



EGYPT THROUGH THE MAGIC LANTERN: BRINGING AN ANTIQUE TECHNOLOGY BACK INTO THE LIGHT

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ABSTRACT

Bryn Mawr College's magic lantern slides of Egypt from the early 20th century are a significant source of archaeological and historical data. The oldest slides in Bryn Mawr's collection were introduced between 1908 and 1911 by Dr. Caroline Ransom, the first American woman to receive a PhD in Egyptology. They represent a pivotal moment in the shift toward more accessible Egyptological pedagogy and preserve unique unpublished images that are valuable to modern archaeological research. Bryn Mawr College has nearly 2,000 glass slides of Egypt, including images of sites prior to excavation and reconstruction. Photographs of sites that were later affected by early excavations, tourism, looting, and environmental changes make this collection especially valuable to modern scholars. Effort is underway to index and digitize Bryn Mawr's lantern slides and publish these images in an online, open-access database.

In recent years, we have seen new forms of laser scanning technology, digital photogrammetry, and virtual reality reconstructions develop and inform our scholarship. Technology has always played an integral role in shaping Egyptology. Some of the earliest technological advancements in the field were far simpler than the technologies we are familiar with today, including an elementary projection device that consisted of a candle or other light source, a slide of a transparent image, a lens, and a screen. This humble apparatus—fantastically named the magic lantern—was pivotal to the development of mass visual media. By the late 19th and early 20th centuries, universities adopted the magic lantern as a teaching device in classrooms and lecture halls across Europe and the Americas. In the early 1900s, scholars at Bryn Mawr College began

amassing a large collection of magic lantern slides, which were used to teach generations of Egyptology students at the historic women's college before the magic lantern was eclipsed by new forms of projection devices. This article will demonstrate that, while now an obsolete technology, the lantern slides of Egypt in Bryn Mawr's collection hold intrinsic value to modern scholars in a number of ways. Firstly, the slides in Bryn Mawr College's collection connect the history of Egyptology with the often-overlooked contributions of women to the field, such as Dr. Caroline Ransom, who established the collection. Secondly, these slides preserve annotated, rare, and unpublished photographs of archaeological sites throughout Egypt from the early 20th century. This article will also describe the ongoing lantern slide preservation and digitization project at

Bryn Mawr College, which continues Ransom's legacy as a project led by women engaging with cutting-edge technologies to preserve these images and make them accessible to the broader scholarly community.

HISTORICAL OVERVIEW

In order to understand the significance this obsolete projection device holds for modern Egyptologists, it is essential to understand its broader history. The magic lantern's origins can be traced back to the 1660s, when the first patents were issued for projection devices (FIG. 1).¹ Magic lanterns took the form of a candle or a hurricane lamp—and later an electric light—that cast light through an image painted on glass. The light transmitted the image through a lens or pair of lenses onto a screen or wall. Originally, magic lanterns were a curiosity primarily used for entertainment purposes in the 17th century.² It is easy to understand why the magic lantern held such a fascination for its audiences: it had the potential to captivate the imaginations of a room full of people and transport them to a different place and time.

With the development of photography, these devices became increasingly used as educational tools. To create these photographic slides, images were developed onto a transparent film, sometimes hand-tinted, and then pressed between two panes of glass. These panes were then taped together and labeled (FIG. 2). Professors sent their own photographs from their travels and excavations to photography labs to be processed into lantern slides. They also shared their negatives with colleagues.³ In doing so, they developed educational collections of this visual medium to illustrate their lectures. Given that many of these images were taken by academics for personal use in their classrooms, they often contain unique and unpublished glimpses into the sites and artifacts they depict. Lantern slides were increasingly used as visual aids during academic lectures from the early 1900s through the late 1950s, when they were replaced by 35mm carousel projectors.⁴

This new form of 35mm projectors functioned much like magic lanterns—a light projected through a transparent image and a lens onto a screen—but the 35mm slide casings were made of thin cardboard or plastic instead of the more expensive and fragile glass. Additionally, 35mm slides were much more compact and therefore easier for institutions to store. That being so, many glass lantern slides were

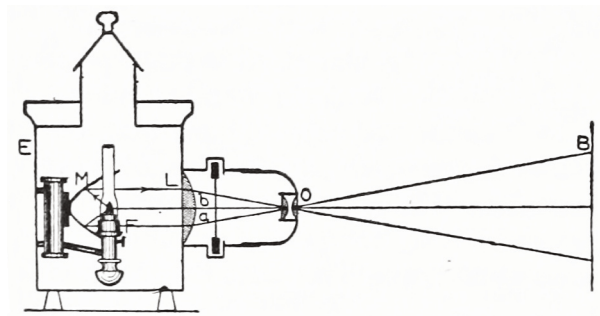
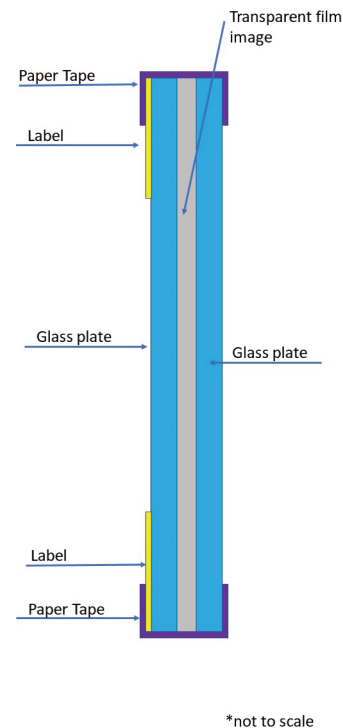


FIGURE 1: Diagram of a Magic Lantern (from Foster and Hughes 1919, 2218).



*not to scale

FIGURE 2: Cross-section diagram of a glass lantern slide (drawing © 2019 Clara McCafferty-Wright).

converted to this new medium, and then the old slides and any labels or captions accompanying them were discarded. Many institutions and libraries got rid of their glass slide collections entirely.⁵ Those who kept them usually tucked them away in storage, and as a result, magic lantern slides have received very little scholarly attention. Nevertheless, before the invention of new projectors, the magic lantern held the attention of spectators and students for over 300 years.

DR. CAROLINE RANSOM AND BRYN MAWR COLLEGE'S COLLECTION

Dr. Caroline Ransom (FIG. 3), the first American woman to earn a PhD in Egyptology, founded Bryn Mawr College's collection of lantern slides of Egypt when she came to teach at the historic women's college in 1905.⁶ Ransom's contributions to Egyptology have often been overlooked by modern scholars, even though she was a groundbreaking Egyptologist in her own right. Ransom earned two PhDs, in Egyptian archaeology and classical archaeology at the Oriental Institute of Chicago as a member of the institute's first cohort.⁷ She was the first Egyptologist to join the faculty at Bryn Mawr College, where she became department chair of archaeology and was the first female vice president of the Philadelphia chapter of the Archaeological Institute of America.⁸ In 1910, Ransom became the first woman to be appointed assistant curator at the Metropolitan Museum of Art's Egypt galleries,⁹ where she wrote the first catalog of their growing Egyptian collection.¹⁰ As assistant curator, she continued to experiment with photographic media as an educational tool and revolutionized museum work by designing exhibits that used images displayed next to artifact cases.¹¹ Later on in her career, she cataloged the Egyptology collections of the New York Historical Society and the Cleveland Museum of Art.¹² Ransom was the first Egyptologist to study the famous Edwin Smith Surgical Papyrus and was responsible for bringing it to the attention of Dr. James Henry Breasted,¹³ who was a lifelong friend and supporter of Ransom's career. In the 1920s, she was part of Breasted's Chicago excavations at both Luxor and Medinet Habu,¹⁴ where she is credited with developing the methods used by the Oriental Institute's Epigraphic Survey.¹⁵ In 1929, Ransom became the first woman to hold the position of officer and president of the American Oriental Society.¹⁶

The first slides in Bryn Mawr's collection date from 1908–1909, when Ransom took a sabbatical to Egypt.¹⁷ Ransom traveled extensively throughout the country, exploring ancient sites, museums, and ongoing excavations. She took with her two cameras, a 5x4 large-format camera and a smaller Kodak, which she used to photograph the sites she visited.¹⁸ When Ransom returned to Bryn Mawr, she brought back more than 800 slides with the intent to have more created in America for use in her classroom.¹⁹ Her letters attest that these included more than 400

of her own photographs as well as images she requested from influential Egyptologists she knew, including James Henry Breasted²⁰ and Flinders Petrie.²¹ At the time Ransom established her impressive collection, only one other course at Bryn Mawr College was illustrated with lantern slides.²²

Her slide collection continued to be used by her successors to teach Bryn Mawr students. A young Leonard Woolley, who served briefly as Ransom's replacement at Bryn Mawr, taught with her slides,²³ and the eminent linguist George A. Barton likely did as well.²⁴ Subsequent Egyptology professors built upon Ransom's original slide collection, expanding it to suit a broader curriculum that covered sites across Egypt and Nubia, and comparative art and linguistic studies. Even after Egyptology courses ceased to be regularly offered at Bryn Mawr, the renowned Bryn Mawr classicist Rhys Carpenter used Ransom's Egyptology slides to teach his architecture courses, arguing that elements of Greek architecture developed out of Egyptian designs.²⁵

Bryn Mawr College's collection of slides is significant in part because it offers a rare view into the contributions of women to the development of Egyptology as a discipline. The work of scholars who have been marginalized due to their gender, such as Ransom, has often been confined to a footnote in accounts of the history of Egyptology, if indeed their work is mentioned at all. Bryn Mawr College's earliest collection of Egyptology slides was photographed and collected by a woman for the purpose of training young women in the principles of Egyptology, a field that was otherwise inaccessible to many women at the time. It is important to note that in the early 20th century, a Bryn Mawr College education was available only to privileged white women. The exclusivity that shaped the early history of the discipline, notable in terms of economic status, nationality, and race, is still an issue that the field of Egyptology must fully acknowledge. However, both Bryn Mawr College and the field of Egyptology more broadly have shown incremental changes in accessibility within academia. As a professor of Egyptology,²⁶ Ransom made the subject available to the women of Bryn Mawr in an era when their gender was harshly discriminated against in academia and very few had professional access to such disciplines. Several of her students are known to have followed in her footsteps and pursued graduate work in Egyptology. The lantern slides in Bryn Mawr's collection played a vital role in their



CAROLINE LOUISE RANSOM.

FIGURE 3: Dr. Caroline Ransom, Bryn Mawr College yearbook, 1909 (image courtesy of Bryn Mawr College).

training, allowing them access to a field to which they would later contribute.

At a time when Egyptology was inaccessible to many women, Ransom's slides represent a pivotal moment when classrooms full of young women were being professionally trained in subjects such as Egyptian art and ancient Egyptian history. The slides Ransom collected in her travels to Egypt made use of cutting-edge technology of the day, bringing ancient Egypt closer to her students. In 2019, an on-campus exhibit at Bryn Mawr College highlighted Ransom's role in introducing Egyptology to the college, featuring projections of newly digitized images of Ransom's slides. These slides are artifacts of a time when Egyptology was deeply colonial and a discipline closed to many, but they also represent the beginnings of a transition to greater accessibility beyond an audience of mostly white, elite men in the early 1900s.

LANTERN SLIDES AS ARTIFACTS

Bryn Mawr College's antique slides of Egypt offer rare—and at times unique—glimpses into the history of the sites that they record and are an incredibly valuable resource for modern scholars. In the century that has elapsed since these photographs were taken, tourism industries, the environment, and population size of Egypt have undergone drastic changes. Many of the slides in Bryn Mawr College's collection show sites before they were excavated or reconstructed, changes that are irreversible and not always well documented. In the course of early excavations, many of the Greco-Roman, late-antique, Byzantine, and Ottoman mud-brick structures were destroyed in order to uncover the pharaonic phases of construction. A number of Bryn Mawr College's slides show rare glimpses of these remains, which have been largely lost to the archaeological record since the early 20th century. Slides such as Ransom's photographs of Kalabsha temple show an extensive and intact mud-brick late-antique settlement prior to excavation and relocation (FIG. 4).

The mudbrick remains surrounding the Roman-era temple were never thoroughly documented by archaeologists. When the temple was moved to save it from the flooding caused by the construction of the Aswan High Dam, the mud-brick remains were destroyed. Other slides show early aerial photography, perhaps taken from a hot air balloon, of sites in the Theban valley, such as Medinet Habu. FIGURE 5 is an early aerial photograph that shows the mud-

brick remains of the late-antique village of Djeme, which once stood among the ruins of Medinet Habu before they were removed by excavators seeking to quickly uncover pharaonic ruins at the site. Relatively little was done to document these mud-brick structures that dated from the late- antique period, and the extensive remains of the town were removed by excavators in the course of a single season in an effort to reach New Kingdom levels.²⁷

In the course of indexing efforts, the Bryn Mawr Lantern Slide Digitization Project uncovered hundreds of slides that date to the early 1900s. Due to the meticulous labeling system of Bryn Mawr College's early slides, many can be securely identified as belonging to Ransom's original collection, including a slide signed by Ransom as her own photograph. As far as the authors of this paper are aware, the majority of slides from Ransom's original collection have never appeared in publications and were created solely for teaching purposes. Ransom went out of her way to travel to sites that were not frequented by tourists and thus were rarely photographed except when excavations were underway. She traveled to sites such as the Kargha Oasis and the Fayum, where she met with excavation teams and took photographs for her growing collection of teaching materials.²⁸

One of the values of glass lantern slides is that they allowed significantly more space for dates and notations to be written on the slide labels than do 35mm slides. This important metadata allows scholars to clearly identify the site and often the date of each photograph. If the image has been published before, the author and year of publication are often included as well. Most of the slides from Ransom's original collection preserve handwritten notes on their labels listing the site name, date, and occasionally the direction she was facing or where she was standing with her camera when the photograph was taken.²⁹ While these notes were originally intended to help orient Ransom's students to sites in Egypt that they had never visited, these detailed labels are also useful tools for modern archaeologists looking to analyze historic photographs of specific sites in specific years.

It is only in the last decade that digital scanning has advanced enough to successfully scan these slides with noninvasive methods. Previously, institutions seeking to preserve the images inside their fragile glass slides resorted to splitting open the glass casings in order to rephotograph the original



FIGURE 4: Digitized slide showing the ruins around the temple of Kalabsha with directional notes, 1909-1910 (scanned image by the Bryn Mawr Lantern Slide Digitization Project, 2019).

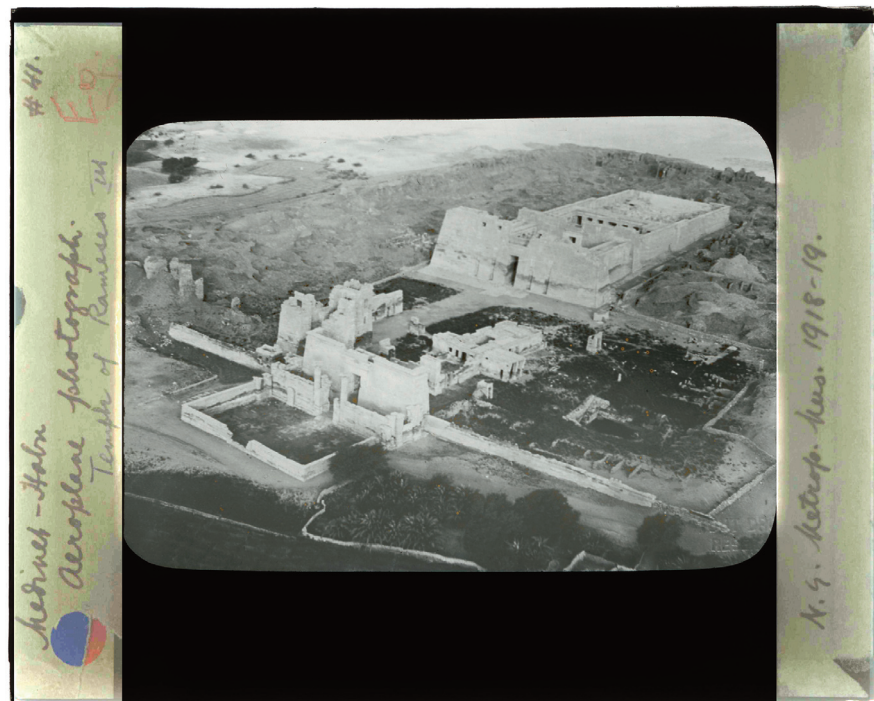


FIGURE 5: Digitized slide of aerial photograph of Medinet Habu, 1918-1919 (scanned image by the Bryn Mawr Lantern Slide Digitization Project, 2019).

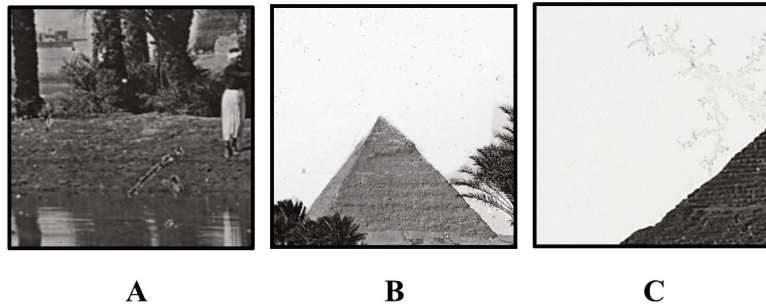


FIGURE 6: Examples of photographic features present in lantern slides from Bryn Mawr College (scanned images by the Bryn Mawr Lantern Slide Digitization Project, 2019).

film at high resolution, resulting in the loss of accompanying labels. Additionally, institutions often destroyed or discarded glass lantern slide collections that were considered outdated, and many slides were given away. A number of the slides in Bryn Mawr College's collection were acquired from the University of Chicago and New York University's Fine Arts Institute when they decided to discard their extensive glass slide collections in favor of 35mm carousel formats. By incorporating these slides into the Egyptology collection, Bryn Mawr College saved these important slides and the information their labels contain from dispersal and destruction.

Magic lantern slides not only hold critical data regarding the sites and artifacts they represent but also contain numerous clues as to how these slides were produced. Many of the Egyptology slides show evidence of sand scratching the negatives, a direct influence of the Egyptian environment on the images. These sand scratches in the film negatives create underdeveloped white streaks on the positive image (FIG. 6a). At times, the developer has attempted to paint over these scratches with watercolor or so-called India ink. The quality of the camera used to take the photographs can be determined by looking for lenticular fallout, an effect caused by a lens that is poorly ground, resulting in features along the edges becoming blurred (FIG. 6b). Photographs taken by professional photographers can often be distinguished from images taken by professors or tourists in this way, given that the prolific professional photographers of Egypt's archaeological sites, such as Pascal Sébah and Francis Frith,

shot with high-quality lenses. Several of the oldest slides in Bryn Mawr College's collection contain frost-like crystal formations on the image (FIG. 6c). These features are consistent with sodium thiosulfate crystals (also known as hypo or hyposulphite of soda), a chemical used in the photographic development process that crystallizes over time.³⁰ The presence of these crystals indicates that the developer did not thoroughly rinse the lantern-slide film before it was inserted between its glass panes. These sodium thiosulfate crystals are a factor that puts these lantern slides at risk. Over time, they can grow, obscuring the image, and they can even embrittle the photograph.³¹ Bryn Mawr College's earliest slides are more than a hundred years old, and as more time passes, they are at increased risk of further irreversible damage from the sodium thiosulfate. It is vital that these images be digitized using noninvasive methods as soon as possible, to preserve the data they contain for future generations of scholars before these antique images further degrade.

THE BRYN MAWR LANTERN SLIDE DIGITIZATION PROJECT

The Bryn Mawr Lantern Slide Digitization Project was established in 2019, when Clara McCafferty-Wright, co-president of the Bryn Mawr College Egyptology Association, stumbled upon Bryn Mawr's Egyptology lantern slide collection. She realized the intrinsic value the slides held for modern scholars and recruited the help of fellow BMCEA officers Leah Packard-Grams and Ella McCafferty-Wright. In conjunction with Bryn Mawr

College's director of library research Dr. Camilla MacKay, digital media specialist Del Ramers, and visiting assistant professor Dr. Susanna McFadden, the authors of this article founded a research project focused on digitizing the slides. The end goal of the project is to ensure that the Egyptology slides in Bryn Mawr College's collection are published in an open-access database, continuing Ransom's legacy of increasing accessibility of Egyptology through the use of the latest-available technologies.

The first stage of this project was to develop a working index of the Egyptology lantern slide collection. To do this, the directors of the project assigned a number to each slide box and began cataloging them. At some point in the past, these slides were separated by paper labels according to course and topic. Throughout the process, a detailed index of box contents and subsections was made, including how many slides each section and box contained. This helped establish the scope of the project and enables the scholars involved to easily locate individual slides. To date, the project has indexed sixteen boxes containing 1,690 lantern slides of Egypt, with each box housing between 100 and 130 slides. Given the magnitude of the collection, the decision was made to identify a set for prioritized digitization as the first phase of the project. Criteria for prioritizing slides included:

1. The oldest slides dating between 1908 and 1911, originally compiled and donated by Ransom;
2. Unique images that are likely to be the only surviving copy; and
3. Slides that show a site before excavation, reconstruction, or relocation.

According to these criteria, eighty-five slides were selected for prioritized digitization and set aside for cleaning and scanning. As mentioned above, past efforts to digitize lantern slides at many institutions split open the slides to extract the film and rephotographed them at high resolution. The directors of this project were determined to improve upon this method and find a noninvasive way to digitize these images while preserving the original artifacts (FIG. 7). To this end, a method using a flatbed photo scanner was developed. This process is detailed here for the benefit of future digitization efforts.

The slides are first carefully cleaned with an ammonia-based glass cleaner and a microfiber cloth to remove any dust or residue and preserve the integrity of the scanned image. The scanning bed is also regularly cleaned. For digitization, the project utilizes an Epson Perfection V850 flatbed digital photo scanner. The Epson scanner is set to "Professional



FIGURE 7: Project directors Leah Packard-Grams (foreground) and Ella McCafferty-Wright (background) cleaning and scanning slides at Bryn Mawr College (photograph © 2019 Clara McCafferty-Wright).

Mode,” and the document type is set to “Film.” For black and white slides, the film type is adjusted to “Positive Film” in “16-bit Grayscale.” The inclusion of the special settings such as “Grain Reduction” and “Backlight Correction” at times greatly improves results. The scanning resolution is set at as high as deemed reasonable for the particular slide, usually 600 dpi for clear, publishable images.

While this noninvasive scanning process yields high-quality digital images of the photographs in the lantern slides, it also leaves the handwritten labels on the edges of the slide dark and obscure. In order to digitize and preserve the metadata contained on these labels in addition to the photographic images, the Bryn Mawr Lantern Slide Digitization Project developed an innovative method to digitally manipulate the pixels of the slide labels. By using the curves tool in editing software such as Adobe Photoshop and Gimp, the person digitizing a slide can selectively adjust the tonality of the labels to make them legible without affecting the overall image. This enables researchers to see the original notes present on a slide along with the slide’s image (FIG. 8).

FUTURE WORK AND CONCLUDING REMARKS

With the index of 1,690 slides completed and the first forty prioritized slides scanned for digitization in the

spring of 2019, the directors had planned to continue with work to scan and upload a large collection of slides to an open-access online platform in the spring of 2020. Due to the COVID-19 pandemic, the project came to a temporary halt. Until the project is able to continue, the slides are in the care of Bryn Mawr College. The directors are eager to resume as soon as it is safely possible to do so.

The lantern slides of Egypt housed in Bryn Mawr College’s collections are artifacts of early Egyptology and closely tied to the work and teachings of Ransom. The slides are artifacts of a time when Egyptology was just beginning to become a more accessible field, and they serve as powerful reminders of the role that Ransom and Bryn Mawr College played in contributing to that increase in accessibility. Additionally, the images and metadata that these slides contain have the potential to aid scholars studying sites across Egypt that have been affected by time, early excavations, population increase, climate change, and the construction of the Aswan High Dam (FIG. 9). Once these images are published in an open-access online database, they will be preserved and accessible for generations to come. Thus, scholars will continue to benefit from these unique windows into the history of Egyptian archaeology, the work of Dr. Caroline Ransom, and the contributions of women to early Egyptology.

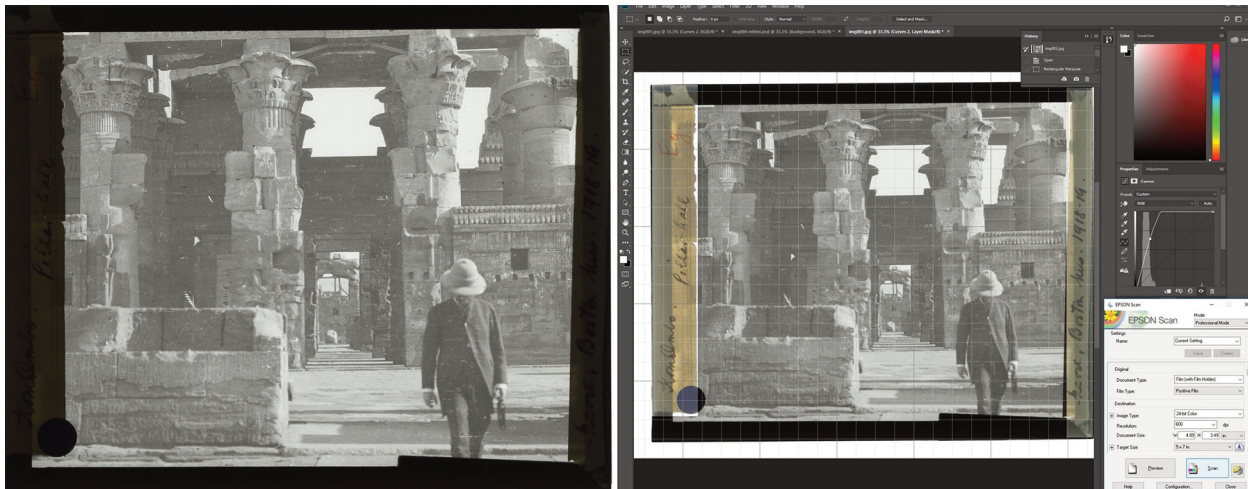


FIGURE 8: Comparison of an unaltered slide scan versus the final version with labels visible (scanned images by the Bryn Mawr Lantern Slide Digitization Project, 2019).



FIGURE 9: Hand-tinted slides from the early 1920s, shortly after the discovery of Tutankhamun's tomb, ready for indexing (photograph © 2019 Clara McCafferty-Wright).

REFERENCES

- Bryn Mawr College. 1908. *Bryn Mawr College Undergraduate College Catalogue and Calendar, 1908*. Bryn Mawr College. < repository.bryn mawr.edu/bmc_calendars/61/ >, accessed 10 September 2020.
- Bryn Mawr College. 1910. *Bryn Mawr College Undergraduate College Catalogue and Calendar, 1908*. Bryn Mawr College. < repository.bryn mawr.edu/bmc_calendars/61/ >, accessed 10 September 2020.
- Bryn Mawr College. 1911. *Bryn Mawr College Undergraduate College Catalogue and Calendar, 1911*. Bryn Mawr College. < repository.bryn mawr.edu/bmc_calendars/59 >, accessed 19 October 2020.
- Bryn Mawr College. 1916. *Bryn Mawr College Undergraduate College Catalogue and Calendar, 1916*. Bryn Mawr College. < repository.bryn mawr.edu/cgi/viewcontent.cgi?article=1008&context=bmc_calendars >, accessed 11 September 2020.
- Artstor. 2016. "Classical Antiquity Lantern Slide Collection (Bryn Mawr College)" Collections, March 28, 2016. < artstor.org/content/classical-antiquity-lantern-slide-collection-bryn-mawr-college >, accessed 10 September 2020.
- C.L.R. 1912. "The Value of Photographs and Transparencies as Adjuncts to Museum Exhibits." *Metropolitan Museum of Art Bulletin* 7: 132–134.
- Foster, Ellsworth D. and James Laughlin Hughes (eds.). 1919. *The American Educator*, vol. 5. Chicago: Ralph Durham Company.
- Hölscher, Uvo. 1931. "The Architectural Survey." In Harold H. Nelson and Uvo Hölscher, *Medinet Habu Reports*, 49–69. Oriental Institute Communications 10. Chicago: The University of Chicago Press.
- Keller, Karlheinz, Helmut Kampfer, Reinhard Matejec, Otto Lapp, Werner Krafft, Hans Frenken, Hermann Lübrig, Rainer Scheerer, Max Heilmann, Heinz Meckl, Peter Bergthaller, Dirk Hübner, Erich Wolff, Bernhard Morcher, Wolfgang Zahn, Hans Buschmann, Rudolf Blank, Rudolf Tromnau, Jürgen Plamper, Adolf Seiler, Klaus Nieswandt, Immo Boie, Erik Moisar, Robert Winiker, Matthias Schellenberg, and Leendert Ketellapper. 2000. "Photography." In *Ullmann's Encyclopedia of Industrial Chemistry*. Wiley Online Library. DOI: 10.1002/14356007.a20_001.
- Lesko, Barbara. 2004. "Caroline Louise Ransom Williams." *Breaking Ground: Women in Old World Archaeology*. Brown University. < brown.edu/Research/Breaking_Ground/bios/Ransom%20Williams_Caroline%20Louise.pdf >
- Nims, Charles F. 1972. "Publications of the Epigraphic Survey." *Oriental Institute 1973–1974 Annual Report*, 7–17.
- Sheppard, Kathleen L. (ed.). 2018. *My Dear Miss Ransom: Letters Between Caroline Ransom Williams and James Henry Breasted, 1898–1935*. Oxford: Archaeopress.
- Vermeir, Koen. 2005. "The Magic of the Magic Lantern (1660–1700): On Analogical Demonstration and the Visualization of the Invisible." *The British Journal for the History of Science* 38.2: 127–159.
- Wells, Kentwood D. 2008. "The Lincoln-Darwin

- Bicentennial." *The Magic Lantern Gazette* 20.4: 3–12.
- Whitehouse, R. 2013. "Margaret Murray (1863–1963): Pioneer Egyptologist, Feminist, and First Female Lecturer." *Archaeology International*, 24 October 2013. < doi.org/10.5334/ai.1608 >
- NOTES**
- ¹ Vermeir 2005, 128.
 - ² Vermeir 2005, 129.
 - ³ Sheppard 2018, 18 (letter no. 0006, Caroline Ransom to James Henry Breasted, 17 June 1908).
 - ⁴ Artstor 2016.
 - ⁵ Wells 2008, 8.
 - ⁶ Sheppard 2018, 9–10.
 - ⁷ Lesko, 2004, 1.
 - ⁸ Lesko, 2004, 2.
 - ⁹ Lesko, 2004, 1.
 - ¹⁰ Lesko, 2004, 1.
 - ¹¹ C.L.R. 1912.
 - ¹² Lesko, 2004, 3.
 - ¹³ Lesko, 2004, 4.
 - ¹⁴ Lesko, 2004, 5.
 - ¹⁵ Nims 1972, 3.
 - ¹⁶ Lesko, 2004, 6.
 - ¹⁷ Sheppard 2018, 10.
 - ¹⁸ Sheppard 2018, 20 (letter no. 0007 from Caroline Ransom to Frances Hart Breasted, 18 June 1908).
 - ¹⁹ Sheppard 2018, 20 (letter no. 0007 from Caroline Ransom to Frances Hart Breasted, 18 June 1908).
 - ²⁰ Sheppard 2018, 18 (letter no. 0006, Caroline Ransom to James Henry Breasted, 17 June 1908).
 - ²¹ Sheppard 2018, 22 (letter no. 0007 from Caroline Ransom to Frances Hart Breasted, 18 June 1908).
 - ²² Bryn Mawr College 1908, 146.
 - ²³ Bryn Mawr College 1911, 106.
 - ²⁴ Bryn Mawr College, 1916, 103.
 - ²⁵ Bryn Mawr College 1916, 125–128.
 - ²⁶ Ransom was possibly the first woman to hold a doctorate in Egyptology in the world, since University College London did not grant Margaret Murray's honorary doctorate until 1935 (Whitehouse 2013, 16).
 - ²⁷ Hölscher 1931, 50–56.
 - ²⁸ Sheppard 2018, 20 (letter no. 0007 from Caroline Ransom to Frances Hart Breasted, 18 June 1908).
 - ²⁹ E.g., see FIG. 4, a photographic slide of the Kalabsha temple on which the label reads "View from higher ground at n.w. of temple."
 - ³⁰ Keller et al. 2000, 3.1.2.
 - ³¹ Keller et al. 2000, 3.1.2.