Anthro Notes

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FORENSIC SLEUTHS SOLVE MYSTERIES

Few people are aware that physical anthropologists serve as regular consultants to the FBI Laboratories in Washington, D.C. or that they assist medical and law enforcement personnel throughout the country in forensic cases by examining the remains of unidentified deceased persons, especially when the remains have been partially or completely skeletonized.

Smithsonian forensic anthropologists have helped develop many of the techniques used to identify and study the dead and have participated in some of the most notorious cases of this century, including the identification of victims of serial killers. The first article, "Getting Away with Murder--Almost" presents two case studies taken from a new book by Douglas Ubelaker and writer Henry Scammel titled *Bones: A Forensic Detective's Casebook* that details the work of forensic anthropologists. Forensic techniques are described in the second article, "Tales Bones Tell" by Robert Mann, formerly with the Smithsonian's Department of Anthropology.

GETTING AWAY WITH MURDER --ALMOST

Before the value of the forensic anthropologist's insight and experience gained its present wide acceptance in the legal process, there is no doubt that more people got away with murder. A good example is the onetime insurance salesman in Yakima, Washington, who beat his wife to death with a hammer in 1975, set up the killing to look like an accident, and escaped arrest for almost a decade.

On the face of it, he was the kind of killer one would expect to be caught a lot earlier. He would put away half a quart of scotch and a six-pack of beer in a typical day. He advertised his intentions in advance to at least one of his numerous girlfriends. His former in-laws were so certain he had murdered his wife that they went to the expense of an exhumation, private autopsies, and an appeal to the district attorney to reopen the case based on evidence that contradicted the official cause of death. His second wife divorced him and told the police he had boasted to her of the crime; she even recited in detail how he had done it. For all that, it took a special petition to the governor by the dead woman's sister to bring the man to trial.

According to his second wife's court testimony, the killer believed he was free for so long because the cops were stupid. Anybody can get away with murder, he said, if they just commit the crime that plausibly can be explained as an accident. He hit his wife three times on the head with a claw hammer because sideways it made the same kind of impact mark as a horse-shoe, placed her body in a horse stall behind their house, then drove down to the local bakery where he paid for a bag of assorted donuts by check. He told the police that when he returned home and didn't find his wife in the house, something prodded him to look in the barn. Imagine his horror when he found she had been kicked.

He thought she was still alive when he called an ambulance--a nice touch. One of his children said he cried for a week.

The killer was wrong about the police being stupid. They did what they were supposed to do, but sometimes that is not enough protection against a good lie and a killer's good luck. Sheriff's deputies recorded a detailed report of what they were told and what they found, investigated the murder scene, took pictures, and removed the body.

The medical examiner was not stupid either, but the state did not require forensic training for physicians who certify accidental death. The coroner did what he could, considering his lack of training and experience. He found a gaping laceration in the right temporal parietal area exposing a depressed skull fracture, and a similar injury with a broader fracture on the opposite side of the head. He removed the scalp and then the top of the skull, measured and described the two depressed fractures, and reported in detail on the linear fractures connecting them. The coroner compared these injuries to those described in the story he had heard; then, with a detective sergeant, he returned to examine the horse stall. Two feet above the floor, directly adjacent to a wall which was still stained with the brush marks of the victim's bloody hair, they found a timber with a projection on the end which corresponded to the injury in her right temple. The coroner wrote in his report, "The blood stains indicated that the deceased's head had been moving in a direction away from the timber which would be logical as a result of her falling forward after being kicked against the timber." Under Manner of Death he entered, "Being kicked by a horse."

A few months later, the killer married one of his girlfriends, to whom he had described his crime. It is hard to imagine that a union based on such a bond would ever end, but when it did, several years later, there was an unpleasant agreement over who got the furniture. As a general rule, it is imprudent to argue too vehemently with an adversary you know is holding aces. She settled the furniture issue by going to the police with the story of the murder.

Fortunately, there was a huge difference between the first medical examination and the studies of the remains that preceded the formal trial. This time the evidence was reviewed by experts: three forensic pathologists, two forensic anthropologists, and detectives trained in reading the evidence of murder. These experts included Douglas Ubelaker, a Smithsonian consultant in forensic anthropology to the FBI Laboratories in Washington, D.C.

Ubelaker reported two principal points of focus on the skull that produced separate, unconnected fracture lines that

contradicted the observations of the original examiner and pointed to the possibility of a different type of event than the one described earlier. The object producing the puncture mark at the smaller site was sharper than the other, and it produced an ovoid hole measuring 14 x 21 mm with a sharp upper margin and a crushed, flattened lower margin. The pattern suggested the trauma was inflicted at this site from above rather than from below or from the side.

The killer had allowed the murder weapon to turn in his hand before delivering that particular blow; an ovoid hole of that type and size does not come from an object resembling a horse shoe, *but is the signature imprint of a hammerhead.* A second forensic anthropologist even computed the exact angle of the hammer's attack and the force of the blow. A pathologist demonstrated it was physically impossible for the body to have contorted in such a way that the puncture wound could have been caused by the knob on the beam. Finally, another specialist demonstrated that the swipes of bloody hair on the wall were not the consequence of a kick, but were painted there by hair that had time to become fully saturated and had brushed against the wall, not once but twice, as the dying or dead woman's body was being carefully lowered by the killer into its position on the floor of the stall.

In his summation, the prosecutor addressed the essence of the difference between the first and second examination. He pointed out that the first medical examiner did what many physicians, not forensic specialists, would have done under similar circumstances. He took what appeared on the surface to be a reasonable explanation, "a horse kick killed her," and did his autopsy and subsequent examination of the scene with that in mind. He made a fatal mistake: he assumed he knew what had happened and then tried to fit the facts into those assumptions. Forensic pathologists are trained not to make that mistake.

Part of a detective's job is to include any relevant information, even speculative, that might be of use to the examiner. Like the examiner, the detective is expected to remain neutral, not anticipating the result of such a search. Even when the policeman is careful to express no such anticipation, there is a risk the examiner will find more clues in the letter accompanying the examination request than is in evidence from the remains. A letter accompanying the skeletal remains of a young girl from Swansea, Massachusetts, offers a case in point.

The identity of the victim had already been established, the letter said, as a young woman who had disappeared two years before. "She was age 16 at the time. She had run away from home three times already and had returned. She was a known drug (marijuana) user and had been in trouble with the law." The letter went on to describe two specific physical characteristics by which the identity might be confirmed--a chipped mandibular front tooth and an old injury above the left eye from a rock thrown up by a lawn mower blade when she was only two. In addition to the positive ID, the letter asked for "possible cause of death," adding at the end, "Several weeks before her disappearance, her mother stated that she had been threatened with bodily harm by her boyfriend."

On the face of it, the detective did not appear to express a bias toward either possible cause of death: a drug overdose or violence at the hands of her boyfriend. But it was clear, later, that police in Massachusetts were leaning heavily toward the probability she had died of an OD. The detective who sent the remains to the FBI was apparently a better guesser than most of his peers; he addressed his letter to the Microscopic Analysis Laboratory. After a body has been skeletonized, a microscope does not reveal much information about drug use, but it often can reveal insights as to possible acts of violence.

A forensic examination by Ubelaker began with sex, age, race, and time since death, all of which were consistent with the information on the supposed victim. Ubelaker confirmed a chip out of the buccal surface of the right central mandibular incisor.

Despite the tremendous growth and remodelling the face undergoes between the ages of two and sixteen, the old fracture from the lawn mower incident, long since healed, was still visible on the frontal bone above the left eye orbit. Without reasonably current medical x-rays or dental records for comparison, neither was positive proof of identity, but, added to other evidence recovered at the site, they reinforced a strong circumstantial case that these were the remains of the missing girl.

A first sign of trauma was on the first bone examined; the left twelfth rib bore a 2 mm incision produced by a knife or a knife-like instrument. There was another incision, this time 12 mm in length, on the next rib. Because it had been two years since the girl's disappearance and presumed death, her skeleton had largely disarticulated. But as Ubelaker examined bone after bone, he kept encountering evidence of brutal stabbing.

The victim had been stabbed just below the right knee and three times more above and below the left knee. She had been stabbed once in each buttock and in the groin. There were seven separate stab marks scattered around the back, four more in the nape of the neck, and one in the left side of the neck. There was a total of ten more such wounds in the head. Some of the incisions in the skull were so violent they had bent back the bone. Ordinarily wounds that result from such obvious frenzy are grouped in a particular area, but in this case they appeared to travel the full length of the body. Ubelaker still remembers the surprise of the police when he called to tell them their case of suspected drug overdose was in fact a violent murder.

A few weeks after Ubelaker's examination an important new piece of evidence was recovered near the murder site as a consequence of his report. A man who lived in the area came forward after reading in the newspaper that the death had been by stabbing. Only a short distance from where the skeleton had been discovered, he said he had found an object he now realized as a likely murder weapon. The object was a folding trench knife with brass knuckles on the handle and the word "Assassin" written on the eight-inch blade. By matching the curve of the blade exactly with some of the incisions in the bone, Ubelaker was able to prove the knife could have been the murder weapon and to demonstrate that the blade likely had become bent in the fury of the attack.

Matching the murder weapon to the signatures it had left on the skeleton was only part of the necessary equation, however, and the case remained unsolved for another two years. Finally, one of the neighborhood boys went to the police. He said the killer was a friend from high school, and that he had shared the details of what had happened the day of the murder. One of those details was that the folding blade of the knife had snapped shut against the killer's thumb during the attack, and that night he had gone to a walk-in medical center for stitches. Police verified that the suspect had indeed received treatment on the night of the date the girl disappeared. They finally had enough evidence to arrest the boyfriend--who had been suspected by the victim's mother from the beginning.

When Ubelaker flew up to Massachusetts to testify at the trial, he thought how unlikely it was that this murder should have gone so long unsolved. Totally unplanned, it had been carried out by a heavily drugged young man in a rage, the body left out in the open where anyone could have tripped over it, the murder weapon recovered within just a few yards of the corpse, and the perpetrator identified as a prime suspect even while the case was nothing more than a missing person. These thoughts were reinforced when Ubelaker arrived at the courthouse. During the trial he learned that the killer had confided his crime to at least six other boys in the weeks following the murder, yet five years passed before a single one of them came forward.

Strangest of all was what the boyfriend/murderer recalled of events at the walk-in medical center, where he received stitches in his hand. "One of the nurses told him, 'It

looks like you killed somebody from all the blood.'"

Douglas Ubelaker
Henry Scammell

TALES BONES TELL

In cases of homicide, mass disaster, missing persons, and death from undetermined or suspicious causes, law enforcement personnel often turn to scientists. Scientists in diverse fields (physical anthropology, botany, entomology, biochemistry, and sociocultural specialties such as costume design and analysis) apply their expertise to examining the human skeleton and related artifacts to illuminate the identification of remains or the circumstances surrounding a death. Physical or forensic anthropologists have participated in some of the most publicized cases of the century, including the identification of victims of serial killers such as Ted Bundy, the Green River Killer, Henry Lee Lucas, and Jeffrey Dahmer; of soldiers killed in Korea, Vietnam or Operation Desert Storm; and the solution of mysteries surrounding such figures as the Texas gunfighter William P. Longley and the kidnapped Lindbergh baby.

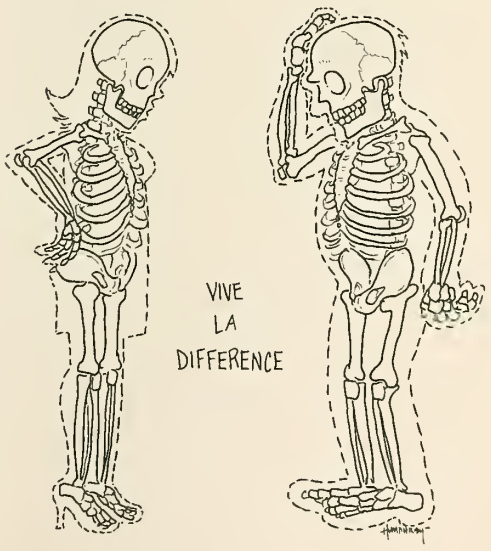
The forensic anthropologist can usually determine age at death, race, sex, and stature; detect any indications of trauma, disease, and occupational or habitual activities; and estimate elapsed time since death. The best sources--often the only sources--of such information are the skeleton and teeth.

When a complete skeleton or even a single bone is found, the first question is whether it is human, nonhuman animal, or other (e.g., burned gourd resembling a human skull). As human and animal bones differ in texture, density, shape, and size, visual examination quickly provides an answer. Should human and animal bones be present, they are separated, and the number of individuals represented by the human bones determined. Next the bones are examined for evidence of stabbing, bullet wounds, or butchering (i.e., disarticulation).

Forensic anthropologists examine human skeletal material using a variety of techniques to obtain many kinds of data. Determination of sex, race, age, stature, date and cause of death, and occupational or habitual activities all help in the quest for positive personal identification.

Determination of Sex

The most reliable osteological (bony) indications of sex are the pelvis, skull, and mandible, and the size of the long bones and joints. The female pelvic girdle consists of two hip bones and a sacrum that have a number of bony features differing from those of a male. For example, when the two hip bones of an adult female are put together with the sacrum and viewed from above, the birth opening is circular and large; female hip bones have a more outward flare than those of males; and the female pelvis has a broader notch for the sciatic nerve and a wider angle where the two pubic bones, which are long and rectangular, come together. These structural traits facilitate the process of giving birth. In contrast, the male pelvis is usually larger and more muscle marked than the female. The cavity viewed from above is heart-



shaped rather than circular and the pubic bones are short and triangular.

Like the pelvis, the male skull is typically larger and more muscle marked than that of the female. In addition, males exhibit larger mastoid processes (behind the ears), a sloping forehead with more developed browridges, blunt upper margins of the eye orbits, in contrast to the sharp orbital rims of females, and a larger lower jaw with a more squared chin.

Racial Affiliation

Racial affiliation is difficult to determine even in the living. Human populations, or even human families who are closely related genetically, are extremely variable. In addition, humans have always been quite mobile, and interbreeding among different populations is common throughout the world. Many of the characteristics used by the public to determine "race", such as a particular skin color or nose shape, actually occur throughout the world in unrelated populations. The concepts "Black," "White," "Asian," or "Native American," commonly used in the US, are social constructs, whose boundaries are arbitrary and bear little relationship to biological affinities. In examining skeletal material, the forensic anthropologist faces a further dilemma. Skeletal attributes more common in particular populations may not correspond at all to the surface characteristics such as skin color or hair form that are used to suggest ancestry among the living.

In the order of most to least reliable, the skeletal indicators of racial affiliation--people of African descent, people of European descent, and East Asians, which include Native Americans, Eskimos, Chinese, Japanese, and other Asians--are most apparent in facial structure, skull, teeth, and thigh bone. Anthropologists assess these attributes on a scale ranging from mild to prominent. For example, many people of African descent have short, wide nasal openings and grooves at the base of the bony portion of the nose in contrast to many people of European descent, who have narrow, long nasal openings and a ridge at the base of the nose. When viewed from the front, the faces of "Europeans" tend to be narrow and long, and those of "Africans" tend to be wider and shorter; and those of "Asians" may range from flat to concave.

In regard to teeth, "Africans" often have complicated or "wrinkled" molar cusp patterns. Two dental traits common to many "Asians" are an edge-to-edge bite and shovel-shaped incisors. Nearly all Native Americans who lived before about AD 1900, and many extant Asian groups, have severely worn teeth.

Determination of Age

The age of a person less than 18 years old can be determined most accurately by the stage of dental development, as the teeth develop in a predictable sequence making possible an age estimate generally accurate to within six months.

The size and stage of development of the long bones in the legs and arms also provide information for estimating the age of a subadult to within about 16 months. The maximum length of a single bone can be obtained and compared to bone lengths based on clinical growth standards; the resulting age estimate is accurate to within a few months.

Whereas age estimates of children are based on the stage of development of the skeleton and teeth, those of adults are derived from advanced growth and degenerative changes. Thus indicators of adult age include the stages of sutural closure in the skull's cranial vault and palate and structural changes of the pelvis. Equally important indicators are degenerative changes, such as arthritis of the spine and joints, and a general decrease in bone mass, a condition known as osteoporosis.

Determination of Stature

Stature or height can be determined for a child or an adult if there is at least one complete or nearly complete long bone of the arm (humerus, radius, or ulna) or leg

(continued on p. 14)

SUMMER FIELDWORK OPPORTUNITIES

Looking for adventure? For an opportunity to acquire new skills? Become a member of an archeological excavation or a scientific expedition in the United States or abroad and learn about another culture, past or present.

SMITHSONIAN PROGRAMS

Anthropology-related summer projects offered by Smithsonian Research Expeditions are:

Crow Culture: Writing a Contemporary Ethnography. The first team will record everyday life on Crow Agency in Montana (April 14-20); the second team will document activities at the annual pow wow, Crow Fair (August 18-24).

Assisting the North American Indian Program. Planning for the new Native Peoples of North America Hall requires three teams: script verification (March 7-20), photographic documentation (May 9-22), and research for the information guide (July 11-24).

The Him-Dak Museum. Volunteers will create a native garden in cooperation with The Him-Dak, a tribally operated ecomuseum on the Ak-Chin Indian Community in Maricopa, AZ (May 9-15).

Polynesian Barkcloth: Preserving a Tradition. Two teams of volunteers are needed to assist in the conservation of Polynesian barkcloth in the Department of Anthropology's collections. Tours of conservation labs and lectures will give volunteers additional knowledge.

For further information, write or call Smithsonian Research Expeditions, 490 L'Enfant Plaza, S.W., Suite 4210, Washington, DC 22024; (202) 287-3210.

Office of Elementary and Secondary Education (OESE)

OESE offers week-long courses in the sciences, arts, and humanities with in-service credit for teachers, K-12, from Maryland, the District of Columbia, and Virginia. Call Clare Cuddy at (202) 357-2404 for a registration form after May 1.

ORGANIZATIONS TO CONTACT

Anthropology departments at local universities and colleges, state historic preservation offices, and state archeological societies organize local archeological excavations and frequently accept volunteers with no previous fieldwork experience. The Archaeological Institute of America (AIA) offers a listing of state archeologists as part of its yearly field school listing for the U.S. and abroad. The cost, including shipping and handling, is $11.50 for members and $13.50 for non-members. For each additional copy ordered, add 50 cents for shipping. Write: Kendall-Hunt Publishing Co., Order Dept., 2460 Kerper Blvd., Dubuque, IA 52001; (800) 338-5578. *Archaeology* magazine, published by the AIA, features an archeo-

logy travel guide to sites open to the public in the Old World (March/April issue) and the New World (May/June issue). A field school listing is also available from the American Anthropological Association for $5.00 for members and $7.00 for non-members, with a self-addressed envelope with 56 cents postage. Write: AAA, 1703 New Hampshire Ave., N.W., Washington, D.C. 20009 or call (202) 232-8800.

Several organizations offer volunteer public participation in worldwide research expeditions. Many of these organizations, listed below are non-profit and participation fees may be treated as tax-deductible contributions.

University Research Expeditions Program
University of California
2223 Fulton, 4th Floor
Berkeley, CA 94720
(510) 642-6586

Earthwatch
680 Mount Auburn St., Box 403,
Watertown, MA 02272.
(617) 926-8200
(Scholarships available for teachers)

CEDAM International
(CEDAM stands for Conservation, Education, Diving, Archeology, Museums)
Fox Road
Croton-on-Hudson, NY 10520
(914) 271-5365

SELECTED FIELD SCHOOLS

Syracuse University offers summer and semester programs in Australia to study Australian cultures, native language, society, and ecology. Write: Syracuse University, Division of International Programs Abroad, 119 Euclid Ave., Syracuse, NY 13224; 1-800-235-3472.

Summer Abroad through World Learning, Inc., the U.S. Experiment in International Living, offers students and adults opportunities to learn another culture through homestay, language-study, and ecologically-focused programs. Write: World Learning, Inc., The U.S. Experiment in International Living, P.O. Box 676, Kipling Rd., Brattleboro, VT 50302-0676; (802) 258-3173.

Picuris Pueblo in the Sangre de Cristo Mountains, New Mexico, is the focus of an ethnographic field school (July 25-August 15) sponsored by Middlesex County College. In addition to three weeks of instruction on the southwest cultures and in field methods, students will live with Pueblo families and participate in village life, including pottery making, adobe construction and feast day. Write: Dr. Diane Z. Wilhelm, Middlesex County College, 155 Mill Road, Box 3050, Edison, NJ 08818-3050; or call (908) 548-6000 ext. 3099.

High school students and teachers are invited to excavate, for one to four weeks, a ceremonial mound at Moundville Archaeological Park, the site of a Mississippian culture (A.D. 1,000 to 1,500). Write: Melissa Moon, Museum Expeditions, Alabama Museum of Natural History, Box 870340, Tuscaloosa, AL 35487-0340; or call (205) 348-2040.

Archeological Field School in Bermuda, sponsored by The College of William and Mary, July 5-August 14, will focus on early 17th century forts on Castle Island and rural domestic sites in Hog Bay Park. Application deadline is April 1. Field School director is Norman F. Barka. Write: Dr. Ann M. Moore, Programs Abroad, Reves Center for International Studies, College of William and Mary, P.O. Box 8795, Williamsburg, VA 23187-8795, or call (804) 221-3594; FAX (804) 221-3597.

Crow Canyon Archaeological Center is a non-profit institution specializing in Southwestern archeological research and education. The Adult Research Program: Ethnobotany, consisting of week-long sessions, is conducted from the last week of May through the second week of October. The High School Field School takes place from June 27 to July 24. The Teachers' Workshop is scheduled for July 31-August 8. Transferable academic credit is available for these programs. Archaeological and cultural programs to the Southwest and workshops led by American Indians are also

offered. Write or call: Crow Canyon Archaeological Center, 23390 County Road K, Cortez, CO 81321; (800) 422-8975, (303) 565-8975.

Special seven-day Archeological Field Seminars on the Four Corners Region, led by Southwestern archeologists, will take place from May through October. Write or call: Dr. Stuart Struever or Dr. Stephen Lekson, Crow Canyon Archaeological Center, 1777 South Harrison St., Suite 815, Denver, CO 80210; (303) 759-9212.

Expedition to the Negev desert in Israel (July 9 to August 8) will involve excavation of a Byzantine church and a Middle Bronze Age structure, with one week of touring. Write or call the Prof. Steven Derfler, Department of Religion, Hamlin University, St. Paul, MN 55104; (612) 641-2392; FAX, 641-2956.

Center for American Archeology, Kampsville Archeological Center conducts educational research programs for junior and senior high school students, college students, and the non-professional, and workshops for teachers. Scholarships are available for American Indian students. Write: Admissions Office, Kampsville Archeological Center, Kampsville, IL 62053, or call (618) 653-4316.

Drew University in West Africa offers a comprehensive study of West African art and architecture in Mali and Cote d'Ivore. In Mali (July 4-24), students will be introduced to West African cultures through lectures and travel. In the Cote d'Ivore (July 22-August 21), students will learn through apprenticeships about West African arts and crafts and archaeology. Write: Off-Campus Program Office, BC-115, Drew University, Madison, NJ 07940-4036; (201) 408-3438.

Northwestern University's Ethnographic Field School (June 21-August 14) is an opportunity to learn about the Navajo or Hispanic cultures of New Mexico and Arizona by designing independent research projects. Write or call: Professor Oswald Werner, Department of Anthropology, Northwestern University, Evanston, IL 60208; (708) 491-5402 or (708) 328-4012, evenings.

Historical Archaeology Field School at Historic St. Mary's City, Maryland will focus this season on an unknown brick foundation that may be a 17th century Jesuit school. The ten-week intensive field school begins June 10. The public can volunteer to excavate throughout the summer and conduct lab work in the winter. Write: Dr. Tim Riordan, Archaeology Program, Department of Research, HSMC, P.O. Box 39, St. Mary's City, MD 20686, or call (301) 862-0974.

Fieldtrip to Mexico (May 7-25) is designed for understanding the geography and cultures, past and present, of Mexico. Write: Isabelle Champlin, University of Pittsburgh at Bradford, 300 Campus Dr., Bradford, PA 16701-2898; or call (814) 362-7500.

Quarai Pueblo field season (May 31-July 11) will explore ceramic production and trade relations between southern Plains hunter-gatherers and eastern Puebloan farmers. Application deadline: March 30. Write: Dr. Katerine A. Spielmann, Department of Anthropology, Arizona State University, Tempe, AZ 85287-2402; (602) 965-6213.

Human Origins and Prehistory in Kenya: The Koobi Fora Field School (July 18-August 28), offered by Harvard University Summer School and the National Museums of Kenya, introduces the wealth of paleoanthropological evidence at Koobi Fora and field methods in early human research. Write or call: Dr. Harry V. Merrick, Koobi Fora Field School, Harvard Summer School, 20 Garden St., Cambridge, MA 02138, (203) 481-0674 or (617) 495-2921.

Salt Center for Documentary Field Studies will document the tradition and change in Maine among American Indians, fishermen, store keepers, mill workers, farmers, and artisans. Write Salt Center for Documentary Field Studies, 19 Pine St., P.O. Box 4077, Portland, ME 04101, or call (207) 761-0660.

ANTHROPOLOGY AND MULTICULTURALISM

[Editor's Note: The following article on Anthropology and Multiculturalism is composed of two sections: an Introduction by Ruth O. Selig and excerpts from "Multiculturalism, Cultural Relativism, and Competing Perspectives on the Encounter," by Lawrence B. Breitborde, published in the March 1992 issue of *Social Education*.]

Introduction

> At an informal party, among strangers, a majority of non-Indians try to make talk with whoever will listen. They feel compelled to act, to make contact, to cover their uneasiness with talk, with action. Traditional Indians, on the other hand, will stand or sit quietly, saying nothing, watching, learning, trying to discover what is expected of them, and speaking only when they are sure of themselves. White people find their place by active experimentation, Indians by quiet alertness. One Indian said about a white acquaintance, "He'd rather be wrong than silent" (*Teaching the Native American*, edited by Hap Gilliland, et. al., 1988).
>
> Jose Ybarra and Edmund Jones are at the same party and it is important for them to establish a cordial relationship for business reasons. Each is trying to be warm and friendly, yet they will part with mutual distrust and their business transaction will probably fall through. Jose, in Latin fashion, moved closer and closer to Edmund as they spoke, and this movement was miscommunicated as pushiness to Edmund, who kept backing away from this intimacy, and this was miscommunicated to Jose as coldness. The silent languages of Latin and English cultures are more difficult to learn than their spoken languages ("The Sounds of Silence" by Edward and Mildred Hall, 1971).

During this past year, several anthropologists have addressed the issues of "Cultural Diversity" and "Multiculturalism," and the role anthropology should be playing in helping students and teachers face the challenges of an increasingly diverse and changing world. (See "Points of View: Multiculturalism and Museums," by Ruth O. Selig in *Anthro.Notes*, Fall 1992). Anthropology is not a central player in the growing debate over issues of diversity, equity, and multiculturalism in schools, or in universities as Richard J. Perry points out in his article, "Why do Multiculturalists Ignore Anthropologists." (Richard J. Perry, *The Chronicle of Higher Education*, March 4, 1992: A52). As Perry wryly states, "most anthropologists hope that we can play a part. But many of us are taken aback by our empty dance cards."

As Perry says, the issues that appear central to educators concerned with multiculturalism--"the concept of culture, cultural relativism, the interpretation of other systems of thought, and so on--have been central to anthropology throughout this century," yet anthropologists are scarcely included in the debates on university campuses across the nation. In addition, anthropologists find some of the approaches of the new multiculturalists questionable because they are based on a simplistic concept of culture and a "visceral" approach to understanding other cultures. "They communicate a sense that one can bypass tedious scholarly discussions of kinship systems, economic patterns, and food-getting strategies of "others" and go straight for what it 'feels like' to be one of them."

Perry accuses the new multiculturalists of naivete, particularly in dealing with cultural relativism that is commonly confused with moral relativism. "Cultural relativism does not...mean that all human behavior merits approval. It only means that to understand what people do, it is more useful to ask why they do it than to decide whether or not they should." Four months after Perry's article, the President of the American Anthropological Association, Annette B. Weiner, wrote a second piece for *The Chronicle of Higher Education* titled "Anthropology's Lessons for Cultural Diversity" (July 22, 1992:B2). Like Perry, Weiner decries the fact that "anthro-

pology's insights into studying and representing multiple cultural identities... are ignored by most participants in today's debates. As the multicultural controversy has gained increasing public attention, anthropologists have remained silent--perhaps discouraged by the simplistic assumptions about cultural identity promulgated by those on the right and the far left."

Weiner's article goes on to describe the anthropological understanding of culture as it developed through time, and in particular Franz Boas' contributions and battles in the early 20th century to combat ethnocentrism and racism. Boas strove to foster respect for cultural diversity in an atmosphere of hostility and determination to use public schooling to "enforce assimilation of ethnic minorities into the dominant American culture." Weiner's article ends with a clarion call to anthropologists:

> It is time for anthropologists to help other scholars redefine multiculturalism as a movement that finally takes us beyond the ethnocentrism and fear that so deeply shaped the history of this country. The challenge remains--as it was in the 19th century--to foster multiple ways of understanding cultural differences, thus creating a more equitable society without feeding the forces of racism and ethnocentrism once again.

In his article, Lawrence B. Breitborde considers at length the relevance of anthropology to the Quincentenary and to the debate over multiculturalism. Breitborde welcomes Columbus Day as a challenge for us "to help students--and ourselves--understand how groups separated by cultural differences can be integrated into a larger, coherent society." In the article, Breitborde offers an extended analysis of the concept of cultural relativism and thereby offers one concrete way in which anthropology can help teachers and students understand their increasingly diverse world.

Cultures are constantly being negotiated by the culture-bearers. Someone enculturated into one culture but operating in another is often faced with two sets of cultural rules. He or she may choose one or the other set of rules, modify either so that it is even more different in order to emphasize his or her distinctiveness, negotiate a compromise between the two, or create something entirely new. While Breitborde's article does not address the complexity of cultures in contact in a multi-cultural nation such as the United States, *Anthro.Notes* editors plan to publish on this topic in the future.

Ruth O. Selig

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CULTURAL RELATIVISM

[Below are excerpts from "Multiculturalism, Cultural Relativism, and Competing Perspectives on the Encounter" by Lawrence B. Breitborde]

Anthropology. . .provides a perspective by which [we can] make sense of the world in which we live, including the cacophony of competing views, values and perceptions. What anthropology offers is **cultural relativism**, a concept that has fallen out of favor in recent years.

The classic definition of **cultural relativism** is that perspective by which any aspect of behavior or custom is understood in the context of the culture of which it is part. Its opposite is, of course, ethnocentrism, by

which one would use the values and standards of one's own culture to evaluate (erroneously) the meaning of behaviors or customs of another culture. Ethnocentrism distorts the meaning and function of a particular custom by detaching it artificially from its immediate cultural context. Cultural relativism allows us to see how particular customs, values and beliefs fit together, providing a sense of the world as a particular community understands it.

...Anthropology brought the world cultural relativism as a corrective to ethnocentrism. It has become a concept powerful in its simplicity: Understand the behavior of other groups in their own terms and from their own perspective.

Critics of Cultural Relativism

All along, there have been critics of this concept. The concern most widely known outside universities, and the one that has often brought cultural relativism into disfavor in the current debates on multi-culturalism, is about values. When we consider behavior only in the context of the culture of which it is part, we discover time and again that there is almost always a clear sense, a rationale, for the behavior under scrutiny--that behaving makes sense in a culturally defined way. What might, from our own ethnocentric point of view, appear to be appalling, evil, or stupid, will, from the context of the culture of which it is part, make sense and may even meet the local definition of goodness and virtue. More alarming is the implication that no absolute definitions or standards exist or can exist for virtue and evil; in this sense, cultural relativism leads to moral bankruptcy.

Worse still, in assessing the value of other people's customs in terms of their own cultures, we simultaneously relativize our own customs and beliefs. Our ways of behaving, our values, and our notions of good and evil become just another way that a culture (this time, our own) has arranged things. In this view, everything is quite arbitrary. Anthropologists' gift to the world, cultural relativism, leads to a recognition of the arbitrariness of all cultures and values.

These fears are confirmed outside of anthropolgy; social critics have not spared cultural relativism or its anthropological proponents from blame for the increasing social divisiveness and moral decay they see in our society. In his recent critique of higher school education in the United States, for example, Allan Bloom singles out anthropologists and relativism for special attention:

> Sexual adventurers like Margaret Mead and others who found America too narrow told us that not only must we know other cultures and learn to respect them, but we could also profit from them. We could follow their lead and loosen up, liberating us from the opinion that our taboos are anything other than social constraints. We could go to the bazaar of cultures and find reinforcement for inclinations that are repressed by puritanical guilt feelings...(Bloom 1987, 33; cited in Klass 1991, 356).

...On-going controversies about multiculturalism in our schools add fuel to these fires. For some time, most anthropologists deployed the concept of cultural relativism in the study of cultures other than our own. The debate on multi-culturalism, however, brings cultural relativism to **intra**-societal questions. Now we must ask how our own society will be able to hang together given the myriad cultural differences that characterize the population. We are forced to confront the search for common moral standards and values among groups whose cultural differences seem at times greater than their cultural commonalities. We have lost the luxury of approaching, as relativists, groups of people far removed from us by oceans and time; we now are challenged to approach, as relativists, people with whom we share our society--our cities, our schools, and other public institutions--but with whom we may differ in appearance, language, deportment, tastes, and values.

There is a historical irony about this most recent dilemma of cultural relativism. In

its formulation in the early 20th century, cultural relativism was shaped by political events in U.S. society. To a great extent, cultural relativism was an intellectual response to "bad" science deployed to justify restrictive immigration. The anthropologist Franz Boas and his students promoted relativism as a "relativist and anti-racist 'social scientific orientation to human differences'" (Handler 1990, 253). These early anthropologists, actively engaged in establishing anthropology as an academic discipline, directed much of their energies to (if not receiving their inspiration from) events outside their universities:

> Boasians repeatedly spoke out against racism and national chauvinism, and in favor of pluralism and intercultural tolerance--in the early 1920s when American xenophobia reached hysteric proportions, during the economic depression of the 1930s, and during World War II.... Boasian anthropologists took seriously the duty of the scholar and scientist to make specialized knowledge accessible to the citizens of a modern society (Handler 1990, 253).

Now, decades later, we see relativism skewered for contributing to divisiveness within our own society, even though it was originally developed and promoted as a tool toward the formation of a U.S. society that would integrate diverse cultural groups on the basis of mutual respect and understanding.

The Original Concept of Multiculturalism

The historical social mission pursued by the early proponents of cultural relativism suggests that it might be useful for us to return to the original concept. What we discover is that as cultural relativism gained acceptability outside anthropology and outside the academy, certain of its features became diluted and misunderstood. I would suggest that by sharpening our understanding and appreciation of cultural relativism, we can recognize its continuing promise for helping us cope effectively with the challenges of a culturally diverse U.S. society.

Two features of cultural relativism should be underscored in the context of today's debates.

First, although cultural relativism forces us to search for a logic of behaviors, values, or perceptions according to the cultural system of which they are a part, this embedding of custom within its own cultural context should not be interpreted as leading to the view that cultural differences are arbitrary....

Cultural relativism leads us to see that customs are *not* arbitrary. Through such thinking, we should be led to explore anew our own customs, which we often take for granted: how does a particular value of ours, or one of our customary practices, make sense in terms of its contribution to the larger organization of our lives, to the position we occupy in society, or to external ecological or material circumstances of our community? Making our own values relative--viewing them in the larger comparative context of other groups' values-*has as much potential for strengthening our commitments to our own values as for weakening them.* Cultural relativism leads us to recognize that values and beliefs are necessary parts of a larger, complex cultural whole on which the continued functioning of communities and societies, including our own, depends. Thus, cultural relativism and anthropology can lead to an affirmation of our own way of life.

Second, in encouraging us to see the world from another group's point of view--that is, to understand what behavior, values, and perceptions mean to those who engage in or espouse them--cultural relativism leads not to a moral nihilism, but to a respect for the need of every human community (including our own) to have a cultural system by which individual and societal values are defined.

Cultural relativism, and the anthropological search for the sense that behavior makes, helps us recognize the necessity for all peoples, including groups within our society, to have some *particular* culture, some *particular* values, beliefs, and customs.

This recognition provides a basis for understanding that the cultural diversity we are part of in contemporary United States is neither ephemeral nor arbitrary. Such diversity is inevitable, given both our historical knowledge of the demography of our citizenry and our anthropological understanding of the way in which human groups function....

The cultural diversity of the U. S. population is not arguable. It is real. Our question is how to prepare students to live in a society that will continue to be characterized by cultural differences. We simply cannot begin to address this question without cultural relativism. Cultural relativism is necessary to help understand the nature of these differences, to recognize that they are real, that they are likely to persist, and that they are functional. In these terms, we must use cultural relativism to help students learn to *cross* cultural boundaries. As the distinguished anthropologist of education, John Ogbu, has written (1990:428-429, emphasis added):

> Education in the context of cultural diversity is a process in which teachers and schools bear the responsibility of acquiring knowledge of the cultures and languages of minority and other nonmainstream students and using such knowledge to educate the students from these groups. The other part, which complements the responsibility of teachers and the schools, is the willingness and efforts of students from different cultural and language backgrounds to learn and use the language and culture of the schools. ***These students...must be willing to cross cultural boundaries and this does not require them to give up their own cultures and languages...***A true cultural diversity that promotes the academic success of minority students and other marginal populations is one that permits them to cross cultural and language boundaries without feeling threatened.

Elasticity and Flexibility of our Humanity

Finally, cultural relativism underscores an essential feature of our being on which the struggle to maintain our society depends: the elasticity and flexibility of our humanity. We *can* understand another culture and experience a culturally alternative point of view without losing our own. In a world of competing viewpoints, and in classrooms where cultural diversity, improperly understood, can lead to divisiveness rather than understanding, we need to underscore the affirming nature of cultural relativism.

Lawrence B. Breitborde
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("Tales Bones Tell" continued from. p. 6)

(femur, tibia, or fibula). The measurements can then be compared with tables giving ranges in relation to sex, age, and so on.

Elapsed Time Since Death

To estimate the postmortem interval from death to discovery in weeks, months, or years is perhaps the most difficult aspect of forensic anthropology. During the first 24 hours after death, the human body goes through rigor mortis. Within a few days the body begins to decompose, and the facial features become unrecognizable. Maggots are responsible for most of the process of reducing the body to a skeleton. When the body is not fully skeletonized, forensic anthropologists or entomologists can determine time since death by identifying the species of insects feeding on the body and determining its stage of development (maggots metamorphose from egg to the adult). If the remains are skeletonized, then the forensic anthropologist considers the color, cracking, and dryness of the bones and the absence of odor.

Trauma and Disease

Blunt and sharp force trauma in bone results from the impact of a brick, gunshot, or stabbing or slashing weapon. If the individual was fatally injured and died before the affected bone began to heal, the injury is designated perimortem, meaning that it occurred at or near the time of death. Examination of perimortem trauma can suggest the type of implement used and, often, the cause of death. Certain diseases such as cancer, syphilis, tuberculosis, and leprosy can also be identified in a skeleton because the disease alters the bone.

Evidence of Occupational or Habitual Activities

Bone responds to mechanical activity and exercise through growth. Conversely, insufficient activity and immobility lead to a decrease in bone mass. In persons who engage in repetitive activities for long periods of time, bones display adaptations to such activities. Overdevelopment can be seen, for example, in baseball pitchers (humerus), archers (scapula), blacksmiths (humerus), and dancers (feet). Other examples include dental grooves from holding nails between teeth (carpenters), chipped front teeth from opening bobby pins or safety pins, and stress fractures of toes in persons engaged in martial arts.

Positive Personal Identification

Frequently, the ultimate goal of a forensic investigation is to establish a positive identification. The police or medical authorities search files of missing persons for individuals who fit the physical description supplied by the anthropologist (for example, a white female, 25-30 years of age, who has been missing for one year). Facial photographs and dental and medical records, including radiographs (x-rays), of suspected victims are then requested from family, doctors, dentists, and hospitals. In the absence of fingerprints, a positive identification can be made from comparison of features revealed in x-ray pictures taken before and after death.

Forensic anthropologists seek unique and individualizing features in the skeleton, such as a healed broken bone or evidence of a particular bone disease, and in the teeth, such as the number and shapes of dental fillings. Most identifications are achieved through comparing dental x-rays of a missing person with those of the victim. Unusual dental traits such as chipped front teeth visible on photographs also provide evidence leading to a positive identification. When all else fails, a facial reproduction, either in clay or a sketch by an artist, can be produced and the presumed likeness distributed to police agencies or news media in an effort to find someone who recognizes the victim.

Forensic anthropologists, with their specialized knowledge of comparative anatomy and skeletal variability, have become integral members of homicide and mass disaster teams that travel worldwide. Their expertise in the identification of decomposed and skeletonized human remains has led to the identification of many individuals for whom conventional means have not been successful.

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