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BIOSOCIAL PERSPECTIVES ON SCHOOL-AGE PREGNANCY

To many Americans, anthropology is a discipline with little relevance to modern life. What can the customs and social patterns of technologically simple societies in far-away places, the bones of ancient humans, the artifacts of vanished civilizations, or the biology and ecology of non-human primates have to do with the problems that beset our society today?

In actuality, anthropologists are increasingly involved in studying cultural and historical aspects of modern American society (see "Students Explore Their Community's Past," Anthro.Notes vol. 9 no. 1). One anthropologist, in particular, has brought the broadest perspectives of anthropology to bear on some of the most critical problems of contemporary

American families. Although her early research centered on non-human primate behavior and its relevance to the evolution of human language, culture, and society, Jane Lancaster's recently edited books (School-Age Pregnancy and Parenthood, with Beatrix Hamburg, Parenting Across the Life-Span, and Child Abuse and Neglect) are proof of her ability to focus her own and her colleagues' efforts on understanding and resolving current crises in family life.

Last April, Lancaster conducted her first high school seminar at Dunbar High School in Washington D.C. Her topic, "School-Age Pregnancy and Parenthood," was part of a year-long Anthropological Society of Washington symposium on the origins of human



society, held in conjunction with the school's humanities program. (Lancaster's visit to the school was funded by a small grant from the D.C. Community Humanities Council, an affiliate of the National Endowment for the Humanities.) Several members of the student audience were teen-age mothers with infants in the school nursery two floors below.

The Bio-Social Perspective

presented by Lancaster School-Age Pregnancy and Parenthood, the anthropological perspective forces us to consider "normal" family life through evolutionary and historical time, across cultural boundaries, and in other species. While evolutionary and cross-cultural perspectives are familiar to most social scientists, a biosocial perspective reflects a new interdisciplinary focus. As Lancaster and her co-editor, Beatrix Hamburg, write: "The biosocial perspective takes into account the biological and the social environments as determinants of patterns of behavior and pinpoints in which contemporary parental behavior exhibits continuities with, and departures from, patterns evident throughout human history" (p.3). Human biology, in this view, is far from deterministic, but is itself defined as a genetically limited range of possible biological responses to environmental and social variables. "Recognizing the normal, predictable environment from our human heritage and defining the resultant reaction, allows us to ask questions as to whether a phenomenon is really new and outside past experience or if it is simply one aspect of the expected variability of expression" (p.5). It is this failure to study the normative aspects of adolescence, pregnancy, and motherhood in the broadest possible biological and social perspective that Lancaster and Hamburg are trying to redress in their book. As one Dunbar student asked: "How can you figure out how to fix society's problems if you

only study the problem cases and don't look at the ones that turn out 0.K.?"

Morality vs. Biology

To the high school students in Lancaster's audience, society seems to be placing all the blame for the epidemic of school-age pregnancies on young people's declining moral standards. The message they are getting is that if teenagers today could just say "no" until marriage, the problem would disappear. While this may be true, studies of adolescent biology in historical and cross-cultural perspective reveal that human teenagers as a group have never had to say "no" for quite so long.

For most pre-industrial societies, including those in our own past, the interval between menarche (onset of menstruation) and marriage is less than to four years, while industrial countries, the interval has expanded to eight years or (Whiting, Burbank, and Ratner 273-301). The increasing gap is due as much to a declining age at menarche as to an increasing age at marriage. Furthermore, girls are now fertile throughout the greater part of this expanded "maidenhood," rather than only at the very end.

As recently as 125 years ago, the average age at menarche in Scandinavia, the U.K., and the U.S. was between 16 and 17 years. At the time of World War I, the average age for menarche was 14.5 to 15 years. In pre-industrial societies such as the Masai and the Mbuti of Africa and the Bundi of New Guinea, the average menarcheal age is still between 15 and 18 years. In the modern U.S., on the other hand, mean menarcheal age is about 12.5 years. The combination of decreasing age of sexual maturity in developed countries and more rapid growth and increasing adult size are part of a long-term or "secular" trend. These shifts, which can be observed today in developing

countries, are thought to be largely due to improvements in nutrition, health, and other socioeconomic factors, since the trend occurs first among wealthier and better nourished groups in any society. For girls, the ratio of body fat to lean body mass and the degree of daily energy expenditure have both been used to explain why better nourished girls mature earlier, and anorexics and athletes mature later. However, genetic differences between populations also play a role.

In pre-industrial populations, as well as in the great apes, menarche is followed by a period of one or more years during which the complex feedback cycle of hormonal shifts leading to regular ovulation becomes established. This process may take as many as five years for completion. During this interval of adolescent sub-fertility, when more than half the cycles are anovulatory, a girl's chances becoming pregnant are considerably reduced. But recent studies summarized by Reiter (pp.53-76) suggest that the period of adolescent subfertility has been declining even more rapidly than age at menarche. Early maturing girls are now essentially fertile within one year of menarche rather than the 4.5 years measured for late maturing girls.

Is Adolescent Pregnancy New?

While improved socio-economic conditions have drastically lowered the age of reproductive maturity, other biological, psychological, cognitive systems, such as dental maturation or analog reasoning skills, less accelerated bу changing conditions. Cognitive systems, particular, may take as long to mature as before. Probably for the first time in human history, most girls capable of becoming mothers before they are able to function as adults. Clearly, school-age pregnancies large numbers are a relatively recent phenomenon, although later teenage or out-of-wedlock pregnancies are not.

Indeed one of Lancaster's colleagues (Vinovskis, pp. 303-322) suggests that around the time of the American Revolution the percentage of first children conceived out-of-wedlock and born within 8.5 months of marriage may have been as high as 30%! The fact that the rate was considerably lower (10% or less) in Puritan New England and Victorian America indicates that the trend towards increasing numbers of extramarital pregnancies has reversed in the past and could possibly reversed again through pressures. Even if we wanted to return women to the Victorian era, however, the increasing gap between sexual and social maturity would demand greater repression over a longer period than either the Victorians or the Puritans were able to manage.

Adolescent Pregnancy in Other Animals

Among non-human primates, reproductive maturation accelerates in captive and provisioned compared to their wild counterparts. As in humans, sexual maturity is more responsive to environment than other growth and development systems such as dental maturation. Under conditions of developmental dyssynchrony, females will experience a type of "adolescent pregnancy" at an earlier stage of dental and skeletal development than in the wild. This situation results in smaller infants and greater risk to both mother and infant (Altmann, pp. 247-271).

Adolescent Fathers

One little-studied aspect of the present crisis is the role of the adolescent father. Since reproductive maturity has always been at least two years later for males than for females, the fathers of infants conceived by older teenagers in the past were unlikely to be teenagers themselves. In most pre-industrial societies, moreover, only adult males were allowed to marry, or in the case of infant

betrothal, to take up the full responsibilities of family life. In these societies marriage was a more likely and a more successful outcome when teenage girls conceived out of wedlock. Also newly-wed couples nearly always lived in close proximity to at least one set of parents who provided important support for first-time "From and fathers. perspective of a Kwoma or !Kung, the problem of school-age pregnancy is not why are these young women getting pregnant, but why is the society so resentful and unsupportive of them" (Whiting et. al. p. 295). If more efforts could be focused on problems of teenage fathers, it might be possible to develop ways to help them develop a greater sense of responsibility for their actions.

Adolescent Pregnancy and Infant Mortality

Other concerns center around poor outcomes of adolescent pregnancy for both mother and infant. The greater likelihood of complication and death in an adolescent pregnancy is closely tied to a high incidence of low birth-weight particularly for mothers younger than 16 (Garn, Pesick and Petzold, pp. 77-93). Why are so many of these babies so small? The biosocial perspective suggests that this may be due in part to the relatively small size of young adolescent mothers. Early maturers tend to be small since early sexual maturation shortens the growth period.

Another factor is a tendency for younger mothers to produce smaller infants than older mothers even though they have the same initial weight and weight gain. Where is the extra weight going if not into the fetus? In humans maternal fat stores are critical to the successful raising of a child. Since, as Lancaster points out, human brains are only 23% of adult size at birth, (chimpanzee infant brains are 45% of adult size), the prolonged period of

lactation is essential to achieving proper brain growth. Human huntergatherers who do not have access to processed substitute foods, nurse their infants for 3.5 years on average, by time the immune system has largely matured and the brain reached 90% of adult weight although overall body size is only 50% of adult. Fat stores to sustain the greater energy costs of lactation without additional food supplies are laid down in puberty and during early pregnancy at the expense of fetal weight gain, if necessary. Inadequate weight gain or nutritional deficiency during pregnancy results in a lower birth weight infant with higher risks of complications and death.

Low birth weights are thus correlated both pre-pregnancy with weight and with weight gain during pregnancy. Young teenage mothers (13-15) tend to be smaller than average, since their early maturation has led to early cessation of growth. Additionally, more of their weight gain pregnancy during goes to functions such as maternal fat stores than to the developing baby. Infants of young teenagers, therefore, are at greater risk. This situation can only be partially mediated through improved care and nutritional prenatal counseling.

New Directions and Solutions

Lancaster reports that discussion that followed her Dunbar "was exciting and verv students asked gratifying....The questions for well over an hour and only the lunch bell stopped them." Towards the end, attention turned to solutions to the question of These adolescents current crisis. claimed to know all about contraception but often did not use it. As one of Lancaster's colleagues demonstrated, improved communication and information

RESOURCES FOR TEACHERS: NATIVE AMERICANS AND ESKIMOS

Handbook of North American Indians, William C. Sturtevant, General Editor, an encyclopedia summarizing knowledge about all Native peoples north of Mesoamerica, including human biology, prehistory, ethnology, linguistics, and history. The volumes now available are: Volume Northeast, 1979 (\$27.00); Volume 8: California, 1978 (\$25.00); Volume 9: Southwest (Puebloan peoples and Southwest prehistory and history), 1980 (\$23.00); Volume 6: Subarctic, 1981 (\$25.00); Volume 10: Southwest (non-Puebloan peoples), 1983 (\$25.00); Volume 5: Arctic, 1984 (\$29.00); and Volume 11: Great Basin, 1986 (\$27.00). order, write: Smithsonian Institution Press, P.O. Box 1579, Washington, D.C. 20013.

Indian Lands and Communities, 1985 is a three-color 20" x 30" map poster produced by the Native American Science Education Association (NASEA) that illustrates regions of federally

recognized tribes, state recognized tribes, and other tribal reservations, trust lands and communities. A copy of the map may be obtained for \$8.00 (price includes postage) from NASEA, 1228 M St., N.W., Washington, D.C. 20005 (202-638-7066).

American Indians in the United States, 1980 is a map illustrating the geographic location and population densities of Native Americans based on the 1980 U.S. Census. The black & white map, designed by Francis Paul Prucha, S. J., is 20" x 30" and available free from the Office of Public Information, Department of Anthropology, Smithsonian Institution, Washington, DC 20560.

A Bibliography of Contemporary North American Indians; Selected and Partially Annotated with Study Guide by William Hodge (New York: Interland Publishing Co., 1976). The emphasis in teaching about Native Americans has been on their traditional cultures. This approach has left students as well as teachers with little understanding of contemporary Indian life and concerns. The references listed in this



bibliography include articles, some of which may be somewhat difficult to obtain. The book covers such topics as Indian images, material culture, reservations. languages. stability and change, migration education, patterns. city living, political organizations, music. Native religion, health, American periodicals, and arts and crafts.

American Indians Today; Answers to Your Questions is a 24-page booklet written in response to the most frequently asked questions received by the Bureau of Indian Affairs. The booklet also includes a map of Indian lands, a bibliography, and other sources of information about Native Americans. Write: Office of Public Information, Bureau of Indian Affairs, Department of the Interior, Washington, DC 20245.

The leaflet <u>Information About Indian</u>
<u>Pen Pals</u>, produced by the Bureau of
<u>Indian Affairs</u>, provides a list of
Native American schools by state for
teachers who may wish their students to
correspond with Native American
students. For a copy of this leaflet,
write: Public Information Office,
Department of Anthropology, Smithsonian
Institution, Washington, D.C. 20560.

The North American Indians in Early
Photographs by Paula Fleming and Judith
Luskey (New York: Harper and Row, 1986,
\$35). This is a unique collection of
over 200 black and white photographs
documenting the history of Indian and
White relations, both peaceful and
turbulent. The book also traces the
evolution of photographic techniques
and includes short bibliographies of
over 200 important photographers of
Indians. Many of the photographs come
from the Smithsonian's former Bureau of
American Ethnology collection and are
published here for the first time.

The Smithsonian Book of North American Indians Before the Coming of the Europeans by Philip Kopper. Smithsonian

Books, 1986. (\$39.95, \$29.97 for SI members) A well-illustrated overview written for the general public on the pre-Columbian cultures of North America. To order, write or call, Smithsonian Books, P. O. Box 10229, Des Moines, IA 50381, 1-800-247-5072.

The Webber Native American Resource Center is expected to open June 1987 in Hall 3 of the Field Museum of Natural History in Chicago. The Center provides a wide variety of resources teachers. students, and the general public. Materials include periodicals, curriculum aids. maps. photographs, audio and visual tapes, activity boxes, and collections artifacts.

Pitengnaqsaraq is a Yup'ik Eskimo Subsistence Board Game designed and produced by the Lower Kuskokwim School District, Bilingual/Bicultural Department. Although it is printed entirely in Yup'ik, English-speaking players can quickly grasp the concept of the game and begin to learn the limited Yup'ik vocabulary by association with drawings. The game, which simulates the traditional Yup'ik subsistence system, requires a combination of judgement, luck, and foresight to allow players to survive through the year. For more the information, write to Kuskokwim School District, Bilingual/ Bicultural Department, P.O. Box 305, Bethel, Alaska 99559. Price is \$50 plus postage.

Teachers Resource Guide: North American Indians is available from the Public Information Office, Department Anthropology, Smithsonian Institution, Washington, DC 20560. The packet contains a general bibliography American cultures information leaflets on origins, languages, crafts, food, photographs, and teacher resources.

TEACHER'S CORNER: BAFA BAFA: A GAME OF CULTURE CONTACT

How can students experience the problems that can arise when two cultures misunderstand each other? How can students experience culture shock and ethnocentrism?

For popular many years, a simulation game, Bafa Bafa, has provided one answer. R. Garry Shirts originally developed the simulation for the Department of the Navy to resolve difficulties experienced by American sailors on leave in foreign countries. Since then, high school and college teachers have used it in anthropology, social studies, and English classes. As cultural pluralism and multi-cultural concepts have gained educational prominence, the game has been used to sensitize teachers to the feelings of students from disparate cultural backgrounds. This simulation has also been useful for training in education, public administration, social work, and school desegregation. Yet, ironically, the game has been accused of sexism and ethnocentrism. However, with a few significant changes, Bafa Bafa still be used effectively.

How The Game Is Played

Bafa, Bafa takes a minimum of two (but preferably three) class periods to play. Two cultures are created, Alpha and Beta, each with simple behavior rules and a simple game. Half the students join each culture and learn its rules. The Alpha culture is a patriarchy in which women can only initiate contact with an outsider with the approval of a male, preferably the patriarch. Alphas are friendly to each other, greet each other with a hug and inquiries about each other's family, stand close to each other in conversations, and frequently touch. When playing the Alpha game, the goal is to have a good time, laugh, and slowly, not abruptly, say goodbye to each other

before playing the game with another Alpha. In sharp contrast, the Betas have brief greetings, play a competitive trading game, and use a language other than English. There are no cultural differences between the sexes.

Bafa Bafa comes with two tapes that explain the operating rules of each culture, all the necessary objects with which to play the cultures' games, and very specific discussion questions that aid in critical discussion following the simulation.

The basic procedure involves introducing, playing, and discussing the game. During the first class period, the teacher discusses the



concept of culture, divides the class into Alphas and Betas, assigns them different rooms, appoints visiting pairs and observers, and plays for each group separately the tape that explains the values and rules of politeness, and the game for their culture. In this way each culture remains ignorant of the other. The next day each group reminds itself of the rules for social interaction, begins the simulation, and sends first an observer and later visiting pairs to the other culture. During these visits, the remaining Alpha and Beta members carry on their culture's activities. Each group's goal is to determine the other culture's values and the rules of its game. Once the visiting is completed, it helpful to have students write down how they felt about being a part of their own culture, about visiting the other culture, and about playing the game. On the third day, the crucial discussion occurs with the teacher connecting students' experiences with the broader cultural significance that those experiences illustrate.

Weaknesses Of The Simulation

Despite Bafa Bafa's popularity and stimulation it provides students, the game has been criticized sexist and ethnocentric. Carol Mukhopadhyay, an anthropologist California State University at Chico, argues that Bafa Bafa is ethnocentric in that it perpetuates Euro-American stereotypes about other cultures, especially with regard to male-female relationships. Many may view African cultures and Middle Eastern cultures as patriarchal societies where women have no decision-making power, where men dominate and 'own' women, and where achievement is not valued. Anthropological research has disproven some of these stereotypes. The game may also subtly reinforce sexism. subordinate position of women in the Alpha society is obvious. But more subtly, the Beta society, where women are "equal," may suggest that when

equality is gained, warmth, nurturing, non-achievement orientations, and support from others are lost. Since this is a fear some women and men have in our society, the game reinforces those fears (Mukhopadhyay and personal communication).

The game can be changed relatively easily to avoid these pitfalls. Dr. Mukhopadhyay suggests that

one way is to ignore gender completely and just create two groups -- the X's and Y's or any label you wish--to replace the males and females in the Alpha society. This allows you to concentrate on value differences and focus on any culture/microcultures you may wish to use (e.g. ethnic groups within the U.S., different cultures outside the U.S., genders, class differences, perhaps teachers and students within the school system). You specific groups select represent the X's and Y's ahead have of time or not specific demarcation.

Students Discuss Their Reactions

The discussion on the third day is critical. The Bafa Bafa kit gives some useful discussion questions students' suggestions, emphasizing personal reactions. For example, a teacher might ask: How did the Betas appear to the Alphas when they visited the Beta cultures? How did you feel when you visited the Alpha culture? Which culture would you prefer to live in and why? Is it possible to talk about another culture without using evaluative terms? Alphas often describe Betas as greedy, aggressive, and unfriendly. Betas find the Alphas to be hostile to outsiders although friendly to each other. Both groups usually find themselves ill at ease when visiting and are often ignored or expected to understand the other culture. Teachers have found the game a very helpful way to have students experience culture shock (anger, frustration, disorientation, and insecurity), an emotional attachment to their own culture's values to the exclusion of outsiders values, and the development of stereotypes (Webber and Fiske). Mukopadhyay, in her article (p. 103), recommends linking these feelings to an understanding of culture with questions such as:

- "1) What do you think were the goals of the game for the Alphas? For the Betas? How did this affect their behavior?
- 2) What kinds of things did you do to make it less uncomfortable in the new culture? What could you have tried?
- 3) What cultures exist today that are like the Alphas? like the Betas?
- 4) Would [you describe] American schools [as] more like Alpha or Beta microcultures? What would schools organized along Beta lines be like? along Alpha lines? How might these different value systems affect student behavior?
- 5) Which aspects of the simulation are NOT like real life/culture? Are the alternative value systems presented (social vs. achievement) necessarily in opposition? Why is the seeming contentment of the women among the Alphas unrealistic? Do egalitarian societies have to sacrifice achievement and individual striving?
- 6) Could some new students in school feel the way you did while playing the game? How might children from minority ...families feel? (Most schools are designed to transmit the traditions of the most pervasive culture [in the community]....
- 7) On the basis of this experience, what guidelines might you formulate to help reduce culture conflict generally?"

Bafa Bafa provides experiential learning to help students discover how easy it is to misunderstand the motivations of people in another culture, to think other people are hostile or rude, to be unable to communicate, and to fail to grasp the proper or polite rules of behavior in another culture.

Resources:

Bafa Bafa is published by Simile II, 218 12th St., P.O. Box 910, Del Mar, CA 92014, (714) 755-0272. A simpler version, Rafa Rafa, is designed for elementary school age.

C. Mukhopadhyay. "Teaching Carol Cultural Awareness Through Simulations: Bafa." In Integrating Multicultural Perspectives Into Teacher Education; A Curriculum Resource Guide by Hilda Hernandez and Carol C. Mukhopadhyay (Chico: California State University, 1985). Available from the Office of Professional Development and Sponsored Projects, California State University, Chico, CA 95929. Cost: \$14.67 (includes mailing). Make check payable to: University Foundation. "Teaching About Cultural Awareness; Bafa Bafa." This 20-minute videotape shows how to use the game without the ethnocentric and sexist Contact: H. Hernandez, Department of Education, California State University, Chico, CA 95929.

Kikanza Nuri Webber and Shirley J. Fiske. "Bafa Bafa: Teaching Multicultural Concepts Through Experiential Methods," In Anthropology and Multicultural Education: Classroom Applications (Publication 83-1, Anthropology Curriculum Project), edited by Yolanda T. Moses and Patricia J. Higgins. The University of Georgia, Department of Social Studies Education, Athens, Georgia 30602. Cost: \$5.00.

JoAnne Lanouette

TEACHER'S EXCHANGE

If you would like to share your teaching ideas or your favorite curriculum units, films, books, and games, please let us know. As space permits we would like to include a selection of them in Anthro.Notes. Below are a few such items submitted to the Anthro.Notes editors:

Primatology: A Topical Bibliography of Books compiled by Dr. Leslie E. Sponsel, 1986 (\$6.00). This 22-page bibliography (including a preface and table of contents) surveys the field of primatology with a focus on studies of behavior and ecology of free-ranging non-human primate populations in their natural, social, and ecosystemic contexts. Write: Dr. Leslie E. Sponsel, Department of Anthropology, University of Hawaii, Honolulu, Hawaii 96822.

"The Ancient Mariners," an Odyssey program about the work done by the Institute of Nautical Archaeology. The film is visually appealing, gives an excellent summary of ancient seafaring, and shows the work of nautical archeologists. Available for rental and sale in 16 mm from: Sue Marshall Documentary Educational Cabezas. Resources, 5 Bridge St., Watertown, MA 02172; (617) 926-0491. Available on Video, videocassette from PBS Building, 475 L'Enfant Plaza West. S.W., Washington, D.C. 20024; (800)424-7963. Submitted by Beth Braznell. Staff Assistant, Nautical Archaeology, University. ["Selected A&M References on Underwater Archeology," a two-page bibliography prepared with the assistance of George Bass, head of the Texas A&M Nautical Archeology Program, is available free from the Public Information Office, Department Anthropology, Smithsonian Institution 20560.



Forensic Anthropology: Not for Adults Only by Peggy C. Caldwell, science and consulting forensic anthropologist in New York City. This forensic anthropology, exercise on for designed young people, the Brearley School. developed at Interested teachers can write to Ms. Caldwell at The Brearly School, 610 East 83rd St., New York, NY 10028. This activity was published in the 1986 Teaching fall issue of Newsletter, Anthropology pre-college publication available from the Department of Anthropology, Saint Mary's University, Halifax, Nova Scotia B3H 3C3.

"Cultural Change," is a teaching unit on creating a hypothetical society. This exercise in creative thinking and writing can be used for anthropology, geography, world cultures, sociology, and English classroom teaching. For a description of this activity, write: Carl F. Herman, Supervisor-Social Studies, Guilderland High School, Guilderland Center, NY 12085.

TEACHERS TALKING

Does the study of anthropology affect teachers--their values and beliefs, their teaching, their own personal and professional lives? Do teachers pass on that exposure to their students by integrating it into students' learning?

Teachers in Maryland, Virginia, Washington, D.C., and Wyoming provide one resource pool for answers to these questions. From 1978 to 1985 the Smithsonian Institution's National Museum of Natural History carried out intensive anthropology teacher training programs in cooperation anthropology departments at the George Washington University and University of Wyoming. For five years, academic courses specifically designed for pre-college teachers involved over 350 teachers with anthropology. During each year's program, monthly and year-end evaluations were submitted by teachers. For the Wyoming program, a professional outside evaluator

conducted interviews and designed questionnaires, and the program director conducted interviews with participants one year after the program. In the fall of 1985, a follow-up questionnaire was sent to all graduates of the two programs that asked for further evaluation of anthropology's continuing impact on these teachers' lives and teaching.

From these sources, a composite picture has been gathered, although a highly impressionistic and subjective one. "Teachers Talking" offers an inside view of some teachers' assessments of the importance of anthropology to their personal and professional development and to their students.

1. How have you pursued anthropology outside your classroom?

"I worked one summer in the preservation lab of the Page Museum in Los Angeles where the finds of the La Brea tar pits are housed."

(continued)



"In 1983 I was awarded a Fulbright Summer Seminar to study the history and culture of India, during which I visited sites all around India. It was a very intense, exciting six weeks."

"I am a teaching supervisor for a summer school archeological seminar for secondary school students."

"I participated in Crossroads Africa the summer after my involvement with the SI/GWU Anthropology for Teachers Program."

"I spent a summer traveling to archeological sites in New Mexico."

"I participated in the George Washington University summer session in Mexico visiting and studying archeological sites. Also, on a trip to Ephesus, Turkey, it was exciting to see so many different stages in the unearthing of a city."

"I have been involved in digs in Greece, have served as a member of the Alexandria Archaeological Commission, and am anticipating a summer program with Earthwatch."

"I presented workshops on classroom anthropology and archeology for the National Council for the Social Studies annual meetings."

"In 1983 I won a Fulbright scholarship to Israel to study Israeli history and culture."

"Research I did on a Schnapps (liquor) bottle excavated from a city archeology site in Alexandria grew into a study of local history of the city of New York from 1830-1860 and national attitudes toward the use of alcohol in that period--all part of further graduate work."

2. In what ways has anthropology influenced you?

"Studying anthropology has broadened my horizons, given me new subject matter for my curriculum, and provided multiple new materials for use in my classroom."

"As my 8th grade student, David, said to me: Learning about anthropology has given me a whole new outlook on the meaning of life."

"My appreciation of other cultures has increased tremendously....I feel I understand much more about Native Americans now than I ever did before."

"I see anthropology all around me--in people, in magazines, T.V.--and I assimilate more of the information around me in a cultural context."

3. In what ways have you incorporated anthropology into your teaching?

"My American history classes use colonial inventories, wills, and stratigraphic and archeological drawings to lead them into a greater awareness of colonial social structure."

"Anthropology is now my opening unit for my Ancient and Medieval history class, a unit in which students learn about human evolution and the beginnings of various cultural regions throughout the world."

"Working with an 8th grade science teacher, I have designed a small population study for Rock Creek cemetary, looking at mortality rates by sex and age in the 18th and 19th centuries."

"My class studies primate behavior, communication, and group interaction at the Washington Zoo and on the Janney school playground."

"I teach a long primate unit in my Biology II class and also incorporate studies of the Nacirema."

"In my archeology/anthropology elective, my students do an anthropological 'fieldwork' project with the English as a Second Language (ESL) classes at the schools."

"I have taught 10th-12th graders a one-term anthropology elective for the last five years. For four years I taught a required Introduction to Society (cultures) class to 8th graders. Also, I teach anthropology in my 9th grade ancient history class and my 7th grade geography class."

4. Why does anthropology belong in the pre-college curriculum?

"My biology classes all have an evolutionary theme, and with anthropology my students can gain a clear picture of the biological and social evolution of man and the other primates."

"I believe anthropology is an important (and neglected) area of knowledge and understanding to pass on to young people. Its greatest importance is that it broadens people's objective understanding of their own culture and themselves—helping them, we hope, to become less ethnocentric."

"Learning should be inter-related. Anthropology can provide the unifying thread in the core areas of language, social sciences, math, and science."

"[A study of anthropology means] gaining the ability to look into the faces of our own ancestors in order to see our own reflections."

"Because of the diversity of cultures within our country, understanding and appreciation of the origin and development of social groups are essential. New immigrant groups (Haitians, Cubans, Southeast Asians)

are coming to the U.S. in unprecedented numbers. These newcomers with disparate backgrounds and mores require from us knowledge of an anthropological nature if we are to be truly accepting."

"Because [anthropology] gives kids a sense of the whole picture. It allows for an integrated, meaningful study of social science, history, and science in a contextual way so students are not learning facts piecemeal, but seeing how their learning all fits together."

Ruth O. Selig



(continued from p. 4)

sharing between mothers and daughters on this subject has little effect on the daughter's subsequent behavior (Furstenberg et. al., pp. 219-243). Knowledge of contraception was not an issue here, but the determination to use contraceptive methods was. How can these adolescents be motivated to say "no" to pregnancy until they are socially mature?

Adolescence is now a stage of life equal in length to childhood, but with few defined responsibilities for innercity youth, other than waiting to grow up. Some students cited Harlem counterparts who were in a program that guaranteed a college education if they finished high school. This program was seen as one example of how new demands and expectations and community support can make a difference in adolescent behavior. In other cultures, adolescence is seen as a time of exploration both geographical and social frontiers, when peer groups are often separated from the rest of society and given unusual freedom and resources. Even in the industrialized countries of western Europe, where adolescent pregnancy is far less of a problem than in the U.S., adolescence is a more clearly defined stage of life, a time to explore and enjoy oneself free of the heavy responsibilities of adulthood. European families at all economic levels make major sacrifices to provide adolescents with opportunities travel, to serve their communities and nations, to socialize among themselves, and to have fun. Access to appropriate education. whether academic job-centered, is also guaranteed by many European countries.

Present "solutions" to the crisis of adolescent pregnancy emphasize the negative rather than the positive. We tend to focus on the problem rather than the solution. In 1985, while officials argued over providing counseling and information on



contraception to school children, 52% of the ca. 12,000 teen-age pregnancies in the Washington area ended in abortion (Washington Post, 4/21/87), and more than half of the new babies in the District of Columbia were born to single mothers. Although a return to a Victorian moral climate would certainly make a difference, we simply cannot expect our children to behave as we supposedly did, when they are biologically different from us in their pattern of maturation.

Jane Lancaster's work suggests that the increasing gap between biological and social maturation, together with a dramatic increase in the number of single-parent families, has created an entirely new ball game for today's adolescents. whom we are trying unsuccessfully to coach by the old rules. These studies and the Dunbar students are both telling us, that if adolescents are to win at this game, they need a new definition adolescence, with new kinds of societal and familial incentives and support aimed at peer groups of both sexes. If both boys and girls could see clear their alternatives to current lifestyles, perhaps they might be more likely to say "no" to adolescent pregnancy.

AMERICANS BEFORE COLUMBUS: ICE AGE ORIGINS

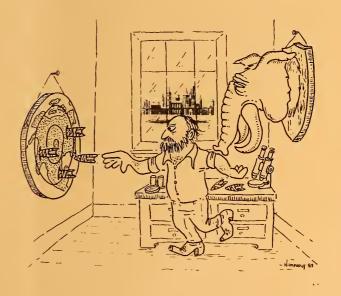
Within the scientific community, there is general agreement that the first human beings came into North America from northeast Asia across the land bridge where the Bering Strait now separates Siberia from Alaska. There is, however, great disagreement as to when, how, and why these people migrated to the Americas. On Saturday, September 26, "Americans Before Columbus: Ice Age Origins," a public symposium sponsored by the Smithsonian Institution, will explore the issues and controversies arising over the question of the first human occupation of the Americas. Distinguished scholars will present research on questions such as: Who were the first Americans? Where did they come from? When did they arrive in North America? What kind of environment did they encounter? How did they affect the environment?

The purpose of the symposium is to promote a better understanding of the complexity of early human occupation of the Americas. Evidence of early life in America will be discussed in non-technical terms. Current ideas on late Ice Age environments, plants, and animals will be presented, and the audience will be encouraged to participate in debating the issues surrounding controversial evidence.

The participants include Stephen Porter, Jared Diamond, Richard Morlan, James Adovasio, Vance Haynes, Larry Agenbroad, Paul Martin, Ernest Lundelius, Dennis Stanford, George Frison, and Donald Grayson, with an introduction by Robert Hoffmann, Director of the National Museum of Natural History.

Teachers are encouraged to bring up to five of their students. Advanced registration for this free, public symposium is required. Registrants will be provided with entrance vouchers and a reading list to prepare them for discussion. The symposium will take place September 26 in Baird Auditorium, National Museum of Natural History. For a brochure and an application, write or call Smithsonian Institution, Directorate of International Activities, 1100 Jefferson Dr., S.W., IC-3123, Washington, DC 20560, (202) 357-4794.

For those unable to attend but who would like to explore this topic further, Anthro.Notes editors recommend the Natural History magazine monthly series on early man in the Americas that began November 1986.



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