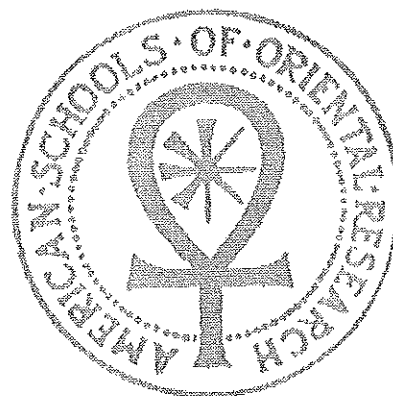
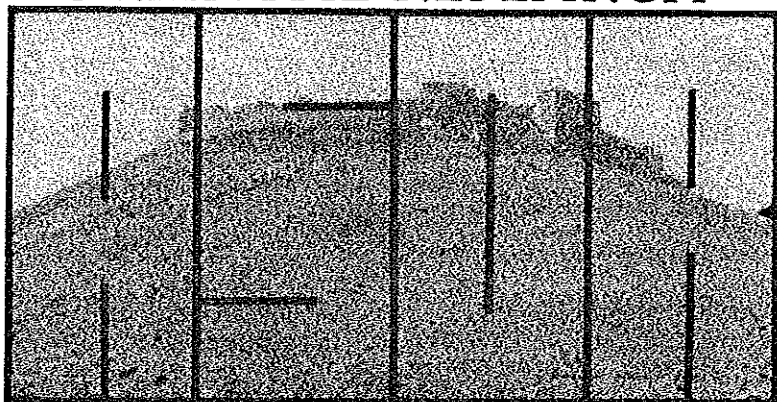


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NEWSLETTER

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The President's Office: INMAN STREET

SMITHSONIAN RECOGNIZES ASOR

President King wants ASOR members to know of the recognition their work is receiving in other quarters. The following is reprinted by courtesy of the Smithsonian magazine, from the August 1981 issue--Editor.

The View from the Castle

*In times of world tensions, our
American scholarly centers abroad
keep vital human channels open*

Despite nearly half a century (since World War II) of deep involvement in the affairs of the rest of the world, it would seem that we as Americans still have only a limited understanding of our fate as citizens of all of the Earth.

Yet there are cultural resources which, if properly supported, can increase our capacity to understand other societies. The network for these resources has at least three parts. Most

REPORTS

4

THE OBJECTIVES, ORGANIZATION, AND APPROACH OF THE ECOLOGY LABORATORY TEAM AT MASKHUTA, EGYPT

Introduction

The ecology laboratory at Tell Maskhuta, an archaeological site in the Wadi Tumilat region of the eastern delta of the Nile, was organized for two principal reasons: first, to provide excavation staff with pertinent ethnoarchaeological and taphonomic analysis as well as prompt in-the-field processing primarily of rocks, soils, plant and animal remains unearthed daily; and second, to facilitate in-the-field collaboration between various specialists on the problem of human adaptation in the Wadi Tumilat region. This brief report states objectives, organization, and approach of a team of five specialists consisting of a biological anthropologist, Everett Bassett; a paleobotanist, Pat Crawford; a sedimentary geologist, Mark Elliott; a surfacial geologist, Larry Lacelle; and the coordinator of this team, the writer, a social anthropologist and zooarchaeologist. Supporting the team were Patricia Tyner, who helped with processing of animal and plant remains; Mary Westland and Ann Hatfield, who helped with drafting of drawings and maps; David Logie, who helped with photography; Magda and Amira, who were our translators. Fieldwork by the team was carried out during eight weeks in the summer of 1979, beginning May 20.

As the team coordinator, I am grateful to Jack Holladay, Director of the Wadi Tumilat Expedition, for both material and intellectual support of our efforts. Through his persistent efforts, funding for the work was obtained from the Smithsonian Institution and the University of Toronto; the cooperation of the Egyptian government, the American Schools of Oriental Research, and the American Research Center in Cairo was assured.

Objectives

The objectives of the ecology lab were consistent with the reasons for its existence. They were:

- 1) processing--including cleaning, labeling, identification (as far as possible) and registration of all rocks, soils, plant and animal remains brought to the lab by excavation staff;
- 2) investigating the natural and sociocultural processes responsible for the formation and character of the archaeological and bioarchaeological record in the region by means of taphonomic and bioarchaeologic experiments and ethnoarchaeologic observations;
- 3) ascertaining the dynamic characteristics of the local climate, hydrology, geology, vegetation, animal life, and in particular, extreme events and natural hazards affecting the human population in the region; and
- 4) ascertaining the ways in which specific aspects of human life in the region, such as land use and diet, are influenced by the local environment.

Organization

The organization of the ecology lab was modeled in part on the labs coordinated by the writer for the Heshbon Expedition (1975, 1978, 1979) and also on the teamwork approach being practiced in many hospitals where team conferences are held and multidisciplinary, problem-oriented files of patients' medical records are prepared by various specialists. As far as possible, each team member was provided with ample table space, shelves, specimen trays, and plastic bags for use in sorting, exhibiting, and storing specimens. In order to promote interdisciplinary collaboration, all five specialists were assigned work spaces in the same room. This room came to be known as the "specialists' lab" or the "ecology lab."

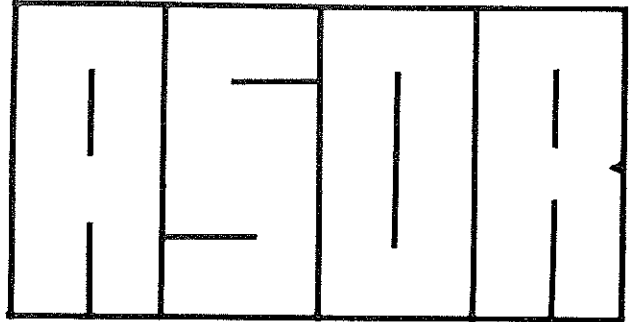
While each of the five specialists established his or her own routine both in the lab and in the field, everyone's activities were planned during weekly staff meetings where the overall objectives of the team were

reformulated according to specific goals and tasks reflecting the interests and expertise of the respective specialists. Progress made during the week by each team member was reported in a weekly specialist's report. These reports usually contained:

- 1) a statement of the overall goals for the week and reflections on the week's progress--whether it was a "good," "average," or "bad" week;
- 2) topical discussions of problems addressed including details about hypotheses or questions being investigated, experiments or field surveys conducted, and the outcome of these for the week;
- 3) a proposed plan of action for the ensuing week designed to continue research on unresolved problems from previous weeks, but also to introduce pertinent new research; and
- 4) requests for additional equipment or facilities and notification of problems requiring administrative attention.

These progress reports became the principal vehicle of interdisciplinary collaboration and cumulative work by the specialists because:

- 1) they encouraged a critical rather than mechanical attitude toward the data the team members were gathering and processing. This resulted in novel hypotheses and questions being proposed for interpreting and explaining the data *in the field*;
- 2) this, in turn, led to better use of the opportunities for carrying out novel experiments in the field or making previously unplanned for observations pertinent to hypotheses formulated on the basis of current field and laboratory work;
- 3) the progress reports made interdisciplinary cross checking of results possible and facilitated dissemination of the specialists' findings among interested excavation personnel; and



- 4) the reports made the specialists' preparation of an on-site, end-of-the-season report easier because the final report needed merely to highlight the most interesting findings, since the steps which led to them were traceable in the weekly reports.

The compiled weekly notebook reports were taken to the U.S. at the end of the season. There they were photocopied, copies returned to each specialist, and a copy of the entire notebook was given to the dig director for use in preparing his first preliminary report. These reports also facilitated the production of specialist reports as well.

REPORTS

Approach

All members of the specialist staff shared a common approach, namely studying the present as a means of understanding the past. Specific reasons justifying the approach can be offered as an illustration and as information regarding methods and techniques employed by specialists at Maskhuta.

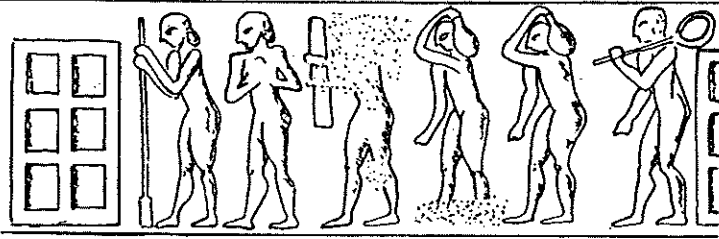
First, the present is a good place to begin reconstructing the character of the ancient physical environment and man's impact on it. Because of the archaeological and historical evidence for the existence of extensive canal works in the Wadi Tumilat region (reported elsewhere by Holladay and Lacelle) inquiries were made into the activities of the Suez Canal Authority in this region. Thanks to the gracious cooperation of Dr. Ahmed Ammar, Director of Planning and Research and member of the Board of the Suez Canal Authority, the library of the Suez Canal Authority at Ismailia was made available to the specialist staff. Not only did these inquiries lead to understanding of the impact which large-scale canal systems have on the host habitat, but it also has helped us to reconstruct the unaltered pre-canal environment of the Wadi Tumilat region.

Second, the present is often a good place to search for clues about the uses of ancient artifacts. For example, a clue to ancient use of "jars" with openings in both ends such as those found at Tell Maskhuta came from ethnoarchaeological observations in the village of Rizqalla. Thanks to the cooperation of Hassan, a villager, and his family, "jars," were found to be used as pigeon shelters. Typically, a tower of mud and straw is built around walls. On it hundreds of these "jars" are placed so that pigeons can nest in them, giving the birds access to the outside and inside of the tower. Pigeons, of course, are an important source of protein for the farmers in this region.



Third, the contemporary society is a convenient starting point for reconstructing the depositional and post-depositional processes recorded by local archaeology. For example, by means of taphonomic experiments and surveys, we now have a plausible explanation for why the animal remains from Tell Maskhutz were far more crumbly and fragmented than those found at Tell Hesban, Jordan. The key lies in the difference between water management at the two sites. At Hesban, rain water is collected by means of elaborate collection systems, including flat-topped roofs, water channels, cisterns and (in the past) reservoirs. During the rainy season, the bones of food animals wash into protected areas, especially cisterns, where they could remain for centuries, safe from human trampling and in relatively stable microclimates.

In contrast, the people of Maskhuta rely principally on ground water drawn from wells. (Wells could not have been dug at Hesban with ancient technology.) The bones of food animals, therefore, have no protected environment and remain on the ground where they are trampled extensively and are consumed by dogs and other scavengers. The few fragments that eventually are buried become victims of the saline soils of this region. As salt accumulates in cracks and even penetrates into the bone itself, it eventually causes further fragmentation and often total destruction of the bones. Therefore, bones were common at Tell Maskhuta with salt crystals attached to them or inside them. Not surprisingly, whole bones were almost *never* found.



● Fourth, the present is a good place to begin when developing comparative collections for use in on-site identification of excavated rocks and remains of animals and plants. The sun-bleached skeletal remains of dead animals encountered in the fields around Maskhuta, the left-over skeletal remains of animals eaten at the excavation camp, the seeds of plants produced or growing wild in local fields, and rocks found lying on the ground were selectively gathered, identified, prepared, and labeled for use in different comparative collections being developed by the specialists. These collections provide clues for archaeologists by serving as "benchmarks" against which to compare assemblages of comparable specimens from earlier periods.

● In summary, the reason for our concern with the present is that we believe it to be helpful for developing fruitful hypotheses to be used in interpreting the archaeological record. Modern society literally holds the "key" to the past when it comes to identifying skeletal and plant remains. This is so because species determinations based on fragmentary plant and animal remains is often impossible where whole parts of known species from the present are lacking. Current samples are needed to compare with the fragmentary remains from the past. Thus, the more similar the attributes of an archaeological specimen and the modern comparative specimen, the more likely it is that they both belong

to the same species of plant or animal.

It is also the case that when continuity with the past is less obvious, the present is still a good place to begin. This is especially so when reconstructing the *processes* which account for associations discernable in the archaeological record, as in the cases discussed above. The present is where the link between peoples' intentional behavior and the results of that behavior can be directly observed. All that the archaeologist can directly *observe*, of course, are the *results* of peoples' behavior. The ecology team has approached the past by means of studies of the present in order that the intentional behavior and processes which account for the associations visible in the archaeological record may be understood.

Conclusion

In this brief report I've opened our project for discussion and criticism. The topic is the structural arrangement whereby the fieldwork of specialists from the natural and social sciences is coordinated and integrated, and the accomplishments of the four broad objectives focused upon by the ecology lab at Maskhuta. Specifically, I've called attention to:

- 1) our use of the weekly, problem oriented progress report as an organizational vehicle for coordinating, integrating, and focusing the fieldwork of team members; and
- 2) our general approach whereby the present was studied as a means of deriving fruitful hypotheses for use in interpreting the archaeological record. While neither of these arrangements is particularly novel, their role as organizational vehicles for multidisciplinary fieldwork has now been made explicit.

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