EDITORIAL

This issue of Expedition is devoted entirely to the involvement of the University Museum in Egyptology, from the 1890’s to the present, and thus provides information directly connected with the special exhibition The Search for Ancient Egypt: University Museum Excavations 1890-1979, partly funded by a N.E.H. grant of $41,000, and co-directed by Drs. David O’Connor and David Silverman of the Egyptian Section.

This exhibition is unusual in that the University Museum’s Egyptological collections were almost all acquired directly from excavation, rather than from purchases via the saleroom. Despite the high prices that Egyptian material commands in the salerooms, the cost of conducting properly controlled scientific excavation and research is even higher. The Eckley B. Coxe, Jr. Fund was the single source of funding for the Egyptian Section of the University Museum, and its excavations, until the 1950’s. Since then, alas, progressively rising inflation has eroded the value of the Fund, and the Museum’s Egyptian Section has now entered a crucial phase. The Section’s staff has raised over $1,000,000 in United States and Canadian Government grants since the 1960’s to fund excavation (for which the Coxe Fund has long been insufficient), but now even the essential permanent core of professional Egyptologists can no longer be fully maintained by the Fund. The Section’s permanent endowment must be very substantially increased if the Museum is to remain a leader in Egyptological excavation, research and teaching, and if the heavy publication and museological responsibilities incurred during nearly a century of fieldwork are to be met.

Dr. David O’Connor and the Director of the Museum earnestly request the support and advice of the Museum’s many interested friends. It would be ironic if the present innovative presentation should prove to be the last major exhibition of scientifically excavated ancient Egyptian material that our University Museum can manage to display.

BERNARD WAILES, Editor

---

CHRONOLOGY OF ANCIENT EGYPT

Prehistoric Period
Early Dynastic Period (Dynasties I-II)
Old Kingdom Period (Dynasties III-VI)
First Intermediate Period (Dynasties VII-XI)
Middle Kingdom (Dynasties XI-XIII)
Second Intermediate Period (Dynasties XIII-XVII)
New Kingdom Period (Dynasties XVIII-XX)
Third Intermediate Period (Dynasties XXI-XXV)
Late Period (Dynasties XXVI-XXXI)
Ptolemaic Period
Roman Period

ca. 4500-3100 B.C.
ca. 3100-2680 B.C.
ca. 2680-2180 B.C.
ca. 2180-2040 B.C.
ca. 2040-1730 B.C.
ca. 1730-1570 B.C.
ca. 1570-1080 B.C.
ca. 1080- 664 B.C.
ca. 664- 333 B.C.
ca. 333- 30 B.C.
ca. 30 B.C.-A.D. 324
UNIVERSITY MUSEUM ANNOUNCEMENTS

NEW DIRECTIONS: The Director writes

Martin Biddle

THE UNIVERSITY MUSEUM IN EGYPT

THE PAST

INTRODUCTION

David O'Connor and
David Silverman

THE UNIVERSITY, THE MUSEUM AND THE
STUDY OF ANCIENT EGYPT

THE MUSEUM IN THE FIELD

THE EGYPTIAN COLLECTION

ECKLEY BRINTON COXE, JR.

THE EGYPTIAN ANTIQUITIES ORGANISATION

THE PRESENT

ABYDOS: THE UNIVERSITY MUSEUM—
YALE UNIVERSITY EXPEDITION

David O'Connor

THE UNIVERSITY MUSEUM EXPEDITION TO
DRA ABU EL NAGA

THE UNIVERSITY MUSEUM EXCAVATIONS
AT THE PALACE-CITY OF MALKATA

THE AKHENATEN TEMPLE PROJECT AND
KARNAK EXCAVATIONS

THE PENNSYLVANIA—YALE GIZA PROJECT

William Kelly Simpson
UNIVERSITY MUSEUM ANNOUNCEMENTS

Museum Institute for Conservation Archaeology (MICA)

The Museum Institute for Conservation Archaeology (MICA) has been formed at the University Museum, University of Pennsylvania, to act as a center for the investigation, preservation and management of historic and prehistoric properties. MICA specializes in contracting for services required by the terms of the National Environmental Policy Act of 1969 and Executive Order 11999 of 1971, as well as The Archaeological and Historic Preservation Act of 1974 as augmented in 1978.

Museum Expedition

Dr. Gregory Possehl has returned from India where he was invited to assist and advise the Archaeological Survey of India on the museum program in that country as part of a longer co-operative program between American academic institutions and the Archaeological Survey and National Museum of India.

Hellenic Cruise

There are still some vacancies available for the Museum’s Hellenic Cruise to archaeological sites in the Eastern Mediterranean, departing March 13, 1979. The cruise is led by Martin Biddle, Director of the Museum, accompanied by Museum Curators who will lecture on the sites to be visited. These include sites where Museum expeditions have worked in the past or where excavations are in progress.

Return will be from Venice, via London, arriving Philadelphia on March 30. A special pre-cruise visit to Athens is planned for March 9 through 14 for those who wish to explore that city in depth and at leisure. The cost per person ranges from $2653 to $4178 (including all air fares), depending on size and location of cabin but not including a tax-deductible contribution to the Museum. Members interested in going on the cruise should call Mrs. Margaret Pugh—(215) 243-4023—as soon as possible.

Grant Received

The University Museum received a grant of $41,000 from the National Endowment for the Humanities toward the cost of installing the exhibition: “The Search for Ancient Egypt.”

Reopening of the Elkins Library for University Museum Archives

Following extensive renovation, the Elkins Library in the Museum was reopened by Dr. William L. Elkins on December 19, 1978 at the invitation of Mr. Howard C. Petersen, Chairman of the Board of Managers. The Elkins Library, which is part of the original University Museum building, will be used to house the Museum’s extensive archives.

Museum Exhibitions

The Third National Exhibition by Blind Artists is now being shown in the Oceanic Gallery of the Museum. It will continue until March 31, 1979. The exhibition will not run concurrently on a rotating basis between the Museum and the Library for the Blind and Physically Handicapped as previously announced.

“The Search for Ancient Egypt: A Special Exhibition Celebrating University Museum Excavations 1890-1979” will open on February 23, 1979 in the Pepper Hall of the Museum and will run for six months. Many important objects from the Museum’s Egyptian Collection will be on display for the first time. See “Grant Received” above.

The Lucy Wharton Drexel Medal

The Lucy Wharton Drexel Medal of the University Museum was presented to Prof. Homer A. Thompson of the Institute for Advanced Study, Princeton, by Howard Petersen, Chairman of the Board of Managers of the University Museum, at a dinner of the Museum Fellows on November 29. This award was for his contribution to the knowledge of Classical civilization and the archaeology and topography of the city of Athens. He was on the Agora staff from its beginnings in 1930, and he directed the work from 1947 to 1967. He has continued to produce notable publications of the excavation results. His other awards include an honorary citizenship of Athens and the gold medal of the Archaeological Institute of America.

The Drexel Medal was established in 1902 to further recognition of distinguished archaeological work by English-speaking scholars. Nineteen previous awards have been made, with living recipients being Richard S. MacNeish (1966), Ignacio Bernal (1971) and Grahame Clark (1974).
NEW DIRECTIONS

The Director writes

In the last issue I wrote about the great size of our collections, the invisible nine-tenths—if not ninety-nine hundredths—of the iceberg which constitutes the reserve collection in storage: our greatest challenge and our biggest responsibility.

Here I want to explore the strategy which might inform our displays. This issue of Expedition is the place to do this, for it introduces the Museum's most important exhibition for many years: 'The Search for Ancient Egypt.' This 'retrospective show' of the University Museum's work in Egypt over nearly ninety years opens on February 20. It will provide the foil for the peak of Tutankhamunology on which the seventies are closing.

The Museum's Egyptian show draws on our standing exhibits and on a great deal never before displayed from our reserve collection. It gives us a splendid view of a place and a long moment in time. And it raises a great issue: what was happening elsewhere in these centuries and millennia, in China, in Mesoamerica, in Europe north of the Alps? What were man's other courses toward and into civilization 'when Egypt was great'?

This is just the problem facing every excavator of an ancient site. Shall he dig down to establish the history of the site, a relatively small vertical window on the past? Or shall he open out horizontally, learn much about a short period, and lose the long view? If vertical versus horizontal is the digger's crux, it is also a museum's.

Traditionally, we have our Classical, Egyptian, Mesopotamian, Chinese galleries, and display a vertical view of the development of culture in limited regions. We do not take the horizontal view. Just where did man stand on this planet the year that Hammurabi died? When Caesar crossed the Rubicon, William conquered England, or Cortés stood in Darien?

Our regional displays must stand; the vertical view is vital too. But a balance must be struck with the horizontal. Otherwise the parallels and the contacts, the variety, and the richness of the springs of our now planetary civilization will escape the little world of museums, and we shall have abdicated some part of our role.

MARTIN BIDDLE
INTRODUCTION

"Do not reproach someone older than you, for he has seen the Sun before you."
(The Instruction of Amenemope, ca. 1400 B.C.)

The story of Egyptology at the University Museum is fundamentally that of the men and women who for over 80 years staffed the Egyptian Section and were responsible for the major contributions that section has made to our understanding of ancient Egypt. Some of these people, such as Rudolf Anthes, Henry Fischer and other Egyptian Section staff members of recent years are happily still alive and vigorous. The others are at least partly revealed to us in hundreds of letters preserved in the Museum archives and in the published reminiscences of themselves and their contemporaries. They varied greatly in character and personality; they had their successes and their failures, their virtues and their follies, and all of these will emerge in the course of this article. But basically the record is one of outstanding achievement, a record that challenges us, their successors, to equal, let alone surpass our predecessors; with respect and affection we dedicate this memoir to them.
Nothing could more appropriately introduce our story than the visit of Sara Yorke Stevenson, first curator of the Egyptian Section, to Cairo in 1898. This shrewd and vigorous Philadelphia lady immediately set about trying to organize the University Museum's first Egyptian field project. The task was a formidable one and Mrs. Stevenson's experiences were very different from those of the many well-off tourists who flocked to Egypt at that time. As John Wilson made vividly clear, they found a trip to Egypt 'an easy and fascinating way to see the East.'

"From Shepheard's [a famous hotel in Cairo, 'with a vivid decor in pseudo-pharaonic style] famous terrace, over a coffee or a lemon squash, one could sit idly and watch the teeming throng sweep past: Egyptians in from the villages returning one's stares openly, barefooted Nubians of great dignity, two-wheeled donkey carts, and then shouts and a rumble as an open landau carrying some fat Turkish dignitary in a red tarbush careened past, preceded by running sois es who cleared the way with sticks. Veiled ladies rode by, fiercely guarded by eunuchs. A diplomatic carriage would have a fiercely moustached kavass mounted beside the driver and clothed in brilliant costume and carrying a curved saber and staff as insignia of his master's 'sublimity." Those tourists who tired of Cairo could sail upstream in comfortably appointed sailing house-boats or steamers and visit the tombs and temples of ancient Egypt and the picturesque native villages beside them. (John Wilson, Signs and Wonders upon Pharaoh. A History of American Egyptology, 72-74.)

Mrs. Stevenson had little opportunity to enjoy this leisurely life. The Egyptian government at this time was controlled by a British consul-general and Egyptological affairs were the responsibility of British, French and other foreign scholars and bureaucrats. Her commission was to deal with these gentlemen, who represented different, often competitive national factions and were often on bad terms with each other. Mrs. Stevenson soon made a forthright assessment of the situation, "I never in my life saw such intriguing," she wrote. "Politics-science-personal rancor is
all mixed up.” Her chosen agent and assistant, a young man called Rosher, had proven ineffectual, a fact Mrs. Stevenson accepted with a good-tempered realism which was one of her greatest assets. “One must have a genius for diplomacy to steer an enterprise through Egyptian conditions today,” she noted; and as for Rosher, “one cannot expect a Talleyrand or a Roebling combined at a guinea per diem.”

Although Mrs. Stevenson contacted the English and American Egyptologists in Egypt, seeking a suitable excavator for the Museum, her principal item of business was a proposal that the American Exploration Society, which had been founded to secure funding for Museum expeditions, should pay for the removal of colossal statues and massive inscribed architectural elements which were partially exposed at Tanis. Tanis was a remote site in the northeastern Delta and the monuments would be taken to the National Museum in Cairo. In return, she requested that the Egyptian government assign duplicate material from Tanis—i.e. statues or architectural elements which were more or less identical with the material to be deposited in the Cairo Museum—to the University Museum.

Loret, the French Director-General of the Egyptian Antiquities Organisation, quite properly turned down the proposal, for this was one of the rare occasions when Mrs. Stevenson’s enthusiasm led her into an error of judgment. As Loret pointed out, the appropriate way to recover antiquities was to have properly conducted excavations at Tanis followed by a division of the finds between the two museums. Sensing that Loret might be vulnerable because of rivalries within the antiquities organisation and the more generalized tension between the British and French, long-time rivals and now uneasy collaborators in Egypt, Mrs. Stevenson continued to promote her proposal with tact, skill and perseverance. She won the support of important government officials through argument and persuasion (pragmatically, she also considered bribery, but wisely rejected it). Pursuing Loret to Aswan, 580 miles south of Cairo, she made a final appeal, but he was obdurate. As her hopes for the project faded, Mrs. Stevenson’s charitable feelings towards the ineffectual Rosher cooled: somewhat waspishly she remarked: “I instructed him to go at once to Mr. Petrie—to put in two or three months’ (excavation) at Denderah under him (so that he might justify his winter’s employment).” (For Petrie and his connection with the Museum, see pp. 17 ff.)

The artifacts Rosher found were sent to Philadelphia, but in fact the first Egyptian antiquities received by the Museum had
arrived (from Petrie) in 1890, the year Sara Stevenson was appointed curator of the Egyptian and Mediterranean Section. Since the Museum itself had been founded only three years earlier, in 1887, it is true to say that the history of the Egyptian Section reflects in microcosm the evolution of the Museum as a whole. For many years in the Egyptian as in some other Museum sections different individuals were respectively responsible for museology, excavation, and teaching. Until the Museum's excavations in Egypt ceased in 1932 its Egyptological field directors, while usually entitled curator, came to Philadelphia only periodically for intensive curatorial and publication work. The day-to-day management and exhibiting of the large and growing Egyptian collection was left to others, who were not professional Egyptologists. As for teaching, formal courses in Egyptology began at the University of Pennsylvania as early as 1902 and continued—with some interruptions—thereafter, but the instructors and professors had no or only tenuous connections with the Museum. Curators and field directors did no teaching at all. It was not until 1938 when Hermann Ranke, who had been trained by the great German Egyptologist Adolf Erman, was appointed to the Oriental Studies Department that an Egyptian Section Curator became a fully affiliated member of a University teaching department.

Because of policy and structural changes over a long period of time, the story of Egyptology at this Museum is a complicated one. To simplify it we have divided it into two main topics, field-work and the
collections, with research, public education and university teaching emerging as the vital links between these two topics. The current and very active and expansive phase of Museum field-work in Egypt, which began in 1907, is described elsewhere in this issue.

We must not forget however, in the need for simplification, those factors other than personal and professional activity which shaped the lives and careers of our predecessors in the Egyptian Section. These factors will emerge as critical ones from time to time in our story. The most important intellectual influences upon the professional Egyptologists associated with the Section were of course the Egyptological concepts and research methods prevalent at the time, but these changed significantly from generation to generation. All Section staff members were inevitably affected by the general, always gradually changing intellectual climate, especially in so far as it was relevant to the study and exhibition of the texts and artifacts of ancient societies.

Egyptology at the Museum was strongly affected by the changing policies of that institution over 90 years and by the different personalities of the men and women who were successively the chief officers of the Museum. Also directly impinging upon the field-work were conditions in Egypt itself. From 1882 onwards Egypt was engaged in a continuous struggle—often hidden, sometimes overt and turbulent—to make itself independent of foreign rule, a struggle that did not finally end until 1952. In addition, there were both before and after this date periodic major social and economic reforms which affected the status of foreign archaeological expeditions. Egypt has been and continues to be one of the most hospitable countries in the world to the foreign scholar and excavator, but the vicissitudes of its history through this century inevitably at times seriously affected the Museum's work. Beyond Egypt itself other events of wider significance—two world wars, the great depression, other international political and economic fluctuations, the relationships between Egypt and the United States—also affected that work for both good and ill.

![Work on Tutankhamun's tomb in the 1920s: packed artifacts removed on a small railway. Relations with the Egyptian authorities over the tomb grew strained at this time and affected other archaeological work.](Photo courtesy Egyptian Expedition, Metropolitan Museum of Art)
THE UNIVERSITY, THE MUSEUM
AND THE STUDY OF ANCIENT EGYPT

"The Eckley B. Coxe, Jr. Expedition of the University of Pennsylvania did solid but unsensational work in Nubia and then moved north to Denderah and Memphis." (John Wilson, Signs and Wonders upon Pharaoh. A History of American Egyptology, 151).

This quotation, the only substantial reference to the University Museum’s Egyptological program in the best and most authoritative history of American Egyptology so far written, brings out a curious paradox. Over the years the Museum’s Egyptian Section has greatly enlarged knowledge and understanding of ancient Egypt, but this fact has not had the impact in either the scholarly or the public world that it should have. This is not the fault of careful and generous historians like John Wilson, but is due to a disservice the Museum has done itself. It has always employed well qualified Egyptologists who consistently chose sites of major importance, sites yielding masses of new and valuable information carefully recorded and documented. This represents however only one aspect of the work of an archaeological or epigraphic expedition. Without subsequent research, synthesis and publication or, in plain terms, the writing of scientific monographs and papers, and popular books and articles, this laboriously and expensively gained knowledge is of little value to the scholarly world or the interested public in general. And, in fact, of the eight Egyptian field projects directly sponsored by the Museum between 1906 and 1956 four of the most important have either been only very partially published or hardly published at all.

We must not over-exaggerate the Museum’s Egyptological achievements. Compared to those of other United States institutions, it did not enjoy the very substantial financial resources which supported the extensive Egyptian field projects of New York’s Metropolitan Museum from 1910 to 1936 or which have maintained the epigraphic expedition of the Oriental Institute of the University of Chicago in the field since 1924. Nor was the University Museum associated over a long period with a single brilliant and productive archeologist who was virtually always in the field, as the Boston Museum of Fine Arts was with George Reisner from 1906 to 1942. Nevertheless, in comparison with the work of these institutions that of the University Museum is consistently underestimated; its contributions were major and important to an unappreciated degree and this is largely because a much larger proportion of the work of the other institutions referred to has been published. At the moment therefore we can describe the University Museum as a major contributor to our knowledge of ancient Egypt only in a qualified sense, anticipating the full publication of its rich stores of important Egyptological data.

As we try to demonstrate what it was that was important about the material recovered by the Museum in Egypt we must take into account the fact that Egyptology has been a vigorous and changing discipline. Any good piece of work done in the past will provide data valuable enough, if sufficiently well recorded, to contribute to our understanding of what we think of today as the most important aspects of Egyptian history and culture. But the work of each of our predecessors must also always be evaluated with reference to the scholarly standards and preoccupations of his particular generation of Egyptologists. Research priorities and values change significantly over the years and what seemed legitimate in the circumstances existing at one time might no longer be acceptable in the changed circumstances of a later period of study and research.

Egyptology is a young discipline, which in a real sense came into existence in September 1822 when the young Jean François Champollion burst into his brother’s office in Paris, threw a bundle of papers on the desk, cried “I have got it!” and promptly collapsed into an exhausted stupor for five days. After months of intensive intellectual effort, often following false leads to their baffling or discouraging conclusions, Champollion had suddenly fully grasped the nature of the hitherto largely untranslatable hieroglyphic script.
Others had come close to the solution, but in Champollion’s work it crystallized out and his peers were for the most part rapidly convinced of the accuracy of his results. In that instant in 1822 the inscribed monuments of ancient Egypt, unintelligible for over a millennium since the last hieroglyphic and cursive texts were written in the 5th century A.D., became accessible and its extraordinary history and culture began to emerge as it had been recorded at first hand by the Egyptians themselves.

Inevitably the best Egyptologists of the next seventy years concentrated upon the texts rather than upon the archaeology of this richly literate culture. Its basic chronology and history—the essential framework for future research—were outlined and increasingly sophisticated standards of epigraphic recording and philological analysis and instruction developed.

Surprisingly early in the period the University of Pennsylvania emerges into the story of Egyptology with one of the earliest Egyptological publications in the United States. In 1858, thirty-six years after Champollion’s momentous discovery, three graduate students who were members of the Philomathean Society of the University published a translation of the Greek and ancient Egyptian texts of the Rosetta Stone. This famous bilingual decree of Ptolemy V in 196 B.C. had been important for the decipherment of the hieroglyphs and several translations existed already.

Nevertheless, this was a “new and independent” one and, gaily decorated in lithography by one of the authors, it proved to be a best-seller and was reprinted in 1859. The translation was a creditable one and should always be remembered in our local annals for the delightful premise upon which it was based, namely “that nothing possible to man ought to trouble a graduate of the University of Pennsylvania and of the Philomathean Society.”

During the first four decades (1822-1860) of productive philological research the archaeological picture in Egypt was bleak. With a few exceptions, scholars in general during that period did not appreciate the historical and cultural significance of the archaeological data on any culture, and Egyptian sites were ransacked for additional texts and for art works and the more exotic artifacts such as mummy-cases and canopic jars. The European interest in Egyptian art and ‘curiosities’ which had
Mariette admires some of his finds (After J. Wilson, Signs and Wonders upon Pharaoh, pl. 16a)

Belzoni, an early archaeological explorer in Egypt, at work

Mariette as Conservator of Egyptian Monuments, a position later expanded into the Office of Director General of the Antiquities Service, or Antiquities Organisation as it is known today. For the first time there was a government agency charged with the protection of Egypt's ancient sites and monuments and Mariette made the most of the opportunity. A larger than life personality, Mariette was vigorous, combative and aloof, although he diplomatically maintained good relations with the Khedive,
the ruler of Egypt. In the context of the times his achievements far outweighed his defects. It is true that he engaged in excavations at several sites at the same time and concentrated upon the recovery of inscriptions and art works with little concern for context, but he was an able, professional Egyptologist whose monopoly of major excavations in Egypt, by virtue of his office, saved many sites from the archaeological bandits who had preceded him. At Mariette’s urgent legislation protecting Egyptian antiquities was approved —amongst the world’s earliest such legislation. It is due to this legislation that the Antiquities Organisation has the legal obligation to expropriate at the lowest reasonable price land upon which significant ancient remains have been found. Mariette also established the nucleus of a national museum, which created a mechanism inhibiting the flow of antiquities out of the country. Later the museum became the repository for thousands of art works and artifacts recovered by excavators working under the more permissive regimes of Mariette’s successors, Maspero and later Directors-General. The later history of the Antiquities Organisation and Cairo Museum is given elsewhere in this magazine. (See p. 45.)

The principles and methods of well-controlled, carefully recorded archaeological excavation were introduced into Egypt during the 1880’s and ’90’s, quite soon after they had begun to be established in England and Europe. The two men mainly responsible were an Englishman, Flinders Petrie and an American, George Reisner. Many of the excavators active in Egypt well into the 1930’s had been trained by Petrie or Reisner, but never by both! Throughout their long careers the two men remained respectfully remote from each other, their implicit professional rivalry being accentuated by marked differences in personality and techniques of excavation and analysis. Both were combative and rather autocratic, although Reisner mellowed over the years and Petrie always had an unexpected streak of impish humor. In his 70th year, laden with academic honors and one of the ‘grand old men’ of Egyptology, Petrie chose to recall in his memoirs that as a young man surveying the pyramids at Giza he found “for outside work in the hot weather, vest and pants [underwear] were suitable, and if pink they kept the tourist at bay, as the creature seemed to him too queer for inspection!”

The advent of scientific archaeology in Egypt brings us to the beginning of the
THE MUSEUM IN THE FIELD

“To be a good (archaeological) finder one needs a peculiar quality which is not altogether erudition—the hog which is most lucky at finding truffles is not always the fattest, best eating hog—on the contrary.”

SARA YORKE STEVENSON

Sara Stevenson's sense of humor, of which the above is a good example, enlivens her correspondence and publications. The two 'hogs' she referred to were well known to her, being the distinguished Egyptologists Flinders Petrie and Edouard Naville. She hastened to tell her correspondent that "I beg these gentlemen's pardon for the homely simile," but the incongruity between it and their late Victorian dignity must have amused her. Equally typically, her remarks had a serious point. Petrie had just been replaced by Naville as the excavator for the Egypt Exploration Fund, from whose excavations the Museum at that time obtained most of its Egyptian antiquities in return for the financial support it provided the Fund. "My private opinion is that the... Fund... has made a great blunder in parting with Petrie," she wrote; "his successor has not his 'nose.'" Irresistibly, the simile of the hogs followed.

Mrs. Stevenson's concern was natural. From 1889 to 1905 she devoted much of her formidable talents and energy to both the development of the Museum as a whole and its Egyptian Section in particular. The vigor, adaptability and perseverance, tempered with tact and good humor, that she brought to these tasks characterized her life as a whole. Her background was unusually varied. Born of American parents in Paris in 1847, she spent most of her first fifteen years there and, while enjoying a sociable life, first became interested in antiquities and research into them. By 1862 her family had settled in Mexico, where she joined them and lived for five years during the turbulent reign of the French-imposed "Emperor" Maximilian. Subsequently the family moved to Vermont, but in 1868 Sara Yorke, as she was then,—aged 21,—went to Philadelphia and
settled in with some aged relatives, of whom she was very fond. The ancestors of her father, Edward Yorke, had settled in Pennsylvania in 1728. Her pleasures in Philadelphia included a regular “evening supper of oranges, nuts, crackers, cheese, beer and port with the blind uncle, with whom she swapped stories until late each night, thus forming her habit of late hours” (Sara Yorke Stevenson, A Tribute from the Civic Club of Philadelphia, 1922, 10).

In 1870 Sara Yorke married a Philadelphia attorney, Cornelius Stevenson, and while maintaining an active social life—“much as society people do today,” her obituarist in 1922 somewhat tartly remarked, “but with more decorum and better manners” (op. cit. 10)—in a few years she became deeply involved with the city’s civic, philanthropic and educational affairs, an involvement which lasted until shortly before her death in 1921. In 1905 she had severed her connection with the University Museum (then the “Free Museum of Science and Art”) and three years later, when her family’s financial situation deteriorated, Mrs. Stevenson had, with characteristic aplomb and resilience, augmented its income by becoming literary editor and columnist—“Peggy Shippens’s Diary, a Chronicle of Events”—for the Philadelphia Public Ledger. Her newspaper work continued until 1920, as did a curatorship in the Pennsylvania Museum at Memorial Hall, Fairmount Park, (now the Philadelphia Museum of Art) and many other activities, including strong participation in the women’s suffrage movement. In 1921, some months before her death, she was publicly honored by prominent Philadelphians and she herself gave a luncheon for many friends, some of fifty years, duration or more. On the place cards was inscribed her motto: “Why not tell the truth with a smile?”

Mrs. Stevenson’s vital role in the founding and development of the University Museum is described elsewhere (see pp. 33 ff). Here we are concerned with her curatorship of the Egyptian and Mediterranean Section from 1890 to 1905. As curator, Mrs. Stevenson had two main ambitions, in the first of which she was ultimately unsuccessful. She had hoped that the Museum could establish its own field-work in Egypt, through the agency of the American Exploration Society, a group of wealthy individuals of whom she was one, who had been organized to fund Museum expeditions to the eastern Mediterranean and Egypt. No doubt they were inspired by the Museum’s successful expedition of 1889-1900 to Nippur in Iraq. The problem—which turned out to be insurmountable—was to engage a competent excavator.

As we have seen, Mrs. Stevenson’s first choice, Rosher, was a failure, but while in Egypt in 1898 she made other contacts. Edouard Naville suggested that he excavate for the Society the important funerary temple of Nebhepetre Mentuhotep (ca. 2060-2010 B.C.) at Deir el Bahri. This 11th Dynasty king had reunited Egypt after a period of conflict and civil war and had inaugurated a cultural renaissance. Nothing came of the idea. Mrs. Stevenson also tried to get James Quibell, a Petrie trainee, to excavate for the Society while maintaining his position with the Antiquities Organisation, but his superiors forbade it. In Quibell the Museum would have had a man who was not only (and continued to be) a successful and ‘lucky’ excavator, but one renowned for his geniality and shrewd good humor. Later, according to one story (perhaps, like all the best stories, apocryphal), when the excavation of Tutankhamun’s tomb during the 1920’s had created tensions which provoked the archaeological supervisor of the work, Howard Carter, who was a fierce-tempered man, to stalk off the site and retire sulking into his hotel room in Luxor, Quibell was instrumental in persuading him to return to the excavations where his expertise was essential to the work. They were good friends and Quibell’s cable from Cairo, “Dear Carter, I hear you have thrown down your bucket and spade and refused to play,” helped to restore his sense of perspective.

For a brief and, to us, in retrospect, exciting period it looked as if the Museum and Reisner, then beginning his career, might join forces. Mrs. Stevenson met Reisner in 1898 and was initially not enthusiastic; he had not yet gained any field experience (although he was determined to do so) and she thought him over partial to the development of German Egyptological field-work. Reisner did have strong professional and emotional ties with Germany; his grandfather was one of Napoleon’s German soldiers and Reisner himself had been trained by German Egyptologists, who were (and are) amongst the best in the world. But he was also a thorough-going American, who was born in Indianapolis in 1867, raised and educated in the United States, and devoted his long career from its outset to the promotion of American Egyptology. In fact, Reisner’s German ties eventually became traumatic.
assistant Fisher and Rowe, and now through the Pennsylvania-Yale Expedition to Giza (see page 60).

In her other ambition as curator Mrs. Stevenson was outstandingly successful. She wanted to build up a collection of excavated material, of works of art and objects that would be thoroughly representative of all periods and regions of ancient Egypt. In fact, she ensured a steady flow into the Museum of items which were not only representative, but not infrequently of outstanding historical or aesthetic value, by encouraging the support by the American Exploration Society (see page 17), of the Egypt Exploration Fund, a society founded in England by Amelia Edwards (another charming but formidable lady) and others to promote scientific excavation in Egypt. In return for its financial support the Museum, through the American Exploration Society, received an often substantial share of each year’s finds.

Mrs. Stevenson always maintained good relations with the Egypt Exploration Fund and its excavators, relations based on a combination of her genuine respect for scholarship and her diplomatic skills. A series of letters in the Museum archives in the characteristically (to those who have consulted his field notebooks) execrable hand of Petrie reveal that Mrs. Stevenson was particularly successful with this prickly genius. Petrie often complained that some museums failed to appreciate the material sent them from his excavations and Mrs. Stevenson noted that many people thought Petrie was, while unique, “almost impossible to get along with and full of angles,” meaning of course his personality was rather rugged, not devious! But her letters to him were genuinely and warmly respectful as well as diplomatically flattering. “You are,” she told him, “the father of our (Egyptian) department—for to you we owe all that we are and have.” Petrie was appreciative and ensured that the Museum benefited in the allotment of his very important finds.

Mrs. Stevenson then had succeeded in firmly linking the University Museum to what was, despite its faults, one of the most innovative and fruitful phases in Egyptological field-work. During this phase the full dimensions of the ancient Egyptian cultural experience began to emerge for the first time. This experience, insofar as it can be reconstructed, has been described in a variety of ways by writers on Egypt, but to bring out the significance of the Museum’s contribution to our understanding of that experience we must emphasize...
certain points and themes. All attempts at reconstructing Egyptian history and culture are necessarily incomplete, because so little data is available as compared to what existed, or even to the data that has survived but still awaits excavation or recording. However, attempts at reconstruction must be made and, if they are to convey the depth and texture of the ancient culture, must make fullest possible use of both the available textual and archaeological data. Each partially compensates for important gaps in the other.

We must also try to see Egypt, at any period, as a whole and not become over-influenced by the impression conveyed by a few major or comparatively well explored sites. In fact, three major themes provide a usefully broad frame of reference in trying to understand the nature and development of Egyptian history and culture, and the Museum’s role in contributing to that understanding. The first theme is that of the royal centers at which resided the royal dynasties which governed Egypt throughout the last three millennia B.C. During the long periods of stability and national unity in Egyptian history these royal centers enjoyed great human and economic resources and were responsible for major social, intellectual, artistic and technological advances.

However, a second theme—that of the provinces—is equally important. Ancient Egypt consisted of a series of regions, each subtly different in geography from the others, while overlying the regions was a second pattern of historically significant divisions, the ‘nomes,’ or provincial political units. During periods of political stability provincial resources were vigorously exploited by the royal centers, while provincial society was strongly influenced by the cultural and artistic modes of the centers. When, during periods of national disunity, the royal centers weakened, the provinces asserted varying degrees of political independence, and considerable cultural and artistic variety developed throughout the country. Our third theme is that of the towns, which linked the royal centers and the provinces. At any historical period there was a network of such towns, consisting of a tiny number of national

17 Statuette of Amun, the imperial god of the New Kingdom (1570-1085 B.C.) with the features of Tutankhamun (in the University Museum collection). The high aesthetic quality and the subtle merging of god and king aptly symbolize the ideological and artistic dominance of the royal centers.

18 Stela from Nag el Der (University Museum collection). This provincial piece of the First Intermediate Period (2256-2040 B.C.) shows the decreased sophistication but great vigor sometimes found in provincial art.
capitals and a much larger number of provincial towns. In our terms, even the largest of these towns must have been comparatively small, for the total population of ancient Egypt probably never exceeded four or five millions; but they were the physical foci and expression of those concentrations of people and resources which were the foundations of the major advances at the centers and the innovations and experiments in the provinces.

By becoming a major sponsor of the Egypt Exploration Fund and, later, of a second organization, the British School of Archaeology in Egypt (founded by Petrie), the University Museum was one of the institutions responsible for a rich documentation of these themes. This sponsorship was strongest from 1890 to 1907, but was periodically revived (1913-15, 1924) when the Museum’s own Egyptian fieldwork slackened. The aims and methods of Petrie and those he trained and employed were innovative and ambitious. Petrie’s basic aim was to reconstruct, by combining textual and well-documented archaeological data, the totality of Egyptian society, “weaving,” as he wrote in 1885, “a history out of scattered evidence using all material of inscriptions, objects, positions and probabilities.” (W. M. F. Petrie, 70 Years in Archaeology, 113.) He and his followers therefore worked at sites in many different parts of Egypt and paid as much attention to the remains of the middle and lower classes as to those of the elite.

Of course, the results often failed to live up to the ideal. What in fact was attempted was a vast sampling technique, in which hopefully representative elements of sites were examined but others, sometimes equally important, were overlooked. The pace of the work was intense, partly because Petrie had early become afraid that much vital information was being lost as sites were affected by the expanding agricultural system or ransacked by antiquities dealers, and as a result, field techniques of excavation and recording, even as practiced by Petrie himself, often failed to meet his own standards. Publication was rapid, in order to make data available to Egyptologists in general, but much important detail was omitted; and Petrie’s followers failed to attempt the substantial interpretive studies required if their work
was to have the scholarly impact it deserved. Petrie himself wrote voluminously on Egyptian history and culture, sometimes with great insight but often with a superficiality or dogmatism which lessened the value of his work.

Nevertheless, the fundamental effects of Petrie and his 'school' were extremely positive. His comprehensive approach to the study of ancient Egypt has made an ineradicable impression upon the work of later generations of Egyptologists, and he himself applied to the data powerful analytical methods the more developed uses of which are only now becoming fully apparent. A striking example is his method of 'sequence dating' or establishing a relative chronology for artifacts found in both prehistoric and historic cemeteries; outlined by Petrie in 1901, sequence dating was the first step toward the more sophisticated techniques now being applied very successfully to Egyptian material. Petrie also set the precedent for the orderly classification of the many categories of ancient Egyptian artifacts and for the study of their historical and cultural significance. This classification was based in large part upon the enormous masses of data recovered by his and others' field-work, much of which data came to the University Museum.

The geographical range of the sites with which the Museum was indirectly involved is immediately seen on the map (Figs. 19, 20), while chronologically all periods were covered, from prehistoric to Roman and Christian times. To Petrie and his followers Egyptian history and culture was a continuum, and although they concentrated on pre-Hellenistic sites they did not neglect later material when circumstances made it available to them. The characters of the sites were also very varied. Cemetery sites were frequent (about 30 in all), representing many provincial areas as well as royal centers like Giza and Meydum. Some temple sites (about 14) were excavated, as were a large number (13) of town or settlement sites. The excavation and study of the latter were often inadequate by modern standards, but reflect an appreciation of the importance of urban archaeology in Egypt, which was to largely disappear in the forties and fifties and has only begun to revive in recent years.

Only a few of the many sites involved can be singled out for specific reference. At Naqada and Ballas, Petrie found vast prehistoric cemeteries enabling him to reconstruct the character and chronology of Egyptian culture in preliterate (i.e. before
3100 B.C.) times, while at Hierakonpolis Quibell and Green explored one of the earliest of the royal centers, a late prehistoric-early Dynastic town yielding extraordinary works of art. Subsequently Petrie excavated at Abydos the tombs of Egypt's earliest historic kings—those of Dynasty I—and documented the rise of historic civilization in Egypt. At Kahun Petrie discovered a Middle Kingdom (ca. 1890-1700 B.C.) town, and studied the social stratification revealed in its carefully laid out plan and the associated artifacts. He also spent several seasons at Memphis, an immensely complicated site which was a royal center or northern capital from ca. 3100 to about 300 B.C. Finally, we should note that the Museum was a sponsor of excavations at Naukratis, a town which was the earliest Greek settlement in Egypt (ca. 7th century B.C.) and received important papyri on administrative and religious matters from the Graeco-Roman towns at Oxyrhynchos and El Hibeh. The greater part of the extraordinary range of materials received by the Museum as a result of these and other excavations arrived during the curatorship of Mrs. Stevenson.

DAVID RANDALL MACIVER AND AN EXTRAORDINARY PROVINCE

In 1905 Sara Yorke Stevenson, then president of the Museum's Board of Managers, resigned all her Museum positions, apparently to express disagreement with the Board's handling of a famous dispute about Hilprecht, Curator of the Babylonian Section. By then Mrs. Stevenson and her colleagues had firmly established the viability of the Museum and during the next five years it rapidly evolved. The number of archaeological and ethnographic expeditions was increasing, while an expanding collection and staff were not only outgrowing the building constructed in 1889, but required a more coherent administrative system. In 1910 Eckley Brinton Coxe, Jr. became President of the Board; C. C. Harrison, formerly the University's Provost, became chairman of a building committee; and an energetic, formidable Canadian, George Byron Gordon, was appointed Director. The Museum now "took on the exciting air of the seat of a storied empire," as Percy Madera, Jr. aptly put it, (Men in Search of Man, 30); but like all empires it first encountered vigorous opposition from satraps who had flourished under an earlier, looser regime. Hilprecht clashed with Gordon, went on leave in 1910—"defiantly taking the keys of the Babylonian Section with him" (op. cit., 27)—and retired in 1911. The same year MacIver, the Museum's first professional
Egyptologist, appointed a curator only six years earlier, concluded a feud with Gordon by not seeking reappointment.

Before this unhappy break David Randall MacIver had established the Museum as a major excavator in Egypt, following the innovative trends already evident in its earlier association with Petrie. Coxe, an Egyptological enthusiast, had provided funds for a curatorial staff and excavations, and in MacIver the Museum found an archaeologist of unusually broad and adventurous interests. He was a handsome and charming man who had excavated in Egypt since 1899, in association with Petrie’s group; but had also surveyed the archaeology of Algeria and, in 1905, worked at the famous Central African monument of Zimbabwe. MacIver demonstrated that Zimbabwe’s earliest structures dated to medieval and not, as many argued, to Phoenician or earlier times; and were built by indigenous Africans not intrusive and “superior” foreigners, a conclusion unacceptable to many at the time.

MacIver had phenomenal energy and ambition and, since he was responsible for both Egyptian and Mediterranean antiquities, first proposed a five year program of excavation in Egypt or Nubia (1907-1908), of megalithic remains in Algeria (1907-1908), and of sites in Cyprus or Spain (1909-1911). In fact all MacIver’s Museum excavations (1907-1910) were in Lower Nubia, a region then largely unknown archaeologically but of great potential interest. Prominent Egyptologists such as Reisner, Junker and Griffith were becoming interested in it and MacIver’s sense of adventurous scholarship was roused. In 1907 he noted that apart from a few still visible Egyptian temples “nothing is known of the country at all” and whatever he discovered he was sure would be “of quite a new character.” MacIver’s prediction was correct, but even after he had started work Coxe and Gordon (whose position as Director was then crystallizing, although not yet formalized) must have found it alarmingly difficult to keep their new curator’s enthusiasm confined to Nubia.
During that first year in Nubia, MacIver discovered a rich provincial culture with strong connections with Late Roman and Byzantine Egypt and initiated the first comprehensive study of some of the well preserved Nubian brick churches which had survived from the medieval period. The same year he saw for the first time the Byzantine churches and fortresses of Turkey and Greece and, afire with enthusiasm, linked them with characteristic boldness to his current work in Nubia. MacIver argued there was "a straight line through from Pagan Nubia of the 1st century before Christ to Gothic churches of the 15th century" and proposed that he, on the Museum's behalf, "should launch out on a great historical study of medieval Greece, especially of the medieval architecture and in so doing lay the foundations . . . of an historical-architectural department in our Museum such as no other institution has attempted." MacIver sensed that his superiors might be a little taken aback by these bold schemes and joked to Gordon, "unless you intend to get a mighty great new Museum built you had better not get more like me into it, for the present building will not hold so many." In fact, 'the Byzantine scheme' was not to their liking, but it took Gordon what he perhaps euphemistically described as "a good many talks" before MacIver could be persuaded to drop it.

MacIver was thus forced to channel his energies into the Nubian work, through which—with substantial assistance from Woolley who had been appointed Assistant Curator—he contributed significantly to several areas of knowledge. What made Lower Nubia a most unusual province of ancient Egypt was its frontier position between Egypt and other important African groups, which made it the setting for strong cultural interactions between the two. Moreover, conditions of preservation were unusually good and MacIver, who liked to excavate settlements as well as cemeteries, considerably enhanced our knowledge of Egyptian urbanism and its effect upon the indigenous Nubians.

The lower Nubian population was apparently always ethnically and linguistically different from the Egyptian, but in ancient and medieval times Egypt periodically sought control of the region to secure a southern frontier and exploit Nubia's trade routes and natural resources (especially gold). MacIver and Woolley were amongst the earliest recorders of a fascinating pattern in which indigenous Nubian cultures maintained distinctive characteristics for long periods, but were often strongly influenced—and sometimes totally swamped—by Egyptian culture. Reisner in 1907-1908 demonstrated that this pattern went well back into prehistoric times, but MacIver concentrated on the historic period as represented at several sites.

For example, in 1907-1908 he excavated a settlement of the 'C-group,' the indigenous Lower Nubian culture from ca. 2290 B.C. onwards. This settlement clearly reflected the increasing influence of Egyptian architectural norms upon the C-group, and only one other C-group settlement of comparable size has ever been excavated. On a much larger scale was the great Egyptian fortress town at Buhen, which dated to the Middle and New Kingdoms (ca. 2000-1000 B.C.). Two seasons were spent at Buhen, one of the best preserved examples of ancient military architecture in the Near East, and much data of great historical value was collected. MacIver was over sanguine about the completeness of the excavation; a subsequent British expedition spent eight profitable seasons on the site! The full implications of the material found by MacIver in the town and nearby cemeteries, together with the British material, are emerging only today and show that in the later Middle Kingdom a permanent Egyptian colony (instead of the rotated garrisons of Dynasty XII) developed at Buhen. Like others in Nubia, this provincial town grew wealthy as it capitalized upon the growing weakness of the Egyptian royal centers at the time, but eventually it fell under the control of an intrusive Kushite (Upper Nubian) Kingdom which exploited the expertise of the Egyptians. Later, in the New Kingdom, Buhen did again come under the rule of Egypt proper. Only one other of the many Egyptian fortresses in Nubia (Mirkissa) has been as historically revealing as Buhen.

MacIver's single greatest achievement however was one not fully acknowledged in recent histories of Lower Nubia, the literal discovery of its Meroitic culture. He fully realized the importance of the discovery—he and Woolley, he wrote, had given "to the history of southern Egypt a new chapter"—and the main conclusions he reached in his pioneer study of Meroitic Nubia are, with a few exceptions, the same as those of more recent researchers with much more material at their disposal. The Meroitic Nubians occupied southern Lower Nubia from the second to the fourth centuries A.D. and lived in substantially built
brick towns and villages, parts of which Woolley excavated. They were politically linked to the great Meroitic kingdom of the Sudan, and were dominated locally by rulers living in a few major fortified towns. From the cemeteries of Shablul and Karanog Maclver recovered hundreds of artifacts, revealing an extraordinary amalgam of local, Meroitic, Egyptian, and Hellenistic-Roman influences, the range of which he demonstrated while at the same time remaining sensitive to the originality of this regional culture. In important areas of his material and intellectual culture Maclver considered the “Nubian less of a copyist than an adapter: he stamped his borrowings with his proper genius and evolved something which at any rate had the merit of originality.”

**WILLIAM KELLY SIMPSON AND LATER WORK IN NUBIA**

Today, many years later, Nubia has disappeared beneath the waters of the new Aswan High Dam reservoir, but the University Museum did have an important role in the great salvage campaign of the 1960’s which preceded the construction of that reservoir. Froelich Rainey, then Director of the Museum, was a leading participant in the securing of United States support for the international collaboration with the Egyptian government that saved the famous temples of Abu Simbel for posterity. Simultaneously, a University Museum-Yale University expedition, directed by William Kelly Simpson of Yale, excavated several sites which recalled Maclver’s pioneering work. Parts of important Christian and earlier settlements were excavated and a number of important Meroitic inscriptions recovered. Perhaps most striking was the discovery of the tomb of an Egyptianized Nubian chieftain, Hekanefer, of the 14th century B.C.; although known to be a Nubian, he was depicted as an Egyptian and followed Egyptian customs. In 1910 MacIver had discovered at Buhen statuettes of a similarly Egyptianized chief, Amenemhat (15th century B.C.), although their significance was not realized until later.

**CLARENCE FISHER: AN UNKNOWN ACHIEVEMENT**

Coxe’s enthusiasm for Egyptological research remained undimmed after MacIver’s departure and in 1914 Gordon recruited a new Egyptian Curator, Clarence Stanley Fisher. Fisher spent most of the next nine years in the field, accomplishing an enormous amount of work of which much was of major significance, yet his career with the Museum was, in a professional sense, a tragic one. He began under favorable auspices; Petrie thought highly of him and Reisner, for whom he had worked, believed Fisher had the ability and opportunity to become “the most important archaeologist in Egypt.” But when Fisher left the Museum in 1925 all his major work was—and still is—unpublished and his achievements are so poorly known that he is assigned an undeservedly peripheral place in the history of American Egyptology.

Fisher’s advantages included a supportive Museum Director, a generous endowment left for Egyptological research by Coxe when he died in 1916 and a favorable environment for foreign archaeological activity in Egypt. The causes of his problems can only be guessed at, but were
to some degree rooted in his very merits as a person and an archaeologist, Fisher was very experienced in the field, and had a special orientation to architectural recording and history. He graduated as an architect from the University of Pennsylvania in 1897, worked with the Nippur expedition from 1897 to 1900, and subsequently assisted Reisner in Egypt and at Samaria in Palestine. From Reisner he learnt good field techniques and elaborate if time con-

suming methods of recording and documentation, but found difficulty in bringing his results into a publishable form.

This was partly due to the pressure of an intense excavation schedule, but also reflected Reisner’s influence and Fisher’s own limitations. Reisner liked to analyze his material in elaborate and sometimes numbing detail before publication, which meant that excavation and publication were typically far apart in time. Fisher’s only important Egyptological publication—on a minor cemetery at Giza—came out in 1924, nine years after the excavation. It is an excellent record of data and of architectural interpretation, but is not a major piece of archaeological scholarship; Fisher lacked Reisner’s brilliance and had never received any formal Egyptological training.

Fisher was to a degree a good organizer, and had a sound and well-informed concept of the needs of Egyptian archaeology; sites representative of all periods of Egyptian history should be systematically excavated “on thoroughly scientific lines,” the extant temples carefully recorded and a “corpus of all existing Egyptian archaeological material” should be prepared, being made useful for ready reference by means of card index systems. However, he devised research schedules which eventually proved too much for his health and personal equilibrium. Punishing schedules were not unusual then, as Petrie, Reisner and others worked long seasons with what to us seems tiny staffs, but Fisher’s efforts were excessive. From 1915 to 1919 he worked each year at two major sites, moving from Memphis to Dendereh when the water table became uncomfortably high at the former. Later, his plans verged on the fantastic; in 1919-20 he proposed to Gordon that he be responsible for excavations in Egypt, Palestine and Babylonia and, in fact, from 1921 to 1923, Fisher did alternate between Memphis and Dra Abu el Naga in Egypt and Beth Shan in Palestine.

Fisher’s health was seriously affected by his work load in 1919, and began to break down again in the early twenties. The physical strain was further exacerbated by his tendency to become involved in emotionally draining disputes. In 1922, for example, Fisher complained to Gordon that his field assistant Greenlees (recommended by the eminent Egyptologist Francis Llewellyn Griffith) “is very young and inexperienced and has pronounced Bolsheviki ideas. These views make him assert an independence of all authority.
I have tried to help him but he has a habit of pointless criticism which is most annoying." Queried by Gordon, Griffith wrote: "Neither my wife nor I can conceive of Greenlees (who had been Griffith's student) having or expressing Bolshevik views or anything bordering on insubordination unless someone or something has driven him to a state of lunacy! Has he been working too hard?" The exchanges read like passages from a Wodehouse novel, but the problem was a real one. Reisner had noted years earlier that Fisher was "liable to error where his personal feelings are concerned" and Fisher in fact during his career quarreled too often and too seriously—with Reisner, Petrie and several of his own assistants—to have been always in the right.

Inevitably, Fisher and Gordon also had a major falling out. For many years Gordon was sympathetic to Fisher and appreciative of his field-work, although, as a director devoted to increasing the Museum's collections and its public educational role, he sometimes grew restive at Fisher's long absence in the field. Subsequently, Gordon became increasingly concerned about Fisher's problems with his subordinates and at the same time expressed increasing impatience at Fisher's inability to produce, after 1919, the major monumental art works with which Gordon wished to embellish his expanded Museum. In 1925 Fisher, who had then been back at the Museum some time, quarreled with Gordon and resigned, taking up what appears to have been a happier and, in terms of publication, more productive archaeological career in Palestine.

The vicissitudes of Fisher's career however should not detract from his very real achievements in Egyptology, which we hope will in time be fully published and appreciated.

Fisher had a strong interest in the
archaeology of the people living in ancient Egypt, as well as that of the gods and the dead: urban and settlement sites attracted him as much as temples and cemeteries. His director, Gordon, was not unsympathetic to an interest in the less pretentious aspects of ancient Egyptian culture. In 1916 he publicly stated that no "object, however humble, is without significance in the reconstruction of the past" as attempted in the Museum's exhibits [The Museum Journal, VII. 2, 85]. However, at the same time Gordon made it clear that major monuments were also desired, for the "might of Egypt" must be represented in the Museum by "sculptured stone and hammerd bronze" (ibid. 86). Fortunately, in Egypt urban sites typically included monumental temples and palaces, and Fisher, having first applied for the ancient town mound of Tanis (which turned out to be reserved for the French) and considered that of Sais, another major Delta site, finally settled on Memphis. The results met both his and Gordon's expectations, although Fisher's other choices of sites were less productive in monuments and contributed to the final break with Gordon.

Fisher, perhaps the only Egyptologist who had previous experience working on the complex town mounds of Mesopotamia, was not put off by the similar, equally difficult town-sites of Egypt. Memphis was a major challenge to the excavator and, since no visible major temple complex like that of Karnak at Thebes had survived, had generally been avoided by Egyptologists. Petrie alone had carried out serious excavations there (1909-1913) with results which were very variable in quality. Memphis is enormous in size. It was for millennia a major royal center, having been founded perhaps at the opening of Dynasty I (ca. 3100 B.C.) and having remained of great importance into Roman times. Its history, in terms of periodically rebuilt temple complexes and the build-up of overlying town strata, was very complex while the site itself lay in the cultivation and was surrounded and partly covered by fields, villages and date palm plantations. The water table lay not far below the surface and has always been a serious problem for excavators.

Despite these difficulties, Fisher was very successful. From 1915 to 1920 he uncovered the remains of a large [over 3000 square meters] mud-brick palace of the pharaoh Merneptah (ca. 1236-1223 B.C.) and totally cleared a large area of stratified ancient town remains running over the palace ruins and surrounding them on every side. These perhaps comprise the largest segment of complex and stratified ancient Egyptian town remains ever excavated in a systematic and well recorded way. Fisher's architectural recording was of high quality and his aim was "to take the strata in their order and not destroy anything [i.e. without adequate recording] no matter how unimportant it may seem at the time." The chief limitations of his results are that, like other excavators of his time (e.g. MacIver at
Fisher equated strata with building levels, whereas they are in fact usually much more complex entities; and he made no study of the thousands of stratified sherds he must have encountered. The latter would have been an invaluable record and facilitated both the relative and the absolute dating of his superimposed building levels and their stratified matrixes.

Merneptah’s palace, as recorded by Fisher, greatly enriched our understanding of the original appearance of such structures, for the building burned and collapsed at an early date, sealing off many fallen architectural elements such as massive inscribed stone columns and doorways. No other of the few excavated Egyptian palaces has been so rich in architectural data. The exact nature of the palace remains uncertain however, because Fisher was unable to recover its surrounding complex. It was quite possibly a ceremonial palace, meant only for periodic, short visits by the king but not lived in permanently by him, and lying at right angles to the axis of an (as yet undiscovered) temple with an east-west axis. Such palaces are found in the later New Kingdom (ca. 1300-1080 B.C.) royal funerary temples, and an earlier, more elaborate ‘temple-palace’ occurred under Akhenaten (ca. 1379-1326 B.C.) at Amarna.

Despite the importance of his Memphis work, Fisher’s greatest archaeological achievement was his excavation in the cemetery of Dendereh, a major provincial center in southern Egypt. It was an important cult center, probably from prehistoric times, of the popular goddess Hathor and supported a substantial town from early historic into Hellenistic times; its cemetery therefore reflected both local and national cultural fluctuations which were historically important. Fisher applied Reisner’s methods—"with the idea of working the site like one ploughs a field, leaving no place to chance or unexplored"—to a large area previously sampled by Petrie. Where Petrie reported about 140 tombs, Fisher recorded over 2000!

Petrie’s and Fisher’s material, which has been studied by Henry Fischer and Ray Slater Hemphill, covered mainly the time-span from the late Old Kingdom into the late Middle Kingdom (ca. 2500-1700 B.C.) and is particularly informative on a fascinating historical period, the First Intermediate Period when the royal centers became seriously weakened. The provincial governors buried at Dendereh in Dynasty VI were, in some cases, conspicuously wealthy, reflecting perhaps a draining away into the provinces of the wealth once largely monopolized by the royal centers. Further provincial vitality was attested by distinctive styles demonstrated in tomb superstructures and the inscribed stelae affixed to them, styles peculiar to Dendereh and provinces adjoining it. During the disturbed times following Dynasty VI Dendereh became a fortified town, and its prosperity, as reflected by grave-goods, dropped, until it revived again during the national reunification achieved by Dynasties XI and XII (ca. 2040-1786 B.C.). In addition to giving important historical data, Fisher’s records also document an archaeological sequence of tomb-types, ceramic and other artifacts for the period ca. 2500 to 1700 B.C. which is rivaled at very few other provincial sites.

Fisher’s third major project (1921-1923) was the excavation and recording of Dra Abu el Naga, a section of the West Bank cemetery of the great royal center of Thebes. This site includes the inscribed and decorated tombs of some of Egypt’s highest officials of the period ca. 1320-1085 B.C., but Fisher’s valuable architectural and archaeological records were not complemented by cleaning and epigraphic work of comparable quality. A new Museum expedition began work at the site in 1967 to make up for these deficiencies (see p. 50).

ALAN ROWE AND THE MYSTERIOUS PYRAMID OF MEYDUM

One of the most striking symbols of the intellectual and economic resources of the royal centers of ancient Egypt was the rapid evolution in the style and size of the pyramids during the first half of the third millennium B.C. These great monuments dominated the ‘residence-cemeteries,’ i.e. the cemeteries of the royal centers in which the reigning king, his relatives and highest
Rowe's excavations at a huge mastaba-tomb (No. 17) in front of the Meydum pyramid

Evolution of the pyramid. 1, the step pyramid of Djoser at Saqqara, ca. 2650 B.C. 2, the Meydum pyramid, begun as a step pyramid, probably by Huni in ca. 2635 B.C., and completed as a true pyramid by Snefru, ca. 2600 B.C. 3, The Bent Pyramid and 4, the true pyramid of Snefru at Dahshur, ca. 2600 B.C. 5, the largest pyramid ever built, that of Khufu at Giza, ca. 2575 B.C.

officials were buried and at which major technological and artistic advances were made. About 76 kilometers south of Cairo is one of the most mysterious of these pyramids, a massive stone ruin still rising about 300 feet high at Meydum. Our increasingly better understanding of this monument and its associated archaeological remains is based mainly upon data collected under the partial (Petrie) or total (Alan Rowe) sponsorship of the University Museum. (For photograph, see cover.)

By whom, and when, was this great pyramid built and the impressive 'residence-cemetery' surrounding it laid out and begun? The question is important, for the Meydum pyramid itself was originally designed as a step pyramid, like those of Dynasty III (ca. 2700-2600 B.C.), but was transformed into the first true pyramid, the type so familiar to us from Dynasty IV (ca. 2600-2500 B.C.) Giza and later sites. Moreover, the associated funerary temple and causeway and the adjoining cemeteries of royal relatives and nobles, as we shall see, comprise the earliest examples of the classic 'residence-cemetery' of the Old Kingdom. Strangely, the identity of the royal builder of Meydum has not survived in any explicit form, but many scholars have believed him to have been King Snefru (ca. 2700-2676 B.C.), primarily because the ancient Egyptians, at least from the 15th century B.C. on, themselves thought so. If true, this would make Snefru the greatest monumental builder of early Egyptian history, for he was certainly the builder of two further pyramids at Dahshur to the north. These three pyramids, if combined, would have created a pyramid nearly twice the size of the pyramid of Snecfru's son Khufu (Cheops), the single largest pyramid ever built. Equally intriguing is the present state of the pyramid, for of all the completed, massive stone pyramids of the Old Kingdom it has suffered the most damage, having lost about 20% of its original content, mostly from the exterior casing.

When the University Museum decided, in 1929, to resume excavations in Egypt, it was natural that Alan Rowe, the field director chosen, should have been attracted to Meydum. An Englishman, Rowe had learnt excellent excavating and recording techniques from Fisher (with whom he worked at Beth Shan in Palestine in 1922) and Reisner. Already an enthusiastic
Egyptologist, Rowe presumably became particularly interested in the history, art and architecture of Old Kingdom Egypt while serving as Reisner's assistant at Giza from 1923 to 1925, during which time it was Rowe who actually discovered the famous tomb of Hetepheres, the mother of Khufu or Cheops, builder of the 'Great Pyramid.' Noting that the pyramid of Meydum, if dating to the reign of Snefru or thereabouts, was critical for an understanding of the evolution from the early step pyramids, with their small-scale masonry, to the true pyramids built of megalithic blocks, Rowe anticipated that excavations at the Meydum pyramid and its nearby 'residence-cemetery' would "provide much new light" upon the transition from Dynasty III to Dynasty IV (The Museum Journal, XX, 2, p. 118). He was also careful to stress that magnificent art treasures had been found by earlier excavators at Meydum, clearly being aware that although Gordon had died in 1927, his successor as Director, Horace Jayne (1929-1940), followed Gordon's shrewd policy of encouraging excavations which were both scientifically important and likely to yield outstanding as well as culturally representative items for the Museum's collections.

Rowe, like most of his contemporaries, was convinced that Snefru had built the Meydum pyramid, and supported his case with a mass of well-documented detail, both archaeological and textual. He was, in an academic sense, more of a professional Egyptologist than Maclver or Fisher and, unlike either of them, could read Egyptian hieroglyphs with some proficiency. (In 1907, Gordon had urged Maclver to learn hieroglyphs; Maclver promised "I shall have a try as soon as I can, but it takes longer than I think you realize!"; and in fact never did so). However, the evidence was scanty, and Rowe's enthusiasm sometimes outstripped his scholarly caution. In 1931 or 1932 he wrote to the Museum on a discovery which had much excited him, and the Museum authorities, not quite succeeding in distinguishing fact from speculation in Rowe's lengthy report, published a statement that Rowe had found: "a limestone slab on which is carved . . . a portrait of Snefru. The fact that the portrait was found in a quarry used in building the pyramid clearly indicates that it is a work contemporary with the Fourth Dynasty . . . it is the only contemporary portrait of King Snefru that has ever been found in Egypt" (The University Museum Bulletin, 3.5, 1932 p. 111). In fact, the 'slab' turns
out to be a fragment of a small (6.3 cm. high), roughly shaped stone stela, bearing a crudely carved royal figure which is unidentified, although Rowe thought he could make out Snefru's name in shallowly scratched hieroglyphs. Even if the stela does represent Snefru, it could be an ex-voto of a much later period.

As an unpublished research paper by James Weinstein has argued persuasively, the real importance of Rowe's excavations around the pyramid itself and in the cemeteries was to delineate in detail the funerary temple and causeway and to discover good evidence that Snefru had been active at Meydum, but almost certainly to complete a pyramid largely built by his predecessor, King Huni, who must have been buried here. Snefru himself was probably buried in the 'northern' of his two pyramids at Dahshur. The Meydum pyramid was perhaps also responsible for the fact that Snefru himself had two pyramids. The southern Dahshur pyramid abruptly changes angle and is 'bent,' and hence a second, more suitable pyramid had to be built. Kurt Mendelssohn has argued in The Riddle of the Pyramids (1974) that the 'Bent Pyramid' reflects adaptations to compensate for poor constructional techniques revealed when the recently or partly completed casing of the Meydum pyramid collapsed like a shattering landslide while the 'Bent Pyramid' was being built; Snefru's name remained associated with Meydum and it was natural for later generations of Egyptians to mistake him as its builder. Most of the Old Kingdom rulers were shadowy figures in later times, except for Khufu who was identified as a tyrant, but Snefru survived in literature as the type figure of a benevolent and good-natured ruler, not unlike our own 'King Cole' who was "a merry old soul, And a merry old soul was he!"

Petrie and, in richer detail, Rowe demonstrated how closely the Meydum 'residence-cemetery' anticipated the layout of later ones, and that innovations had occurred at Meydum as they did at other royal centers in earlier and later times. Petrie documented in the tomb chapel of Nefermaat a unique treatment of the decorated chapel walls, making extensive use of inlaid faience, while Rowe established that a huge tomb superstructure standing before the pyramid had originally had a stepped appearance, the only example of its kind. Neither found sculpture to equal that discovered by Mariette's workmen at Meydum in 1871, when they found the famous statues of Rahotep and Nofret in a sealed chamber and fled, terrified by the statues' lifelike appearance in the flickering torch light.

Rowe's other major achievement was to show that Meydum had remained an important cemetery well into Roman times; he thus demonstrated an appreciation for continuity in Egyptian history earlier seen in Maclver. Rowe was a productive scholar, and his writing kept well in pace with his excavations; but unfortunately the onset of the Depression led to the termination in 1931 of his appointment as Field Director and prevented the publication of his full manuscript on Meydum. So this work, like most of Fisher's, remains one of the great unpublished records of the Museum.

RUDOLF ANTHEIS: A FOILED ARCHAEOLOGIST

Rudolf Anthes, Curator of the Egyptian Section from 1950 to 1963 and now living in retirement in Berlin, is well remembered in the Museum for his outstanding qualities as teacher and scholar and his humor and good nature. We are sure that he would not object to the slightly whimsical title above, for it makes a very important point. In the course of two seasons' work at Memphis, the famous royal center already described, Anthes came to grasp with enthusiasm the fundamentals of a discipline—archaeology—in which he had previously had little experience; and developed a projected excavation program at Memphis that was potentially most important for urban archaeology in Egypt. It was, as he said, then "unique" in Egypt and would anticipate "new methods of
excavating (new for Egypt)," which would be needed in "the future of digging in Egypt," the excavation of the great Delta town sites. However, circumstances prevented the plan going into effect and foiled Anthes' effort to open up a new line of development in his distinguished career.

How was it that Anthes, a philologist, historian and student of Egyptian art with no significant archaeological training or experience, found himself in February, 1955 beginning excavations at Memphis, one of the most difficult sites in Egypt? The particular cause was his own courageous and adventurous scholarship, but the general one was the extraordinary revival of University Museum field-work throughout much of the world in the 1950's.

After Egyptian field-work was terminated by the Museum in 1932 for financial reasons, important Museum field projects continued in some other countries, funded by wealthy individuals or cost-sharing with other institutions. However, the depleted Cox Fund income was devoted to engaging curators—Battiscombe Gunn and Hermann Ranke—to meet the urgent museological needs of the large Egyptian collection. With the Second World War, Museum field-work everywhere had to cease, but after 1947, a newly installed Director, Froelich Rainey (strongly supported by the Board's Chairman-President, Percy C. Madeira, Jr.) applied his flair and energy to reviving Museum field-work and succeeded brilliantly. By 1956, several major, long-term projects had begun—Gordion (Turkey), Hasanlu (Iran), el-Jib (Jordan) and Tikal (Guatemala)—with further important work beginning in the early '60's at Sybaris (Italy) and in underwater archaeology.

Archaeological research sponsored by United States institutions in Egypt had declined since the 1930's and Rainey was anxious to see the Museum's tradition of Egyptian field-work revived with, as he wrote in 1954, "something significant... so that we might revive American interest in that field." Perhaps with some reluctance Anthes was persuaded to select a site for excavation and chose Memphis, for reasons which showed considerable foresight about the future imperatives of archaeology in Egypt. Further excavation of the comparatively well-preserved cemeteries, temples and occasional settlements on the dry desert fringes of Egypt was, he wrote, "not urgent. It is the ruins in the cultivated land and those monuments which are already uncovered that we have to look to first of all" (The University
two seasons (1955, 1956) at Memphis he made some serious mistakes in archaeological techniques and interpretations due to the inexperience of himself and his staff. However, his correspondence and publications reveal that Anthes' powerful scholarly mind gradually came to appreciate the importance of good excavation techniques and the value of properly interpreted archaeological data. He also began to develop a comprehensive plan of excavation designed to solve some major archaeological and historical problems of Memphis. "Only a coordinated system of horizontal and vertical cuts is adequate for the understanding of a site which has accumulated under changing living conditions in contrast to the consistent activity of wind and sand in the desert," he wrote, and added, the "main object of excavating (at Memphis) should be the stratigraphy as it applies to the site of an ancient city." [R. Anthes, Mit Rahineh 1956, pp. 2-3.]

The large-scale project which he envisaged as an expansion of the 1955-56 work would contribute significantly to a "greater pattern . . . the understanding of the topography, the history and the economical development of Memphis through more than one and a half millennia" (The University Museum Bulletin, 21, 2, p. 12).

Although this larger project was never effected, the results of the work Anthes had done were most valuable, and his discussions of them interwove textual and archaeological data with a scholarly depth and richness never achieved by any of the previous directors of Museum projects in Egypt. The small temple of Ramesses II which Anthes excavated raised, as he showed, many questions about the character of the Ramesside remains in the southeast sector of Memphis (which included the palace of Merneptah excavated by Fisher and re-investigated by Anthes). Further, he demonstrated that a huge...
brick enclosure wall surrounding the temple complex of Ptah, god of Memphis, was Roman and not, as generally thought, Ramesside in date. Some of the recovered artifacts were also of great interest. A large stone libation basin (32 centimeters high) reproduced in miniature the huge towered walls which had surrounded the Ptah temple in Ramesside times, and a representation of a man and woman of ca. 1250 B.C. showed them as “almost life-size on a single slab” which is “hardly known elsewhere in Egypt” (The University Museum Bulletin, 21, 2, p. 29).

Why were Anthes’ proposals not put into effect? The Museum, in the ’50’s, had emphasized more strongly than ever before its “traditional dedication to scientifically valuable excavation and had recognized that the archaeologists’ prize today is not trinkets, but knowledge,” especially since most countries refused any more to divide antiquities with the foreign expeditions that found them (Percy C. Madeira, Jr., Men in Search of Man, p. 60). However, the older (and perfectly reasonable if limiting) Museum policy of sponsoring field-work which combined important scientific results with others of more popular appeal was still powerful. In this regard Memphis compared unfavorably with the other field projects of the period. At Gordion, a richly equipped royal tomb—perhaps of the legendary Midas—had been discovered; and although other projects were concerned mainly with urban centers, each had a special and unusual feature: ‘el-Jib was Gibeon, where the sun stood still for Joshua; Tikal was dominated by extraordinary pyramid temples, reaching a height of 270 feet; and Hasanlu lay in an archaeologically unknown region.

Memphis, by contrast, was a site almost too familiar; it was so well known, after all, that in the 19th century Memphis in Tennessee received its name presumably, like Cairo and Karnak in Illinois, to create “an atmosphere of grandeur” (D. J. Boorstin, The Americans. The National Experience, p. 298). Moreover, it lacked the obvious monumental strength or potential richness (in terms of visually striking artifacts) of other sites. An eminent and influential visitor from the Museum wrote back ominously of Anthes’ excavation that “work is not likely to result in worthwhile discoveries of objects”; and once the substantial investment of time and money required by Anthes’ expanded plan was realized, the Memphis project was terminated. Anthes accepted the situation gracefully; in terms of the Museum’s own scholarly development, his Memphis project was before its time.

During the next five years the archaeological picture in Egypt changed rapidly as the Egyptian government encouraged the redevelopment of large-scale foreign archaeological activity in Egypt. Since the 1930’s for reasons which were understandable, divisions of finds had become less favorable, and eventually ended altogether; and the government “supervision of (foreign) excavation in Egypt became stricter and was often responsive to anti-foreign feeling expressed in the Egyptian press and parliament” (John Wilson, Signs and Wonders upon Pharaoh. The Story of American Egyptology, p. 194). Naturally, archaeological work as a whole had, as a result, diminished. But in 1959, Egypt, now a fully independent and self-confident nation, reinstated more generous terms, first to encourage work in Lower Nubia, soon to be inundated by Lake Nasser, the new Aswan Dam reservoir, but subsequently also in Egypt proper. During the ’60’s United States government funding of archaeological work in Egypt dramatically increased and for American institutions in general, and the University Museum in particular, a new and expansive phase of Egyptian field-work began. But that story is told elsewhere in this magazine (pp. 46 ff).

A stone libation basin from Anthes’ excavations, depicting the walled enclosure of the Ptah temple in Ramesside times. Dedicated by the scribe Amenemhet, whose inscribed prayer includes the phrase: “Praise to (Ptah) at the great enclosure wall as this is the seat of hearing.” Depicted on the towers are ears symbolizing the hearing which Ptah gives to petitions.
THE EGYPTIAN COLLECTION

The Egyptian collection of the University Museum came into being during the last decade of the 1800's. It was then that Dr. William Pepper, Provost of the University, backed by Dr. Charles C. Harrison, Chairman of the Ways and Means Committee, had "conceived the idea of drawing wealthy and prominent Philadelphians who were interested in archaeology but not particularly in the University into an association which would tie them and the institution together. This he did through the formation in 1889 of the University Archaeological Association—the beginning of the University Museum" (Percy C. Madeira, Jr., Men in Search of Man).

Prior to that time there had been sporadic gifts of Egyptian objects made to the University, but the creation of the Archaeological Association served as the nucleus of a definite interest in Philadelphia in Egyptology.

In 1890, an Egyptian and Mediterranean Section of the Museum was formed, and naturally Sara Yorke Stevenson became the first curator, a post which she held for fifteen years. Her tenure was a time during which the general direction of policy was set, rules and regulations to which the Egyptian Section specifically and the Museum in general still adhere. In a letter written just before the turn of the century she stated her feelings, shared by her colleagues, that the collection should be available not only to scholars "as a basis for original and comparative study, but also to public school teachers and pupils, as well as the people at large who can enjoy at home some of the benefits derived from foreign travel and a visit to the great state museums of Europe."

It was a collection which had already, by the later part of the century, outgrown its temporary space in College Hall. When the 'new' University Library, in 1890, granted its permission to use one of the rooms therein, the objects quickly took over the available space, and it was clear that something more accommodating had to be provided.

In 1892, Mrs. Stevenson had been elected a member of the Board of the Department of Archaeology and Paleontology. With that honor added to her list of credentials, she campaigned hard for the new museum to be called the "Free Museum of Science and Art"—a name still visible on the front of the present building. A site was selected, plans were drawn up, and pledges were solicited. There were some temporary discouragements with the fund drive which Mrs. Stevenson had to put aright. She even handled the more mundane problems as well, as indicated by her own description of the building site in 1895:

"... as the East wind blew—such dense black clouds of smoke swept over the space on which we stood that Mr. Strawbridge and I... begged Dr. Pepper to pause and consider... We therefore notified the architects to devise some plan by which the work could be started on the
other end of the lot." Mrs. Stevenson was describing the 'pollution'—emanating from the steam-operated trains. Considering our proximity to the tracks, Mrs. Stevenson's fears were well founded: we are fortunate that trains are now electrically powered.

Eventually, these setbacks proved to be only minor. The problems with money, however, were major, and it was not until the state legislature voted a grant of $150,000 (to be matched) that the building could be begun. The archives contain much material that documents the difficult and time-consuming work done by the backers of the project, of whom Mrs. Stevenson was one, that finally secured the private and public funding necessary for the edifice. Estimates by their very nature being low, the first section alone cost about three-quarters of the original amount named for the whole building. Soon other sections were added, the latest addition, which contains the academic wing, housing offices, teaching departments and laboratories, dedicated in 1971. While the extremely ambitious original design was never completed, the "Free Museum of Science and Art" which, within a few years after its opening was being referred to as the University Museum—a name that would become official in 1913—has provided a good home for the artifacts about which Mrs. Stevenson and her cohorts were so concerned.

Dedicated on December 20, 1899 the first section of the Museum was a landmark in the city. Not only was it a showcase of the creativity of mankind, it was and still is the home of the most comprehensive collection of its kind in the state. The New York Times stated:

Ten years of energetic effort, liberal support and scientific exploration end today in the opening of the University's Free Museum of Science and Art . . .

Stored as they have been hitherto . . . the Museum has made no such impression on the general public as its character, size and importance deserved.

The importance of the Egyptian collection was, and still is, that, unlike those of some other institutions which were for the most part acquired through purchase, it is almost entirely excavated. While the early participation of the museum in Egypt was in actuality 'second hand' in that the Museum helped to support excavations such as those carried out by the British archaeologist Sir William Flinders Petrie, rather than to organize its own expeditions, some of our earliest association with Egypt was through Mrs. Stevenson, its first Egyptian curator. In 1898 she proceeded to that country as a representative of the American Exploration Society and the city of Philadelphia. Her trip—discussed earlier in this journal (pp. 5, 6)—had many positive effects for this institution, one of which was that the first curator of the section returned with 42 boxes (according to press coverage of her arrival in Philadelphia) of Egyptian material which had been excavated by her agent at Dendereh.

An urgent task was to catalogue these artifacts together with the occasional gifts from local people as well as the fruits of the association with Petrie and the Egypt Exploration Fund. One of Petrie's pieces from Ballas serves as this museum's first published object from Egypt, and while we can appreciate the accompanying cogent description of the material, we cannot help but wonder at the proofreaders who allowed the illustration to appear upside-down!

Early scientific excavation set the example for the Museum, and whenever the institution worked in Egypt, directly or indirectly, by our own labors or financial support, the return came in the form of
antiquities allotted to us by the Egyptian government. The long-standing interest in Egypt, coupled with the diversity of sites chosen, makes the collection quite representative of the long-lived culture of the ancient Egyptians. Town sites, temple sites, palaces, cemeteries, pyramid sites, and provincial areas, all were part of the itinerary. From the royal and provincial workshops come superb reliefs and statuary, architectural elements, and so forth. Tools, implements, jewelry, medical instruments, textiles, written material, and pottery and stone vessels and even human remains comprise the collection which, according to records just before the turn of the century, ranked only third in popularity after the Babylonian and the American Indian Halls. Needless to say, the attendants' salaries reflected this difference: $4.00 per week in the Babylonian Hall versus $3.00 per week in the Egyptian Hall.

51 Bulletin of the Free Museum of Science and Art of the University of Pennsylvania, vol. 1, no. 1, p. 36, fig. 10. Philadelphia. May, 1897

52 Figure in steatite of the "gardener" Merer. This Middle Kingdom statue comes from the Museum's excavation at Buhen, Nubia

53 Headless quartzite statue of Nefershemem from El Kab, dating to the late IVth or early Vth Dynasty

54 Stone jars from tombs of the First Intermediate Period to the Middle Kingdom excavated by the University Museum in Dendereh
Hall. While not one of the best known collections of Egyptian material, the University Museum’s collection is one of the most significant because of the completeness of the scientific record. If the context of an object is known, then the dating and analysis can be easier and more precise. Purchased pieces often owe their stated provenience, date, and authenticity to stylistic comparisons with pieces from recorded sites. Therefore, some of our objects, although of a less aesthetically appealing nature to our modern eye than some beautifully executed object purchased on the art market, often provide the basis for our knowledge of the latter.

While outright purchases were limited, the Museum did acquire a substantial portion of its papyrus collection through purchase. Max Müller, acting on behalf of the Museum shortly after the turn of the century, compiled an impressive array of papyri from the local dealers in Egypt. Combined with material acquired through the Egyptian Exploration Fund and later University Museum excavations, the papyrus collection contains documents from Pharaonic through Graeco-Roman Egypt. An article in a previous issue of Expedition (Winter, 1978) provides detailed information regarding written material in the Museum.

Benefactors too have played a substantial role in helping to determine the nature of the collection by their choice of which Museum project to support financially or to which objects offered for purchase to contribute.

Notable among these early benefactors were Eckley B. Coxe, Jr., John Wanamaker, Dillwyn Parrish, Mrs. John Harrison and Charles C. Harrison. Mrs. Stevenson gave not only of her time but also of her own personal collection of artifacts. In 1904, Mr. Wanamaker purchased the tomb of Kapure, the major section of an Old Kingdom mastaba from Saqqara, which is on display in the lower Egyptian Gallery. He also secured for the Museum a large, red granite sarcophagus and other items of importance which also had been exhibited at the St. Louis World’s Fair. Through Dr. Müller, Mr. John F. Lewis donated much of his Egyptian collection which contained one of the finest Books of the Dead on exhibit in this country. Temporary loans of objects had the habit of becoming permanent, such as the important stela of Akhenaton that came here in 1900 on loan. Thirty-one years later, it became a permanent addition to the collection. The early records show prominently the name
those acquired in other ways, many were fully documented. Because of the time spanned (almost a hundred years), the method of operation (either its own expedition or by support of an outside expedition) and the variety of field directors, the range of the collection is extremely broad.

The name of Eckley B. Coxe, Jr. turns up often in regard to the Egyptian Section of the Museum, since in addition to the generous and virtually unrestricted support he gave to the Egyptian field-work, he arranged for his aid to continue beyond his own lifetime. Through the terms of his will, an endowment was established for the maintenance of the Egyptian Section. The income from this fund has been a valuable asset, representing one of the primary reasons for the success and continuity of Egyptology at Pennsylvania.

Unlike many other museums, where the curator of a section will often base his acquisition policy upon the gaps in the present collection, the University Museum often did not have a resident curator of its Egyptian Section. Although it periodically employed members with curatorial rank, their function in the Museum was minimal, while their function in the field was paramount. Not until Mr. Battiscombe Gunn joined the staff in 1931 has there been a curator interested primarily in the collection. The commitment to the field was made early and was consistent, but the commitment to the collection in terms of display, conservation and publication was not always so carefully directed.

Mrs. Stevenson resigned in 1905 and David Randall MacIver became curator in 1907. His duties, however, were as field director in Egypt. A well known German Egyptologist, Hermann Ranke, came to teach Egyptian for three years until 1905, but he had no curatorial position. W. Max Müller had University affiliation in 1909-10 but no official museum position, despite the fact that his interest and work were in large part responsible for our papyrus collection. In 1920, Henry F. Lutz was a Research Instructor in both Assyriology and Egyptology. Nathaniel Reich, later Professor at Dropsie College, was an assistant from 1922 to 1924, translating some of the Egyptian papyri. During this time Professor George Barton, whose major area was in Semitics and Biblical Studies, occasionally taught Egyptology for the University. It is clear that the Museum was not at a loss for Egyptological talent during these early years. It is odd, however, that full, consistent and continuous advantage of these talents was not taken.

For eleven years (1914-25), Clarence Fisher as curator directed the expeditions in Egypt, while at home little was done with the collection or teaching program. He did, however, have responsibilities with the collection and when at home concerned himself with them. Shortly before leaving the Museum, in a letter to Gordon, dated April 15, 1924, he discussed the installation of Egyptian objects in the new wing and the need for a comprehensive card catalogue. He also mentioned plans for a handbook giving a detailed catalogue of the objects, but written as a connected story of the rise and development of Egyptian art and merely using the exhibits to illustrate it. Although exhibiting foresight, his suggestions did not meet with immediate acceptance.

The collections were installed in time for the opening of the Coxe Wing in May 1926, but it was not until 1929 that his idea of a comprehensive card catalogue came into fruition. When Horace H. F. Jayne was appointed Director of the Museum in May of that year, one of his first projects was to establish a card catalogue for the entire museum. A registrar was appointed and a number of temporary assistants were engaged, some to copy onto cards the data on catalogued objects written in the large accession books, others to catalogue previously uncatalogued material. The work in the Egyptian Section was begun with the thousands of objects excavated by Fisher between 1914 and 1925.
and identified only by their field accession numbers. Dorothy Cross and Margaret Moon had the job of finding each of these objects, giving it a Museum catalogue number and making the catalogue card, using the information in the field catalogue. As to Fisher’s idea of a published catalogue, it was not until more than twenty-five years later that Hermann Ranke published a catalogue of the collection, and now, fifty-five years later, the Museum is mounting an exhibition of ancient Egyptian material where the objects displayed are virtually the illustrations for the story being told.

Fisher was succeeded as field director by Alan Rowe, who spent almost all of his time in Egypt (see page 26).

In 1931, Battiscombe Gunn came to Philadelphia as Curator of the Egyptian Section and, according to his obituary, it was here that he made a "new discovery—the secret of successful teaching." He did some teaching in the Museum but was never appointed to a teaching position in the University. A superb British philologist who had already published a substantial volume on Egyptian grammar, Gunn had previously been Assistant Keeper of the Egyptian Museum in Cairo. Although he spent only slightly more than three years here, he made a consistent effort to complete the cataloguing of the collection, to organize all the holdings in a consistent manner, and to number all objects. Material that had been donated as a group was now individually catalogued and numbered. As a philologist, his attention was directed also toward the large collection of papyri only incompletely organized by Müller and Reich. Through Gunn’s efforts in conservation, mounting, and identifying the papyri, the scope of the collection was realized. In a short time, Gunn had made the first concerted and sustained attempt to organize the entire collection, and his thoroughness included examination of the collection of amulets and the organization of them by types of stone. To help the researcher unfamiliar with lapidary nomenclature, he included a helpful list of terms with descriptions, such as: "chrysoberyl is not a variety of beryl"; and "carnelian is red chalcedony." When faced with questions regarding the material we received from our support of the Sedment expedition, Gunn wrote directly to the excavator, Guy Bruntom, for the particulars. Gunn did not, however, take an active interest in the field during the period that he held the title of Curator of the Egyptian Section. He was assisted in his work by Phillipus Miller and Margaret Moon.

A third assistant, Carroll Young, began work shortly before Gunn left Philadelphia to accept the chair of Egyptology at Oxford. She provided the expertise in the Section until a new curator, Hermann Ranke, was appointed in 1938. Ranke, who had been teaching at the University several decades before, was the first Egyptologist at the University who had official teaching and curatorial responsibilities, and, with his dual appointment, Egyptology at the University was beginning to be treated on a strictly professional level. While attempts by Ranke were being made to publish previously excavated material, little concrete results for this venture were forthcoming during his tenure. Egyptological activity was limited to Philadelphia now until the early ‘50’s, when the Museum would again sponsor an expedition to Egypt.

Ranke, however, published several articles on museum objects and produced the
guide to the Egyptian exhibition published as volume 15, nos. 2-3 of the 1950 University Museum Bulletin. It was not a handbook as Fisher had visualized but a traditional guide to the Museum's collection with prefatory essays on chronology, geography, history, and religion; there is no essay on art. Now out of print, it is to this day the only published record of the Egyptian exhibition. Ranke could accomplish only part of his ambitious goals, since his dual appointment made it necessary for him to maintain an Egyptological teaching program in addition to his curatorial responsibilities. He directed as much of his attention to the galleries and storage areas as possible: he rearranged the exhibition of mummies and took a strong interest in conservation. He frequently queried John Cooney, the Curator of the Brooklyn Museum, regarding problems of conservation, and Mr. Cooney reciprocated by studying advanced stages of Egyptian philology with Dr. Ranke. Ranke's organization is indicated by one of the monthly Section reports that he prepared:

MONTHLY REPORT ON WORK DONE IN THE EGYPTIAN SECTION

1. Mending of pottery continued.
2. Cataloguing of pottery and negatives continued.
3. Rearrangement of exhibition of alabaster vases and recataloguing of same.

4. Preparatory work for rearrangement of pottery for exhibition, according to periods.
5. Study and recataloguing of scarabs continues.
6. Copying and studying of inscriptions on Saitic statue.
7. Cleaning of Old Kingdom lintels and New Kingdom stela.
8. Rearrangement of some objects in Upper Hall.

It is clear that both Ranke and his predecessor, Gunn, were primarily interested in and devoted their time to the collection. It was the intent of Gunn, who was then followed by Ranke and his assistants, to locate, identify, and record the more than 40,000 objects that then comprised the collection. Ranke was fortunate to have Carroll Young assisting him, and it was she who "held the reins" during the seven years that elapsed, until Ranke returned in 1949 as Visiting Curator for two more years. Miss Young continued the practice of monthly Section reports, documenting her activities. Kenneth D. Matthews (later director of the Educational Department) and Barbara Copp, among others, assisted her in her efforts. The latter aide, now Barbara Wilson, is still part of the Museum, devoting her valuable time to the maintenance of the Archives, and without her help and advice, articles like this one could never be written.

On November 18, 1943, Miss Young stated: "I continue to try to track down missing numbers on the field negatives and to track objects that have lost their numbers back to their original cards. I believe it to be worthwhile and what Professor Gunn had started and wished us to finish." Her perseverance in regard to the collection took her into all aspects of the work, and her reports documented the variety of her activities—"cataloging the Egyptian objects of Mr. Madeira's gift" (December 18, 1942); field notes—"Mr. Brickelmaier is now helping me find numberless objects pictured on the negatives. We spend Saturday mornings in the cellar looking for these objects, so that we may type their numbers on the negative bags" (February 17, 1944); storage collection—"The Theban material [we have all of it here] would also make a fascinating volume. We have catalogued 300 Theban field negatives this month and the more I work with them, the more I realize what a shame it is that we can not get an Egyptian Archaeologist like Dr. Ranke to publish them. There are so many human touches in the inscriptions. One broken fragment reads: "... which I have passed upon earth as one happy with my wife and all my children..." A third gentleman is so gallant he even includes his
mother-in-law's name on his tomb wall" (December 21, 1944). Miss Young often dealt with the public, as her records indicate: "Mr. Rose . . . was back again, this time for information on a 'galabieh.' I gave him sketches of this Arabic cloak, but Mrs. Henry [Grace Henry, in the Educational Department] gave him the most help . . . Took three friends of Miss Kraus through the Egyptian Section" (January 18, 1945).

"A Mr. Keely from Roxborough also brought in a forged limestone stela which I translated for him and explained my reasons for believing it a forgery. Goodness knows why he was pleased to know he had a forgery, but he was, for he sent me some music he had written as a thanks offering" (April 18, 1945). Miss Young frequently guided tours of school children and other interested parties through the Egyptian collection, and it was she who fielded inquiries from a variety of scholars: "Dr. Stanley Truman Brooks is interested in finding Ramie in Egyptian textiles. So I have sneezed through 124 fragments of linen . . ." (February 28, 1946). Her interest in the conservation of the collection is well indicated in her Section report of April 10, 1946: "The Dow Flake [a dehydrating agent] is melting again and will soon need to be emptied a second time. In this connection, I would like to say that there is really a crying need for a trained chemist in the Museum to treat diseased specimens."

Her dedication to the collection in all its manifestations can be appreciated in her monthly report for June 1946: "I thoroughly cleaned the Upper and Lower Egyptian Sections, scrubbing dirty woodwork and fingerprints off the outside of Kaipure's
tomb and the pyramid model. Also washed all the stone sarcophagi that could not be harmed by soap and water, i.e. such stones as marble and alabaster; straightened crooked objects in their cases; typed, cut and mounted new labels when they were dirty or even torn and covered all the labels in both halls with clear acetate; made new acetate covers for the offering trays . . ."

While Miss Young's hopes for a noted Egyptian archaeologist to take over as Curator were fulfilled when Dr. Ranke returned to Philadelphia in 1948; he stayed only two years. In 1950, another noted German Egyptologist, Rudolf Anthes, came to the University Museum as curator. Like his predecessor, he too had a University appointment as Professor. Unlike Ranke, however, he also directed field-work in Egypt. Anthes, then, became the first Egyptologist at the University Museum to have an official tripartite appointment, a precedent that would continue with his successors as well. It took more than half a century, but the Egyptian collection of the University Museum was finally receiving professional care on a consistent and continuous basis—the kind of attention its former caretakers had tried to establish. It is not surprising then, that it is about this time that there appears to be a flurry of outside interest in the University Museum's collection. Among the many congratulatory letters sent to Anthes by Egyptological scholars around the world, there are none which do not comment on the quality of Anthes' new collection. Professor Edgerton of the Oriental Institute in offering Anthes the hospitality of Chicago stated: "We hope very much that you will soon give us the pleasure of seeing you here in Chicago. We cannot show you a museum comparable to Philadelphia or Boston—but you will find a few antiquities of some slight interest . . ." Almost all of the Egyptologists who wrote added their regrets at not having seen the collection in Philadelphia, and each indicated his intention of visiting soon. The following letter of Cyril Aldred of October 1950 to Anthes at his accession is typical of many letters the new Curator/Professor received: "I regret that I do not know the Philadelphia Collections at all well—though I believe they contain material worthy of your expert attention."

It was probably Ranke's catalogue more than anything else that was responsible for bringing the collection to the attention of the Egyptological world. Anthes was constantly being requested to send information regarding particular pieces pictured or
mentioned in the catalogue. His own catholic interests caused his answers often to include questions regarding either objects in other collections or opinions on a particular matter. His correspondence grew, therefore, as did his reputation for aiding all scholars in regard to the Egyptian collection, whether neophyte or established. His assistant, Henry Fischer, aided in handling the correspondence, organizing the storage material, and handling curatorial problems. When Anthes went to the field in 1955 and 1956, Fischer accompanied him. Later Alan Schulman assisted in the Section.

Public attention to the Museum in general, and to some extent the Egyptian collection, grew when in 1951, the University Museum launched its critically acclaimed and award-winning television program “What in the World?” Dr. Froelich Rainey, then Director of the Museum, acted as moderator to a panel of experts who would try to identify on the air an unknown object from the collection. John Cooney and Bernard Bothmer of the Brooklyn Museum were frequently guest panelists.

Anthes covered the three aspects of his position admirably. Not only did he take care of the collection and teach, he also managed to provide preliminary reports on his excavations almost immediately after his season and a finished text shortly thereafter. The Denderah material from the early Roscher and the later Petrie excavation was brought in to order following early organization by Miss Young, and it formed the basis of Henry Fischer’s dissertation. The archaeological material from the site was later used for the thesis of Ray Slater. These studies provided the direction for publishing the vast quantity of archaeological material that comprises the collection.

Anthes was interested in making available to all scholars the resources of this institution. Through him, Bernard Bothmer, first at the Museum of Fine Arts, Boston, and later at the Brooklyn Museum, compiled a wealth of information regarding the pieces in Philadelphia. This knowledge served him well, for many objects in his corpus of Late Egyptian Sculpture are from the University Museum. We supplied him with several of these works of art for Brooklyn’s exhibition “Sculpture in the Late Period”; in 1973 Bothmer borrowed from our Amarna collection for his Museum’s exhibition, “Akhenaten and
Nefertiti,” and in 1978, a substantial portion of the Brooklyn Museum’s exhibition, “Africa in Antiquity,” is from the Nubian collection of the University Museum.

In 1953 Dr. Elise Baumgartel wrote to Anthes regarding the nature of the prehistoric material:

You may remember my visit to your Museum in 1950, and how impressed I was by the amount of material it possesses from Flinders Petrie’s excavations at Naqada...I am just preparing for the printer the second revised edition of my Cultures of Prehistoric Egypt...I intend to attach to this second part a catalogue of the contents of the Naqada graves, but I can hardly do that without the material in your keeping...You must have more than a thousand pieces...The Naqada material is still the most important ever excavated from Predynastic Egypt and is still vastly unknown. Petrie published about 50 graves (incomplete) out of about 3000...

(October 21, 1953)

A similar story can be found for almost every scholar after he had seen the collection for the first time, and Anthes tried to make as many people familiar with it as possible.

One of the activities that made the Egyptian collection more prominent did not, however, have much to do with Dr. Anthes. Late in the 1950’s, the world had begun to become concerned over the certain destruction of the Nubian monuments to be flooded by the construction of the new Aswan Dam. The University Museum, along with other concerned organizations, mounted expeditions in conjunction with Egypt to save these treasures. To bring attention to this work, including a group of 34 objects from the tomb of Tutankhamun lent by the Egyptian government, an American exhibition of Egyptian antiquities was planned. Dr. Rainey, with the help of David Crownover, Museum Secretary, organized this exhibition which opened in the National Gallery of Art in October of 1961 and came next to the University Museum in December. A total of 16 institutions hosted the show, and 73,000 people saw it here for its one-month stay. Needless to say, the Egyptian Section became even more popular. The exhibition was entitled “Tutankhamun’s Treasures.”

By the end of 1962, Dr. Anthes had retired, but it was not until 1964 that the Museum found a replacement, Dr. David O’Connor, an Australian Egyptologist trained at University College, London and Cambridge. Having worked with one of Britain’s most renowned Egyptian archaeologists, Brian Emery, Dr. O’Connor’s appointment indicated the University Museum’s commitment to working in Egypt at the highest professional level. Like Anthes, O’Connor had duties of tripartite nature. Along with teaching archaeology and history in the Department of Oriental Studies, he has maintained ongoing expeditions in Malkata and Abydos. In addition, he organized in 1971, an exhibition regarding the University Museum’s work in Abydos and was responsible for the reinstallation of the Mummy Room in 1970. Under his curatorial direction, the room depicting the activities of daily life in Ancient Egypt was redesigned and implemented.

Dr. Jaroslav Černý, who held the chair of Egyptology at Oxford University, was visiting professor during the Fall terms of 1965 through 1968; he taught all phases of the Egyptian language. Dr. Ahmed Fakhry and Dr. William Kelly Simpson were visiting curators for a short time.

After Černý’s return to England, Lanny Bell assisted O’Connor in the Egyptian Section, eventually becoming Assistant Professor of Egyptology in 1976. Dr. Bell, too, had responsibilities in Egypt and his epigraphic and archaeological expeditions to Dra Abu el Naga continued the University Museum’s earlier commitment to the site under Clarence Fisher. Throughout his tenure at the Museum, Bell...
also assisted O'Connor in all curatorial matters. Dr. James Weinstein and Dr. Ray Slater assisted in the section, working on the research and conservation of stone, pottery, and metal.

Both O'Connor and Bell were well supported by a man whose dedication to the Section cannot be matched. Charles Detweiler, who has voluntarily cared for the storage section for more than a decade, still keeps his protective watch over it.

When Lannie Bell accepted the position of Director of Chicago House in Luxor, Egypt, in 1977, Dr. David Silverman came to Philadelphia from the Oriental Institute and Field Museum of Natural History in Chicago for a one-year appointment. In July 1978 he was officially appointed Assistant Curator of the Egyptian Section and Assistant Professor of Egyptology for the Department of Oriental Studies.

"The Search for Ancient Egypt," an exhibition of objects detailing the University's Museum's work in Egypt for almost 100 years, is the first major project of the present Egyptian Section of O'Connor and Silverman. Opening early in 1979 and consisting of more than 200 pieces, most of which have never been displayed, the exhibition again testifies to the importance and level of quality of the Egyptian collection at the University Museum.

David O'Connor has a diploma in Egyptology from the University of London and a Ph.D. in Egyptology from Cambridge University, England. Since 1964 Dr. O'Connor has been curator in charge of the Egyptian Section, University Museum and has taught Egyptology in the Oriental Studies Department, University of Pennsylvania. He has excavated at a number of sites in Egypt and the Sudan. From 1969 to 1964 he was a field archaeologist working under the late Professor W. B. Emery; since 1964 he has been co-director of the Pennsylvania-Yale Expedition to Abydos in southern Egypt; and in 1977 he concluded a four-year project of excavations on the site of a palace-city built by Amenhotep III, Tutankhamun's probable grandfather.

Dr. O'Connor has published a number of articles on Egyptian and African history and archaeology, and written a chapter for the Cambridge History of Africa Vol. I (in press). Currently he is preparing monographs describing the results of his excavations.

David P. Silverman is Assistant Curator in the Egyptian Section of the Museum and Assistant Professor of Oriental Studies at the University of Pennsylvania. Previously, he was Project Egyptologist for "The Treasures of Tutankhamun" in Chicago and was also in charge of the Egyptian collections at the Oriental Institute and the Field Museum of Natural History. He received his Ph.D. from the University of Chicago and has worked in Egypt recording inscriptions at Giza, Saqqara, Thebes and Aswan. His books, Fifty Wonders of Tutankhamun and Masterpieces of Tutankhamun, have just been published, and Interrogative Constructions with Jn and Jn-Jw in Old and Middle Egyptian will appear in the spring.
ECKLEY BRINTON COXE, JR.

Not many men would, some sixty years after their death, be celebrated by a great research institution, but Eckley B. Coxe was to the University Museum, what, on a more opulent scale, John D. Rockefeller was to the Oriental Institute of the University of Chicago. The Museum owes a great debt to Coxe, for it was the combination of himself and two extraordinary men, C. C. Harrison and G. B. Gordon, which fostered the first major period of the Museum’s growth (1910-1916). As President of the Museum Coxe was extraordinarily generous, and by 1915 was paying half of its operating expenses personally; but his letters reveal that he also took his administrative responsibilities seriously and that, while ‘he took some time to arrive at a decision’ it was always the ‘generous and just decision of a gentleman’ (C. C. Harrison in The Museum Journal, VII. 3, 1916, p. 141).

Coxe was born in 1872, descended from a prominent family which settled in the eastern United States in the 17th century and ultimately acquired extensive anthracite coal fields from which Coxe derived his wealth. Coxe always had a strong interest in Egypt and it was he, advised by Harrison and Gordon, who ensured that the Museum become a leader in Egyptological research. From 1905 Coxe paid for the salaries of MacIver, Woolley and, later, Fisher, for their expeditions and for the other costs of the Egyptian Section. He was not a dilettante. As Chairman of the Egyptian Section he expected, and received, detailed and frequent reports from the field, both from the ebullient MacIver (the work is now ‘fast and furious’; March, 1907) and the more restrained Fisher. Coxe himself, with Gordon, visited Buhen (caption 26, p. 20) in 1910 and, with MacIver’s advice, undertook excavations there himself, while his letters home show a detailed understanding of the historical importance of the discoveries made there.

Coxe was a modest man, who quietly supported many charities and struck his contemporaries as ‘a fine gentleman (and) a noble and generous citizen’ to the Philadelphia community. He avoided public recognition, insisting that the Museum Rotunda, opened in 1915, be named for Harrison rather than himself. Not until the Coxe Wing opened in 1926 was a section of the Museum formally dedicated to his memory.

Coxe’s death in 1916 did not end, but rather ensured the Museum’s Egyptological research, for he left an endowment of $500,000 which was primarily for the Egyptian Section. Until the nineteen fifties all the expenses of that section—curatorial, professorial and other salaries, gallery and collection maintenance, large field expeditions and publications—were met by the income from the Coxe endowment. Today of course, inflation has restricted the income’s functions. Egyptian expeditions are funded largely by government and institutional grants and even salary and overhead expenses are no longer fully met by the income. Nevertheless, it is Coxe’s generosity which still maintains the essential core of the Egyptology program; and which challenges us to find further sources of endowment that will enable the Museum to maintain itself as a leader in Egyptological research and training, as Coxe intended.

Much scholarship has stemmed from Coxe’s informed generosity. We can fairly say of him, what the ancient Egyptians said of their learned scribes: ‘it has come to pass that their names will endure forever, although they are gone, having completed their lives, and although their offspring are forgotten... they made heirs for themselves of the writings and books of instruction which they made.’ [Papyrus Chester Beatty IV, trans. by W. K. Simpson.]
THE EGYPTIAN ANTIQUITIES ORGANISATION

The Egyptological achievements of the University Museum owed much to the generosity of Eckley B. Coxe, Jr. and to the professionalism of the Museum's Egyptological curators and field-directors. However, equally large is its debt to the Egyptian Antiquities Organisation (already referred to, p. 11) which is primarily responsible for safeguarding, maintaining and making accessible the ancient sites of Egypt and for promoting the study of them. The story of Egyptology, at this Museum or in general, cannot be properly understood without reference to the achievements of this organ of the Egyptian government.

The founding of the Antiquities Organisation (then known by a different name) in the 1850's occurred as a result of the desire of the independent Egyptian government of the Khedive Said to end the ransacking of Egyptian sites which had occurred in the earlier years of that century. This recognition of responsibility for any country's greatest cultural resource—its past—made Egypt a leader in this regard amongst Near Eastern countries, all of which developed their antiquities organizations at later dates. The strong and explicit legislative framework concerning antiquities is the fundamental support of the Egyptian Antiquities Organisation.

During the last 125 years the Antiquities Organisation—which is these days responsible to the Minister of Education—has developed a large and impressive administrative system which spreads outward from its headquarters in Cairo through all the provinces, in which it is represented by its chief inspectors, supported by their inspectors, officials, guards and technicians. The Organisation's responsibilities include protecting all known sites from damage, conserving and restoring standing monuments, excavating sites which are of particular interest or are threatened by constructional or agricultural works, and expropriating (with suitable compensation) land upon which ancient remains are discovered. These tasks are often difficult and require considerable dedication, for many sites are located in the more remote and rural parts of the country, where communications are still developing and conveniences, as yet, are few. The Organisation also greatly enhances the work of foreign expeditions, by assigning each an inspector to ensure that the standards of research desired by the government are maintained and to facilitate the expedition's work in many ways.

Egypt is becoming increasingly richer in museums, not only the great treasure-houses in Cairo but also in the provinces—this in spite of the fact that it is the only Near Eastern country which still divides 'finds' with foreign excavating institutions, thus generously making available to communities throughout the world examples of the art and artifacts of its past.

The Antiquities Organisation is not simply a bureaucracy; like several of the Egyptian universities, it is also one of the leading contributors to Egyptological research. In the late 19th and early 20th centuries it is true that European domination of the Antiquities Service inhibited the development of indigenous Egyptology; as Ahmad Kamal, an early Egyptian Egyptologist said to a French Director-general of the Service who chided him on the absence of indigenous Egyptologists, in the years that 'you French have directed the Service, what opportunities have you given us?' In the twenties, the serious training of Egyptian Egyptologists began, and since then they have—in ever increasing numbers—emerged as equal to their scholarly peers in Europe, the United Kingdom and the United States.

Throughout the long period in which the Organisation has been in existence the Egyptians have maintained a traditional hospitality to foreign scholars and expeditions. Political vicissitudes of course have sometimes modified this hospitality; but usually, as is the case today, foreign scholars have received the salutation 'Ahlan wa Sahlan'—'Welcome!'—from this proud and generous people who have granted us the privilege of sharing with them the exploration of their unique and extraordinary past.
THE PRESENT

ABYDOS: THE UNIVERSITY MUSEUM-YALE UNIVERSITY EXPEDITION

DAVID O'CONNOR

The provincial centers of ancient Egypt were vital elements in its political, economic and religious systems and their remains reflect the continually changing pattern of the interaction of national and local influences. One component of these remains—the cemeteries generated by such centers—is in middle and southern Egypt, usually accessible and relatively well preserved (being on the low desert); they have often been excavated and recorded. The other components—the ancient town itself and its temples—are less well understood, because typically they are badly destroyed or inaccessible under modern towns and fields. At a few sites, conditions are better, one such being Abydos, where enough has survived of its long-lived town site and temple center to attract several excavators over the years. Most recently, the Pennsylvania-Yale expedition has worked at the site, from 1967 to 1969, and in 1977, with future seasons planned. The project is co-directed by William Kelly Simpson and the writer, the latter having directed the field-work undertaken to date and being responsible for organizing the publication of the results so far achieved.

The specific archaeological topography of Abydos as a whole was shaped by its primarily religious role, the chief features of which are well known although much of this vast site (which occupies about 13.5 square kilometers) remains unexplored, despite a history of excavation and epigraphic recording going back to the early 19th century. Its earliest importance was as a royal center, at which the late prehistoric kings of southern Egypt and subsequently of the first dynasty to rule over a united Egypt (ca. 3100-2890 B.C.) were buried. During Dynasty II, the Memphite region became firmly established as the royal center, and the royal ceme-
1 Map of Abydos. The broken line divides the northwestern section (right) from the southeastern (left). The stippled area represents an ancient cemetery zone; the hatched area represents the modern cultivation and villages. 1, the Osiris temple complex. 2, the Ramesses temple excavated by the Pennsylvania-Yale Expedition. 3, the possible route of the procession way to the "tomb of Osiris." 4, the royal tombs of Dynasties I and II.

2 Sherds from bowls, the lower two depicting Osiris: Pennsylvania-Yale Expedition. These bowls are unique to Abydos; examples were recovered earlier by the dealer Anastasi.

3 The Ramesses II temple, running southwest from the entrance through the later enclosure wall. 1, profile of the overlying spoil heaps. 2, the shattered fragments of the temple in a sandy matrix. 3, the memorial chapels. 4, an in situ section of the temple floor; the broken line represents the line of the temple floor and, on the left, of the forecourt surface. 5, stratified remains (forecourt floor and underlying fill, and Old Kingdom occupation or rubbish layers beneath them); this section is stepped back from the axis. 6, the entrance through the enclosure wall.

4 Plan of the Pennsylvania-Yale area. The temple of Ramesses II adjoins the western corner of the much later temple-enclosure wall. The hatched area within the Ramesses II temple represents the extent of the memorial chapels so far excavated.

3 Sherds from bowls, the lower two depicting Osiris: Pennsylvania-Yale Expedition. These bowls are unique to Abydos; examples were recovered earlier by the dealer Anastasi.

4 Plan of the Pennsylvania-Yale area. The temple of Ramesses II adjoins the western corner of the much later temple-enclosure wall. The hatched area within the Ramesses II temple represents the extent of the memorial chapels so far excavated.

3 Sherds from bowls, the lower two depicting Osiris: Pennsylvania-Yale Expedition. These bowls are unique to Abydos; examples were recovered earlier by the dealer Anastasi.

4 Plan of the Pennsylvania-Yale area. The temple of Ramesses II adjoins the western corner of the much later temple-enclosure wall. The hatched area within the Ramesses II temple represents the extent of the memorial chapels so far excavated.
lie on its northwest (and probably southeast), dating as late as Dynasties XXV-XXVI (ca. 747-525 B.C.) and probably later; but tombs never intruded into the temple or its forecourt. Moreover, a great Roman enclosure wall of the main Osiris temple, (which lay northeast and downhill from the Ramesses II temple) cut through the Ramesside brick pylon but had a gateway precisely above the entrance to the Ramesses II forecourt, suggesting that access to the Ramesses II structure was still desired.

The ancient town mound of Abydos was largely removed in the past, probably by peasants seeking to reuse its fertile, organically rich soil, but along the southwestern edge of the mound (where our excavations are located) preservation has been better. Old Kingdom strata, (later 3rd millennium B.C.) possibly occupational, run under the Ramesses II forecourt and perhaps the temple itself, while in the nearby Kom el Sultan a peculiar configuration of late period enclosure walls preserved a large segment of the mound. Mariette removed the upper levels of this segment (which included Ptolemaic occupation, according to ostraca found by us in his dump), but strata dating from earlier times to at least the Second Intermediate Period (ca. 1730-1570 B.C.) have been recorded by Barry Kemp, while we ourselves have excavated part of an Old Kingdom stratum with substantial houses in Kom el Sultan. Future work will enable us to reconstruct the history of this fragment of the old town in more detail.

Especially important for reconstructing the topography of Abydos, and for Egyptian religious history in general, was our discovery of a complex of mud-brick chapels under the Ramesses II temple. These chapels are dated to the Middle Kingdom (ca. 2040-1740 B.C.) by rare in situ inscriptions, by others scattered through the debris and, above all, by literally thousands of sherds from discarded offering jars and bowls. They are in fact the first scientifically excavated and recorded examples of private ‘cenotaphs’ or memorial chapels, referred to in Middle Kingdom texts from Abydos but never described in detail there. Such chapels probably stretched in a belt from the entrance to the processional valley northwest along the low desert crest overlooking the Osiris temple, but our section of them must be the best preserved, for it was sealed off for centuries by Ramesses’ temple; subsequent exposure and repeated plundering still left our chapels structurally intact.

The larger chapels are of two types.
The "window" stela of Ukhhotep (23.3 cm. high). The left-hand side refers to the festival of Osiris, and Ukhhotep's mother, Hotep, and another relative (?), Sneferptah, are also commemorated.

Note
The Pennsylvania-Yale expedition is funded mainly by a United States government grant administered by the Department of State.

Some are single barrel-vaulted chambers, originally containing stelae and statuettes; they were fronted by low-walled forecourts, sometimes with one or two tree pits. Others are square, solid structures of which the upper sections (cut away when the Ramesside builders levelled the site) probably had stelae set in them. The spaces between the large chapels are packed with smaller ones, due to an accretion process covering a long time span. This is the archaeological equivalent of a process observed by Simpson amongst the Middle Kingdom inscribed material recovered by Anastasi, Mariette and others at Abydos. Many of these inscriptions 'cluster' together by referring to interrelated individuals, and each 'cluster' must have been originally housed in an architectural complex similar to ours.

The function of these chapels was not funerary. There is no space for burial shafts, no subterranean chambers exist beneath the chapels and no trace of the typical Middle Kingdom funerary equipment was found. The chapels' purpose was to enable those commemorated in them to share in the offerings made at the Osiris temple and, above all, to participate in perpetuity in the great annual festival re-enacted along the processional way. We found in situ proof of this desire which had previously been known from a number of uncontexted Abydos stelae. A small stone stela had framed the 'door' of a small chapel and through it a statuette had peered out. The text on the still largely surviving left hand side of this stela originally read: "Kissing the ground before Khenty-Amentiu (Osiris)" and "seeing the beauty of Wepwawet at the first coming forth" "by the revered one, Ukhhotep" (translation by the author). These phrases refer to participation in the great Osiris festival.
THE UNIVERSITY MUSEUM EXPEDITION
TO DRA ABU EL NAGA

Dra Abu el Naga is the Arabic name for a site in Thebes, north of Deir el Bahri, not too far from the Valley of the Kings. This part of the Theban necropolis is of especial interest to the University Museum today just as it was several decades ago. Through monies from the Coxe Fund, Clarence Fisher directed two seasons of work from 1921 to 1923 for the Museum. He concentrated mainly on the decorated tombs of Ramesside officials, but he worked as well in the Eighteenth Dynasty mortuary temple of Amenhotep I and his wife Ahmose-Nefertari. Published in a preliminary report (see The Museum Journal, XV, 2, 28-49), the results of Fisher's work still await full publication, although research on the excavation and the finds has continued over the years.

Early in 1967 the University Museum reaffirmed its commitment to the work already begun there, and Lanny Bell went to Dra Abu el Naga as Assistant Investigator to examine the site. He hoped to be able to extricate the complicated genealogical, historical, and religious information hidden in the archaeological material. Professor Černý, who was Visiting Curator at the Museum and Visiting Professor for the University, was an exceptional mentor, for his reputation as an epigrapher, philologist, and historian was rarely equalled. He acted as the Adviser for the survey, and Dr. David O’Connor, who had originated the movement toward publishing the past excavations, was the Principal Investigator. In this first season (see Expedition, 10, #2, Winter 1968, pp. 38-47), Bell examined the site in detail, and he, Černý, and O’Connor selected three tombs: 35 (Bekenkhons), 157 (Nebwenenef), and 283 (Setau). To this first group was added a second: 156, 289, and 300 with others following at a later date. Having submitted an application to the authorities, work on tomb 35 was begun, the first stage of which was to collate the 1921-23 copies of the inscriptions against the original version.

In the second season (winter 1968; see the reports in Expedition 11, #3, Spring 1969, 26-43), Field Director Bell was assisted by Ray Slater of the Egyptian Section and Geoffrey Pearce, a British conservator. As was the case with the first season, the financing was by the Coxe Fund and the Smithsonian administered counterpart funds (PL 83-480). Bell and Slater continued collating the texts in tomb #35, correcting earlier misreadings and the resulting conclusions and discovering new texts. Pearce directed the cleaning and repair. The goals of the expedition were not only to extract as much information as possible from the pharaonic remains but also to conserve and reconstruct these monuments for many more generations.

The staff also began the laborious task of clearing tomb 157, the interior of which had much debris from the successive years of occupation, including evidence to indicate that it had at one time been used as a Coptic sanctuary. On the walls, they found extremely fine raised relief from the Ramesside period, but most of the painted plaster decoration had decomposed. The pillars in Nebwenenef’s broad hall were reconstructed and a ceiling shored up.
They brought electricity into tomb 35 which would be accessible to other locations, and they began the exterior stonework for tombs 289 and 300 in which the protective iron doors would be placed. Tomb 289 was opened, but because of evident extensive damage caused by bats, it was resealed until a later time. The University Museum site now comprising 14 tombs was fully inspected and carefully looked after.

Successive seasons saw the further clearing of the Nebwenenef tomb and the completion of the collation of texts in tomb 35. Archaeological work was directed by Martha Bell and her assistants, and the staff in general was enlarged to accommodate the increasing range of the projects. No part of the concession at Dra abu el Naga was left uncare for and with each survey, cleaning, and collation, exciting discoveries were made. In the winter of 1973, Bell stated, "We have now to revise the biographies of Nebwenenef, Bekenkhons I and II, and Roma-Roy, to evaluate their places within the succession of High Priests of Amun during Dynasties XIX and XX (1320-1085 B.C.)." As Dra abu el Naga continues to be sifted through, it is clear that more such enlightening information will be forthcoming.
THE UNIVERSITY MUSEUM EXCAVATIONS
AT THE PALACE-CITY OF MALKATA

DAVID O'CONNOR

Urbanism was an essential element in ancient Egyptian culture, for its predominantly rural society was held together, and its extraordinary organizational, artistic and technological developments made possible, by a network of provincial towns dominated by two or three national capitals and sub-capitals. In terms of their historical functions and their archaeological remains, both the provincial and national centers would be described as 'urban' by historians and archaeologists. Egyptological archaeologists during the late 19th and earlier 20th centuries frequently encountered and sometimes partially excavated remains which they unhesitatingly described as 'towns' but when archaeological activity diminished from the 1930's to early 1950's the concept developed that Egypt was a "civilization without cities." Now however, the importance of urbanism and urban archaeology in Egypt is being restressed, and a number of town sites are being excavated. Some are of the 'classic' long-lived type, with overlying strata and building levels covering many centuries. Others represent but a short time-span, but compensate for their lack of time-depth by preserving a basic town lay-out unencumbered by the overlying remains of subsequent centuries.

The most famous example of a 'short-lived' site is Tell el Amarna, the city founded by Akhenaten (ca. 1379-1362 B.C.) and largely abandoned within a few decades of his death. Less well known is another royal town, perhaps of a less strongly defined urban character but nevertheless of great interest, founded by Akhenaten's father, Amenhotep III (ca. 1417-1379 B.C.) at Malkata on the west bank opposite the ancient southern capital of Thebes. Malkata had fallen into disuse within a century. It was partially explored by the Metropolitan Museum of Art, New York (1910-1920), but the University Museum resumed excavations there in 1971 because several major questions remained unanswered. Five seasons of work were carried out (1971-1977), directed by the writer and Barry Kemp of Cambridge University, England; funds were provided by the University Museum and—primarily—grants of United States government funds from the Smithsonian Institution. Detailed publication of the results is underway and several fascicles have appeared or are in press, so far generously published without subsidy by the English publishers, Aris and Phillips.

A major question was: what was the nature of this royal town? The Metropolitan Museum had revealed the outlines of an Amun temple, several royal palaces, adjacent elite villas and traces of a workers' village. Other excavators had found fragments of houses, contemporary with the 'palace-city' as it has been called, under later structures at Medinet Habu and behind the funerary temple of Amenhotep III's favorite official, Amenhotep son of Hapu. These suggested that some form of urban development may have stretched from the palace-city to the funerary temple of Amenhotep III, now completely denuded but once the largest of the royal temples fronting the Theban necropolis.

Our investigations were necessarily limited, for the site of Malkata and its environs is very large (occupying just under two square kilometers, if the harbor is excluded) and some of our work was in waterlogged soil. However, we have shown that the palace-city continues under the cultivated fields which now intrude on
much of the site; that a contemporary occupation level lay under Qasr el Agooz, near Medinet Habu; and other contemporary structures lay immediately northeast of the harbor. A magnetometer survey (by Beth Ralph, for MASCA), followed by selective excavation, also showed that the workers' village was much larger than had been thought. Therefore, while the denser urban build-up of Amarna may not have occurred at Malkata and an extension to the funerary temple was not determined, the town remains were shown to be substantially larger than the original Metropolitan Museum excavations indicated.

Our other principal target was a great harbor (originally probably about one and a half square kilometers in area) which lay southeast of the palace-city. The harbor's location is still marked by enormous heaps of sandy soil thrown up when it was cut into the alluvial plain, although the basin has long silted up and is covered by modern fields; a canal once linked it to the Nile, well over two kilometers away. The Metropolitan Museum had not investigated this extraordinary feature. Texts refer to harbors as important adjuncts to Egyptian towns but that of Malkata is the only one (apart from a much smaller example in Nubia) to have been located.

We have demonstrated that the harbor was dug contemporaneously with the building of the palace-city (a fact sometimes assumed but not previously proved) and was an integral part of the over-all design. It consisted apparently of a simple basin without stone revetments, and the northwestern spoil heaps—partly fronting the palace-city—had been deliberately and regularly 'landscaped' for aesthetic or symbolic reasons. The harbor, fed by Nile water, would have functioned effectively for about half the year and no doubt was significant for the building and servicing of the palace-city. Its enormous size, however, is disproportionate, and contemporary texts make it clear that this vast expanse of water was also symbolic, a material expression of the mythology of kingship, and that the traversing of it by the king and queen was charged with ritual significance.

Our work has also increased knowledge of the prehistoric and historic geology of the region, detected prehistoric remains, and demonstrated considerable activity in some parts of the site (not the palace-city proper) in Hellenistic and Roman times. It has also added to our knowledge of Egypto-Aegean relations in the 14th century B.C. In 1977 we dredged up from the water-table, under three meters of stratified Hellenistic and Roman town remains, many late Dynasty XVIII sherds, including one Mycenaean example. A number of Mycenaean sherds were found at Amarna, but this is the first recorded at Malkata.
THE AKHENATEN TEMPLE PROJECT

AND KARNAK EXCAVATIONS

DONALD REDFORD

Scholarly study of the reign of Akhenaten, pharaoh of Egypt (ca. 1375-1357 B.C.), has focused with justification on the last thirteen years of his life and the new capital he founded in Middle Egypt at Amarna. Investigation of this latter site is rendered difficult, however, by the fact that the city was almost completely razed within a generation of Akhenaten's death, and its masonry removed to neighboring towns as new building material. To date only some 2,000 relief blocks from buildings originally standing at Amarna have been recovered from neighboring Hermopolis.

This paucity of material is not found at Thebes, the earlier capital of Akhenaten which he occupied during the first five years of his reign. Here, as early as the second quarter of the 19th century, the ruins of Karnak and Luxor had begun to yield blocks of a standard dimension, 52 x 25 x 22 cm., which the natives called "talatat." By the mid '60's of the present century over 100,000 of these blocks had come to light, some 35,000 being decorated on one or more sides with parts of relief scenes. Beyond the obvious fact that the talatat were quarried and decorated by Akhenaten, and certainly belonged to long-dismantled structures of his at Thebes, nothing was known of purpose or date, or the number and identity of the buildings themselves. It seemed clear to all that, should it be possible to fit back together these "jig-saw" pieces of reliefs, decorated walls would begin to take shape and in fact the temple would be reconstituted. But no ground plans were visible, and so thorough had been the destruction that even the site of the buildings was unknown.

Attempts to study the talatat seriously were rare and desultory before the late '20's. Then the vast restoration program at Karnak set on foot by the inspector of antiquities, Henri Chevrier, brought tens of thousands of new talatat to light from inside later construction, and made immediate study imperative. Nevertheless, storage facilities at Karnak were so poor that most of the newly extracted blocks, many brightly painted, were forced to remain in open-air stacks, a prey to the elements, and only a few were stored in a magazine. Moreover, the conditions under which the blocks were recovered were less than ideal, there often being no recording supervisor on the spot while the laborers worked. The result was that the storage areas were rapidly filled with a jumble of blocks, no two originally contiguous fragments being together, and there being no direct means of telling where a given block had come from. Scholarly study of the talatat during this period (ca. 1945-1965) was restricted to random selection and study of the "best" pieces, subjectively chosen, and art books would feature photographs taken in desultory fashion to illustrate a particular point, not to elucidate the talatat themselves.

In 1965 a retired American diplomat of distinguished career, one Ray Winfield Smith, became interested in the problem of the Karnak talatat. He conceived the plan of photographing all the Karnak talatat to scale, both those still in the Luxor area and those taken to Europe and America, and, with the aid of computer science, of attempting to reconstruct the relief scenes of which they were once the components. In 1966 Mr. Smith secured the sponsorship of the University Museum, amassed a skilled staff of Egyptologists, partly Egyptian, partly British, and set to
work on a project which had become by this time a compelling dream. Smith was indefatigable in his pursuit of talatat. All the blocks at Karnak were photographed to scale, and then the intrepid investigator set out on a search which led him to France, Germany, Switzerland and the U.S.A. Everywhere talatat were photographed, and Egyptologists willingly offered their own photos. Prof. W. Helck of Hamburg gladly lent his collection of photographs, the earlier collection of Prof. Legrain was secured, and M. Chevrier, now in retirement, offered by letter what his memory retained of the period when the blocks were being removed.

The success of the project, dubbed the "Akhenaten Temple Project," was phenomenal. The photographs were subjected to a rigid classification, and very soon matches began to be made. All photographs were classified according to content, and contact photos were mounted on glass plates. As matches were made, the photographs in question were removed from their respective "classification" plates, and mounted on "temporary scene" plates, which themselves were classified according to the content of the scene, thus "king and queen," "princesses," "servants," "nature scenes," "offerings" etc. To date thousands of these embryonic scenes have been put together, and matches between individual scenes, in fact, are not uncommon.

The work was carried on in Cairo, which constituted the headquarters of the Project. Here were available facilities for developing and printing of photographs, the drawing of facsimiles, and a library for research. Five years of the Project had produced a mass of partly digested material and the time had come for publication; and consequently the year 1971 witnessed increased research with a view to preparing a MS. From the outset the Project had enjoyed the services of a wide range of consultants, including Professors Abu Bakr of Cairo University, John Wilson of the University of Chicago, Sayed Tawfik of Cairo University, and Mr. Gerhard Haeny of the Swiss Archaeological Institute in Cairo. Chapters in the publication were assigned to Prof. Abu Bakr, Dr. Ramadan Saad of the Egyptian Antiquities Organisation, Prof. Tawfik and Mrs. Jocelyn Goharry, a Ph.D. candidate at the University of Liverpool working on the Project in Cairo. By dint of hard effort, and the services of two gifted artists, Mr. Leslie Greener and Mr. Joseph Clarke, the line drawings and the first half of the projected volume were completed in December 1971. The second half achieved MS form in September 1973, and
the entire work, the first of a projected three volumes, was published in 1977.

The work of the ATP, by the very nature of the material it had to deal with, is concentrated in the formative period of Akhenaten’s program, viz. the first five years of his reign. At this time the king’s thoughts were undergoing change, and a good deal of experimentation informed the new, “expressionistic” style of art. ATP has elucidated all phases of the new program to a remarkable degree. Chief among our findings was the hitherto unsuspected prominence in the relief decoration of Nefertiti, the chief royal wife of the heretic king. Although this beautiful lady’s parentage and pedigree remain unknown, she is represented in the painted reliefs of her husband’s temples nearly twice as often as he himself; and one whole structure, “the Mansion of the Bnbn-stone” (jwt-bnbn) shows only Nefertiti and her daughters in its decoration. We also know that the inception of the new art form was attended by some uncertainty among the master artists who were commissioned by pharaoh to usher in the new relief art. The king must have adumbrated his ideas in general terms, and left it to his chief draftsman to effect his wishes in detail. At least six different treatments of the king’s form are discernible in the talatat reliefs, attesting apparently the latitude in interpretation permitted by the vagueness of the initial directives. Only later at Amarna was the revolutionary art form confined in a single “canonical” channel.

Another discovery of note was the hitherto unsuspected fact that Akhenaten had erected at Thebes prior to his departure to Amarna at least eight structures, probably all temples. Judging by the frequency with which they are alluded to, four of these buildings were large and imposing. The largest, called the Gm(t)-p3-itn “the Sun-disc is found,” displayed on its walls sculptured scenes depicting almost exclusively the jubilee or sd-festival, and it is virtually certain that it was here that this great festival was celebrated in the second or third year of the king’s reign. Why he should have celebrated the jubilee so early in his reign (the 30th regnal year was the norm) is a mystery; but the lavish relief decoration of this temple has provided us with perhaps the best graphic description of the elaborate rites comprising the sd.

The first half decade of the reign was crucial for the inception of the new program and the experimentation which resulted in the final form to be taken by the new cult. One might expect to find texts of public royal speeches (which abound in other reigns) telling why the king did what he did. In fact, heretofore such inscriptions have been wholly absent from Thebes, so thorough was the destruction wrought by Akhenaten’s enemies. But the Project has now brought to light several fragments of hieroglyphic inscriptions which, in fact, have proved to be parts of just such royal monologues delivered to the court, informing of and rationalizing the monarch’s intended activity. One block, uncovered within the core of the 10th pylon as part of the filling, describes the king’s new sun-god and his attributes, as well as the shortcomings of the deities he is about to replace. These fragments prove that such inscriptions do exist, and further examination of the 10th pylon ought to produce a good many additional fragments.

Up until 1975 the Project was confined to the matching of talatat in photographic reduction, without reference to site, ground plans or other remains in situ. In fact the sites of these buildings had long since been lost, and although the talatat numbers mounted into the tens of thousands, no known site could be pointed out for any of the shrines. True, in 1925 a
drainage canal dug around the Karnak site had by accident revealed a line of fallen colossal statues running east-west along the central Karnak axis, east of the main Amun temple. But the precise significance of the colossi and the nature of the building they decorated were by no means certain.

It had been from the start the hope of the Project to initiate excavation at Karnak to complement, as it were, the reconstruction of wall reliefs. After unavoidable delays, caused partly by the October war of 1973, a concession was secured from the Egyptian Antiquities Organisation to excavate a wide tract of land east of the main temple of Amun at Karnak; and in April 1975 a survey team spent four weeks at the site producing a contour map. Successive campaigns in the summer of 1975, the winter and summer of 1976, 1977 and 1978 have laid bare a sizable area and have produced results more gratifying than could have been foreseen at the outset. The area chosen for excavation was the site of Chevrier's discovery of the colossal statues, the only site in Karnak known to have produced in situ Akhenaten material. By January 1976 excavation had detected the south colonnade of a large temple, and a lucky find revealed its identity to be none other than the Gm(t)-p3-itn. The summer of 1977 saw the south wall and colonnade exposed as far as the southwest corner, and the summer campaign of 1978 commenced the excavation of the western side. Although the destruction of the temple had been thorough, the wreckers had left a...
pile of masonry debris along the line of the temple wall, and from these piles over 200 decorated fragments of relief have been retrieved. They are identical in style and content to the thousands of talatat the ATP had been dealing with for over a decade. Moreover, as already suspected from our examination of the talatat coming from Gm(t)-p3-inn, all the fragments belong to jubilee scenes; and some few even fit directly into incomplete scenes we have long since matched!

In a very real sense the excavations constitute a necessary follow-up to the office work. We now have some idea, and are bound shortly to increase this knowledge, as to the layout and physical aspects of the temple. The shattered fragments, moreover, lying where they fell along the course of the wall, are telling us what the office project never could, viz. the sequence along the wall of individual scenes. In other words the overall organization of the wall decoration is becoming apparent. The next logical step in the present program of research would be physical restoration of the walls upon their original foundations, and it would be relatively easy to select the individual scenes now known to follow in sequence for the rebuilding of the south wall of the temple. But there are problems connected with such reconstruction. In the first place, a large sum of money would have to be secured for an enterprise not directly related to archaeology or any other scholarly discipline! In the second place, security requirements would necessitate the building of a special wall around the area, now unfortunately outside the Karnak temenos wall, the posting of guards, and the provision of protection from the elements. Thirdly, the component blocks of the various scenes are now scattered throughout five or six storerooms, in no special order and requiring some diligence in searching out.

But there remains far more to do than simple restoration. Excavation has shown that there are other periods than that of Akhenaten represented in the 3.5 meters of strata at East Karnak. The site was occupied by the domestic quarters of the city of Thebes in the Middle Kingdom (21st-18th centuries B.C.), by a cemetery in the 17th century B.C., and by some kind of defensive (?) installation in the 21st Dynasty (11th century B.C.). Thereafter, during the Kushite period (8th-7th centuries B.C.) Thebes once again spread its houses over the site, and a prosperous domestic and industrial (pottery manufacturing) quarter flourished until the coming of the Greeks (late 4th century B.C.). The sector was then abandoned, and became the dump which it remains today. All these periods must be carefully investigated from a variety of disciplinary standpoints (Egyptological, historical, anthropological, ecological etc.), and the Project has now graduated from a purely art-historical endeavor to a full-fledged modern archaeological expedition, for the area granted as a concession encompasses approximately one-third of the ancient Thebes, specifically the more domestic section of the city. Of this the Akhenaten Temple was but a small part. Two other standing temples occupy the site along with two other shrines now buried, a mud-brick pyramid of uncertain date, and streets of houses, shops and industrial buildings, all awaiting excavation. In the latter alone lies the hope of elucidating how this once-great ancient capital functioned, how its citizens lived, what they ate and drank, what their occupations were, how they laid out their streets and houses. Whereas once the Project was made up of Egyptologists and artists only, our staff now shows a wide range of experts, including pedologists, osteologists, specialists in archeometrics, engineers, draftsmen, stratigraphers, ceramic experts.

If the Project has indeed shed some new light on the reign of history's first monotheist, there remain many unknowns. We still know little of the king's motivation, and even the family relationships of the dramatis personae of the period are obscure. As for the Gm-p3-inn temple, we can be sure only of its site and the presence within it of a colonnaded court. To date, the north wall of this court has been detected by magnetometer, but not dug, while the eastern end lies beneath the modern village and is probably forever inaccessible. The relief scenes of the temple suggest that a palace stood not far away, but again no such structure has yet appeared in the excavations. The sites of the remaining temples continue to defy investigation, although it is becoming increasingly clear that they all lay within the environs of Karnak. (Years ago an Akhenaten temple was postulated for the Lunor area, mainly because of the large number of talatat retrieved from the Luxor temple; but it is certain that it was Ramesses II that was responsible for taking them there).

Our uncertainty stems, of course, largely from the violence of the destruction which overtook Akhenaten's program, its monuments and buildings, after his death.
Mainly responsible for this systematic anathematization was Pharaoh Horemhab (ca. 1350-1320 B.C.), a former lieutenant-general in the armed forces, who was not related to the former royal house. Any doubt that it was, in fact, Horemhab that effected the destruction of the Gm-p3-itn at least was dispelled this year by a chance find among the debris along the west side of the colonnaded court. Here, under a pile of fractured masonry, was discovered a small bone appliqué with the cartouche of the pharaoh, probably from some wand of office borne by one of the supervisors of wrecking crews. To us in the excavation it was tantamount to a signature, marking the end of this glorious, zany and ill-conceived experiment by a spiritual maverick.
THE PENNSYLVANIA-YALE GIZA PROJECT

WILLIAM KELLY SIMPSON

The story of the Pennsylvania-Yale Project at Giza takes us back to the beginning of American archaeological work in Egypt. In December 1902 the Egyptian Government granted concessions for archaeological work at Giza to three universities, one of which was the University of California (the other two were German and Italian). The University of California was represented in the negotiations by Dr. George Andrew Reisner, and he obtained for it the Third Pyramid and part of the area east of the First Pyramid; he would be the field director. Originally the University Museum was to cosponsor the project, but withdrew. In 1904 Dr. Reisner transferred sponsorship of the Giza work to the Museum of Fine Arts in Boston although the University Museum continued its interest, and Reisner always maintained friendly relations with the University Museum until his death in Cairo in 1942.

In 1915 part of Giza was excavated by the Eckley B. Coxe, Jr. expedition from the University Museum, of which Clarence S. Fisher was field director. Also, from 1923 to 1925, Alan Rowe, later to be the University Museum field director at Meidum, excavated at Giza under Reisner (see p. 28).

In 1969, David O’Connor and I started the third season of the Pennsylvania-Yale expedition at Abydos (see Abydos article). However, the political situation in Egypt soon resulted in a suspension of work at Abydos and all other sites, except for those in the four major cities of Alexandria, Cairo, Luxor and Aswan. This situation led directly to the resumption of work at Giza, for it coincided, in 1970, with my new position in Boston and the assumption of the responsibilities of my predecessors, including of course the continuation of the publication of the expedition results from Giza. Considerations of funding also played a part, for the records of the Giza excavations, with extensive drafts of chapters by Reisner, were in Boston and the Museum there had established a fund for their publication. On the other hand, the Pennsylvania-Yale grant from the Bureau of Educational and Cultural Affairs of the U.S. Department of State was only half spent on the work in Nubia and Abydos, and this grant would come to an end without continuing projects. With the concurrence of the Directors of the Peabody Museum at Yale and the University Museum of the University of Pennsylvania, Dr. O’Connor and I decided that he would excavate at Malkata at Thebes (see pp. 52-53), funded by Smithsonian Institution PLAGO grants, and I would conduct field-work at Giza to record the reliefs of the offering chapels of the Old Kingdom, using the Pennsylvania-Yale grant.

Reisner was a pioneer in this country of statistical analysis, typology and horizontal stratigraphy. At the Giza necropolis his chief concern was the relation of the mastaba tombs to the overall plan, the relative importance of each as determined by the cubic content of its chambers and burial arrangements, and the typology of its construction and burial equipment. For the reliefs of the chapels themselves, his concern was mainly in the type of scenes.
The great western cemetery at Giza as seen from the Great Pyramid. Here the Italian, German and American excavations, in three strips from left to right, studied the development of the tombs of the officials of the Old Kingdom, Dynasties IV to VI. The large mastaba in the foreground belonged to Bubast. and is featured by two square statue houses in front of it. The huge mastaba in the upper right failed to yield the name of its owner. The small structure in front of it on its left end is the mastaba of Tjefet, recently copied by the Expedition.

Note: The project at Giza is conducted in association with the Museum of Fine Arts, Boston, and is supported by a grant in Egyptian funds from the Bureau of Educational and Cultural Affairs of the United States Department of State, now reorganized under the newly created International Communications Agency of the U.S. Government. Other costs have been borne by a grant to the Peabody Museum of Yale University from the Andrew W. Mellon Foundation and by the Egyptian Department of the Boston Museum of Fine Arts.

represented, their distribution over the available wall surfaces, and the identification of the status and family relationships of the owner. Accurate tracings of the scenes were not always attempted or completely represented in the expedition files, and this determined our chief task: the tracing of the wall surfaces for inclusion in a series envisioned by Reisner, to be entitled “Giza Mastabas.” Three such monographs have now been produced, in 1974, 1976, and 1978, and the work of the Pennsylvania-Yale team to date has provided material for at least two or three more volumes. Each mastaba is presented through the Boston photographs, plans, and sections; the objects recorded in the field notes, whether in Boston, the Peabody Museum of Harvard, or the Egyptian Museum in Cairo; and the Pennsylvania-Yale tracings of the reliefs.

There are several methods of accomplishing this tracing. Our system, while not ideal, is in fairly common use. Sheets of a photographic-type paper with one dull surface are spread over the wall surface and the artist traces the scenes directly on this dull surface using flashlights or other artificial light to see the surface. When the surface is perfectly smooth the paper is transparent, but this is rarely the case. The tracings thus obtained are later, generally in Boston or New Haven, placed on a drawing table and finer pencil retracings made on regular tracing paper, checking the
a fine flair pen and then recopied on tracing paper. The tracing material can then be wiped clean and reused several times. This requires both the skill of an accomplished draftsman accustomed to the system and retracing at the site, but it eliminates the difficulty of seeing through the dull coated sheets. The best known system is used at the Oriental Institute of Chicago’s project at Thebes. Here photographs are taken and printed with a matt surface on which the artist traces. The sheets are then bleached to show only the traced lines; these are then revised several times by an Egyptologist and redrawn by the artist. This system is useful for large temple walls where tracing directly would involve an incredible amount of paper. It also requires elaborate camera equipment and scaffolding as well as one’s own photographic studio, with precision in the reducing of the photos to scale. It is ideal for a permanent headquarters. Still another method, used by Professor Caminos of Brown University, consists of rubbing with carbon paper on a special type of tissue paper, which is then placed on the drawing board directly in front of the scene and traced on regular tracing paper for subsequent inking. As with our own system the method cannot be used when the wall surface is fragile.

Our drawing of the south wall of the portico mastaba chapel of Tjetu (G 2001) is based on an actual tracing made by the Pennsylvania-Yale project in 1975 with the aid of early photographs and watercolor renderings by the original expedition artist, Norman de Garis Davies. The chapel was cleared in 1905 by Lythgoe, a former student and associate of Reisner, with the aid of A. C. Mace. We hope to include it in the projected Giza Mastabas Vol. 4, scheduled for publication in 1980 or 1981, three-quarters of a century from its discovery! With a backlog such as this it is no wonder that we must give priority to the publication of material already excavated (and rapidly deteriorating) rather than new excavation. The names and titles of Tjetu’s son and lector priest in the lowest register of the wall, visible in part in the photograph, have now completely vanished, as they were not cut in relief and only lightly painted. Similarly, the elaborate spotting of the hair of the dog under his chair and the calf of the offering bearer have vanished without a trace since the time of the discovery of the portico.

Tjetu lived at the very end of the Old Kingdom, probably even after the end of Dynasty VI, and bore the titles of Overseer
of the Giza Necropolis, "the Horizon of Cheops," as well as Inspector of the Purifying Priests of Cheops, King's Liegeman of the Palace, and the frequently attested office of Overseer of the Tenant Farmers. Standing in the shade of his portico, he could view the great pyramid and most of the great western cemetery. The portico and its court to the east reflected the architecture of his own house, although the three "false" doors of the portico represent the real doors of his own dwelling. Tjetu's mastaba seems diminutive in juxtaposition to the huge mastaba G 2000 just behind it. The latter is by far the largest in the entire Giza cemetery. Although it has been completely excavated, no fragment of relief or statuary preserving the name of its builder has been found. It is ironic that we should know the names and activities of Tjetu and his family while the very important official of the great mastaba is now anonymous.
University of Pennsylvania
THE UNIVERSITY MUSEUM
Founded 1887
Martin Biddle, Director

BOARD OF MANAGERS
Chairman: Howard C. Petersen. Vice-Chairman: F. Otto Haas

WOMEN'S COMMITTEE
Chairman: Mrs. Pierre C. Fraley

STAFF
Emeritus: Froelich Rainey, Ph.D., Director; Rudolf Anthes, Ph.D., Curator, Egyptian Section; Samuel Noah Kramer, Ph.D., Curator of Tablet Collections; Wilton Marion Krogman, Ph.D., Curator of Physical Anthropology; James B. Pritchard, Curator of Syro-Palestinian Archaeology.

Honorary and Research Curators: Carleton S. Coon, Ph.D., General Anthropology; Anthony N. B. Garvan, Ph.D., American Historical Archaeology; Agi Jambor, Musical Instrument Collection; Margaret Plass, African Art.

Curatorial Staff
African Section
Igor Kotytoff, Ph.D.
Curator of African Ethnology
Sandra Barnes, Ph.D.
Assistant Curator

American Section
William R. Coe, Ph.D.
Curator
Ruben E. Reina, Ph.D.
Curator of Latin American Ethnology
Anthony F. C. Wallace, Ph.D.
Curator of North American Ethnology
Robert J. Sharer, Ph.D.
Associate Curator
John Witthoft
Associate Curator of North American Archaeology
Claudia Medoff
Keeper, American Section Collections

American Historical Archaeology Section
John L. Cotter, Ph.D.
Associate Curator in Charge
Joseph H. Hall, IV, Ph.D.
Assistant Curator

Syro-Palestinian Archaeology Section
Frances James, Ph.D.
Visiting Curator

Egyptian Section
David O'Connor, Ph.D.
Associate Curator
Co-Director, Egyptian Expedition
David Silverman, Ph.D.
Assistant Curator

European Archaeology Section
Bernard Wailes, Ph.D.
Associate Curator
Birtha Kjallbye-Biddle, Mag. Art.
Assistant Curator

Mediterranean Section
G. Roger Edwards, Ph.D.
Associate Curator
Donald White, Ph.D.
Associate Curator
Keith De Vries, Ph.D.
Associate Curator
Spyros Tzavos, Ph.D.
Visiting Curator

Near Eastern Section
Robert H. Dyson, Jr., Ph.D.
Curator
Ake W. Sjoberg, Ph.D.
Curator of Tablet Collections
Erle Lechty, Ph.D.
Curator of Akkadian Language and Literature
Barry L. Eichler, Ph.D.
Associate Curator of Tablet Collections

Brian J. Spooner, D.Phil.
Associate Curator of Ethnology
Christopher Hamlin, Ph.D.
Assistant Curator

Oceanian Section
William H. Davenport, Ph.D.
Curator
Ward H. Goodenough, Ph.D.
Curator of Oceanian Ethnology

Palaeolithic Archaeology Section
Jacques Bordaz, Ph.D.
Associate Curator

Physical Anthropology Section
Francis E. Johnston, Ph.D.
Curator
Solomon H. Katz, Ph.D.
Curator
Alan Mann, Ph.D.
Associate Curator
Robert S. O. Harding, Ph.D.
Assistant Curator

South and Southeast Asia Section
Chester F. Gorman, Ph.D.
Assistant Curator in Charge
Gregory L. Possehl, Ph.D.
Assistant Curator
Arjun Appadurai, Ph.D.
Assistant Curator
Office of the Director
Ronald J. Goff
Secretary of the Museum
Gloria S. Swift
Assistant to the Secretary
of the Museum
Esther Van Sant
Assistant to the Director
Alissa Stieglitz
Project Budget Assistant
Maria Wiemken
Bookkeeper
Christine Pietrucha
Secretary

Office of Public Information
Director, Appointment Pending

Women's Committee
Margaret Pugh
Secretary
Sydney Cheston
Assistant

Membership and Development Office
Nancy B. Hastings

Buildings and Grounds
Christopher Conyers
Superintendent
James M. McCane
Assistant Superintendent
Claythorne Horsey
Foreman
Frank Youngblood
Packer and Shipper

Museum Shop
Ethel D. Hansen
Manager
Susan Garson
Assistant Manager

Pyramid Shop (Children's Shop)
Nancy Flood
Manager

Museological Services
Mary Elizabeth King, Ph.D.
Keeper of Collections

Carol Slotkin
Secretary
Jeanette Flamm
Acting Registrar
Caroline G. Dosker
Assistant Registrar
John T. Murray
Preparator

Education Department
Gillian Wakely
Co-ordinator
Jeffrey Ray
Docent
Ellen Dahlen
Guide Liaison
William Smith
Director of Music
Marietta Meltzer
Chairman, Volunteer Guides
Janet Dougherty
Chairman, Mobile Guides
Louis B. Klein
Chairman, International
Classroom
Kathryn Grabowski
Secretary

Conservation Department
Virginia Greene
Conservator
Wendy Stayman
Assistant Conservator

National Exhibits by
Blind Artists, Inc.
Hester Pepper
President
Guigui Roberts
Secretary, Co-ordinator

Publication Services
Alan M. Cook
Keeper of Publication Services
Geraldine Bruckner
Associate Editor
Martha Phillips
Graphic Designer
Jennifer Quick
Secretary

RESEARCH ASSOCIATES

African Section
Paula Ben-Amos, Ph.D.
David Crounover

American Section
John Bockstoece, D.Phil.
Frederica de Laguna, Ph.D.
Elizabeth Easby
Robert Rands, Ph.D.
John Fought, Ph.D.
Christopher Jones, Ph.D.
Tikal Project
Arthur Miller, Ph.D.
Tikal Project
David Sedat
Quirigua Project

Cultural Anthropology Section
Peggy Sandoz, Ph.D.
Associate Curator

Egyptian Section
Lanny Bell, Ph.D.
Donald Redford, Ph.D.
William Kelly Simpson, Ph.D.
Co-Director, Egyptian Expedition
James Weinstein, Ph.D.

Far Eastern Section
E. Dale Saunders, Ph.D.

Mediterranean Section
Ann Harwell Ashmead, Ph.D.
Philip P. Betancourt, Ph.D.
Michael H. Jameson, Ph.D.
Ellen Kohler, Ph.D.
Gordonia Publications
Machteld Mellink, Ph.D.
Gordonia Publications
Kyle Meredith Phillips, Jr., Ph.D.
Demetrios U. Schilardi, Ph.D.

National Cultures Section
Nadia Chilkovskaya, D. Mus.
Alfred G. Zantzing

Near Eastern Section
Theresa Howard Carter, Ph.D.
Sol Cohen, Ph.D.
Maude de Schauensee
Assistant to the Curator
Maria de J. Ellis, Ph.D.
Mary Virginia Harris
Registrar, Hasanlu Project
Jane Heimerdingen
Sumerian Dictionary Project
Renata Holod-Tretiak, Ph.D.
Stephen J. Lieberman, Ph.D.
Sumerian Dictionary Project

Barbara A. Wilson
Archivist
Photographic Studio
William Clough
Photographer
Harmer Frederick Schoich
Photographer

Library
Jean Shaw Adelman
Librarian
Anita Fahringer
Library Assistant
Barbara Smolow
Library Assistant

Museum Applied Science Center for Archaeology (MASCA)
Martin Biddle
Director
Stuart Fleming, Ph.D.
Scientific Director
Elizabeth K. Ralph, Ph.D.
Associate Director
for Radio Carbon Dating
F. Otto Haas, Ph.D.
Associate Director
Robert Maddin, Ph.D.
Associate Director
William E. Stephens, Ph.D.
Associate Director
Howard Roboff, Ph.D.
Research Chemist
Henry Michael, Ph.D.
Research Associate
in Physics
Barbara Lawn
Research Specialist
Kathleen Ryan
Research Bibliographer

Research Fellows in MASCA
Diana Birmingham
Stephen M. Epstein
Bernard Fishman
Nicholas Hartmann
Patrick McGovern
Anne Meulengracht

Darlene Loding, Ph.D.
Sumerian Dictionary Project
James D. Muhly, Ph.D.
William Sumner, Ph.D.
Co-Director, Malayan Expedition
Irene Winter, Ph.D.

Oceanian Section
Jane Goodale, Ph.D.
Glubun C. O'Connor, Ph.D.

Physical Anthropology Section
Arnold Dragor, Ph.D.
Barbara Heath

South and Southeast Asia Section
Bennet Bronson, Ph.D.
Charles F. W. Higham, Ph.D.
Elizabeth Lyon
William Schaufler
Douglas E. Yen, Ph.D.

Museum Applied Science Center for Archaeology (MASCA)
Darrel Butterbaugh, Ph.D.
Oliver C. Colburn, Ph.D.
William Kohler
Michael Farrington
Helen Schenck