Dr. John Oates of the City University of New York. Dr. Gerald Cottright of the University of Chicago spoke on “Neontological Perspectives on the Evolution of the Hominin Bipedal Adaptive Complex.”

David Maybury-Lewis spent two weeks in Indonesia in January. At the request of the Indonesian government, the Harvard Institute of International Development is studying the comparative effectiveness of the national social programs. The study is being carried out by economists, sociologists, and anthropologists; the latter have special responsibility for assessing the impact of these programs at the village level in West Java, East Java, Sulawesi (Celebes), and Sumatra.

Prof. Evon Z. Vogt was the guest lecturer during the January 1981 Harvard Alumni College Abroad trip to Yucatan. Maya sites visited included Chichen Itza, Palenque, and Uxmal. In March, Prof. B. Irven DeVore will join graduate students Robert Bailey and Nadine Peacock, already in the field, as part of DeVore’s long-term “Study of the People of the Ituri Forest.” The project, which includes the study of the demography, nutrition, and ecology of the Mbuti pygmies and the Waale (a Sudanic black people) of the Ituri Forest, Zaire, is funded by the National Science Foundation. Prof. Glynn Isaac, University of California at Berkeley, is the George Grant MacCurdy Visiting Professor for the spring term. For the past twenty years, Prof. Isaac has been working in the east African Rift Valley on the archaeology of early man. Currently, he is writing and editing a monograph on researches at the 1.5-2 million year old sites at Koobi Fora, east of Lake Turkana (formerly Lake Rudolph), Kenya. Prof. Stanley J. Tambiah has been invited by the University of Oxford to deliver the Radhakrishnan Memorial Lectures for 1981-1982. During his visit to Oxford he will be a guest of All Souls College. Two previous lecturers in this series were Prof. J. K. Galbraith of Harvard University and Sir Joseph Needham of Cambridge University.

Assoc. Prof. Jonathon E. Ericson just returned from a successful field trip in India as a Senior Fulbright-Hayes Scholar, sponsored by Prof. K. T. M. Hegde of the University of Baroda. A collaborative Indo-American project, numerous mines and copper slag sites along the 1,000-mile copper belt of North Gujarat and West Rajasthan were surveyed. Changes in the copper mining and smelting technologies were observed from the Harrapan to the Medieval Period. The collected samples are being analyzed in the Center for Archaeological Research and Development laboratories in the Peabody. Prof. Antonio Gilman, California State University at Northridge, is a Visiting Scholar in 1980-81 holding a Tinker Foundation Post-Doctoral Fellowship to study prehistoric land use in southeast Spain. Gilman is assessing the agricultural potential of the areas near all the better known settlements of that region between 5000 and 1000 B.C.

Ian W. Brown, research associate with the Lower Mississippi Survey, has published a monograph on the American Indian use of salt. The work resulted from Brown’s investigation of a prehistoric saline on Avery Island, off the Louisiana coast.
Viracocha, the Nature and Antiquity of the Andean High God, a monograph on Inca state religion by graduate student Arthur Demarest, will be released in April as no. 6 in the Peabody Museum Monograph Series. Arthur Demarest has been elected to Harvard's Society of Fellows. Election to the Society, one of Harvard's highest academic honors, is accompanied by the awarding of the Junior Fellowship, a three-year, post-doctoral research fellowship. Demarest is the fourth graduate student in the Department of Anthropology to be elected to the Society. Robert H. Dyson, Jr., elected in 1951, is Prof. of Anthropology and Dean of the Faculty at the University of Pennsylvania; Henry T. J. Irwin (1938-1978), elected in 1964, was Prof. of Anthropology at the University of Washington; and Dr. Thomas Wight Beale, elected in 1975, is Executive Director of the American Schools of Oriental Research, Cambridge, Massachusetts.

Maryellen Ruvolo, a graduate student in Biological Anthropology, is in Limuru, Kenya collecting blood samples from Old World monkeys at the Institute of Primate Research. The only one of its kind in Africa, the IPR houses animals for biomedical and behavioral research. After blood protein analyses, conducted in the Peabody Museum's new Laboratory of Biological Anthropology, the group's evolutionary history will be reconstructed using genetic distance measures. Fred Valdez, Jr., a graduate student in archaeology, conducted an analysis of the ceramics from the site of Chola in Northern Belize. A preliminary report on an obsidian analysis of materials from Copan was presented in January at a conference in Pachuca, Hgo., Mexico by Mr. Valdez.

Wells author of new book

Peter S. Wells's book, Culture Contact and Culture Change: Early Iron Age Central Europe and the Mediterranean World, has just been published by Cambridge University Press in its series New Studies in Archaeology. The book is an outgrowth of Dr. Wells's doctoral dissertation, submitted to the Harvard Department of Anthropology in 1976. It deals with the theme of interaction between different cultures and the changes brought about as a result of such interaction. This issue is examined in the context of central Europe in the Early Iron Age, especially the period 600-400 B.C., where the archaeological evidence is rich and of good documentary quality. While the book offers a synthesis and interpretation of a large body of archaeological data from Iron Age Europe, it also develops a methodology for the study of contact situations applicable to a wide range of other archaeological contexts.

Jane I. Guyer has been appointed Assistant Professor of Anthropology. Her early education and undergraduate degree were completed in Britain, the latter at the London School of Economics and Political Science. After migrating across the Atlantic, her graduate work was done at the University of Rochester in New York. Field research for her dissertation on the social and economic organization of food cultivation in a small Yoruba town and its hinterland was carried out in Western Nigeria. Since then, she has taught social and economic anthropology and completed a further piece of research in Southern Cameroon among the Beti people.

The situation in Cameroon posed some very interesting comparative and theoretical issues which she is still pursuing and which fall into three complementary subject matters. First: the contrast in the position of women in the economies of the Yoruba and the Beti was striking, and the difference appeared to be related to the general structure of occupational differentiation in the precolonial economies. The growth in export crop production during the twentieth century has built on the indigenous division of labor in different ways in the two cases. An exploration of the literature on the social organization of production in African cash crop economies is being pursued this year, financed by a small grant from the Social Science Research Council.

Second: the major focus of Dr. Guyer's work in Cameroon was a reconstruction of the history and social organization of food cultivation and marketing for the supply of the rapidly expanding capital city, Yaoundé. African agrarian studies generally concentrate on structural relationships, control of resources, and the generation of surpluses, either within indigenous society or in the context of the modern state. By contrast, this study focuses on a particular essential function as it has been fulfilled over time. The research for this project has been eclectic in methodology, involving field research on the current functioning of the food cultivation system around Yaoundé, collection of economic historical data from oral sources, archival work in Yaoundé and in the colonial archives in Paris on colonial food policy, and a study of the major agency for food policy in the 1970s. Currently Dr. Guyer is working on a comparison of the history of food supply to different African cities.

Third: Dr. Guyer is pursuing comparative work on agricultural policy in Francophone Africa.

In addition to teaching and research, she is a member of the Project Evaluation Committee of Oxfam America, and recently evaluated a project for them in Tanzania.

Peabody Museum Association

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since most of the women are unrelated to one another, being wives of the hamlet residents. The seating of men within the house follows the same northeast to southwest line as the placement of houses within the hamlet. The Bara explicitly use the house plan as a model to express the order of social relationships. All can diagram the seating arrangements and, also, can and do comment explicitly on the moral attributes of the four directions.

Several houses in the village where I did research are oriented differently. Significantly, one of these is that of a man of a different ethnic group who was married to a village woman of slave descent. The door of this house is at the northern rather than the southern end of the west wall. At a feast held in this house there was evident confusion about the seating arrangements. The elders of the village felt that it was proper to sit at the northern end of the east wall, but, at the same time, felt it was awkward to sit so near the door. They solved the problem by sitting along the southern part of the east wall, but with the eldest sitting in the most northerly position (at the center of the wall). The rest of the people, all men, just sat anywhere, with apologies to those sitting close by who might have cause for offense.

The house — space/time and the zodiac. The Bara also use the house to represent the cyclical astrological calendar which determines, among other things, the personalities of individuals according to the day of birth. Briefly, each of the twelve signs of the zodiac is associated with a position along the interior walls of the house, with one sign at each corner and two along each wall. All Bara know the locations of these twelve signs; they never actually are indicated by house decoration. The cycle of twelve signs repeats each month while simultaneously revolving around the interior of the house. The first sign is at the northeast corner and the last is at the eastern part of the north wall. Each of the corner signs lasts for three days, the wall signs each last for two days, for a total of twenty-eight days each month. Essentially it is a complex means of expressing certain aspects of spatial, temporal, and moral dimensions of life in a single unified system.

In a sense, one can say that the Bara do not view time as we do, as stretching out in a sequence before us. They think of themselves as surrounded by time, surrounded by space/time. Time and space revolve around the walls of their house. Rarely these days do two astrologers agree as to the sign of a particular day, but they are not disturbed by these discrepancies. As one explained to me, time is like a wheel going around, and not everyone is at the same spoke.

Each sign is associated with certain qualities of personality or fortune such as wealth, power, or intelligence. The signs themselves are not inherently good or evil, but in conjunction with a certain day of the week, each sign can become dangerously strong. Being born on a strong day causes a person to exert influence which dangerously transcends his fixed place in the social hierarchy. For a child born under one of these strong signs, the father must arrange for a shaman to alleviate the danger so as to protect the child's kin. In summary, one is born into two systems of moral space/time: the social system of patrilineal ancestral seniority, and the astrological system of cyclical movement. For people born on a strong day, the influence of this latter system predominates and threatens the social order unless the effects of the sign are ritually neutralized. The interior of a properly oriented house is an explicit model of the human dilemma as seen by the Bara. The social order of men descended patrilineally from a common ancestor is compromised on two sides: by the fertile disorder of women and children and by the cyclical astrological system of individual personalities.

The house — disrepair. Notice that arrangement of the house does not develop naturally from the style of daily social intercourse. It does nothing to express or facilitate the cooperative patterns of work and leisure that typify the Bara extended family. Nor does it, in any but a rudimentary sense, exemplify the exigencies of the climate or the potentialities of the building materials. House form is slave to a complex philosophical abstraction. In the house is represented an idea; when a Bara builds or sits in a house, he participates in this abstraction and, in so doing, defines his proper place in human society and in the wider physical universe of earth, heavens, and seasons. It is largely through these spatial representations that the Bara express, perceive, and judge individual social actions. The placement of a house expresses the owner's position or lack of position in the community. The orientation of the house demonstrates the degree of one's acceptance of Bara values. As a result of this, a man living in his father's hamlet (as he should) is constantly reaffirming his own place in the lineally ordered organization of the living and the dead. The Bara house, in spite of its meaningfulness, performs that function for which the best of modern architecture ultimately strives. It creates an emotional, affective bond between the individual and his surroundings, and it expresses a meaningful framework which guides him in practical and important decisions. In this sense, the house form provides a positive and aesthetic motivation toward normative behavior and social integration, and contributes much to the noncoercive tone of Bara social life.

There is a strong contrast between the central importance of the house as a symbol of Bara values and the lack of elaboration, decoration, or maintenance of the structure. The characteristic plainness and disrepair of the Bara house derives directly from the very values it expresses. The astrological system represented in the house stresses that one is surrounded by potential misfortune and capricious powers. The Bara explicitly recognize, as they do, certain house decorations. If you white-wash the house or plant flowers around it, the Bara say, you will be forced to move. It is not just that they dislike moving their hamlets; they do so only as a result of grave and fatal misfortune due to the intervention of bad spirits or a negative astrological conjunction.

From this aspect, the plainness of the Bara house is a purposeful protective device. It is similar to other Bara and general Malagasy customs, such as giving beloved young children insulting names so that they will not attract any special attention from supernatural forces. The Bara protect what they value most highly (their children and their home) by carefully and lovingly making them seem inconspicuous, even ugly.

The seating pattern in the house is a highly abstract representation of the agnatic lineage linking the living to the ancestors who are the source of all blessings. Since the values are represented as almost pure abstractions, decoration and smooth maintenance are irrelevant. One does not decorate an algebraic equation or a proof in plane geometry. Moreover, the abstraction stresses the subordination of individuals to the total relational structure of the social order. The decent Bara helps maintain the moral order by unobtrusively establishing his proper place and by upholding his link in the chain of generation. Male and female, senior

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**Figure 3. House and zodiac**

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<thead>
<tr>
<th>2 days</th>
<th>3 days</th>
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<tr>
<td>X</td>
<td>XI</td>
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<tr>
<td>3 days</td>
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<tr>
<td>2 days</td>
<td>IX</td>
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<td>12 zodiac signs equal 28 days</td>
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<tr>
<td>II</td>
<td>2 days</td>
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<tr>
<td>3 days</td>
<td>VII</td>
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and junior, and the relentless cycle of time and fortune all provide the principles of life and continuity toward which the individual accommodates himself. This is a keystone of Bara philosophy and it receives its most thorough and systematic expression through the medium of the house. To build, decorate, or maintain ostentatiously the very symbol of nonostentation would be an obvious contradiction. Such an act, for a Bara, would be even graver. It would put him outside of his place and would separate him and his children from the life-giving social and moral order.

Life process of the person — spatial representation of death. Madagascar is a place where the social, economic, and religious values and the activities center on an ancestor cult. At the center of life is death. One’s past and one’s future is with the ancestors. Elaborate funeral rituals provide the most important cultural statement of the purpose of life.

While reworking an earlier article for inclusion in a general study of death rituals, I found myself writing that old cliche, “and now let’s bring this abstract discussion down to earth.” How often we anthropologists use such an expression but fail to follow through. I carefully examined the spatial location of the whole three-part sequence of Bara funeral rituals and found that this provided the best (briefest and most verifiable) evidence for my hypothesis about the Bara view of death.

I had hypothesized, in a fashion much more complex and abstract than I’m going to discuss here, that death is viewed as a radical incompatibility between the male and female components of an individual’s social and physical person. According to a complicated and subtle metaphorical notion of sexual conception, a child is conceived when the father’s sperm orders and arranges the female substance of blood in the mother’s womb. Sperm hardens to become bone, giving male structure to the female blood and flesh. Eventually the male bones, devoid of all female flesh and blood, are placed in the tomb of the patrilineage. Life is, in this Bara view, a complementary balance between maleness and femaleness. Dying involves the radical opposition between these two factors.

Much of this seems like a “just-so” story, an ethnographer’s model the replication of which is difficult to demonstrate in Bara thought. What is striking in the funeral customs is the change in spatial arrangements of men and women immediately following death. At the moment of death, men and women are all in the house “as usual.” The men sit along the eastern and southern wall and the women are grouped in the western portion of the house. As soon as breath has ceased, the cosmos, as normally represented by the Bara house, is split in two. All the women and the corpse with its now decaying flesh go to the female “house of many tears.” All the men go to what is called the “male house.” For three days there is this radical separation by sex: no men enter the women’s house and no women enter the “male house.” Furthermore, at night, the girls and boys meet out in the courtyard for what is essentially a mandatory orgy. So for the several day period between death and burial, there is this representation of the radical contradiction in the relation between maleness and femaleness: total separation inside the houses, and an abnormally obscene togetherness in the public space of the hamlet.

Six months later begins the second phase of the funeral process. This is the most “liminal” phase of this final “rite of passage,” to use anthropological jargon. The activities do not take place inside the house, but in the nearby fields by day and in the hamlet courtyard by night. The liminal phase of a ritual is that period when the participants are “betwixt and between” any normal social state, to use Victor Turner’s expression. It is fitting that this phase of the Bara funeral is excluded from the inside of a house, removed from that symbol of the social and cosmological order.

This second phase of the ritual is mainly a three-day feast. The chief event is Continued on page 12
the performance by professional dancers who as a " caste " are forbidden to live with a Bara hamlet or village, but must always make their homes to the south and west of the village. Additionally, the troupe of dancers hired for the affair does not dance in the hamlet courtyard, but only in the nearby field. Also, they are required to leave the village before the conclusion of the feast. All of the most concrete evidence that identifies this phase of the ritual as the critical period of liminality derives from spatial considerations.

The last phase of the funeral ritual, the exhumation and rebural of the deceased, takes place some years after death. This ritual is performed entirely outside of the village space. The activities alternate between the distant fields and the more distant tomb up on the mountain of the dead. The ritual representation of the long process of becoming an ancestor moves gradually over several years from house to courtyard to fields to tomb. Each phase of the funeral ritual is a movement to a more distant location. The ritual pertains to an invisible conception of the human condition and the human end. The only consistently tangible evidence for the dynamics of the ritual is the parameter of space.

Corporate group process — lineage fission and fusion. The spatial representation of the processes of lineage fission and fusion is both the easiest and most difficult level of process to present. It is easy in that, having seen the system of arrangement of houses in a hamlet, the reader can pretty well guess what happens as the lineage gradually expands over genealogical time and finally separates into two. One could do time-lapse aerial photography of a hamlet over a quarter of a century and it would look like a single-celled animal undergoing mitosis. It is the in-married women that split the patrilineage, not because they are women, but because they represent competing affinal alliances tugging at the increasingly fragile patrilineal solidarity. First, our time-lapse film will show two, rather than one, placements of the women's rice-pounding mortars. Gradually certain houses in the middle of the hamlet will be allowed to tumble, new configurations will form at each end, grass will grow in the space between the houses of the related sublineages, and finally a dispute will lead one group to move entirely, forming a satellite hamlet nearer the hamlet of its affines. It is largely as a result of such inevitable group dynamics that we have the characteristic division of Bara villages into central clusters of hamlets and out-lying satellite hamlets.

The opposite process, group fusion and formation, also occurs. To explain the dynamics involved would necessitate a complex discussion of the somewhat unique Bara kinship system of ambilineral recruitment to ideologically agnostic corporate kin groups. But perhaps an anecdote can indicate to the reader something of the salient spatial and physical aspects of such social processes. There was once in a village I knew a rather "grab bag" residential group of individuals related to each other in various ways and all living on the southern fringe of a more established hamlet. One man was building a new house and I went to visit him to see how the work was progressing. As I stepped back out of the doorway, it suddenly hit me that the addition of this one house in this spot made order out of all of the rest. The man had finally managed to get a reasonable enough collection of dependents together to form a true hamlet, now to be represented by the erection of a "patriarch's house." Tragically, he died suddenly shortly thereafter; the group and the residential hamlet disintegrated.

Societal change — spoils representation of new values. Interestingly, Bara customs of house design and placement are not necessarily conservative and certain innovations do occur. Building on certain traditions regarding the patriarch's house, some men do deviate from narrow tradition. The patriarch's house is often a large house in the northeast corner of the hamlet. It is not adorned or maintained any better than the rest, but it is grander and the object of some public pride. This house can be a bit grand since it represents the unity of the lineage, the community of its living and dead. The patriarch himself, however, actually tends not to reside in this house. This house expresses something additional about his social personality. Following this, innovative Bara deviate safely from tradition simply by building more than one house. One small dwelling (where they generally reside) is properly placed and oriented in characteristic disrepair in the hamlet, A larger, less traditional house is built separately, out along the road. One man had a house near the road that was whitewashed, had flowers in front, and was oriented the wrong direction. When I asked him about it he replied that this is not his house but merely his "kitchen." He took me outside and pointed out the lines etched in the earth showing the future location of the walls of his real house, all oriented according to custom. The abstraction was maintained. The focus on architectural representation of values remains, even if the values alter. Bara who feel the pull of new lifestyles on their traditional ways create separate and multiple dwellings to express their stance toward the changing world in which they live.

The authority vested in these items of regalia obviously rested in a larger ceremonial application (see Figure 2).

On the distaff side, there are two women's dresses from the Cree Indians of Saskatchewan, Canada (Peabody Museum catalog nos. 53046, 53047). These are relatively modest garments, intended to cover the body from shoulder to knees, which reflect the northerly latitudes occasioning relatively complete covering of the torso. They are of moose skin and prettily ornamented with quills, paint, cloth, beads, and metal trinkets. The Cree, who lived closer to the Hudson's Bay trading posts in Canada, were a vital source of guns and munitions for the Mandan. The Cree visited the Mandan annually for this purpose during the winter months and so in the winter of 1804-1805 they also met Lewis and Clark. It may be expected that the Cree women were as free with their favors as their southern neighbors, as recorded by the journals of the expedition, and these skirts may be regarded as souvenirs of amorous liaisons, although who the principals were is not recorded. Despite their sexually specific origin and ornamentation, their utility was perceived and appreciated by at least one member of the party: apparently Captain Clark actually wore one, probably both, during later stages of the expedition. One can only surmise the amusement of Indian peoples whom he encountered while thus innocently attired.

The second group of specimens in our collection was acquired by Lewis and Clark in 1806 from the Chinook Indians who lived in the far Northwest near the shores of the Pacific. These include another woman's garment: a woven skirt made of shredded cedar bark (Peabody Museum catalog no. 52990). This skirt was collected from the Wahkiakum, who lived on the north bank of the Columbia River near its mouth below Puget Sound in Washington State. Little else is known about this tribe, making the skirt a unique and important ethnological specimen. Lewis and Clark, themselves, were sufficiently impressed to describe the man-

Yet another item of female apparel is a hat made of basketry (Peabody Museum catalog no. 53080). This specimen (Figure 3) was purchased from a Clatsop Indian, another Chinookan tribe on the Columbia River, for a steel fish-hook. It is so remarkable a piece that it gained a place on our current "Masterpieces of the Peabody Museum" exhibit. As noted in the catalog for the exhibition (Wade 1978, p. 75), this hat was actually made by the Nootka Indians who lived on Vancouver Island to the north. Woven tightly enough to shed water, the hats apparently were popular items among many Indian tribes of the rainy Northwest Coast. They were traded widely, even, it seems, to the anonymous Clatsop woman on the Columbia River. Probably this same hat is described by Lewis and Clark:

The only covering for the head is a hat made of bear-grass, and the bark of cedar, interwoven in a conic form, with a knob of the same shape at the top. It has no brim, but is held on the head by a string passing under the chin, and tied to a small rim inside of the hat. The colours are generally black and white only, and these are made into squares, triangles, and sometimes rude figures of canoes and seamen harpooning whales (Lewis and Clark Journals, vol. 2, p. 329).

Similar hats were often mentioned and sometimes illustrated by the early European explorers, but this specimen is one of the few known survivors of the once popular headgear. Of special interest to us is that a nearly identical example is depicted crowning the head of a Nootka woman in a pen and ink sketch drawn by John Webber in April 1778 which is also in our collections (Figure 3). Thus these specimens—the hat and the drawing—demonstrate the incredible depth of our collections, as well as being confirmation of the historic record.

Another piece of basketry was acquired from the Pishquitpah tribe (Peabody Museum catalog no. 53160; the catalog entry identifies it as "Wasco") who lived on the south side of the Columbia River in Oregon. This is a finely woven bag-shaped basket, which was made by the twined weaving technique using native hemp and grass. It is decorated with a striking pattern exhibiting stylized faces and small dog-like creatures. We can never know the significance of the design to the weaver and to the ideology of her peoples. But this beautiful basket does have significance to us beyond the intrinsic. In a recent article, it was presented as the evidence that the Wasco-Wishram peo-

newborn babies. However, the !Kung San, a hunter-gatherer peoples, hold their infants a great deal more than do women in western societies. Western mothers wear much earlier than !Kung mothers and tend to adopt a pattern of nursing with relatively large feedings at long intervals which is adapted to their greater physical distance from the babies but differs from the frequent short suckling bouts found among the !Kung. Many primate infants display attachment to their mothers at the age when they begin to move off the mother and explore at a distance from her. Human infants show the same phenomenon during the early months of crawling and walking. !Kung infants show it as strongly as western infants and it tends to last longer into the second year. However, within a year, they become as independent as western children and transfer much of their attachment to the multiage child group which surrounds them. Although !Kung mothers and babies maintain closer physical contact, their social contact is no less frequent than that shown between western mothers and babies. In summary, cross-species comparison indicates that human infant care is characterized by early weaning and a reduction in physical contact. Cross-cultural comparison indicates that western infant care is characterized by even earlier weaning and less contact than hunter-gatherer infant care. If we want to use information from other cultures to increase our understanding of our own society, we are immediately faced with a question which cannot be addressed by cross-cultural studies—"Does it matter?" Do our children develop differently because we wean them so early and hold them so little? Does it make them smarter,
Infant care, continued from page 13

slower, happier, nastier, more verbal, more achievement oriented? To address this question we must compare children whose rearing differed in these particular ways but who otherwise share the same cultural influences. The League/non-League comparison provides such an opportunity.

The study sets out to measure infant care and infant development in a number of different ways. First, to assess attitudes about infant care the investigators interview the mothers when the baby is about 6 weeks old. They ask the mothers what they consider to be good ways to take care of a baby, when they plan to start solid food, to wean, etc. Then, to document the infant care as practiced, observers visit the home and observe the infant's actual experience — how much it is held, talked to, fed, and how the mother responds to the infant's distress. Occasionally, the mothers are asked to keep diaries to document the infant's patterns of sleeping and feeding over a 24-hour period. Social and emotional development are assessed both from the home observations of spontaneous behavior and from more formal test situations. The infants are given the Bayley Scales of Infant Development and a tool-using test. They are observed in a standard face-to-face situation with their mothers and in the Ainsworth "strange situation" paradigm with their mother and a strange adult. They are observed with a strange child and with a sibling. They are subjected to mild stress by a brief separation from the mother and by a difficult task. It is not expected that the groups will differ in motor or cognitive development, but differences may be found in attachment to the mother late in the second year or in ability to derive comfort from physical contact with the mother after mild stress.

The study has implications for both theory and practice. From a practical point of view, it may provide information of interest to parents exploring alternative methods of infant care. Information about the consequences of different styles of care may help them in deciding on their own course of action in caring for their baby. From the point-of-view of theory, the results might provide evidence to support the evolutionary theory of Bowlby which predicts that a complex of "natural" features of maternal care tend to vary together and that infants who experience such care will differ in social and emotional development from infants experiencing other patterns of care. The results may provide evidence to support the psychological theory that early experience effects social and emotional development, at least for the first two years of life.

Lost Expedition, continued from page 1

support of both the National Endowment for the Arts and the National Park Service, that catalogue is being readied for publication now by the Peabody Museum Press.

Over 150 ceramics from the Keam Collection, dating from A.D. 1200 to A.D. 1900 and selected for their great artistic and historic significance, have been loaned to the Heard Museum, Phoenix, AZ for an exhibition entitled "America's Great Lost Expedition: the Thomas Keam Collection of Hopi Pottery from the First Hemenway Expedition, 1890-1894." This major exhibit, prepared by the Keam Project staff in conjunction with the Heard Museum staff, opened in Phoenix on December 12, 1980, and subsequently will travel to four other museums in the southwest over a two-year period. "America's Great Lost Expedition" is a novel and multidimensional exhibit. Not only does it return to the southwest and the present generation of Hopi potters an array of ceramics spanning 700 years of their history and aesthetic tradition, it also documents and explores late nineteenth-century American life, especially for the native inhabitants and transplanted Europeans of the north-eastern Arizona frontier. Through the letters and correspondence of the men and women who conceived, organized, and lived the Second Hemenway Expedition — from Boston benefactress to remote field worker to Hopi informant — the exhibit and its accompanying catalogue chronicle the events affecting their lives as they recorded the passing traditional life of an ancient American Indian people and their ancestors have inhabited the harsh, arid mesa country of Arizona, living in adobe pueblos and subsisting through agriculture, continuously for over a thousand years.

The Second Hemenway Expedition to the American Southwest evolved over four arduous years, from 1890-1894. In its time it was the earliest, best financed, and most ambitious anthropological undertaking of its kind. Today it is only dimly remembered, referred to but sporadically in scholarly journals and unknown to the public. The expedition was a pioneering venture which, through its successes and failures, helped to define the new goals of American anthropology and archaeology. The expedition's greatest accomplishment was the procuring of the Keam Collection, the scientific and aesthetic potential of which was never realized in its own day.

"Why have the Second Hemenway Expedition and especially the Keam Collection, given its current artistic and historic value, so long been ignored? In attempting to answer this seemingly simple question, in assessing the significance of both the Hemenway Expedition and the Keam Collection, and in piecing together the puzzle of the neglect of both, the Keam Project embarked on what amounts to a great detective search. The story of "America's Great Lost Expedition," told through the archival materials compiled from this search, and through the objects themselves, provides the proper perspective for appreciating the great legacy of the Hopi people preserved in the Keam Collection.

The primary reason for the obscurity of both the expedition and the collection lies in the fact that the Hemenway Expedition was an expensive undertaking, and its collections were only subsequently "institutionalized" at the Peabody Museum. Mary Hemenway, the Boston patroness who sponsored the expedition, intended to house the Keam Collection, purchased for $10,000 in 1892 by the Second Expedition's Director, Jesse Walter Fewkes, in a private museum adjoining her 40 Mt. Vernon Street residence on Boston's Beacon Hill.

It was her intention that this ethnographic collection, in conjunction with an archaeological collection made by the First Hemenway Expedition (1886-1888), serve to inform the public and students of American Indians of the antiquity of Indian cultures. With her untimely death in the spring of 1894, Augustus Hemenway, Jr., her son and vice president of the expedition foundation, chose Harvard's Peabody Museum as the most suitable alternative to this plan. Hence, the Keam Collection adventitiously was acquired by the Peabody.

Dr. Fewkes was not, however, in any way officially affiliated with the Peabody; he held no curatorial or other staff position, nor was he a trained archaeologist or ethnologist. His appointment as Director of the Second Hemenway Expedition was somewhat fortuitous. Receiving his baccalaureate and doctoral degrees in zoology from Harvard in 1875 and 1877 respectively, he served as Curator of Invertebrates at the Museum of Comparative Zoology for ten years. He was dismissed from that position when a plagiarism controversy involving Fewkes and the museum's director. Almost simultaneously, Frank Hamilton Cushing, Director of the First Hemenway Expedition, was dismissed from his position because he had proven to be an incompetent administrator in the field. Augustus Hemenway, Jr., Fewkes's Harvard classmate, chose Fewkes to head the Second Hemenway Expedition. It was felt that a more conventional scholar could better administrate a scientific expedition than Mr. Cushing, a self-taught student of American Indian cultures.

Because he held no permanent position at the Peabody, Fewkes only agreed to install a small portion of the
Keam Collection on exhibit in a gallery named for Mrs. Hemenway. Upon completion of these duties he terminated his Hemenway salary and assumed a position with the Bureau of Ethnology in Washington, D.C. The remainder of the Keam Collection was scattered among the museum's five floors. Most of this material was never accessioned or catalogued until the 1940s when, as part of a larger task of systematically organizing all Peabody southwestern holdings, Dr. J. O. Brew and his staff undertook to do so. Lacking time and funds to give special attention to Keam materials, nothing further was accomplished until 1976. In that year, as a Research Fellow, Dr. Edwin Wade's work to survey the Keam Collection initiated the Keam Research Project. 

Along with the Keam Collection, the Hemenway Expedition and then the Peabody Museum, acquired a catalogue manuscript of the ceramics compiled by Alexander M. Stephen. Stephen was a Scottish metallurgist who assisted Thomas Keam, trader to the Hopis for nearly 25 years, in assembling and eventually classifying his outstanding collection of Hopi art. Unfortunately, the catalogue manuscript was dismissed by Fewkes as scientifically useless. This proclamation essentially condemned both the manuscript and the Keam Collection to obscurity for nearly a century, keeping students and curatorial care from either interpretation or preservation of these materials. The result was that an invaluable study collection which records the formation of historic Hopi society remained "lost" for several generations. 

Fewkes's dismissal at least in part stemmed from the fact that Stephen's theoretical framework, an evolutionary schema presenting the rise and fall of Hopi society and culture, had fallen out of fashion by the turn of the century. What Fewkes failed to realize, however, was that the manuscript showed remarkable insight into the mythic associations of pottery designs with Hopi religious beliefs. Whether these associations are "true" or not is debatable, but we can be sure that the legends and oral traditions transcribed in the manuscript reflect Hopi religious beliefs, not Stephen's interpretations. His letters irrefutably prove this to be the case, as they reveal that he literally dedicated his life to the faithful rendering of Hopi religious thought. He never hesitated to chastize other respected ethnologists or even Fewkes for printing Hopi lore that was in any way misrepresentative.

Because of the controversy surrounding the First Hemenway Expedition's director and Fewkes's brief and unofficial affiliation with the Peabody, confusion developed about where documents were placed, and business records were scattered. An extensive and intensive search over the past year has uncovered some of these in rather unlikely places, from family albums and collections of memorabilia in Massachusetts to archival collections as far away as California. Fewkes's field notebooks and all of Stephen's correspondence for the duration of the Second Hemenway Expedition, located in the National Anthropological Archives, Smithsonian Institution, constitute an extremely rich body of material on Hopi culture. In Stephen's letters lies the story of a hard life on the western frontier, and of a "lost" yet wholly committed ethnographer of American Indian life. Stephen is not unknown in American anthropology, but his full contribution to this field has yet to be realized. Other manuscripts, field reports, and correspondence from both expeditions still await interpretation and publication. The full story will be an important one as the history of the Hemenway Expeditions records the professionalization and institutionalization of American anthropology, and as the artistry of the Keam Collection continues to yield more and more of the richness, diversity, and endurance of this American Indian culture.

Lea S. McChesney, Program Coordinator for the Keam Project, is a graduate of Bard College and holds a Master's degree in Anthropology from Wesleyan University.

Grants awarded

The Peabody Museum has received a $300,000 challenge grant from the National Endowment for the Arts to launch a revitalization program. Each dollar of the federal grant now must be matched by $3 from nonfederal sources. The grant will enable the Museum to establish a conservation center with special equipment and trained conservators to better protect its collection. Basketry, featherwork, and textiles are particularly prone to deterioration with age, but can be preserved through chemical treatment, climate control, and other methods. Some of the Museum's metals, including archaeological finds about 3,000 years old, also need chemical treatment for protection against erosion.

Over the next few years the Museum also hopes to use the grant to construct improved storage facilities with areas where temperature and humidity can be controlled.

The National Endowment for the Humanities recently announced the award of a planning grant for interpretive exhibits on Cambridge history to a team of applicants which includes Harvard's Institute for Conservation Archaeology and the Cambridge Historical Commission. The exhibits will take several forms; a major display to open early in 1982 will be installed in the Peabody Museum.

The great Sikyatki ceramic tradition of the fourteenth and fifteenth centuries is today, and was at the time of the Hemenway Expedition, considered the finest Southwestern ceramic tradition. A revival of that style which began around the turn of the century is currently produced at Hopi. The style, Sikyatki Revival, was believed to be the work of one exceptionally talented potter, the famous Nampeyo. The Keam Collection manuscript compiled by Alexander Stephen states that Keam commissioned certain unnamed Hopi potters to make reproductions of ancient wares, including Sikyatki pieces, which he included in museum collections. Keam therefore provided a stimulus for a "new" style of Hopi pottery which had previously been unknown. This recently uncovered "lost" information has helped to revise the date of the inception of the Sikyatki Revival style from 1890-1900 to 1880-1890, and to reassess some popular myths about this American Indian art tradition.
Subscription to SYMBOLS

Symbols will be published twice a year by the Peabody Museum and the Department of Anthropology at Harvard. The yearly subscription rate is $4.50. Please make checks payable to "Symbols—Peabody Museum" and send to Peabody Museum of Archaeology and Ethnology, 11 Divinity Avenue, Cambridge, Mass. 02138.

Copan, continued from page 1

Though the New World was the home of civilizations fully equal to those of the Old World, many Americans still suffer the misapprehension that, before Columbus, the continent was settled only by primitive hunter-gatherers. No other New World civilization reached any greater heights than the Maya of Mesoamerica. A new exhibit, jointly sponsored by the Peabody Museum and Boston’s Museum of Science, will help to fill the gap in public understanding of this ancient culture. Entitled “Copan: Ancient City of the Maya,” the exhibit focuses on the people and their civilizations, from the great achievements in art and science to the everyday life of the average person. The exhibit will attempt to show how archaeologists interpret ancient artifacts and how our view of the ancient world develops.

The exhibit consists almost entirely of artifacts drawn from the Peabody Museum’s extraordinary collections. One such artifact is the sculpture fragment pictured above. It appears to be a stylized depiction of a serpent, often associated with one of the most important Maya deities, Itzamna, the lord of the heavens and the earth.

“Copan: Ancient City of the Maya” opens on May 21, 1981 at the Museum of Science. The exhibition is part of the Peabody’s Collection-Sharing Program under which more than one thousand artifacts from the Peabody will be loaned to nine art, history, science, and general museums across the nation.

Funded by a major grant from the National Endowment for the Humanities in the spring of 1980, the program integrates the needs and goals of the Peabody — to organize, conserve, and share its remarkable collections — with the borrowing institutions’ wishes to expand their exhibition programs beyond the scope of their own holdings.

Dr. Richard Leventhal, Post Doctoral Fellow at the Peabody Museum, served as Guest Curator for the exhibition.

Gordon R. Willey, Bowditch Professor of Central American Archaeology at Harvard, directed the excavations in the Copan Valley. He will be presented with the William J. Walker Prize for meritorious scientific investigation and discovery on the occasion of the opening of the exhibition.

Peabody Museum’s Stela A leaves from a third floor window enroute to Boston’s Museum of Science.