The title of my paper, From Mummy to Megabyte: the First Hundred Years of the Tebtunis Papyri, has caused an unwanted amount of confusion in the months leading up to this day. Some pointed out that there is a certain difference between mummies and megabytes with respect to the storage of papyri. Others cunningly remarked that, because the papyri are two thousand years old, in average, I should be talking about the first two thousand years of the Tebtunis papyri. The easy way out, of course, was to just blame it all on the fact that English is not my native language. The hard way out is what follows now.

What I would like to do this afternoon, is to present the collection of papyrus documents that is kept here at the Bancroft Library, and is known under the name The Tebtunis Papyri. The red line is chronological. I will bring you from 1899, one century ago, when the collection was found, to the present day. As you may imagine from the title chosen, the code words for both moments are mummy (for their find) and megabyte (for the present day). At the same time, I will also refer to items that are currently on display in the exhibit Ancient Lives that will be opened after my talk, and thus provide some background for what you are going to see there.

Mummies (1899-1900)

One hundred years ago at this time, the two British archaeologists Bernard Grenfell and Arthur Hunt were preparing an excavation in Egypt. While in other years, they were employed by the Egypt Exploration Fund, this year, they had been hired for one season by George Reisner, Director of the Hearst Egyptian Expedition. The Hearst Egyptian Expedition had been established only shortly before, and was funded entirely by Mrs. Phoebe Apperson Hearst. We do not know how the feelings were on the British side of this cooperation, but the Americans, we know, were thrilled. On the eighteenth of August 1899, George Reisner wrote to his employer Mrs. Hearst:

"The University is really to be congratulated on having secured the services of Grenfell and Hunt this next season in the Fayum. And if you secure us the financial support, we will make the University Museum the best one in the New World; and I hope we may add something more to her credit in the way of scientific achievement."

Grenfell and Hunt left for Egypt in November and started work in the Fayum in early December (and this is still 1899). The site they had chosen was called Umm el Breigat, and was situated in the southwest of the Fayum depression in Egypt. This site was as yet undisturbed by any archaeological activity, so Grenfell and Hunt were quite positive about the possibilities of the site. In those days, you should know, people went to Egypt with an archaeological fixation somewhat different from what we are used to today. While today archaeologists go into the field and are interested in all aspects of the site they are excavating, from the stratigraphy of the finds to the actual objects discovered, meticulously noting and documenting all the aspects of their dig, at the end of the nineteenth century archaeologists went to Egypt, as we will see below, to find booty. The booty was defined rather narrow as artifacts and papyri and it was this what Grenfell and Hunt were looking for at Umm el Boreigat. Their expectations were high, given the circumstances they found at the site, and their expectations were met, or else we would not be here today. It is interesting, perhaps, to look at the success of the excavations as it unrolled itself in various letters that George Reisner wrote to Mrs. Hearst in the months of the excavation (he himself was somewhere else in Egypt). These letters are kept here at the Bancroft Library in the Phoebe Hearst Papers and they provide many opportunities for red-eared bedtime reading, I can assure you. Actual examples of such letters are on display at the exhibit.

On 2 January 1900, about a month after the beginning of the excavations, Reisner wrote to Mrs. Hearst:

"I am very happy to report extraordinary success on the part of Grenfell and Hunt in the Fayum. They have found nearly as much already as in any ordinary year. I will send you a detailed account in my next letter."
This nearly as much as in any ordinary year were some two hundred papyri, plus an unknown number of artifacts, that Grenfell and Hunt had found in the remains of the ancient town. The papyri allowed them to identify the site they were excavating as Tebtunis.

On 13 February, Reisner continued his report:

"Grenfell and Hunt have found a lot more interesting things, over 300 papyri, besides rings and other antiquities. They want to work a month longer than usual in order to clear out the place. (...) You will be delighted with [their] booty when you see it." (italics mine)

From the scanty remarks published by Grenfell and Hunt themselves in the years immediately after the excavations, we can deduce the nature of these so-called interesting things. In January Grenfell and Hunt had directed their attention to the south of Tebtunis, to the desert. There they had found a cemetery filled with mummies from various dates. Even more breathtaking was the discovery of a cemetery filled to the roof with mummified crocodiles. Thousands of them. I think that when Reisner mentions Grenfell and Hunt’s intention to “clear out the place” he is referring to this discovery. The fact that even as we speak Italians are excavating Tebtunis once again and finding all sorts of interesting stuff, including mummified crocodiles, may serve as an illustration that the attempt to clear out the place was in vain. They could have still been digging right now for that matter.

It can be easily imagined from the definition of booty I gave above (artifacts and papyri), that in a way human mummies and crocodile mummies do not really meet this definition. And yet, we saw, Grenfell and Hunt were willing to work an extra month to clear out the place. To explain this, one should know that it was known that sometimes in the fabrication of the painted covering of the human mummies, used papyrus had been recycled by way of papyrus mache. So, the human mummies fitted the definition after all, and were a sought after item in those days. Crocodiles, and especially crocodile mummies, however, were not seen as desirable objects at the time, and the discovery of hundreds of them in the sands of Tebtunis was not really met with real enthusiasm by the excavators. The attitude only changed when one of the Egyptian workman had loosened his frustration of finding yet another crocodile mummy, by breaking it into two, which disclosed the surprising fact that this crocodile mummy was wrapped in sheets of used papyrus. From this day on, crocodile mummies entered the ranks of the booty sought after by excavators in Egypt.

At the end of the season, finally, on 17 April 1900 Reisner once again informed Mrs. Hearst:

"Grenfell says he never expects to have such another year. It is the first big find of Ptolemaic papyri."

At this time, in April 1900, Grenfell and Reisner had met to divide the finds between the Gizeh Museum in Egypt and the financer of the excavations, Mrs. Hearst. The antiquities were shipped to Berkeley directly, while the papyri were first shipped to England, to allow Grenfell and Hunt to prepare their publication. Reisner provided Mrs. Hearst with a list of things, in which he had starred the items he thought most interesting for Mrs. Hearst. The starred items include 2 ornamented crocodile mummies, two inscribed marble statuettes, three writing tables with inkpot, and twelve portraits painted on wood. It is with great pleasure that I can announce that the exhibit you will see shortly features some of these starred items, among which one of the crocodile mummies (Bertram), and the wonderful pair of statuettes. The Phoebe Hearst Museum of Anthropology is thanked for loaning these prize objects to the exhibit.

The papyri, which were as Reisner had hoped for, an abundant mass, consisted of papyri from three different sources. The remains of the town (three packing cases), papyri that had been used in the mummification of the crocodile mummies (1 packing case) and papyri that had been used in the casing of the human mummies (eight packing cases).

**Paperwork (1900-1996)**

The focus of the scholarly attention of the finds at Tebtunis would be at the papyri. For the century to come, a first beginning was made at studying the documents found. And although the outcome of this activity was breathtaking, recent research here at the
spot has learned that this outcome is based upon about five percent of what was actually found during the Grenfell and Hunt expedition.

The first and major steps to the publication of the documents and their interpretation were made by Grenfell and Hunt themselves. With the help of Gilbert Smyly, they managed to publish a volume with over two hundred texts from the crocodile papyri within two years. These texts, it appeared, all dated from the last two centuries of the Ptolemaic era (late second through the mid first century B.C.). A large portion consisted of the wastepaper basket of the clerks of a village in the neighborhood of Kerkeosiris. These papyri gave an unprecedented detailed view into the daily doings and dealing of this official in the late Ptolemaic period. Main character in these papers was a certain Menches, who functioned as village clerk between about 120 and 110 B.C.

Although Grenfell and Hunt were also busy excavating and publishing material from another now famous town in Egypt, Oxyrhynchus, in 1907 they managed to publish a second volume of papyri from Tebtunis, this time devoted to the texts that were found in the remains of the ancient town. These texts dealt with various matters of daily life in this town. Sales of property, tax payments, private letters. You name it, they found (and published) it.

In the years to come, Grenfell and Hunt were way too busy with other things than to be able to publish their promised third volume, devoted to the papyri from the human cartonnage. This volume would only appear in two parts in 1933 and 1938.

Meanwhile, Tebtunis itself did not disappear from the map during this period. In the late twenties, the antiquities market in Cairo offered large amounts of papyri for sale said to have been found (illegally of course) in Tebtunis. A substantial amount was written in Hieratic and Demotic Egyptian, two cursive forms of the Egyptian hieroglyphs. Another portion was written in Greek. Various institutions around the world bought portions of these papyri. To single out some, the university of Michigan bought a substantial portion of the Greek papyri, that appeared to belong to a first century A.D. archive of the record office of Tebtunis. The majority of these papyri was published shortly after their acquisition. The university of Copenhagen bought a fair portion of the documents written in Hieratic and Demotic Egyptian. These documents appeared to belong to the temple library and contained many literary and medical texts; their publication is now under way, with the first three volumes of these texts having been published in the past four years.

From 1929 through 1935 an Italian expedition excavated more parts of Tebtunis. Apart from unearthing parts of the city plan and remains of the temple, they also found a mass of papyrus documents. These included literary fragments but also parts of family archives of the local notables. These papyri were shipped to Milan, and were to be published in the years to come. In the twenties and thirties, therefore, a lot of papyri from Tebtunis became available. It should be noted however that these, of course, are only simple Tebtunis papyri, and not the Tebtunis Papyri. Just that you know.

Also in the thirties, the long awaited third volume of the series The Tebtunis papyri was brought to press, in two parts. Grenfell had died in the meanwhile, and before the second part of this volume saw the light, Hunt had died as well. The papyri found in the human mummies derived from various locales in the neighborhood of Tebtunis and had apparently been brought to Tebtunis to be used in the fabrication of heads and pectoral to cover human mummies. Like the crocodile papyri they contained a fair number of official documents written by government officials. They dated to the late third and second centuries B.C.

The publication of the third volume of the Tebtunis papyri brought an end to the scholarly activities regarding the publication of the Tebtunis papyri, but only for the moment. The main reason for this is, I think, the fact that Grenfell and Hunt suggested in their publications of the papyri that what they had published was all there was. People just did not know that there was more than Grenfell and Hunt had published. (And the general feeling among papyrologists was at that time, and still is, that it is not worthwhile to redo what Grenfell and Hunt did in most of their publications, because the guys were really good, or as young Americans would put it, really awesome. This once again became apparent while I was cataloging the documents and checking the corrections that had been proposed by various scholars in the course of this century against the actual papyrus. In an impressive amount of cases, the correction proved the produce of a fierce imagination, whereas the reading of Grenfell and Hunt was correct.
Given the limited reference material they had at the time, this is very surprising and all the more telling about their grip of the material.

The first moment when people realized that the portion of papyri published by Grenfell and Hunt was only a small part of the whole collection, arrived when the papyri were finally shipped from England to Berkeley in the late 1930s. The library received two large packing cases filled with tin boxes with papyri. An example of such a tinen box can be seen in the exhibit. All boxes were filled with fragments of papyri that had been simply inserted between pages of the Oxford University Gazette.

The people were first at a loss what to do with the papyri. The first objective was to catalog them, and do something about their preservation, but then the first thing to do was to find a papyrologist to do the job (there was, alas, no papyrologist available on campus). The second thing appeared not difficult to do, because papyrologists are always eager to come to Berkeley (look around you), so in the summer of 1940 the first thing could be done as well. It soon became apparent however, that there were way too much papyri to do the whole job necessary in the time allotted (ten weeks) so it was decided the papyrologist, Edmund Kase, would only preserve and catalogue that part of the collection that had been published by Grenfell and Hunt in the first half of the century. In addition, he cataloged some of the larger fragments in Greek.

In order to preserve the papyri, a recently developed material was used, a plastic called Vinylite. The advantages of this material were enumerated by Kase: the material was unbreakable, it was light, and easy to store. Another feature Kase introduced enthusiastically is that “this nonbreakable material would make possible the shipment of documents from Berkeley to other points in case scholars residing at a distance should desire to inspect some of the material.” The wandering papyri of Berkeley. That would have been quite a novelty in the papyrological field. I doubt, however, whether it would have had a good effect on the papyri.

Kase mounted and cataloged all the texts that had been published by Grenfell and Hunt plus a small number of the larger Greek fragments. The total number reached was 1705. The remainder was left in the tin boxes (more than a dozen of them) still inserted between the pages of the Oxford University Gazette. Vinylite and boxes were returned to the vault for some three decades.

In the years after the war, there was still an enormous interest in material from Tebtunis. The gradual publication of documents found during the Italian excavations in the thirties, and the illegal excavations in the twenties, caused this interest. Another new feature that followed the trend in papyrology as a whole was the appearance of studies made on the basis of the documents, instead of just publishing the documents themselves.

Work was resumed at the spot in the Seventies, when Jim Keenan and the late John Shelton prepared an edition of some of the longer texts from the crocodiles that had only been briefly described in the 1902 publication by Grenfell and Hunt. These texts proved to give an detailed view of the land use of a village in the neighborhood of Tebtunis, called Kerkeosiris. In the process of preparing the publication of these papyri, Keenan and Shelton discovered that the Vinylite had not been very kind to the papyri in the thirty years that had passed. You will see examples in the exhibit, but notwithstanding the positive qualifications of the material as given by Kase in 1940, time had disclosed a number of serious disadvantages with the material. Unbreakable as it was, Vinylite was also quite flexible. The papyrus was not, so it is not hard to imagine what happened. Parts of the papyrus broke off, fibers got dislocated. Even worse, inside the Vinylite mount, fibers and parts started to move around due to the static electricity that occurred between two sheets of the material. The damage could not be repaired easily because the sandwiches had been heatsealed. Also, when opening the sandwich, a statical electric current could occur which could just tear the papyrus in two. Or more. And this was not all. On the outside, the vinylite appeared to discolor and to scratch, making it harder and harder to actually see the papyrus and read it.

The alarm bell was sounded that something should be done about the papyri. In order to read the texts they were working on, Keenan and Shelton removed some of the worse fragments from Vinylite to glass, encountering all the problems with the static electricity as noted above. Unfortunately for the collection, Keenan and Shelton moved to other parts of the continent and world soon afterwards, so work on the papyri once again came to a halt.
Also in the seventies, some attention was given to the thousands of fragments still in the tin boxes. Shelton had removed the padding from the boxes, and browsed through the various issues of the Oxford University Gazette to see what they contained, but due to lack of time, he left them as they were. A few years later, Elbert Wall arrived here as the Director of the Photographic Archive of Papyri, and he spent a few months here photographing the collection. He started with the Grenfell and Hunt bit, published and put in Vinylite, filling five reels of microfilm, and he continued in the tin boxes, removing the papyri from the Gazette while doing this and transferring them to acid free folders. He removed more than 21,000 fragments from the tin boxes, filled some twelve reels of microfilm while photographing them, several per exposure, and still found that there was too little time to do it all. He too was forced to leave an unknown amount of fragments in a couple of tin boxes. The exhibit features one of these.

Given the limited time Wall had, set against the actual objective of the project which was photographing the papyri, Wall could not devote much attention to the intellectual contents of the fragments he was photographing. Nonetheless, he managed to find two fragments of Homer among the 21,000 fragments. (Nice percentage).

What did come apparent, however, when the boxes finally gave away some of their secrets to Shelton and Wall, was that a substantial portion of the texts still in the boxes, and since then in the folders, including large fragments, was written in Demotic Egyptian. Grenfell and Hunt had not really made an issue of this, although we know from a remark in the introduction to the first volume of the Tebtunis papyri that they were not really interested in the Demotic part, when they refer to the fact that only few Demotic papyri were found among the crocodile papyri as "happy chance". These demotic papyri come largely from the cartonnage of the human mummies, and thus provide the Egyptian side of the two-faced society of Greco-Roman Egypt.

Megabyte

Since 1996 work has resumed on the Tebtunis papyri in a systematical matter, if I may say so. As part of the Advanced Papyrological Information System, preservation, cataloging and digitizing of the collection was undertaken. In the years that followed I was extremely happy to work with a fine team of people to ensure that more than a thousand papyri are very soon available on the worldwide web. The work is still in progress, but eventually, every text will have images of both the front and back of the papyrus (even if empty; papyrologists want to decide things for themselves), and a catalogue record with all sorts of information ranging from the physical properties of each fragment to the content, including, if possible, an English translation of the text. The digital availability of this information will eventually allow easy cross-checking between papyri from different collections.

Even more important was that in the process of digitizing the papyri, care was also taken of their preservation. In the course of the past four years, papyri have been removed from Vinylite and put behind glass, still the best material to store papyrus in. And even the problem of the statical electricity was overcome. With the help of the engineering department and Berkeley's Ion Systems, a de-ionizing fan was used in opening the mounts which removed the statical electricity. Given the major contribution of this fan to the advancement of the study of the Tebtunis papyri, we have given it a place in the exhibit, so that you can see and thank it yourself.

Future

If we are to summarize what the past century has brought us, the first expression that comes to mind is an awful lot. 1150 texts have been published in four volumes of the series The Tebtunis Papyri, some of which were republished elsewhere in the second half of this century, as our knowledge of Greco-Roman Egypt steadily grew and allowed, even warranted new interpretations of the old material. A fair number of these 1150 texts consisted of documents that were several columns long. All these texts detail the state of affairs regarding many aspects of daily life in Egypt during the Greek and Roman periods. To give one example, without the Tebtunis papyri, our knowledge of late Ptolemaic administration would not be what it is today. But of course, there are still gaps in our knowledge. With their selection of documents Grenfell and Hunt have set the framework for the house called Tebtunis. The details, however, are still lurking in the documents that have not yet been looked at. These will definitely shed light on various themes regarding daily life in Greco-Roman Tebtunis, and inform us in detail about the social economic history of this town during this period, about the day to day life of its inhabitants, about the literature they read, the gods they worshipped, the relations they had with each other and with inhabitants from other villages. Equally important is to fit in the picture arising from the papyri with
the physical objects found in the same spot, never studied in context to this date, and the archaeological remains on the spot. Also helpful may be the numerous other Tebtunis papyri now in other collections, to complete the picture. Indeed, Tebtunis is one the few towns from antiquity for which such an abundant mass of different data is available. It really would be a waste not to use it.

As to the physical aspect of the papyri, once again, a lot has been done. The papyri that were first put in print in 1902 have now been preserved, cataloged, and digitized. Work continues and is well under way to do the same for the papyri published in 1907 and in the thirties. And this should be only the beginning. It may be clear by now that the papyri that have thus been made available present only a small portion of what there is. In a way, we have just cleaned the closet a little and made room to add things. We now have to open the various boxes, and see what their contents is. At the same time, steps should be taken to preserve these papyri as well.

The task lying ahead is enormous, but doable. Because the Tebtynis papyri come from one find, they show an internal coherence that is singular among papyrus collections worldwide who have acquired their collection in the course of time from various sources. Connections are sure to be made, and these connections should be used in working with the collection, and made profitable. There is no more use in editing single texts in periodicals, without taking into account the other texts. Papyri, and especially The Tebtunis Papyri, should be edited in context, and should serve a more detailed study into the world behind the papyri. Although indeed papyri are interesting as separate objects, they become much more important when taken together and when used as a basis to reconstruct everyday life in Greco-Roman Egypt.

What certainly lies ahead, are numerous new discoveries. These discoveries will include, I guarantee it, the identification of a word hitherto unknown in ancient Greek, and causing yet again the revision of the supplement of the Greek-English lexicon, which is not bad for what is supposed to be a dead language; the discovery of a bilingual archive from the first century B.C. illustrating the intriguing layer of society where the Greek and Egyptian element mix quite directly; the finding of many fragments that belong to texts already published and filling the gaps that have been necessarily left blank so far; and the reconstruction of what it was like to live in a town on the edge of the desert in Greek and Roman Egypt. All these little discoveries will have large results in the various specialist fields that they touch upon, philology, Egyptology, ancient history, legal history, religious history, and thus the little discoveries will make a large number of different people happy, in a professional kind of way of course (not to mention the papyrologist making the discoveries). And perhaps that is what papyrology is all about, making people happy. Making the Greek philologist happy by providing him or her with new fragments of old literature thought to have been lost for ages; making the Egyptologist happy by providing him or her with new linguistic information from the latest periods of the Egyptian language; making the ancient historian happy by providing him or her with enough data to enable the creation of a workable model of the ancient economy, not possible for other regions of the ancient world; making the archaeologist happy by providing him or her with the human element that belongs to his dead objects; and possibly, ladies and gentlemen, making you a little happy this afternoon by providing you with some information about the Tebtunis papyri and giving some background for the exhibit Ancient Lives that you’re about to see. If my talk did not make you happy, however, I surely hope that the exhibit and of course especially the reception following it will. For sure, the reception will make me happy. Thank you.