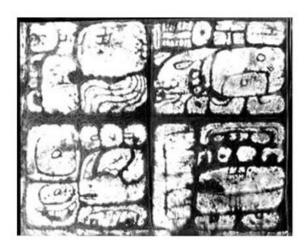
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Recording the Political History of Chichén Itzá: Photography of the Denison Rubbings and Archival Research at the Peabody Museum



Research Year: 1996

Culture: Maya

Chronology: Late Classic to Post Classic

Location: Yucatán, México

Site: Chichén Itzá

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The Denison Rubbings

In 1933, J. H. Denison produced a set of rubbings of selected hieroglyphic inscriptions from Chichén Itzá at the request of S. G. Morley as part of the archaeological investigations being conducted at the site by the Carnegie Institution of Washington. These rubbings are the ones that Hermann Beyer cut-up into pieces for his 1937 structural analysis of Chichén Itzá's inscriptions (see Bolles 1977:262, 264). Ian Graham of the Peabody Museum has stored the rubbings in several manila envelopes

and while they are still cut-up in pieces, most of them have been mounted onto sheets of paper and labeled for easy reference. Although I had never seen the rubbings, I reasoned that they might reveal more detail than the more recent Merle Greene Robertson rubbings, due to weathering over time. In a few cases, this did prove to be the case, however, the overall quality of Merle Greene Robertson's rubbings is superior to Denison's. This makes both sets of information useful and complementary. I have already been able to use the Denison Rubbings as aids in my drawings of the hieroglyphic inscriptions and I am very pleased that this information will now be made available to other scholars. The drawings I am working on will augment my current collection of published drawings of Chichén Itzá's inscriptions (Krochock 1989; Krochock in press; Wren, Schmidt and Krochock 1989) and will be of key importance in my dissertation on the political history of Chichén Itzá.

As a side note, I would like to mention that some of the "Denison" rubbings seem to have been produced by a Mr. Conrad Kratz. At this time, I am not sure how many of the rubbings he did, but I will continue to research this issue so that he may be given proper credit for his work.

Changes in the Original Work Plan

In my original proposal, I had stated that I would (1) photograph and scan the Denison rubbings and bring the information back to the scholarly community and (2) complete my dissertation, which would have made full use of the archival research that I did at the Peabody Museum. I would now like to present to you a report covering the first of these objectives, as I have been unable to finish my dissertation as yet. I fully intend to complete the dissertation as soon as possible and I will provide FAMSI with a copy and I will make the information available to interested scholars. The proposed work turned out to be more difficult than I had anticipated and took a longer time to accomplish than I had hoped. The project has been an incredible learning experience for me and I am pleased with the results of this phase of the work and I hope that you will be pleased with it also.

Photography of the Denison Rubbings at the Peabody Museum

My trip to the Peabody Museum extended from May 6-May 26, 1996. Because I rented a room from a friend of a friend in Boston's South End instead of staying in a hotel, I was able to save money on personal living expenses. This allowed me to extend the length of the trip from two to three weeks and upgrade the photography from 35mm to Hasselblad to improve resolution of the final product.

The first week was spent photographing the Denison Rubbings at the Peabody Museum. Ian Graham was especially accommodating in helping us set up for the photography and also developed our test roll of film in his darkroom. Jeanne Randall photographed the rubbings using a Hasselblad 2000 FCW with both 120 and 80-mm

lenses, depending on conditions. She used a Tota-Light 1000-watt lamp for lighting. Some of the rubbings were mounted on sheets of 8.5x11-inch paper and in most cases we were able to shoot four sheets at a time without compromising detail. Decisions on how to photograph each rubbing fragment were made based on the quality and size of the rubbings, and the method of mounting used. Jeanne set up the camera on a tripod in copy-stand fashion and shot down from various heights depending on conditions; some of the larger rubbings were affixed to the wall and shot vertically. Bracket shots were taken to ensure the best quality. Approximately 30 rolls of T-Max, 12 exposure, 120 film were shot, developed, and contact printed and all the photographs came out well and all have good resolution.

Scanning the Photographs

As I stated in the interim report, I had planned on scanning directly from the negatives rather than from printed photographs. I thought this would save time and money and would increase the resolution of the images. I used Jeanne Randall's and Doug Mahon's Relisys Scanner (RELI 9624) with transparency attachment and the program CorelPhoto. Their system allows one to place Hasselblad negatives on the glass of the flat bed scanner to scan. After many trials using various DPIs (300-2000) I was not satisfied that the images were at an adequate resolution for screen viewing or printing. My inexperience with the process of scanning negatives made it difficult for me to resolve the problem. The images looked out of focus to me and I didn't want to take a chance that the scans would be worthless. We tried printing some 8x10 black & white photographs of the rubbings and scanned the photos instead. Since these images were much sharper and easier to work with, Jeanne and I decided to print all the photos and scan from them. Jeanne has a darkroom, so we purchased photographic paper and chemicals and printed the photos. Jeanne did the work of the actual printing—I assisted when I could with the stopping, fixing, rinsing, and drying.

After the photos were printed, I made sure that they were correctly identified by monument and glyph block and began scanning. Again using CorelPhoto, I decided to use as high a resolution as possible. Wanting excellent quality for archival purposes, I started out with the Las Monjas and the Yula inscriptions at 600 DPI. This resulted in enormous files. However, when the images are opened with the program, Adobe PhotoShop, they are very clear and can be enlarged many times before becoming grainy. This first batch of scans yielded about 1.1GB of information and it was clear that I was going to have to reduce the file size somewhat or I would never be able to store all the images. Doug Mahon provided a Yamaha CDR 100/102 Compact Disc Recordable drive and the program Easy-CD Pro for Windows 95 which allowed us to store the images directly on CD-ROMs as 9660 ISO images that can be accessed by either Macintosh or IBM compatible computers. The rest of the scans were done at various DPIs ranging from 300 to 600 depending on the size of the printed images, the screen resolution, and ability to enlarge and manipulate the images in Adobe PhotoShop. The scanned images have been stored on a set of 5 CD-ROMs and I have included a set for FAMSI with this report. Additional sets were produced for myself.

Martha J. Macri and the Maya Hieroglyphic Database Project, Jeanne Randall, and Merle Greene Robertson so that she will be able to compare these rubbings with her own. The scanned images are saved in TIFF format so that they can be read off the CDs using Adobe PhotoShop. Once the image has been brought up on the screen with Adobe PhotoShop, the best viewing of the image is achieved by using the "invert" function so that the negative image becomes a positive one, resembling a photo of the monument rather than a rubbing. The brightness, contrast, and tone of the inverted image can also be best adjusted by using the "Levels" and/or "Equalize" functions. A guide to the contents of the CD-ROMs is included with each set. This will allow one to locate quickly a specific image for viewing.

The scanned images will be incorporated into the Maya Hieroglyphic Database Project directed by Martha J. Macri. We will include lower resolution images of the Denison Rubbings on the Chichén Itzá CD that we will be producing by summer 1997. The scanned images of the following sites and associated monuments can be found in separate PDF documents.

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Chichén Itzá
      Akab Tz'ib Lintel Front
      Akab Tz'ib Lintel Underside
      Caracol Fragments
            Fragment A
            Fragment B
            Fragment C
            Fragment 4
            Fragment 5
            Fragment 6
            Fragment 7
            Fragment 8
            Fragment 9
            Fragment 10
            Fragment 11
            Fragment 12
            Fragment 13
            Fragment 14
            Fragment 15
            Fragment 16
            Fragment 17
            Fragment 18
      Caracol Pier
      High Priest's Grave Column
      High Priest's Grave Fragments
      Las Monjas Lintels
            Lintel 1a
            Lintel 2
            Lintel 2a
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Lintel 3

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Lintel 3a
              Lintel 4
              Lintel 4a
              Lintel 5
              Lintel 5a
              Lintel 6
       Las Monjas East Wing Annex Lintel
       Serpent's Tail
       Temple of the Four Lintels
              Lintel 1
              Lintel 1a
              Lintel 2
              Lintel 2a
              Lintel 3
              Lintel 3a
              Lintel 4
              Lintel 4a
      Hieroglyphic Jambs
              East Jamb
              West Jamb
       Temple of the Initial Series Lintel
              Front
              Underside
       Temple of the One Lintel
       Temple of the Three Lintels
              Lintel 1
              Lintel 2
              Lintel 3
       Xtoloc Lintel
Yula
       Yula Lintels
              Lintel 1
              Lintel 1a
              Lintel 2
              Lintel 2a
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Archival Research at the Peabody Museum

The second and third weeks of my trip to Cambridge were spent working in the Collections Archives and the Carnegie Photo Archives of the Peabody Museum. While there I was able to inspect and order reprints of selected Carnegie Institution of Washington photographs of hieroglyphic inscriptions and some of the more informative original field notes from the excavations at Chichén Itzá. Among the materials inspected in the Collections Archives were field notes, maps, and drawings by Bolles, Ruppert,

Morley, Proskouriakoff, Martin, Shook, Denison, and others. In the photo archives I was able to find photographs of the 6E1 columns, including one column that is unpublished probably because the inscription is eroded. These photos will aid in my re-drawing of the 6E1 inscriptions and original drawing of the iconography of the unpublished column.

I also used the Tozzer Library several times during these two weeks and was able to find materials that have been difficult for me to locate through interlibrary loan. I made photocopies of several such items.

In addition, I visited the Peabody Museum "Annex" where I was able to view the ceramic collections from Chichén Itzá and Northern Yucatán and to see some of the plaster casts that were made of the inscriptions of Chichén Itzá. Unfortunately, many of the casts were stored in such a way that I could not make much use of them and I could not make arrangements to have them moved so they could be better viewed. It would be a worthwhile project to document the remainder of the plaster casts before they all fall into disrepair or are destroyed.

Peter Selverstone and Lynn Foster helped me make a brief side-trip to the Haffenreffer Museum in Bristol, Rhode Island to view the collection of Spinden's photographs of Chichén Itzá that are being curated by Geoff McCafferty. While there, I was able to order several reprints that will aid in my drawing of the inscriptions. The photographs have not yet been delivered to me, but I expect them soon.

Acknowledgements

I would like to thank all the members of the Foundation for the Advancement of Mesoamerican Studies, Inc. (FAMSI) for making this work possible. Not only has the project been a great pleasure and learning experience for me, but also it will enhance the quality of my dissertation. I am pleased that I have been able to make the Denison rubbings more available to the scholarly community and I trust that other scholars will also benefit from working with this information.

I am very grateful to Jeanne Randall for her dedication and excellent work with the photography at the Peabody Museum and in the darkroom. I would also like to offer my gratitude to Doug Mahon for his patient technical assistance and access to an incredible computer system and CD-ROM accessories. Much of the work would not have been possible without their help. It has been a pleasure working with them and staying at their lovely home in Boulder Creek, California.

For hospitality and generosity in Boston I would like to thank Michael McGovern, Susan Reich, Robert Ullmann, Lynn Foster, Larry Foster, Peter Selverstone, and Connie Cortez. Many thanks to Martha Macri, Michael Evans, Matt Looper, Thomas Tolles, and the Maya Hieroglyphic Database Project for technical support and access to computer resources. Alexiss Holden and John Campos also provided technical advice. My advisors David Freidel and Linda Schele have never failed to be there for me when I need help—thank you so much. Sandy Noble, Justin Kerr, and Barbara Kerr made

themselves available to help me apply for the grant and to work out technical problems as they cropped up. Merle Greene Robertson and Christi Viera have been very generous in sharing with me the work they have done on Merle's Rubbing Database as well as giving advice about the production of CD-ROMs. At the Peabody Museum, Ian Graham, David Stuart, Martha LaBelle, Susan Haskell and the Collections Archive staff were all very gracious and accommodating. And of course, many thanks to Angel Lopez and Buster Pooky for providing lots of emotional support.

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