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ing of the hypotheses of the day. This point of view is now sweeping through the discipline, and is being widely adopted in the current generation of graduate students. To many archaeologists, then, salvage archaeology, conceived of as digging simply for the sake of digging, has now come into very grave disrepute.

A recent article by Thomas F. King (2) summarizes the conflict that has arisen between the intellectual goals of many archaeologists and the immediate practical necessities of salvage projects.

The simplest solution to the conflict between the interests of new archaeologists and salvage-support organizations, King points out, is to disengage; but a mutual withdrawal will obviously have most unfortunate results. The salvage archaeology agencies can find enough trained persons to carry out necessary excavations, but they will lose essential intellectual and material support from the academic community; and the academic archaeologists, in a short time, will lose all the sites to the forces of destruction.

King says that the salvage agencies should yield to the point of view of the new archeology and be reorganized accordingly. The best solution, he suggests, is for salvage agencies and theory-oriented archaeologists together to work out, for given geographical regions, large-scale long-range research projects in which salvage is incorporated within a deductive research program. Given the present self-righteous, more-scientific-than-thou attitude of new archaeologists, which is so clearly expressed throughout King’s article, however, it is doubtful that cooperation between academics and salvage program administrators in the face of the immediate crisis of destruction described by Davis can be achieved in time.

Meanwhile, given the present atmosphere within the profession, it seems likely that new archaeologists and their graduate student followers (who, incidentally, may perhaps be the last generation to see an undisturbed archaeological site in certain areas) will continue to be explicitly disdainful or even fearful of undertaking fieldwork without specific deductive hypotheses to test; or before the millennial development of “more sophisticated” theory and methodology with universal application. One scholar (3) has already called for a moratorium of at least 5 years on all professional archeological excavations in the State of Oregon, despite the horrendous rate of destruction of Oregon sites which he himself documents, for fear that, with the presently perceived deficient state of theory and methodology in archeology, excavation even by professionals will ruin the remaining sites for the truly scientific and anthropological analyses which are expected to come from the new archeology.

The crisis in American archeology that Davis describes, then, has caught professional archaeologists in a bind between idealism and reality. It looks as if the result could be paralysis and loss.

RUTH GRUHN
Department of Anthropology,
University of Alberta,
Edmonton, Alberta, Canada

References

If the destruction of archeological sites is to be prevented, more assistance is needed from professional archaeologists. If the archeologist becomes involved at the planning and early stages of development projects, site destruction, as well as salvage, can be avoided. Archeologists may have to serve in dual capacities to achieve these ends. One young archeologist in southwestern Colorado served as the rod man on a seismograph crew so he could direct the survey line away from archeological sites.

Enforcement and conviction of archeological looters occurs under present laws and works best with the cooperation of the archeologist. The Bureau of Land Management (BLM) in California, with the help of the FBI and a college student, convicted a man under the Antiques Act for stealing a bedrock mortar valued at $1000 from public lands. The FBI recovered a Mayan stela worth $350,000 from a collector, under laws that deal with interstate transportation of stolen goods. Convictions have been obtained by the BLM and the Forest Service under state antiquity laws in Utah.

There is a need to stress all aspects of the preservation of archeological sites and their proper recreational use. Popular articles extolling preservation should be written by professional archeologists. Talented students should be encouraged to work for the government in the archeological preservation
field. Finally, museums need to adopt an accessions ethic for the purchase of archeological materials from the United States, as well as from foreign countries.

LLOYD M. PIERSON
U.S. Department of the Interior,
Bureau of Land Management,
Denver Federal Center, Building 50,
Denver, Colorado 80225

The antiquities market should be exploited rather than suppressed. There is obviously reason enough for all museums to want all the “goodies” of any ancient civilization, but knowledge and preservation might both be improved if the sale of these art objects were sponsored by the government, scientifically controlled, and if their ultimate sale price went to finance the proper excavation of such items. The purchaser would prefer a pedigree to go with his purchase, and the object would probably land in a museum anyway, if proper tax credits are continued.

Like many social proposals, the idea of retaining historical items as part of the public property of the country is idealistic, but human morality often suffers from the effects of greed.

FREDERIC JOHNSON
111 North Odem Avenue,
Sinton, Texas 78387

Smoking at Scientific Meetings

A. B. Pardee’s suggestion (Letters, 17 Mar., p. 1194) that smokers be separated from nonsmokers at scientific meetings is fine, so long as the nonsmokers are not downwind from the smokers.

W. W. G. SCHARLACH
Post Office Box 6367,
Albany, California 94706

Proximate Cause

James S. Dwight, Jr. (Letters, 11 Feb., p. 581), of the California Department of Finance, objects to the implication that Governor Reagan denied faculty salary increases for 2 years in a row, since Governor Reagan did recommend an increase for 1970–71. Dwight concedes that no increase was recommended for 1971–72. But it must be remembered that, in addition to failing to recommend an increase, Reagan vetoed a 1971–72 10 percent faculty pay raise for our university and state college systems which had been passed by the legislature. Later in the legislative session, when a second bill authorizing a 7.5 percent increase was passed, he also vetoed that. What galls is Dwight’s remark on the limited authority of the governor’s office, “The governor proposes, but the legislature ultimately disposes.” It was Governor Reagan alone who disposed (twice) of our 1971–72 pay increase, and by doing so he and he alone was responsible for our being denied a salary increase for two consecutive years.

RICHARD H. O’CONNELL
Department of Psychology,
San Fernando Valley State College,
Northridge, California 91324

Crystal Structure of UpA

Although we referred to the paper of Seeman et al. (1) on the crystal structure of uridylyl (3’5’) adenosine hemihydrate (UpA) in our report on the same structure (3 Dec., p. 1020), the relationship between these two structural determinations was not made clear. Herein, we wish to clarify the matter.

Seeman et al. studied the crystal structure of UpA independently from us and in parallel. Although different conditions were used in crystallizing the UpA, the two structures were, indeed, identical. In retrospect, it is apparent that the Seeman group completed the structure analysis prior to us. Their original paper in Nature New Biology was submitted on 24 May 1971, at which time our structure determination was only partially complete. However, their paper did not appear in print until after our paper had been submitted to Science (31 August 1971). In addition, Seeman et al. reported the structure of UpA at the American Crystallographic Association meeting, which took place on 15 to 20 August 1971 at Ames, Iowa. At that time, our structure had been solved and was being refined, as was reported by M. Sundaralingam at the meeting.

J. Rubin
T. Brennan
M. Sundaralingam

Department of Biochemistry,
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Most substances sensitive to chromatographic analysis can be separated within six to fifteen minutes. Reproducibility is excellent; components may be recovered in semi-preparative volumes; samples are not "denatured"; and the system is simple to use.

The low-cost SORVALL GLC-1 General Laboratory Centrifuge is the "driving force" behind CENTRI-CHROM.

For details on this "revolutionary" chromatography system, ask for our brochure. It also reveals facts you never suspected.

Ivan SORVALL, Inc., Norwalk, Conn. 06856

Request CENTRI-CHROM Brochure No. SC-4CC

<table>
<thead>
<tr>
<th>Typical examples of CENTRI-CHROM Separations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Corticosteroid and steroid mixture of the estrane and androstan series</td>
</tr>
<tr>
<td>2,500 x G — 6 mins.</td>
</tr>
<tr>
<td>Hydrocortisone</td>
</tr>
<tr>
<td>Separation of triglycerides</td>
</tr>
<tr>
<td>Trilinenin</td>
</tr>
<tr>
<td>Separation of pesticides</td>
</tr>
<tr>
<td>Methoxychlor</td>
</tr>
<tr>
<td>TDE</td>
</tr>
<tr>
<td>Separation of 17-keto androstanes</td>
</tr>
<tr>
<td>This is an example of CENTRI-CHROM reproducibility. The first five chromatograms were run with individual components. These five components were then run again as one sample. Note the relative band positions.</td>
</tr>
<tr>
<td>11α-Hydroxyetiocholanolone</td>
</tr>
<tr>
<td>Etiocholanolone</td>
</tr>
</tbody>
</table>

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