

FROM THE EDITORS

Newsletter editors are perpetually seeking assurance that there is "someone out there" and that the collective "someone" is getting what he/she/they expect (or hope for) in a professional society newsletter. Feedback is sporadic at best. General requests for information and contributions draw only a small response.

Hence, it is from a relative vacuum that editors grind out issue after issue, occasionally changing format or thrust, hoping that there is someone out there who finds enough value in the printed page to justify chopping down all those trees for paper.

We see the SAS Newsletter as more than an elaborate bulletin board for the posting of job openings and conference dates. We would like to see the newsletter functioning as a true forum for the airing and exchange of ideas, opinions, and constructive argument that are signs of a growing, vital discipline.

The strength and content of the next issues depend in large part on you. You write the RESEARCH REPORTS, the COMMENT section, and so forth. You are the "someone out there" reading this. Let us know hits from misses, strong features from weak filler, and ideas for profiles or new sections. We look forward to next week's mail.

Rip Rapp
RIP RAPP

Judy Holz
JUDY HOLZ

SAS

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NEWSLETTER

SOCIETY FOR ARCHAEOLOGICAL SCIENCES

SAS NEWSLETTER

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REMOTE SENSING IN ANTHROPOLOGY AND ARCHAEOLOGY

The Archaeology Unit of the 1985 American Anthropological Association Program Editorial Board has requested a daylong symposium entitled Remote Sensing in Anthropology and Archaeology to be held December 6th or 7th at the Washington Hilton during the 1985 Annual Meeting. The symposium will be co-chaired by Payson Sheets (University of Colorado) and Scott Madry (University of North Carolina-Chapel Hill). Topics to be addressed include ethical questions concerning the use of remote sensing in anthropology (especially Third World contexts), future technologies and directions of research, the proposed commercialization of LANDSAT, and the effects of other policy decisions on research. Many of the more active researchers in remote sensing will be participants in the symposium and an ample discussion period has been allowed.

The first number of a proposed Remote Sensing Newsletter will report on the symposium. If you wish to be included on the mailing list, please send name and address to Scott Madry, Department of Anthropology, University of North Carolina, Chapel Hill, NC 27514.

INTNL. SYMPOSIUM ON ARCHAEOOMETRY

May 19-24, 1986-25th INTERNATIONAL SYMPOSIUM ON ARCHAEOOMETRY, Nuclear Research Centre, Athens, Greece.

Topics include: prospection, provenance studies, ancient metals and metallurgy, non-metals, dating of organic materials (e.g., radiocarbon and other cosmogenic nuclides, dendrochronology, amino acid dating), and dating of inorganic materials (e.g., thermoluminescence, ESR, fission track, uranium series, archaeomagnetism). Deadline for submitted abstracts is mid-December, 1985. Contact Dr. Yannis Maniatis, Archaeometry Symposium, NRC Demokritos, 153 10 Aghia Paraskevi Attikis, P.O.B. 60228, Greece.

ENVIRONMENTS AT GLACIER MARGINS

The American Quaternary Association will hold its 9th biennial meeting on the University of Illinois-Champaign campus, 2-4 June 1986. The meeting is entitled Environments at Glacier Margins--Past and Present. Field trips to nearby type sections and archaeological sites will be held both before and after the meetings. For information, contact Wayne M. Wendland, AMQUA Local Arrangements Committee, Illinois State Water Survey, 2204 Griffith Dr., Champaign IL 61820 (217-333-0729).

INTNL. CONFERENCE ON ARCHAEOZOOLOGY

Aug. 25-29, 1986-5th INTERNATIONAL CONFERENCE ON ARCHAEOZOOLOGY, Bordeaux, France.

The conference is soliciting papers and ideas in the field of archaeozoology, defined as "the study of animal remains connected with the settlements of ancient human groups." Contact Dr. Pierre Ducos, Ve Conference ICAZ, C.R.E.P., St. Andre de Cruzieres, France.

UNION INTNL. DES SCIENCES PREHISTORIQUES ET PROHISTORIQUES, XITH CONGRESS

Sept. 1-7, 1986-UNION INTERNATIONAL DES SCIENCES PREHISTORIQUES ET PROHISTORIQUES, XIth Congress, Southampton and London, England.

Contact Peter Ucko, Department of Archaeology, University of Southampton, Southampton S09 5NH, England.

INQUA CONGRESS

July 31-Aug. 9, 1987-12th CONGRESS, INQUA, Ottawa, Ontario, Canada.

Contact Dr. Alan V. Morgan, Department of Earth Sciences, University of Waterloo,
2. Waterloo, Ontario, N2L 3G1, Canada.

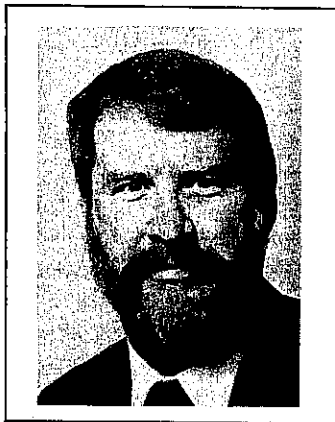
NEWS OF ARCHAEOMETALLURGY

- The first issue of a new journal, tentatively titled Archaeomaterials, is scheduled for summer 1986. According to the editor, Dr. Tamara Stech, the journal will emphasize interpretation: "We hope to reach a broad audience. We strongly urge contributors to avoid jargon and to explain scientific terminology, so that well informed readers will have access to material not directly related to their own fields. We want the journal to stand on its own as a publication of interest to people studying a variety of materials in contexts predating the Industrial Revolution and not to get bogged down in specialized rhetoric." If you would like to submit an article for inclusion in the inaugural issue, notify Dr. Stech now at the University Museum, 33rd and Spruce Streets, Philadelphia PA 19104, telephone (215) 898-4062. Complete manuscripts are due January 1986.
- A visit to the medieval iron smelting site of Lapphyttan was one of the highlights of the Medieval Iron in Society symposium held in Norgberg, Sweden, in May. There was considerable controversy among the Swedish archaeologists present as to the date of this site. The excavator, Gert Magnusson, and others claimed it is the earliest site of cast iron production and fining yet found in Europe. Others place it as late as 1300 AD on the basis of TL dating of some of the slags. Proceedings of this meeting are being prepared for publication by Jernkontoret. The Historical Metallurgy Group of Jernkontoret (Swedish Iron Masters Association) publishes a series of 35 reports (Series H, ISSN 0280-137x), some in English, on various topics from site reports to slag analyses. A complete list of their publications is available from Jernkontorets Forskningsavdelning, att: Gladys Swallving, P.O.B. 1721, S-111 87 Stockholm, Sweden.
- Judith Todd, University of Southern California, has identified copper prills in slag dated to 3800 BC from a site called Selevac in Yugoslavia, putting the beginnings of copper smelting back in the neolithic and in Europe.
- The first meeting of the Association for Metals and Archaeology was held last June in Oxford, with a one-day program of site studies and reports of replication experiments and technical examinations of objects. This was followed by an open discussion of the need for such an association, chaired by Dr. H. Cleere, Director of the Council for British Archaeology. Topics discussed included future meetings, establishment of a newsletter, promotion of replication experiments, and establishment of data bases. It was agreed to continue the present association with the Historical Metallurgy Society. Peter Northover and Chris Salter are interested in hearing your views on these topics. Their address is the Department of Metallurgy and the Science of Materials, University of Oxford, Parks Road, Oxford OX1 3PH England.
- The Historical Metallurgy Society has created a new subcommittee for the study of recent metallurgical history as a result of its annual conference in Birmingham in September 1984, whose subject was alloy development between 1900 and 1950. Twenty-two papers from this conference appear in the latest issue of Historical Metallurgy 19(1). The conference was held within a mile of the birthplace of Cyril Stanley Smith, who was present, as were both William Alexander and Arthur Street, whose "Metals in the Service of Man" has been a Penguin best seller since its publication in 1944.
- Proceedings of the conference held at Ironbridge in October 1984, Ironworks and Iron Monuments, edited by Cynthia Rockwell and Monica Garcia, has just been published (1985) by the Rome Centre. It contains information on forges and furnaces as well as the use of iron, chiefly in Western Europe, and is available from ICCROM, the International Centre for the Study of the Preservation and Restoration of Cultural Property, 13 via di S. Michele, 00153 Rome, for \$10 (U.S.), which includes postage and packing.
- Dr. Gerhard Sperl has produced a 96-page guidebook, "Ein Fuhrer durch die Steirische Eisenstrasse," with maps, photographs, and diagrams illustrating mining and metallurgical monuments in Styria. It can be ordered from the author for 50 Austrian schillings. This includes an English supplement, "The Styrian Iron Trail": Dr. Gerhard Sperl, Osterreichischen Akademie de Wissenschaften, A8700 Leoben, Austria.

- A detailed study by Dr. Erling Benner Larsen of tool marks on the various elements comprising the Gundestrup cauldron, "Vaerktojsspor og Overfladestruktur, the Identification and Documentation of Tool Traces and Surface Textures," has been published in Danish by the School of Conservation of the Royal Danish Academy of Fine Arts (1985) and is being translated for publication in English next year. Dr. Larsen used Dow Corning Silastic 9161 which does not require a release agent, and thus produces molds of exceptional fidelity. These were then gold-coated for examination in a SEM.
- The session on the restoration of the Statue of Liberty presented by the Committee on the History and Archaeology of Materials of the American Society for Metals last February was videotaped and should be available by the end of the year. For information, write or call George Mentzer, Public Relations, American Society for Metals, Metals Park OH 44073, (216) 338-5151.
- A technique often used in characterizing metals, the measurement of mechanical damping, has been applied to the sourcing of amber by Dr. Manfred Weller (Max-Planck-Institut fur Werkstoffwissenschaften, Seestrasse 92, D-7000 Stuttgart 1) and Professor Charles A. Wert of the University of Illinois, Urbana. Unfortunately the method is destructive, the amber being cut to the shape of a fine cylinder and swung in a torsion pendulum. The work is reported in the Stuttgarter Beitrage zur Naturkunde, series C, number 18, 1984 (ISSN 0341-0161) 99 85-100, under the title "Neue physikalische Untersuchungen zur Struktur der Molekule im Bernstein."
- The Institute of Metals has announced plans to publish in paperback L. Hunt's History of Alloy Development (ISBN 0 104357 619). The Metals Society, London, has published a number of historical works in addition to the journal of the Historical Metallurgy Society. From January 1985, The Metals Society merged with The Institution of Metallurgists, to become The Institute of Metals. The Institute of Metals is located at 1 Carlton House Terrace, London SW1Y 5DB England.
- Jacques Briard of the Equipe de reserche No. 27 du CNRS associee a l'universite de Rennes 1 is the editor of "Paleometallurgie de la France atlantique Age du Bronze (1)," a 1984 report of the work of the Laboratoire-protolithique-quaternaire armoricains. His address is Campus de Beaulieu, Universite de Rennes 1, 35042 Rennes Cedex, France. The same group publishes "Analyses Spectrographiques d'objets prehistoriques et antiques."
- Sue Cackett, Science Museum, London, is revising the catalogue of the Percy Collection for republication. The last edition was published in 1925.
- Mark Pollard has left the Archaeometry Laboratory at Oxford to join the Department of Archaeology, University College, Cardiff. His address is P.O.B. 78, Cardiff CF1 1XL.
- Srinivasan Raman, University of Pennsylvania, obtained his undergraduate degree in metallurgy from the Indian Institute of Technology in Madras. Srinivasan brought with him for technical study research materials including samples from the almost unknown iron pillar at Kodachadri. His telephone at Penn is (215) 387-3443.
- A Centre for History and Philosophy of Science has been founded recently in Bangalore, India; Dr. B.V. Subbarayappa is director. The address is: Centre for History and Philosophy of Science, The Indian Institute of World Culture, P.O.B. 402, Bangalore 560004 India. Dr. Subbarayappa, for many years the Executive Secretary of the Indian National Science Academy, has recorded surviving traditional iron smelting methods as part of the program for the new center. One such method required that charcoal for smelting be prepared differently from that used for fining; it was made from tamarind wood with the heap plastered and the charcoal used the next morning in a low (3 1/2') furnace that produced a 4-kg bloom from 10 to 12 kg of roasted ore, and about 2 kg of iron after fining.
- If you have news you would like to contribute, please call Martha Goodway at (202) 287-3733 or write her at CAL MSC, Smithsonian Institution, Washington DC 20560.

PRESIDENT

Born in Chicago, Joseph Michels received a bachelor of arts degree in Philosophy from UCLA. He chose to pursue graduate training in cultural anthropology, receiving both his M.A. and Ph.D. degrees at UCLA. His doctoral research dealt with obsidian hydration dating, at that time a little known technique still in its infancy.



JOSEPH MICHELS

Michels accepted a position in the anthropology department at The Pennsylvania State University which he has occupied with only brief interruptions up to the present. He currently serves as Director of the Penn State Obsidian Dating Laboratory, Professor of Anthropology, and Associate Dean for Research and Graduate Studies in the College of the Liberal Arts.

Michels' research has embraced both archaeometry and complex society archaeology. He has directed fieldwork involving both excavation and survey in the United States, Guatemala, Ethiopia, Tunisia, and most recently Sardinia (Italy). Currently, he is excavating Bronze and Iron Age villages of the Nuragic culture in West-Central Sardinia. His interests are the evolution of social and political organization, settlement patterning, and exchange networks.

Michels' principal archaeometric interest has been obsidian hydration dating. Over the last 20 years he has been involved in basic research on the technique, in its application to diverse archaeological problems, and in the training of archaeologists whose research made heavy use of hydration dating. In 1981, at the end of a two-year period of NSF-sponsored research by Penn State's Obsidian Dating Laboratory in collaboration with its Materials Research Laboratory, a breakthrough was achieved in experimental design that made hydration dating a fully and intrinsically chronometric technique. Michels has published the results of these new findings in Science, Archaeometry, and other journals. He is the author of Dating Methods in Archaeology (Academic Press), The Kaminaljuyu Chiefdom (Penn State University Press), and the editor of numerous volumes of archaeological studies.

VICE PRESIDENT/PRESIDENT ELECT

JOSEPH LAMBERT

Joseph B. Lambert is Professor of Chemistry at Northwestern University, Evanston, Illinois. He was born in Fort Sheridan, Illinois, and grew up in San Antonio, Texas. He received his undergraduate education at the California Institute of Technology (Ph.D., 1965). In 1965, he returned to Illinois to begin his work at Northwestern. Although all his early work was in organic chemistry, in 1973 he spent a sabbatical at the Research Laboratory of the British Museum, learning applications of chemistry to archaeology. His research in archaeological chemistry since then has been on the NMR analysis of fossil resins, the inorganic analysis of human bone as a means to determine ancient diet, and other spectroscopic methods such as X-ray photoelectron spectroscopy. He has been an Alfred P. Sloan Foundation Fellow, a Guggenheim Fellow, a Fellow of the Japan Society for the Promotion of Science, and an Interacademy Exchange Fellow to Poland. He was awarded the National Fresenius Award in 1976. He has been the author or editor of four books, including Archaeological Chemistry III, and has published more than 190 papers in scientific journals. He has served on the editorial boards of Organic Magnetic Resonance, Arts and Sciences, International X-Ray Emission Spectroscopy, and Magnetic Resonance in Chemistry. He is immediate past chairman of the ACS Subdivision of Archaeological Chemistry.

SECRETARY/TREASURER

For seven years, John Twilley has taught courses in the conservation of art and historical artifacts at the University of California at Riverside where he holds an adjunct professorship. His course "Conservation Science and Historical Objects" is a requirement of the History Department's Graduate Program in Historical Resources Management. As a chemist with an emphasis on microanalytical methods, he has served as a consultant on a wide variety of conservation and preservation projects. Twilley served for two years as Conservation Scientist at the J. Paul Getty Museum. Presently, he holds an industrial position as Manager of the Reliability Analysis Center for Teledyne Microelectronics where microchemical analysis, materials science, and electronics are combined in support of the company's medical and space products. His research interests include analysis of the media and pigments of paintings, deterioration and consolidation of stone in artifacts and structures, and the analysis of archaeological metals. He is currently serving a term as President of the Western Association for Art Conservation, a nonprofit organization of art conservators and related professionals that possesses many similarities to the SAS in size, age, and objectives.



JOHN TWILLEY

PAST PRESIDENT

SAS Past President (1984-85) Rainer Berger, is Professor of Anthropology, Geography and Geophysics and Chairperson of the Interdisciplinary Archaeology Program at UCLA. Educated at Cambridge, Kiel (Germany), and the University of Illinois at Urbana, Berger obtained his Ph.D. in 1960 in the field of Isotopic Organic Chemistry. His primary research interest is the application of isotopic dating and tracing methods in archaeology, physical anthropology, and environmental sciences. A Fulbright and Guggenheim Fellow, Berger was a founding member of SAS.



RAINER BERGER

In reviewing his term of office, Berger writes: "During my tenure as president of the SAS, the concept of the annual scientific symposium was introduced. It was to be published as a volume every year, so that gradually a series of volumes will accumulate summarizing the state-of-the-art and science in specific areas. In 1985, it was decided to focus on surface dating methods such as obsidian, quartz, and cation dating. The volume should appear in 1986. As the archaeological sciences incorporate more and more methodologies and techniques from all the other sciences, it should be possible to reconstruct the past with ever increasing detail. Thus we should be able to extend our database of human and natural historical events even further, allowing us to incorporate the lessons of the past into our modern lives. Instead of asking whether or not a field or method is archaeology, I would incorporate anything into archaeology that provides useful answers."

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CONFERENCE REPORT

12TH INTERNATIONAL RADIOCARBON CONFERENCE

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Approximately 300 delegates at this triennial conference held in Trondheim, Norway, June 24-28, heard the usual glowing reports of how well the various gas, liquid and solid counters (traditional Beta particle counters) are performing. Of greater interest to the larger community of radiocarbon users were the developments at the two extreme limits of the method: large-sample, high-precision dating of tree ring clusters and small-sample, moderate precision dating of a remarkable variety of substances.

Fluctuations in the amount of Carbon-14 in the atmosphere have occurred throughout at least the past 10,000 years. It is because of this fluctuation that the radiocarbon timescale must be calibrated, usually using the absolute timetable established by year-to-year tree ring chronology (dendrochronology). The calibration of the radiocarbon timescale, by extremely accurate and precise measurements on 10 or 20 year blocks from trees grown in both Europe and North America, is nearly complete. The 7,000 year curve presented by the Belfast (Ireland) group (using the liquid scintillation Beta particle counting technique) almost exactly overlaps the curve from the Seattle (Washington) laboratory (using the gas proportional Beta particle counting technique).

Archaeologists working with remains dating less than 10,000 years old have been given a plethora of calibration tables to use to interpret their "raw" radiocarbon dates. Some justifiable frustration from the archaeologists was eloquently expressed during the conference. The need was expressed by both radiocarbon laboratories and archaeologists for a universally applicable set of data to be made readily available.

New terminology for calibrated dates was agreed upon (by no means unanimously): 1) raw, conventional ages remain as "years BP" (years before present), 2) dendrochronologically corrected ages are now "Cal BP" or "Cal AD/EC." The use of other dating techniques such as TL (thermoluminescence), K/Ar (potassium/argon, a ratio technique usually used for dating volcanic material), and U/Th (uranium/thorium, a ratio technique often used for dating cave formations), among a host of other techniques, should be encouraged to explore whether their terminology and calibration can be brought into agreement as well.

Papers concerning the relatively new radiocarbon dating technique, TAMS (tandem accelerator mass spectroscopy; also termed AMS, leaving off the word tandem) accounted for 25% of the conference. Most radiocarbon accelerators can now produce results comparable with the average traditional Beta-counting laboratories, a precision of $\pm 1\%$ and an age range back to 40,000 yr B.P. The lack of accurate $^{13}\text{C}/^{12}\text{C}$ ratios (other carbon isotopes) and uncertainties about accelerator beam current and background levels hinder progress with the TAMS technique. Several experiments with gas inlet ion sources may offer better performance in some cases, though this has yet to be proven. There were many demonstrations of the capabilities of present TAMS systems to yield useful data on small volume samples. These include carbon from cores taken of polar ice, foraminifera (tiny marine animals whose shells form the bulk of chalk and some limestones) from ocean sediments, atmospheric gases, archaeological cultigens (e.g., a single kernel of corn), and finally - blood from a stone (tool)!

Much new efforts is going into chemical analysis of samples, noticeably for bones and lake sediments. The dating of more than 20 chemical fractions from a single bone at the University of Arizona (Tucson), and more than 200 different bones using "purified collagen amino acids" at Oxford (England), have restored confidence in the dating of bones - certainly a needed breakthrough for the dating of the earliest Americans. Well-preserved bone from temperate or dry-cave sites can be routinely dated on less than 5.0 g of whole bone in most cases, and less than 0.5 g of bone recovered in the most favorable conditions. Arid-zone or water-washed bone still requires development of more efficient (and gentler) chemistry. Lake sediments have also been subjected to vigorous chemical separations, yielding individual dates on various definable classes of compounds that can be compared with dates from the more traditional fossils and plant humates.

Radiocarbon dating traditionally is accurate back to about 45,000 BP; with special cases and advanced techniques acquiring dates back to approximately 70,000 BP. Quaternarists are interested in the past 2 million years BP. What is needed are techniques for dating remains from the earlier part of the Quaternary, far beyond the Carbon-14 range. The conference focused discussion on whether isotopes of other elements could be used, from ^7Be (Beryllium) to ^{205}Pb (lead). Most attention has been focused on ^{10}Be and ^{36}Cl (Chlorine), with perhaps the most exciting development involving both ^{10}Be and ^{26}Al (Aluminum).

What it all means for the bemused Quaternary scientist is not yet clear except that patience is in order. Those who need isotope dating should keep in touch with their radiocarbon specialist. Interested Quaternarists can keep up-to-date by reading the articles in the journal *Radiocarbon* and a variety of science-oriented archaeological journals. One hope is that there will be an eventual synthesis of the data from the isotopic measurement and the chemical identifications which are increasingly useful for environmental reconstruction. □

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POSITION ANNOUNCEMENT

UNIVERSITY OF WASHINGTON, Thermoluminescence Dating Laboratory: The University of Washington seeks a research associate for its newly established thermoluminescent dating facility, being developed jointly between the Departments of Materials Science & Engineering and Anthropology. Duties will include developing the facility, teaching and conducting research in TL dating techniques, and managing the overall operation of the laboratory. Current National Science Foundation funding is secure through 1988; however, the appointee is expected to develop additional outside funding by the second year of appointment. Candidate should have a Ph.D. and a minimum of 2 year's experience in TL dating. Applications must be received prior to November 1, 1985; starting date as soon thereafter as possible. Interested parties should address a request for a detailed description of the position, along with a current resume and statement of interest to: Dr. T.G. Stoebe, College of Engineering, FH-10, University of Washington, Seattle, WA 98195.

CALL FOR PAPERS

Short manuscripts (approximately three typed pages) of original and current research are solicited for *Current Research in the Pleistocene (CRP)*. Deadline is 31 January, 1986. More information and guidelines can be obtained from the Publications Coordinator, Center for the Study of Early Man, Institute of Quaternary Studies, University of Maine at Orono, 495 College Ave., Orono, ME 04473. Jim Mead, editor of *CRP* at the Center for two years, will continue editing Volume 3, but from the Department of Geology (Northern Arizona University) and the Museum of Northern Arizona, Flagstaff. All manuscripts to be published in *CRP* should be sent directly to Jim I. Mead, Editor, *Current Research in the Pleistocene*, Department of Geology, Box 6030, Northern Arizona University, Flagstaff, AZ 86011, U.S.A. Administration of the journal will still be handled at the Center's headquarters in Orono, Maine.

COMMENT

DATA MODELS, SCIENTIFIC QUESTIONS, AND CLUSTER ANALYSIS

by

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University of California, Los Angeles CA

Chandra L. Reedy
Conservation Center
Los Angeles County Museum of Art

Dr. V. Robinson claims (Research Report 6, SAS Newsletter 8[3]:3, 1985) that "cluster analysis is by far the best method" for analyzing elemental composition of ceramics in relation to provenance. However, this statement overlooks two fundamental considerations in any statistical data analysis.

The first is the structure model we assume for the data sample and the universe from which it comes. Cluster analysis is based on a discrete clumps model. Methods based on continuous or gradient distribution models are sometimes more appropriate. Analyzing clays originating from dozens of points along a river valley is a probable example.

In fields such as physics and ecology, the best progress has been made by using both fundamental types of models and methods as appropriate. We expect the same will be true in archaeology as well.

The second consideration is the nature of the scientific questions we want to answer. If we want to differentiate between products of three known manufacturing centers for a trade study, the "best" method is one such as discriminant analysis, which at least attempts to answer our question.

In summary, a good method is one that is based on an appropriate model of the data and gives an adequate answer to our questions.

RECENT PUBLICATIONS

Three 1985 publications by Vance T. Holliday, College of Geosciences, Texas A and M University:

New Data on the Stratigraphy and Pedology of the Clovis and Plainview sites, Southern High Plains. Quaternary Research 23:388-402.

Early and Middle Holocene Soils at the Lubbock Lake archaeological site, Texas. Catena 12:61-78.

Morphology of late Holocene Soils at the Lubbock Lake archaeological site, Texas. Soil Science Society of America Journal 49:938-946.

From...

Stephen M. Epstein
Department of Anthropology
University of Pennsylvania
Philadelphia, PA 19104

Professor Maddin's reflections on how to build a better archaeometrist are thought-provoking. He is rightly concerned with developing "necessary new techniques," but it is equally important to develop a theoretical framework for making the most of such technical tools.

Our ability to find out new kinds of facts tends to run ahead of our ability to think up intelligent things to say about them. Tactics lag behind technology; too often, we use Star Wars hardware to support the same old cavalry charges that archaeologists have been making for the past 35 years. Our technology can pump out more facts than our theories can integrate.

The next technical refinement of radio-carbon dating will probably come from a hard scientist with some interest in archaeology. Innovations in the application of that new technique will probably come from an archaeologist with an appreciation of hard science. People who become so completely ambidextrous as to be creative in both realms will always be rare enough that we should not count on producing them.

Trying to turn an archaeologist into a hard science virtuoso would more likely produce a Frankenstein's monster. The converse is equally probable. Archaeometry should nurture a more balanced development in both realms by recognizing that the members of its community are of two kinds, each intensely interested in the other. We should welcome this duality as a source of our fertility. It is not cause for an identity crisis.

From...

Mary Jo Figuerero
Programa de estudios prehistoricos
University of Buenos Aires
Buenos Aires, Argentina

I am very pleased with my subscription to the SAS Newsletter. I have found a lot of useful information; the style is dynamic and I receive it on time. Many of the news items, especially those on ceramics and metallurgy, I have passed on to grateful colleagues. Personally I am more specifically interested in techniques applied to organic remains. There are a couple of subjects that I would welcome more information: isotopic analysis of skeletal remains and sediment analysis.

One of the greatest satisfactions was when I learnt that SAS members could subscribe to the Journal of Archaeological Science at reduced rates. If Academic Press prices are hard on Americans, just imagine what they are to us!



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