The Shared Workstation Applications Project

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CARPENTER, ALFRED. 1887. Monkeys opening oysters. *Nature* 36:53.
CHIANG, MICKEY. 1967. Use of tools by wild macaque monkeys in Singapore. *Nature* 214:1258–59.
CROCKETT, CAROLYN M., AND WENDELL L. WILSON. 1980. "The ecological separation of *Macaca nemestrina* and *M. fascicularis* in Sumatra," in *The macaques: Studies in ecology, behavior, and evolution.* Edited by Donald G. Lindburg, pp. 148–81. New York: Van Nostrand Reinhold.
GIBSON, KATHLEEN R. 1983. "Comparative neurobehavioral ontogeny and the constructionist approach to the evolution of the brain, object manipulation, and language," in *Glossogenetics.* Edited by E. DeGrolier, pp. 37–61. New York: Harwood, Academic Press.
———. 1986. "Cognition, brain size, and the extraction of embedded food resources," in *Primate ontogeny, cognition, and social behaviour.* Edited by James G. Else and Phyllis C. Lee, pp. 93–103. Cambridge: Cambridge University Press.
HAMILTON, WILLIAM J., III. 1973. *Life's color code.* New York: McGraw-Hill.
HARRIS, MARVIN. 1975. *Culture, people, nature.* New York: Crowell.
———. 1983. *Cultural anthropology.* New York: Harper and Row.
HERKLOTS, G. A. C. 1972. *Vegetables in "South"-East Asia.* London: George Allen and Unwin.
HILL, W. C. OSMAN. 1974. *Primates: Comparative anatomy and taxonomy.* Vol. 7. *Cynopithecinae* Cercocebus, Macaca, Cynopithecus. New York: Halsted Press.
HUFFMAN, MICHAEL A. 1984. Stone-play of *Macaca fuscata* in Arashiyama B troop: Transmission of a non-adaptive behavior. *Journal of Human Evolution* 13:725–35.
IZAWA, KOSEI, AND AKINORI MIZUNO. 1977. Palm-fruit cracking behavior of wild black-capped capuchin (*Cebus apella*). *Primates* 18:773–92.
JOHNSTON, FRANCIS E., AND HENRY SELBY. 1978. *Anthropology: The biocultural view.* Dubuque: Wm. C. Brown.
JONES, W. O. 1959. *Manioc in Africa.* Stanford: Stanford University Press.
KAWAI, MASAO, AND HIDEYUKI OHSAWA. 1983. Ecology of Japanese monkeys, 1950–1982. *Recent Progress of Natural Sciences in Japan, Anthropology* 8:95–108.
KAWAMURA, SYUNZO. 1959. The process of sub-culture propagation among Japanese macaques. *Primates* 2:43–60.
KING, B. J. 1986. Extractive foraging and the evolution of primate intelligence. *Human Evolution* 1:361–72.
KOTTAK, CONRAD P. 1982. *Anthropology: The exploration of human diversity.* New York: Random House.
MCGREW, W. C., AND C. E. G. TUTIN. 1978. Evidence for a social custom in wild chimpanzees? *Man* 13:234–51.
NANDA, SERENA. 1987. *Cultural anthropology.* Belmont: Wadsworth.
PARKER, SUE T. 1985. A social-technological model for the evolution of language. CURRENT ANTHROPOLOGY 26:617–39.
PARKER, SUE T., AND KATHLEEN R. GIBSON. 1977. Object manipulation, tool use, and sensorimotor intelligence as feeding adaptations in cebus monkeys and great apes. *Journal of Human Evolution* 6:623–41.
———. 1979. A developmental model for the evolution of language and intelligence in early hominids. *The Behavioral and Brain Sciences* 2:367–408.
PELTO, GRETEL H., AND PERTTI J. PELTO. 1979. *The cultural dimension of the human adventure.* New York: Macmillan.
POCOCK, R. I. 1939. *The fauna of British India including Ceylon and Burma. Mammalia.* Vol. 1. London: Taylor and Francis.
SHELFORD, R. W. C. 1916. *A naturalist in Borneo.* London: T. Fisher Unwin.
STRUHSAKER, T. T. 1974. Correlates of ranging behavior in a group of red colobus monkeys, *Colobus badius tephrosceles. American Zoologist* 14:177–84.
WHEATLEY, BRUCE P. 1980. "Feeding and ranging of East Bornean *Macaca fascicularis*," in *The macaques: Studies in ecology, behavior, and evolution.* Edited by Donald G. Lindburg, pp. 215–46. New York: Van Nostrand Reinhold.

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17 IX 87

Nine social scientists assembled by anthropologists in an organization called Linkages (officers: Douglas White, Scarlett Epstein, Nancie Gonzalez) met for a workshop at the School of American Research in Santa Fe, N.M., in July 1987. They were funded by the Wenner-Gren Foundation to consider, in addition to their specific research programs, how best to coordinate software developments in anthropology and related disciplines. The specific focus was on contributions toward development of a workstation for longitudinal field sites and for related problems of population-based and ethnographic or cultural-historical data analysis in the social sciences. At the end of their meeting, they issued the following joint statement:

The Shared Workstation Applications Project (SWAP) has recently been established by social scientists interested in sharing toolkits (ideas and software) for managing and analyzing data. SWAP facilitates the exchange and integration of implementable analytic concepts presented in the form of software procedures. Areas of interest include historical demography, language and text processing, household/genealogical analysis, spatial analysis, social demography, time series, questionnaire development, and psychological testing.

The toolkit idea incorporates two perspectives—one substantive/theoretical and the other procedural/methodological. The first organizes modules relevant to substantive areas of analysis. The second organizes modules of algorithms that might be provided by general methods programmers. One goal is to make available collections of procedural modules cross-referenced to solutions of substantive problems. Some of these already exist, for example, UCINET for social network analysis and BMDP for statistical analysis. Areas currently being organized include genealogical analysis (Chad McDaniel, University of Maryland, College Park), spatial analysis (Doug White, University of California, Irvine), and full text analysis (Oswald Werner, Northwestern). The modules may be used in several ways. For example, a matrix inversion module may be part of a network analysis or a regression and time series, while a full text analysis may be used in decision modeling, descriptive ethnography, etc.

Several means of exchange are envisioned: SWAP columns in newsletters that discuss strategies and standards for contributions, SWAP sessions at professional meetings, SWAP meetings that bring users and program builders together for longer workshops and applications sessions, and specific projects that underwrite further developments and integration. The project provides resources to different areas of substantive analysis and pro-

motes an environment in which the community of contributors writes a "living book" to introduce social science users to the basics of modular computer software workstation usage.

Plans are under way for a meeting sometime during the academic year of 1987–88. Also planned are SWAP nights at several national and regional scholarly meetings. These will be announced in the respective newsletters of the different organizations and societies. Finally, volunteers are invited to coordinate toolkit development in areas other than those mentioned above. Anyone who would like to become involved with SWAP should contact Chad McDaniel, Department of Anthropology/Computer Science, University of Maryland, College Park, Md. 20742, U.S.A. (CKMD@UMDD).

Fact, Fancy, and Myth on Human Evolution[1]

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"Contrary to the general belief there is very little factual support for the theory of evolution"; so begins a review (Bethall 1986) of Michael Denton's (1986) *Evolution: A Theory in Crisis*. Denton's book is a rare example of rejection by a scientist (an Australian microbiologist) of evolution as the mechanism for explaining biological change and diversity and one that does not, on the face of it, invoke popular creationist arguments (see Scott and Cole 1985 and Scott 1987 for a summary). More than curious, however, is the book's notion that agreement among scientists about the factual support for evolution is wavering. Nothing could be farther from the truth. In Endler's (1986) *Natural Selection in the Wild* we find a clear demonstration that evolution and natural selection are alive and thriving in the scientific community (Cooke 1986). In fact, the vast majority of scientists generally favor evolution over other explanations for life. The recent signing by 72 U.S. Nobel laureates of a brief urging the U.S. Supreme Court to declare unconstitutional a Louisiana law requiring the so-called balanced treatment of evolution and its primary opponent, creationism, in state schools (see Palca 1986, Norman 1986) is the clearest statement by scientists in support of evolution yet produced. That this was the largest group of Nobel laureates on record ever to sign a single document (Norman 1986) clearly indicates that if there is still confusion in the public mind concerning the validity of evolution the scientific community does not share it. It is obvious from the strength of creationism that the American public lacks both scientific knowledge and general understanding of evolutionary principles, and a recent study has shown that this is true even of college students.

The study was conducted by college teachers participating in our course "Human Origins: Problems in the Interpretation of New Evidence," part of the Chautauqua Short-Course Program for College Teachers. Over a ten-year period (1974–83), teachers administered to their own students a standard questionnaire on knowledge of and attitudes toward human evolution. A total of 2,100 anonymous responses from students attending 41 U.S. colleges and universities were tabulated and analyzed statistically with the Statistical Package for the Social Sciences. The questionnaire was prepared by a volunteer group of participants in the first short course, given in 1974–75 at the Oregon Graduate Center in Beaverton, Oregon. It consisted of 72 items divided into three sections, the first designed to identify a student's basic knowledge of the evolutionary process and the supporting data, the second eliciting opinions on issues of science and religion, and the third focusing on demographic data (age, sex, year in school, hometown population size, and geographic location—East, South, Midwest, Southwest, or West).[2] Eighty-four percent of the respondents (see appendix) were under 25, and 72% were lower-division undergraduates; 60% reported having completed one or more courses in the biological sciences, and 34% reported having taken at least one course in anthropology. Respondents were distributed fairly evenly by region, with a somewhat larger proportion from the South and a somewhat smaller one from the Southwest.

Almost without exception, the responses to the first part of the questionnaire favored the scientific explanation for each of the questions posed. Percentages ranged from 23.3% for an item involving the fossil evidence for an African origin for the human species to 91.7% for an item involving the paleontological evidence that the life now on this planet probably originated on it. Ten percent of responses, however, endorsed the assertion that evolution has a goal and is directed and 38% the assertion that the Garden of Eden is the point of origin for human life and that the origin itself was an act of creation performed by God as recorded in Genesis.

Approximately 22.2% of responses reported lack of knowledge on a given question, this response ranging from 10% on some questions to nearly 50% on others.

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2. Copies of the questionnaire are available from the authors on request.