New Uses for Old Archaeological Collections

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The following paper is based on the research undertaken for the author’s Master of Arts degree in Museum Studies, entitled *Excavating the Halls of Ivy: Ancient Egyptian Collections in American University Museums*. What follows is a compilation of the results of a thirty-six question survey that was distributed to the collections manager or registrar at American university museums (the term “university museum” here refers to museums, galleries, and teaching collections) with ancient Egyptian collections. Thanks to Danilov’s extensive research and countless web searches, thirty-seven university museums with Egyptian collections were identified and asked to participate in the survey.¹ Divided into four sections—collections, museum policy, funding and opinion—the survey was designed both to measure the success of incorporating old archaeological collections into modern university curricula and museum programming and to identify little-known ancient Egyptian collections available for use by researchers and students.

[T]he science of Egyptology originated in museums. Without the wealth of museum objects and artifacts amassed by private and public collectors, modern man would know little about the meaning and significance of this ancient, rich and endlessly absorbing civilization, and would understand few, if any, of its contributions to contemporary life.²

Ancient Egyptian collections were selected as a representative sample of archaeological collections and the object-based sciences that emerge from their study. Once the foundation of a university education, object-based lessons have been replaced by slide-lectures, and the teaching collections that were once so integral to the university now seem far removed from the modern theoretical and experimental university curricula.³ Furthermore, as university museums strive to professionalize and enhance their educational programming by providing a visitor-centered experience, the older archaeological collections are languishing on the shelves.⁴ The results of this survey demonstrate some of the ways in which university museums with archaeological collections are adapting to the museum industry’s standards while still encouraging faculty, staff, and students to engage in interdisciplinary research and projects.

Survey Results
Of the thirty-seven museums surveyed, eighteen university museums completed the questionnaire, resulting in a 49% response rate. (It should be noted, however, that not all eighteen respondents answered every question.) Staff members from both public and private university museums throughout the continental United States kindly completed the questionnaire. Among those represented were eight art museums, seven anthropology and/or archaeology museums, two art and archaeology museums, and one simply called the University Museum. Within them were collections with anywhere from eight to fifty-two thousand ancient Egyptian objects of all types, some of which were well-published and others which were

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virtually unknown. These eighteen university museums were taken as a representative sample of university museums with old archaeological collections and the bulk of their responses were analyzed according to the following areas: mission and institutional priorities, collections policies, curation and governance, uses in university curricula and educational activities, number of students and researchers accessing the collection, and funding sources.

Mission and Institutional Priorities
Each of the eighteen respondents provided a mission statement with their completed questionnaires and the majority of these statements stressed the museums’ intent to serve the university as an educational tool and identified the university and local communities as the primary audiences. When asked to rank education, public programming, and research in order of priority from one to three, out of the sixteen respondents that answered, twelve of the respondents (75%) marked education as the first priority, 1 (6%) marked public programming, and 3 (19%) marked research. Public programming was the typical second priority response, with research following close behind. (See Chart 1 below.)

Chart 1

Using the criteria set forth by Cato in his 1992 survey of the most important purpose of natural history museums in the Mid-west and Mountain-Plains areas, which included twenty-eight university museums, the mission statements were assessed. When broken down in this manner, six (33%) of the mission statements emphasized education as the museums’ main function, three (17%) underscored research, three (17%) more stressed collecting, four (22%) stressed “improving and stimulating knowledge,” and two (11%) highlighted preservation of an abstract entity. In Cato’s results, 32% of the museums’ missions emphasized education, 21.4% stressed research, another 21.4% stressed collecting, 10.7% underscored “improving and stimulating

5 All of the responding university museums had amulets, jewelry, funerary objects, and an overwhelming majority had scarabs/seals, ceramics, statuary, and stelae/reliefs. Most of these objects originated in the Middle Kingdom, the New Kingdom, the Late Period, and the Graeco-Roman Period.
knowledge,” 10.7% highlighted preservation of an abstract entity, and 3.8% stressed service.6 Although the two surveys used university museums with dissimilar academic foci within a different geographic scope, the institutional priorities were remarkably similar. This signifies that although university museums have not changed their educational missions, they have shifted some of their attention away from research and towards “improving and stimulating knowledge,” which could be interpreted as the impetus for increased concentration on public programming.

Collections Management, Curation and Governance
When asked if the museum has a formal collections policy, of the seventeen museums that replied, fifteen reported that they did in fact have a formal policy and only two replied that they did not. When asked to name everyone who was directly responsible for the care of the collections, thirteen of the eighteen respondents (72%) indicated it was the job of the full-time collections manager or a collections staff member. Of those thirteen, three anthropology/archaeology museums added a full-time conservator to the list of caretakers, five art museums added a full-time curator, and one art museum included the director. Apart from one anomalous answer indicating three caretakers with full-time, part-time, and volunteer status, the remaining four respondents indicated that a curator was charged with the collection’s care, two of whom were part-time and two of whom were full-time. In addition to staff members, the questionnaire inquired as to what extent volunteers performed collections work. Fourteen museums responded and seven of them (50%) indicated that volunteers were responsible for anywhere from 5% to 33% of collections work. Six institutions (43%) responded that volunteers did not work with the collections.

To determine the degree to which these old archaeological collections were curated, the survey prompted the participants to indicate whether or not the collection had a curator devoted specifically to the ancient Egyptian collection. Of the sixteen responses, five (31%) indicated that there was a faculty curator, and three (19%) indicated that there was a full-time curator responsible for interpreting the collection. The remaining 50% of the answers reported no curation for the collection.

Despite the level of curation, the survey contributors were asked if the majority of the collection’s records were digitized and accessible on the Internet. Fourteen of eighteen respondents (82%) replied that the collection was not digitized or available via the Internet.

Finally, the survey included a question regarding the existence of a board of overseers or advisors, apart from the university’s board of trustees or regents, which made decisions regarding the collections. Twelve out of eighteen museums (67%) reported having a board, while six (33%) were without such a group.

Uses in University Curricula and Educational Activities
Although some of the university museums’ mission statements listed enriching university curricula or serving the university’s teaching needs as one of the museums’ functions, the author wanted to specify which departments relied on the archaeological collections as part of their

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course work. In an overwhelmingly positive response, seventeen of the eighteen respondents (94%) revealed that students used the collections as part of their curricula. The participants were asked to mark all departments that incorporated the collection into their courses, and as a result fifteen indicated art or art history and thirteen pointed to the archaeology/anthropology department. Eight contributors chose museum studies, six chose Near Eastern studies or Egyptology, two chose history, and one chose design and industry. The survey contributors also wrote in four ‘other’ selections—library studies, humanities, classics, and religion. (See Chart 2 below.)

Chart 2

<table>
<thead>
<tr>
<th>University Departments Utilizing the Ancient Egyptian Collection</th>
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<tbody>
<tr>
<td>Other</td>
</tr>
<tr>
<td>Design &amp; Industry</td>
</tr>
<tr>
<td>History</td>
</tr>
<tr>
<td>Near Eastern Studies</td>
</tr>
<tr>
<td>Museum Studies</td>
</tr>
<tr>
<td>Art/Art History</td>
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<tr>
<td>Anthropology/Archaeology</td>
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</tbody>
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As one would expect when dealing with eight art museums, seven anthropology museums, and two art and archaeology museums, the contributors reported that the art and anthropology/archaeology departments were the predominant users of the collections. Those universities with Near Eastern studies departments relied on the collection heavily, as would be expected of an object-based science. As a museum professional, the author was delighted to learn of the large number of collections-training courses using objects in both art and anthropology museums. What is surprising is that only two respondents reported usage in the history department, a subject to which an ancient Egyptian collection would presumably lend itself quite easily.

The survey participants were asked to identify the specific means by which the students and/or public used the objects within the curricula of the departments listed above, and under the auspices of other museum programs. Instructed once again to mark all activities that applied, the majority of respondents (15) indicated that the objects were used as class examples, presumably seen on exhibit, in storage, or on a slide. Ten contributors wrote that the collection was used for collections-care or museum training, and nine each indicated its use in children’s programming and as the subject of lectures. Five respondents reported the collections’ use in conservation and while seven marked scientific analysis, which is largely non-destructive, only two marked destructive analysis. Linguistics or translation was an educational activity reported by seven contributors, and one participant reported the collection’s use in mould making. The seven
‘other’ responses written in by respondents included “research for higher degrees,” “Egyptology courses,” “exhibition,” and “university programs.” (See Chart 3 below.)

Chart 3

Educational Activities Using the Archaeology Collection

<table>
<thead>
<tr>
<th>Class Examples</th>
<th>Museum Training</th>
<th>Children’s Programs</th>
<th>Lectures</th>
<th>Conservation</th>
<th>Destructive Analysis</th>
<th>Mould Making</th>
<th>Linguistics</th>
<th>Scientific Analysis</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>14</td>
<td>12</td>
<td>10</td>
<td>8</td>
<td>6</td>
<td>4</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>1</td>
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<tr>
<td>Number of Responses</td>
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</tbody>
</table>

Number of Students and Researchers Accessing the Collection

Whereas both students and the public were taking part in the educational activities reported above, the author wanted to know exactly how many individuals from the university museums’ primary audience—the students—were using the archaeological collections. The survey participants were asked to provide the number of students (both undergraduate and graduate) that had accessed the ancient Egyptian collection in the last six months. Five respondents (28%) indicated that there had been no students using the collection and another three (17%) replied that the number was unknown. Of the others, four (22%) reported one to ten students had used the collection, another four reported fifteen to forty students, and two (11%) reported about one hundred students had accessed the collection.

To ascertain to what extent the museums that listed research as one of the main priorities were actually using the archaeology collection for research, the survey participants were asked to list the number of visiting scholars that had accessed the collection in the last six months. The majority reported zero visiting scholars but five (28%) listed one to four scholars and four (22%) reported five to ten scholars had used the objects, leaving two (11%) reported as unknown. (See Chart 4 below.) One might assume that the majority of the visiting researchers were assessing large and well-published collections, however this was not the case; one researcher worked on one piece in a collection of forty, none of which were published.
When juxtaposed with the level of curation, presence of a curator did not result in an increased level of usage for the collection, supporting the argument that it was the curator’s enthusiasm and not his/her position that dictated to what extent students, staff, and faculty were exposed to the collection. The survey also showed that faculty and museum curators alike had varying degrees of success in researching artifacts and encouraging students and scholars to conduct research, publishing the collection, and teaching lessons on linguistics, scientific analysis, and conservation with the objects.

Chart 4

Funding Sources
Like most museums, university museums have been struggling to obtain sufficient funding for the past twenty years. The author asked survey participants to identify the funding sources of their educational activities in order to determine how successful these university museums had been in finding diverse financial resources. As above, the contributors were asked to mark all sources that applied. Seventeen responses were received and, as one would expect, the majority of them (14) indicated the university was a source. Eleven museums marked donors and alumni as a source, nine marked foundation grants, and six marked government grants. An additional three participants reported support from corporations and one reported support from the state.

Of the responses, only three museums were funded solely by the university. Three of the museums were funded by two sources, an overwhelming six museums had three funding sources, and two museums each had four and five funding sources. In general, the university museums surveyed had successfully become less reliant on the university, relying heavily on donors and grants from both foundations and the government, as well as beginning to gain corporate support. (See Chart 5 below.)

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Synthesis and Recommendations

The author’s survey results were compared to those of Arnold-Forster of the British Museums and Galleries Commission, one of the primary investigators responsible for carrying out the United Kingdom’s effort to conduct regional surveys identifying university museum collections, analyzing their strengths, and increasing their effectiveness. The survey of Northern England, the results of which were published in 1993, revealed that many of the museums and collections had no formal collections management policy, a low standard of care, very few digitized records, and little to no collections work performed by volunteers due to the lack of supervision. Although 75% of the collections were used in teaching, the rate at which they were utilized depended largely on the enthusiasm of the caretaker. She found that a small number of archaeological objects were being used for reference or research, but this object-based method was considered a novelty at best. By 2000, when the results of the Southern England survey were published, Arnold-Forster found that a number of the university museums had digitized their records, improved access to their collections by using the Internet, objects were used in lessons more often, and parent institutions were publicizing the collections’ importance in order to attract new students.

In light of her findings, the responses to the author’s survey suggest that American university museums have made a significant move toward professionalization by adopting both formal policies and an advisory board, by making collections care the responsibility of the museum staff rather than a faculty member with teaching obligations, and by utilizing volunteers to do a

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portion of collections work. Arnold-Forster’s results support the theory that the curator’s desire and familiarity with the objects had a tremendous effect on the frequency of the collections’ use in teaching. Unlike the UK museums, the author’s survey results made it very clear that most university museums were still lacking digitized records and an online catalogue.

In order to evaluate how the type of museum affected how well the institutions integrated old archaeological collections into their modern university curricula, the author’s survey results were divided into three groups according to the frequency of the collections’ use: seldom usage, moderate usage, and regular usage.

The group of museums that reported seldom usage typically housed a relatively small Egyptian archaeological collection with anywhere from eight to four hundred eighty objects. Four out of the five in the group were art museums that placed all or some of the archaeological collection on display permanently or semi-permanently. The respondents from these museums reported the least amount of curation, no visiting researchers and the lowest number of students accessing the collection. Still, four out of the five indicated that universities’ art and/or art history classes used the objects as examples viewed during class.

Six museums, four with an art focus and two with an anthropology and/or archaeology focus, fell into the moderate usage group. With small to medium sized collections, ranging from forty to two thousand seven hundred objects, these university museums together reported ten visiting researchers, and more than one hundred students had accessed the collection. Although only one of the collections in this group had a curator, students in museum studies, art/art history, and anthropology/archaeology courses used the objects as examples viewed during class, as the topic of lectures, and for training in collections care.

The largest collections, consisting of forty or fifty thousand objects, were coupled with collections as small as two hundred in the group of museums that reported regular usage. Five out of seven of these university museums were archaeology and/or anthropology based, and as research-driven institutions they were most often associated with a Near Eastern Studies or Egyptology departments, had the most curators assigned to the collection, as had the highest number of visiting researchers and occurrences of scientific and destructive analysis. They also had the most students accessing the collection for the widest variety of activities associated with the anthropology/archaeology, art/art history, and Near Eastern studies departments, including training in collections care, linguistic analysis, examples viewed during class, and as the topic of lectures. Moreover, the museums in this category used the Egyptian archaeological collection in children’s programming more often than those in the other two groups.

In short, each of the university museums surveyed utilized the ancient Egyptian objects in accordance with its focus and mission. Art museums put them on display to be viewed alongside other pieces of art or used them as tools to teach students collections-care or exhibit curation.

During a recent discussion with Ms. Arnold-Forster, she brought to my attention that in 2004 the summary of all the regional surveys were published in *University Museums in the United Kingdom: a national resource for the 21st century*; this research was not included in this study, but the author will make all attempts to include it in any future publications.
Conversely, archaeology and anthropology museums made the collection available to scholars and students for research.

When asked what other ways the museum could use the archaeological collection to provide hands-on educational activities, the survey participants indicated that putting their catalogue online, along with “virtual museum” activities, and burying deaccessioned material in a simulated dig site for children would be beneficial. Other responses included more staff, more space, working with the education department to encourage teachers to use objects in their lessons and serving a wider public and university audience. All in all, most contributors thought their museum could be doing more to serve the needs of the university and the community.

Education may have been the declared emphasis of most of the responding university museums, but in some areas, the ways in which this emphasis was implemented was contradictory. For example, the number of students who physically accessed and utilized the collections was relatively small, and when delineated, the number of undergraduates surpassed the number of graduate students. It is reasonable to assume that a large percentage of those undergraduates accessing the collection did so as part of an introductory or survey course, as opposed to an upper level course in which graduate students are encouraged to undertake extensive research. Although the author acknowledges that there has been no significant research to date on the efficacy of object-based teaching, its use in archaeology is widespread. There was a detectable resistance to the phrase ‘hands-on learning’ and a poor response rate to one of the survey’s questions about students handling objects. Many of the survey participants’ answers suggested a reliance on exhibits and guided tours as the only form of ‘hands-on learning.’ In order to have these objects remain relevant to modern education, university museums will have to move past the reliance on exhibits to teach and provide context.

Ancient Egyptian artifacts are frequently overlooked as potential illustrations of the origins of art, industry, or civilization as a whole. Certainly digitizing and making a collection accessible is a good way to make information available to the largest group of faculty, staff, and scholars that may want to engage in interdisciplinary collaborations. After doing so, by monitoring the number and type of searches performed on the site, the museum can analyze what part of the collections are most frequently used and what type of information is most commonly sought after.

Moreover, the university should give museum staff and university faculty incentives to incorporate the use of the rich collections in new and innovative ways, for academic publication and public exhibition. For researchers in different fields, studies using radiology, osteology, paleopathology, geomagnetics, genetics, and biochemistry have done a great deal to further the understanding of the artifacts in museums. For example, Brigham Young University microbiologist Scott Woodward extracted DNA from a tooth of the mummy, Usermontu, at San Jose’s Rosicrucian Museum in order to learn more about the ancient man’s life, death, and

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possible familial connections to other mummies who had been tested.\textsuperscript{13} Advanced chemistry students at a university in Texas identified the signature of tars and resins used in mummification and pinpointed their sources at the other end of a trade route still in existence.\textsuperscript{14} In Australia, through a comparison of DNA between modern humans and a diseased mummy from 3700 B.C.E, paleopathologists have begun to determine the evolution of a specific type of bone cancer.\textsuperscript{15} Universities with a medical school should consider forming a team and using CT scans and 3-D visualization technology to study objects, just as faculty and staff from the classics, anthropology, chemistry, textile sciences, and entomology departments at the University of Illinois at Urbana-Champaign did to virtually unwrapped the Spurlock Museum mummy.\textsuperscript{16}

Projects using these technologies are just a few suggestions. As universities focus more on theoretical sciences and museums focus more on visitor-centered experiences, incorporating new analytical techniques and interdisciplinary thought into the study of old archaeological collections is the only hope for university museums to remain relevant to students' modern curricula. University museums must encourage faculty, staff, and students to make new discoveries about old collections, informing science, appealing to a wider academic and public audience, and once again defining the university museum as a place of tremendous discovery.

\textsuperscript{14} E. Berger, “Scientists wrap up old mystery: Mummy’s tar provides a link to ancient trade routes,” \textit{Houston Chronicle}, 8 November 2004.
\textsuperscript{15} “Aussies dig up Egyptian mummies,” \textit{The Courier Mail}, 15 September 2004.