JOURNAL ARTICLES OF NOTE

How can a teacher find time to identify the significant articles that appear each month, much less read them? The editors of AnthroNotes have decided to help by reviewing articles relevant to subjects taught in school or important for updating knowledge.

"THE NEANDERTHALS" by Erick Trinkaus and William W. Howells (Scientific American, December 1979, 241(6):118-133) presents an overview of an "emerging new picture of the Neanderthals." The authors trace the history of ideas about Neanderthals, defining their physical characteristics, time depth, and geographic spread. Trinkaus and Howells differentiate the European Neanderthals from other contemporaneous populations, particularly in Africa and Asia. The European Neanderthals had a certain anatomical pattern, often called "classic Neanderthal," but "in our view they are the only Neanderthal." Describing the massive postcranial bones, the authors maintain that the "robustness reflects muscular power rather than primitive features." The Neanderthals had "the same postural abilities, manual dexterity and range and character of movement that modern man does."

"THE YANOMAMO INDIANS: VICTIMS OF GENOCIDE, CANDIDATES FOR EXTINCTION" by Kate Winslow (American Indian Journal, December 1979, 5(12):2-7, published by the Institute for the Development of Indian Law, 927 15th St., N.W., Suite 200, Washington, D.C. 20005; single copy $3.50) provides a review of the Yanomamo's plight and the campaign to rally international support for a 16 million-acre park to be set aside for them. Included in the article is an account of the last five years of Yanomamo history, written by anthropologist Shelton Davis as part of a defense paper for the Yanomamo park proposal. The Brazilian government has counter-proposed twenty-one miniscule, disconnected Indian reserves for the Yanomamo, who live in a large territory that is being encroached upon by multinational companies looking for minerals and potential cattle ranches. The article asserts that the Yanomamo Indians are "facing perhaps their biggest battle," a fight for their very survival, "which if lost could lead to the annihilation of the largest isolated group of Indians in Brazil."

"USE OF BARLEY IN THE EGYPTIAN LATE PALEOLITHIC" by Fred Wendorf et al. (Science, September 28, 1979, 205(4413):1341-1347) details important new discoveries possibly dating the origins of food production to 10,000 years earlier than previously documented. Grains of barley have been recovered from Late Paleolithic sites firmly dated between 18,300 and 17,000 years ago. If these sites represent the first steps toward food production, old assumptions regarding the origins and consequences of the "Neolithic Revolution" must be re-evaluated. In the Nile Valley, grain was used intensively for more than 6,000 years "without any evidence for changes in settlement size, population density, or social organization." The process, in Egypt at least, neither began under adverse circumstances nor resulted in major social changes.
"CAN AN APE CREATE A SENTENCE" by H.S. Terrace et al. (Science, November 23, 1979, 206(4421):891-902) and "HCW NIM CHIMPSKY CHANGED MY MIND" by H.S. Terrace (Psychology Today, November 1979, 13(6):65-91) report one researcher's five year project trying to demonstrate that apes can form sentences. Washoe, Sarah, Lana -- chimpanzees utilizing vocabularies in visual language -- are well known to teachers of anthropology. For the past decade various psychologists, primatologists, and linguists have claimed that language can no longer be considered the exclusive domain of human beings. But are chimpanzees truly capable of learning the semantics and syntax characteristic of human language?

Terrace concentrated on one infant chimp's language acquisition, studying more than 20,000 combinations of two or more signs. Much to his disappointment, he concluded that "an ape's language learning is severely restricted. Apes can learn many isolated symbols (as can dogs, horses, and other nonhuman species), but they show no unequivocal evidence of mastering the conversational, semantic, or syntactic organization of language."

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SURVIVAL INTERNATIONAL

A Washington committee has formed a chapter of Survival International, a 10-year old London-based organization dedicated to the protection of the rights of indigenous people worldwide. The Washington committee plans to utilize the special resources of the area in working on both international and U.S. issues and will sponsor a special event in March similar to the November forum held on behalf of the Brazilian Yanomamo Indians. For further information call 676-1519.

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THE NATURALIST CENTER

Educators, naturalists, and students! Come take advantage of the unique facility called The Naturalist Center. Located in The National Museum of Natural History, the Center gives the public immediate access to collections of natural history specimens.

The Center is divided into seven areas: Anthropology, Rocks and Minerals, Plants, Insects, Vertebrates, Invertebrates, and Fossils. Each area contains local specimens (D.C. and vicinity) as well as items from elsewhere.

Instructors have had students use the well-equipped Center for research projects, self-study, and special assignments as well as for specimen identification. A few projects that students have completed enthusiastically, using the Center's resources, include: identifying American Indian projectile points and pottery sherds; classifying insects; analyzing rocks and fossils to determine the geological history of a particular area; identifying basic bones with a self-teaching manual to human osteology; comparing mammal osteology; researching extinct life of the D.C. area; identifying and zoning plants; and examining microscopically samples from local ponds and streams.

The Naturalist Center helps educators offer exciting enrichment to their curriculum while introducing students to a new facility that may encourage their further study of natural history.

The Center is open Wednesday through Saturday, 10:30 a.m. to 4:00 p.m.; Sunday, 12:00 noon to 5:00 p.m.

Linda J. Reichlin
Assistant Manager
The Naturalist Center
ANTHROPOLOGICAL TEACHING SUPPLIES

BASIC RESOURCES:

Ward's Natural Science Establishment
For free catalog, write: P.O. Box 1712
Rochester, New York 14603
(716) 467-8400

Various supplies for teaching human evolution, archeology, and human genetics are available. Materials on human evolution include: filmstrips with study guides; transparencies of primate and human skulls; and facial restorations of early man from the American Museum of Natural History. A collection of authentic stone tools with an illustrated text outlines the evolution of human stone technology and describes the function of each tool and how it was made. Plastic replicas of historic and prehistoric artifacts can be purchased. Human genetics can be investigated with lab-aid experiment kits for blood grouping and blood typing as well as with special kits for exploring human variation and natural selection. Ward's also offers osteological teaching aids -- human skeletons (articulated and disarticulated) and human skulls. Their skeleton repair service rewires and cleans natural bone skeletons.

Carolina Biological Supply Company
For free catalog, write: Burlington, North Carolina 27215, or call toll free, (800) 334-5551

C.B.S. offers an extensive selection of teaching materials for human evolution and osteology. Slide sets of early human skulls and a large selection of fossil skull replicas and half skull sets including those of the great apes are available. C.B.S. also offers primate and human skulls and skeletons, and dental castings of monkeys, apes, and man. Replicas of prehistoric and historic artifacts can be purchased including those from the study collection of the Chicago Field Museum. In addition, C.B.S. provides a wide variety of teaching materials such as North American Indian archeology sets, a pottery reconstruction set, and an Egyptian funerary game. Human genetic traits set, several blood typing and grouping kits, and PTC (taste) papers are available for sale.

ANTHROPOMETRIC SUPPLIES:

Siber Higner & Co., Inc.
1250 Broadway, New York, New York 10001
(212) 563-5213

Write for their complete listing of anthropometric instruments for sale, including anthropometer, skinfold caliper, and bone supporters.
FOSSIL REPRODUCTIONS:

University Museum, 34th & Spruce Sts.
Philadelphia, Pennsylvania 19104

Catalog of Fossil Reproductions lists a large selection of fine rubber molds, most of which were made directly from original fossil material. Many of these molds come from F.O. Barlow's "accurate and artistic plastic reproductions."

ARTIFACT REPRODUCTIONS:

Denver Museum of Natural History
Department of Anthropology
City Park, Denver, Colorado 80203
(303) 575-3964

Paleo-Indian materials and some Old World reproductions are available from their museum collections.

Hubbard Scientific Co.
Northbrook, Illinois 60062
(312) 272-7810

Write for their free catalog of Old and New World artifact reproductions.

Bruce Bradley
P.O. Box 834, Oracle, Arizona 85623
(602) 896-2577

Teaching collections of stone reproductions of Old World Paleolithic and New World Paleo-Indian artifacts.

ANTHROPOLOGICAL FILM RESOURCES:

Anthropology Films. Extension Media Center, University of California, Berkeley, California 94720.

Documentary Educational Resources
5 Bridge St.
Watertown, Massachusetts 02172

Anthropology films and study guides for classroom use.

Films as an Aid to Archaeological Teaching, 1st ed., 1972.
The Archaeological Institute of America
260 West Broadway, New York, New York 10013
Catalog price: $1.50


National Geographic Society
Washington, D.C. 20036

Request The National Geographic Educational Services Catalog.

The Pennsylvania State University
Audio Visual Services, Special Services Bldg.
University Park, Pennsylvania 16802
(814) 865-6314

Write for the catalog, Films: The Visualization of Anthropology, 1980.

FILMSTRIP REVIEW

A new filmstrip cassette set, "Mammals, Primates, and Man," may be of interest to secondary science or social studies teachers. Part I, "The Family of Primates", traces the major developments in the evolution of animal life and describes the characteristics unique to mammals and primates, including man. Part II, "The Family of Man", explains the adaptations primates have made to live successfully in their ecological niches. Characteristics such as stereoscopic vision, large cerebrum, and speech are stressed. Recent fossil remains of Australopithecus afarensis discovered in 1975 by Donald Johanson are discussed in detail. The filmstrip set is available from Educational Dimensions Group, Box 126, Stanford, Connecticut 06904, for $60. A 30 day preview can be requested.

Frederick Hardy
Montgomery County teacher
ODYSSEY SCHEDULE

April 6: Seeking the First Americans*
April 13: N'aii, The Story of a !Kung Woman*
April 20: Franz Boas*
April 27: Shipwreck: La Trinidad Valencera

May 4: The Incas*
May 11: Ongka's Big Moka
May 18: Other People's Garbage*
May 25: Masai Women
June 1: The Chaco Legacy*
June 8: Cree Hunters of Mistassini
June 15: Key to the Land of Silence
June 22: The Sakuddei

ODYSSEY programs will be shown on public television, Sundays, 8 p.m. EST. Check your local listings. Each film is repeated the following Saturday at 8 p.m. EST.

* * * SEEKING THE FIRST AMERICANS * * *

Discussion Questions:

1. Who were the first Americans? Where did they come from and when? Why don't we know the answers?

2. Why are archaeologists searching in Siberia, Alaska, and Northern Canada for clues to the origins of the first Americans?

3. What qualities do you think make a good archaeologist? What skills and training would be useful to an archaeologist searching for early humans in America?

4. Dennis Stanford states at one point in the film: "For years we've been looking on 11,000 year old terraces. What have we been finding? 11,000 year old sites -- isn't that odd?" How do expectations and preconception determine what an archaeologist finds? Cite evidence from the film that chance discovery and carefully reasoned looking each play a role in successful archaeological work.

5. Dennis Stanford and Vance Haynes differ on two crucial questions. Where did Clovis technology originate? How did it spread across the Americas in less than one thousand years? For each of these questions, ask students to explain the issues being debated

the spring issue of Anthro-Notes will include questions and activities for the films to be viewed May 18 and June 1.
Further Activities:

1. Have students save all bones (meat, fish, poultry) from a week of meals at home. They should roast half the bones at 300° and boil the other half (1/2 hour). Bring in both halves in 2 plastic bags. Exchange bags with a classmate and then examine the contents. Identify what animal each bone came from. What part of the animal is the bone from? Is the bone cut or broken? Are there any knife marks or tooth marks? How are the boiled bones different from the roasted ones? Could you tell if people roasted or boiled their meat? Students with dogs at home could allow the family dog to chew on some large bones. Students then examine the resultant markings.

2. With students, research wild plant foods in your area and design a dinner menu. Call the Audubon Society or National Park Service for books or tours of edible wild plants. What animals were in your area when the first Europeans came?

3. With fifty feet of shelf paper, construct a time line of important events marking human occupation of the North American continent from 50,000 years ago to the present with one foot equaling 1,000 years. (Or, with 12.5 meters of paper, 25 centimeters equals 1,000 years, 1 centimeter equals 40 years.)

*N'AI: THE STORY OF A 'KUNG WOMAN*

Discussion Questions:

1. What does N'ai remember from her childhood which illuminates traditional San life? What were the sweet memories? The uncomfortable memories?

2. What is N'ai's attitude towards marriage? Compare her view to that of eight-year olds in American society.

What is the economic justification in the film for arranged marriages? Why is N'ai's view of marriage different from that held by popular American adult culture? What other institutions fill the roles in N'ai's life that in our life are filled by marriage?

3. What is the evidence in the film that traditional San life was closely tied to nature's cycles? What advantages might San people see in attaining a more 'modern' lifestyle, and what disadvantages?

4. How do men's jobs and lives differ from those of women in 'Kung society? How independent were women from the control of men in N'ai's youth? In her changed adult life at Tsumakwe? Did the 'Kung have more or less individual freedom than we do?

5. Discuss how religion and healing were intertwined in 'Kung life. How is our treatment of a sick person different from that of the 'Kung? How is it similar, particularly for children?

Further Activities:

1. Have students record what foods they eat for a week, together with approximate amounts. (Calories can be calculated from a calorie chart, if desired.) How much of the food was from plants and how much from animals? How many different kinds of plants and animals were eaten? What is the original country where each of these foods grows or was domesticated in ancient times? If students had to survive for a week on the wild food available to them within a five mile radius of their home, what plants and animals could they eat?

2. Interview a parent or a grandparent about their childhood and their adolescence. Ask about the technological, social, religious or moral, and ethical changes he/she has experienced since childhood. In which ways was life preferable then? Now? What was responsible for the changes? Were they avoidable?

3. Hold an ethical debate on the future of the 'Kung, with class members taking the roles of the San, the army, the local farmers,
the government, the anthropologists. Are "whites" wholly to blame for the lot of the !Kung? Could their fate have been avoided? Is this a reasonable price to pay for the economic progress of a majority? What responsibility does the government have toward the San? Can you think of a way to improve their situation while respecting their cultural values? What are the most important guidelines for the government to follow? Is the hunting and gathering way of life doomed for the San?

** * FRANZ BOAS * * *

Discussion Questions:

1. How did Boas' personal experiences affect his view of the Eskimo and Kwakiutl? How did he become an anthropologist? What is an anthropologist?

2. What were Boas' views on race? Why were they important in his day?

3. Why is Boas considered a great anthropologist and an intellectual giant by his colleagues? What, if anything, do the students admire about Boas? Are there any intellectual giants in our society today? Who? If not, why not?

4. Ask students if they would like to be anthropologists? Which cultures fascinate them the most, and why? Have they visited other cultures? What differences were most striking? What was the same? Having seen the film, how would they study another culture?

5. Why is it important to study other cultures? What is the value of anthropology in understanding human differences? In understanding our society, and ourselves?

6. What is a potlatch? What function did it serve? Why did the Canadian government outlaw this practice? Was the government right to pass such a law?

Further Activities:

1. Have students design a museum exhibit case utilizing objects to illustrate American life in the twentieth century. What would they choose? How would they display these objects? What aspects of life would be difficult to show?

2. Have students bring in newspaper or magazine photographs which convey actions or sentiments without the use of words. Analyze what clues and details in the pictures reveal what is going on. Discuss why people from other cultures might misinterpret the meaning of the photographs.

3. Have students film or photograph a school activity. Show the film or photographs first to the participants in the activity, then to a group of non-participants. Compare their accounts of what is in the film or pictures. How important is it to be a participant-observer in what you are photographing?

4. Have students research the role of totem poles or masks in Northwest Coast Indian societies. Then have each student make a totem pole or a mask reflecting the important groups to which he or she belongs.
THE INCA EMPIRE

Discussion Questions:

1. It was "easier for the Inca to establish their settlements high up in the Andes than for the archaeologists to now do their kind of work". What are the advantages and disadvantages of the Andean environment for an Inca? a farmer today? an archaeologist?

2. Why is the road system a key to the achievements of the Inca? How did their road system differ from the construction and function of our Interstate Highway system?

3. The Inca people paid no monetary taxes or tribute. How then did the Inca government have the resources to govern? Which system do you think works better, ours or theirs?

4. How did the Inca cities differ from your students' concepts of a city? How did these cities help the government harness a huge population to build an empire? What other methods of integration did the Incas use? Why were the cities abandoned so quickly after the Spanish came?

5. The Inca had no writing system. How did they keep records? What records do your students think were the most important for running their empire? Writing is often considered one of the hallmarks necessary for a civilization. Since the Inca Empire lacked writing, do the students consider the Inca Empire a civilization? Why, or why not?

6. Have your students imagine that the United States is conquered in 1986. Two hundred year later, in 2186, archaeologists start to excavate the area where your students live now. What will the archaeologists find? What won't they find? What won't archaeologists ever be able to find out about Inca life?

Further Activities:

1. Have students construct a large-scale relief map from Quito, Ecuador to Cuzco, Peru. Where and how would they construct a road system? What are the engineering problems?

2. Have students study the regional and national transportation networks in and out of Boston, St. Louis, Denver and Los Angeles. How have changing transportation systems affected the course of American history?

3. Have students read and discuss Stephen Vincent Benet's short story, "By the Waters of Babylon", in which a young boy discovers the "American civilization" in the future, long after its demise. Compare Benet's view of American civilization with the film's view of the Inca civilization.

4. From research, have students draw a mural or construct a model of Machu Picchu or Cuzco in Inca times.

5. The film presents a benevolent account of the Inca Empire. Have students read other sources to determine the acceptance of this viewpoint. What accounts for the differences in interpretation?

6. Have students research what technology in the past history of the United States could help us today cope with our energy shortages?
UPCOMING EVENTS

Mar. 5: "Alexandria Social History: Methods and Sources" by Dr. Philip Terrie. Seminar takes place at The Alexandria Archaeological Research Museum located on the 2nd floor of the Torpedo Factory on Union St. at 8 p.m.


Mar. 21 & 22; 28 & 29: "The Legacy of Margaret Mead". A special symposium at The American University, coordinated by Dr. Philleo Nash, will examine Margaret Mead's contributions to anthropology through her major works and films. Guest speakers who have known and worked with Dr. Mead will participate in the seminars. For further information and registration forms, write to the Office of Conferences and Workshops, Division of Continuing Education, The American University, Washington, D.C. 20016, or call (202) 686-6806. Participants can receive credit upon completion of additional written essays.

Mar. 24: "Excavations at a Conestoga Indian Grave Site, Lancaster County, Pennsylvania" by Dr. Jay Custer. Discussion takes place in the Archaeology Laboratory at Marist Hall, The Catholic University of America at 7:30 p.m. For further information and schedule of future talks, call Tim Thompson at 635-5080.

Mar. 26: "Apes and Language" by Dr. Thomas Sebeok. Anthropology Talk in Woods Hall, Room 0104, University of Maryland at 4 p.m.

April 2: "Hypertension: Can Anthropology Lower Blood Pressure" by Benjamin Amick. See March 26.

April 2: "Patterns of 19th Century Dietary Changes on the 500 Block in Alexandria, Virginia" by Dr. Thomas Davidson. See March 5.

April 8: "Torngat, Archeology at Labrador's Arctic Gateway" by Dr. William Fitzhugh. Smithsonian Resident Associate Program. For information call 381-5157.

April 17: "Wolves and Bison, Elephants and Archeology; New Clues and Old Bones" by Gary Haynes. See April 8.

April 27: "Cultural Identification of Spanish Speaking Immigrants: Traditional verses Nontraditional" by Dr. Rita Ailinger. See March 18.

Eighth graders at Newport Middle School are discovering anthropology mixed in with geography this year. Each unit of study relates to an anthropology topic as shown above. We hope this exposure to geography and anthropology will increase students' awareness of how these social sciences interrelate.

During the Introduction, students note characteristics they associate with humans, writing their own definition of man and relating the study of humans to geography, anthropology, and other social sciences. The Arctic unit focuses on human adaptation to environment through the use of tools, both traditionally and today.

In the Soviet Union unit, students study life in the Soviet Union and describe socialization into the culture. The Middle East unit incorporates a study of evolution. Students define what a theory is and explain various theories of human evolution in relationship to Middle Eastern history.

The study of China centers around medical anthropology. Students list the characteristics of the medical systems of the United States and China and discuss the differences of modern and traditional medical practices. A father of one student was part of a medical team visiting China in the mid-1970's. In a two day presentation, the student brought in a "barefoot" doctor's bag, showed 200 slides on China, and displayed acupuncture needles. During the unit, students talked about their families' medical practices. They also prepared comparative charts on the medical practices of China, their own family medicine, and folk medicine in the United States.

The last topic of the year, Urban Anthropology, parallels the study of Europe, Canada, and the United States. Students list the elements of a city and categorize elements of an urban area. As a culminating activity, students plan a new city which tries to eliminate problems common to today's cities and meets more of the people's needs.

So far this integration of anthropology and geography is working well. We have just completed the China unit and student interest in geography seems quite high indeed.
DYNAMICS OF EVOLUTION HALL

A movie showing variation in human facial features. A kitchen swarming with three generations of cockroaches. Hundreds of plant and animal specimens from museum research collections. These are some of the dramatic exhibits in the Dynamics of Evolution Hall that opened in May 1979 in the National Museum of Natural History. Instead of exhibiting fossil material to illustrate the history of life on earth, this hall explains how evolution works.

What are the mechanics of the evolutionary process? By what methods does natural selection work? Once a species becomes distinct, how is it kept so? The Dynamics of Evolution Hall reveals how inherited traits create enormous variation in living things and how the environment acts on those variations to select species best adapted to survive.

Natural selection influences all living things. Anthropology teachers will find human material incorporated in several topics: population potential, human genetics, variation, sickle-cell anemia, and ancestry. All exhibits in the hall are based on scientific research.

Teachers who wish to conduct their own tours of the hall may write (Scheduler, Office of Education, Room 212, National Museum of Natural History, Smithsonian Institution, Washington, D.C. 20560) or call (202) 381-6135 for pre-or-post-visit materials and suggestions. Tour objectives might be built around the following themes:

*how the evolutionary process works for all life forms

*how the environment selects those who will survive

*different aspects of human variation

Education specialists in the Office of Education are available most weekday afternoons to help teachers with suggestions for using the hall. A teachers’ guide to the Dynamics of Evolution Hall is available.

Guided tours of the hall may be scheduled by calling (202) 381-6135. Lesson tours are designed for junior and senior high school students.

A tour of this hall can tie into other museum exhibits and tours. Museum worksheets are available on the History of Mammals (fossils) and Comparative Osteology (skeletons of living animals) for students to use on their own. Other guided tours relating to the evolution theme are: "The Emergence of Man", "Prehistoric Life", "Monkeys, Apes, and Humans", and "Comparative Osteology of the Vertebrates".

Rebecca Mead
Education Specialist
ANTHROPOLOGY FOR TEACHERS PROGRAM

The Anthropology for Teachers Program is a National Science Foundation-funded program for science and social science teachers in the Washington, D.C. metropolitan area. It is conducted by the Anthropology Departments of The George Washington University and the Smithsonian Institution. The program consists of three parts:

1. a two-semester, tuition-free graduate credit course;

2. The Anthropology Resource Center for Teachers, located in the Naturalist Center, National Museum of Natural History, Smithsonian Institution; and

3. Anthro-Notes, a newsletter for teachers published three times a year.

Anthro-Notes and the Anthropology Resource Center are available to all teachers. The course, offered in three sections, enrolls 55 science and social science teachers from the Washington metropolitan area.

The eight-credit, tuition-free, graduate course, Anthropology 255-256, includes both physical and cultural anthropology. The course is specifically designed for secondary school teachers interested in: 1) integrating anthropology into their curricula in biology, social studies, geography, and history; 2) learning of recent research developments; and 3) meeting with university and museum specialists.

Each month the course focuses on one topic in depth. Topics for 1979-1980 include: Primate Behavior; Human Evolution; Socialization in Non-Western Societies; Anthropologists in the Field; Human Variation; Magic, Religion, and Healing; Civilizations of the Past; and Anthropologists Look at America. The course combines lectures, discussions, monthly Saturday seminars with anthropologists, demonstrations of classroom activities, films and materials, and the creation and sharing of actual teaching units.

Applications for the 1980-81 Anthropology for Teachers Program will be available in April. For application forms or further information, write Dr. Alison S. Brooks, Department of Anthropology, Smithsonian Institution, Stop 112, Washington, D.C. 20560; or call JoAnne Lanouette, (202) 381-5961; or write/call Anthropology Department, The George Washington University, (202) 676-6075.