

Title: **Conservation work in the Hatshepsut Temple in Deir el-Bahari (2009)**

Author(s): Rajmund Gazda

Journal: *Polish Archaeology in the Mediterranean* 21 (Research 2009)

Year: 2012

Pages: 251-254

ISSN 1234-5415 (Print), ISSN 2083-537X (Online)

ISBN 978-83-235-1144-1

Publishers: Polish Centre of Mediterranean Archaeology, University of Warsaw (PCMA UW),
Wydawnictwa Uniwersytetu Warszawskiego (WUW)

www.pcma.uw.edu.pl - www.wuw.pl

**CONSERVATION WORK
IN THE HATSHEPSUT TEMPLE
IN DEIR EL-BAHARI (2009)**

Rajmund W. Gazda
PCMA Associate

Abstract: The article reports on current conservation and restoration work being carried out in the Temple of Hatshepsut in Deir el-Bahari by a Polish-Egyptian Mission from the PCMA . This includes the North Chapel of Amun, the Bark Hall, and Osiride statues in the Coronation Portico, as well as preliminary preservation of about 4500 pieces of sandstone sphinxes from MMA excavations at the beginning of the 20th century, now rediscovered in the storeroom.

Keywords: Deir el-Bahari, Temple of Hatshepsut, Osiride, sphinx, stone conservation, restoration

CONSERVATION WORK IN THE HATSHEPSUT TEMPLE IN DEIR EL-BAHARI (2009)

Rajmund W. Gazda

PCMA Associate

Abstract: The article reports on current conservation and restoration work being carried out in the Temple of Hatshepsut in Deir el-Bahari by a Polish-Egyptian Mission from the PCMA. This includes the North Chapel of Amun, the Bark Hall, and Osiride statues in the Coronation Portico, as well as preliminary preservation of about 4500 pieces of sandstone sphinxes from MMA excavations at the beginning of the 20th century, now rediscovered in the storeroom.

Keywords: Deir el-Bahari, Temple of Hatshepsut, Osiride, sphinx, stone conservation, restoration

Current conservation research and work were carried out on the Upper Terrace of the Hatshepsut Temple, in the Royal Cult Complex, North Chamber of Amun-Re, Bark Hall and reconstruction of the Osirides. Work started on the reconstruction of the sphinx statues of Hatshepsut. Monitoring started of the state of preservation of the complexes of the Chapel of Hathor, Lower Shrine of Anubis and individual blocks kept in the lapidaries.

CONSERVATION WORK IN THE COMPLEX OF THE ROYAL MORTUARY CULT (CRC)

Decorated blocks and fragments of blocks with sunken relief from the southern end of the East Wall of the courtyard of the Complex of Royal Cult (CRC-C) were selected for conservation in preparation for an anastylosis of this part of the wall (see Szafranski 2011: 197–198). Thirteen blocks were cleaned of secondary mortar (gypsum and cement mortars from the mid 20th century) and structurally reinforced

with a silicon-organic preparation FUNCOSIL 300 (Remmers). Cracks were filled with modified renovation putty CERESIT (Henkel). The faces of the blocks were cleaned of secondary deposits with compresses made of powdered sepiolite and water. A similar method was used to clean the preserved northern section of the East Wall of the vestibule; 27 blocks were preserved with the silicon-organic preparation (this work was carried out by Krystyna Wadzyńska).

In the next stage two courses of the southern part of the east courtyard wall were reconstructed, the blocks being replaced in their original position based on a reconstruction project prepared by Olga Białostocka (epigraphical and iconographical analysis) and Teresa Kaczor (architectural inventory). The anastylosis was carried out by a team comprising Olga Białostocka, Rajmund W. Gazda, Krystyna Wadzyńska, Teresa Kaczor and the Project's rais, Ragab Yassin. The work is planned for three successive seasons,

hence no aesthetizing work was carried out. The structural bedding was left in full view [Fig. 1].

The southern section of the east wall of the Chapel of Hatshepsut (CH) was conserved up to the cornice. The wall had been reintegrated a hundred years ago by the Egypt Exploration Fund. It is currently built of 27 decorated blocks. The gaps are filled by bricks bonded with gypsum mortar and with limestone blocks. The bas relief was executed with precisely finished hieroglyphs. Partly preserved polychromy was studied to determine the character of the painterly execution.

Secondary gypsum putties were removed in order to reveal the edges of the blocks. The surface of the blocks was cleaned by the same methods as described above. PRIMAL was applied to surface cracking of the stone. The paint layer was fixed with a 5% solution of PARALOID B72 in toluene (conservation carried out by conservator Maria Lulkiewicz-Podkowińska).

FINISHING WORK IN THE NORTHERN CHAMBER OF AMUN-RE

Conservation of the Northern Chamber of Amun-Re (NA), started in the second

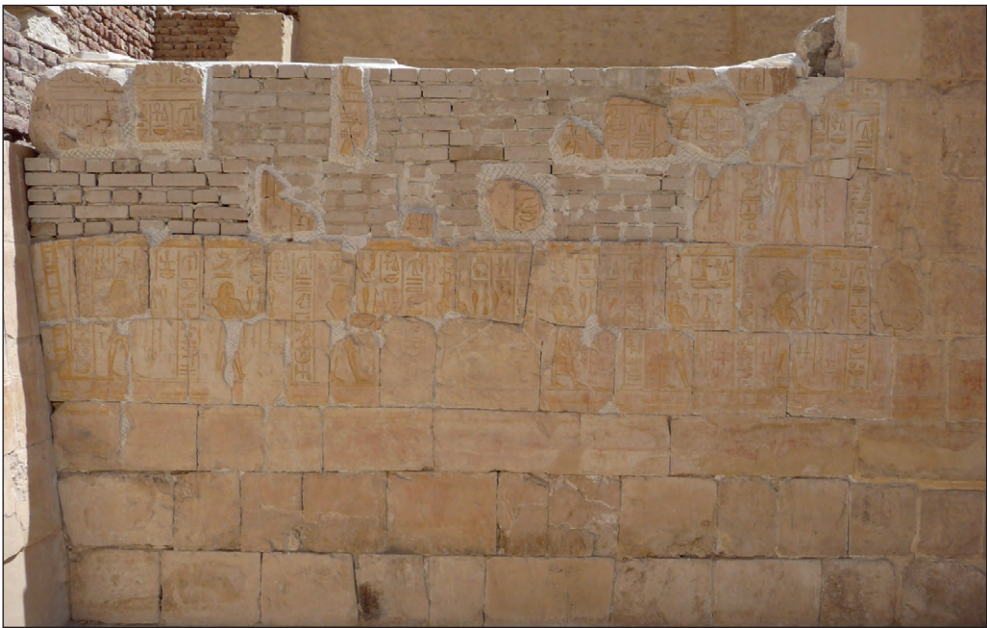


Fig. 1. Southern part of the east courtyard wall in the Royal Mortuary Cult Complex, view after anastylosis (All photos by the author)

Team

Artwork conservators: Rajmund W. Gazda (Chief Conservator), Maria Lulkiewicz-Podkowińska, Wojciech Myjak, Andrzej Sośnierz, Krystyna Wadzyńska, assisted by four technical restorers from the Supreme Council of Antiquities

half of the 1990s, reached a point at which consolidation and aesthetizing of the ceiling was carried out. The roofing structure had been introduced before the Polish conservation project started in 1961. Faults observed in the structure were repaired with HENKEL mortar and the cement mortar was removed from the original ceiling slab decorated with polychromy recreating the heavens in the southern part of the shrine (the work was carried out by Egyptian technical restorers under the supervision of conservator Rajmund W. Gazda). Professional spot lighting (designed by engineer Mieczysław Michiewicz) was mounted to bring out the decoration on the walls. Gaps by the edge of the blocks in the lower and central part of the east wall of the shrine and to a lesser extent the west wall (using renovation putty (carried out by conservator Rajmund W. Gazda). The interior jamb surfaces were cleared of grime and secondary mortar, revealing a text devoted to Sennemut on the western jamb (conservation carried out by Maria Lulkiewicz-Podkowińska). The text was known from the documentation prepared by the Egypt Exploration Fund and had disappeared under a deposit of grime. The walls of the jambs were unified aesthetically with modified mineral plaster after first protecting the stone with FUNCOSIL 300 (work carried out by Krystyna Wadzyńska).

BARK HALL (BH)

The previously reconstructed so-called *Sema-tawy* scene was supplemented with a fragment of a block carved with a representation of the head of the eastern (right) figure of a fertility deity. The Fragment was cleaned and protected with FUNCOSIL 300, then mounted back in the original position with a renovation mortar. The

bottom surface of the fragment corresponds with the course of wall blocks (conservation by Rajmund W. Gazda) [Fig. 2].

OSIRIAC STATUES FROM THE CORONATION PORTICO

The reconstruction and conservation program of the Osiriac statues from the Coronation Portico was continued (carried out by conservator-sculptor Wojciech Myjak). The work covered the faces and crowns of Osirides nos IV, XII and XIII [Fig. 3].

RECONSTRUCTION OF HATSHEPSUT'S SPHINX STATUES

The 4500 fragments of sandstone sphinxes brought to the Hatshepsut Temple lapidaries were documented (see Smilgin 2012, in this volume) and subjected to preliminary conservation (by conservator Andrzej Sośnierz).



Fig. 2. *Sema-tawy* scene from the Bark Hall, after reconstruction with a new fragment

PRESERVATION MONITORING

Monitoring of the state of preservation of particular elements of the temple led to the following decisions regarding future projects:

- vestibule of the Hathor Shrine (HS-V): construction and consolidation work on the cracked structure of the ceiling slabs and architraves, removing at the same time the temporary wooden supports;
- Lower Shrine of Anubis (ASL): electronic

weather monitoring system and gypsum seals for the purpose of technical control of the shrine;

- storage space for decorated blocks (wooden shelves and linen/mat covering for blocks removed temporarily from the Chapel of Hatshepsut and from the Royal Cult Complex, as well as for the blocks from the store on the level of the Lower Terrace, which will be arranged in the future as an open lapidary.



Fig. 3. Reconstructed Osirides in the Coronation Portico

Rajmund Gazda
rajgazda@gmail.com

REFERENCES

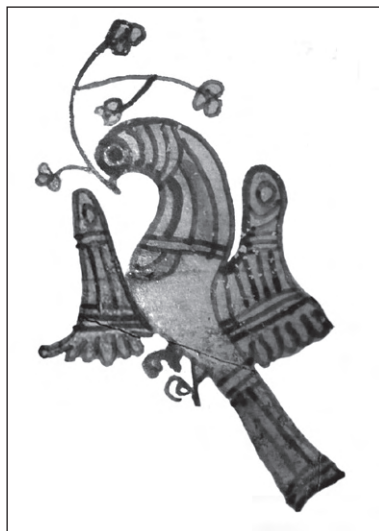
- Szafrański, Z.E.
2011 Temple of Hatshepsut at Deir el-Bahari, season 2007/2008, *PAM 20 (Research 2008)*, 193–202

POLISH CENTRE OF MEDITERRANEAN ARCHAEOLOGY
UNIVERSITY OF WARSAW

POLISH ARCHAEOLOGY
IN THE MEDITERRANEAN

XXI

RESEARCH 2009



CONTENTS

CONTENTS

ACKNOWLEDGMENTS 11

OBITUARIES

Aleksandra Krzyżanowska 13

ABBREVIATIONS AND STANDARD REFERENCES 15

PAM REPORTS

PCMA FIELD MISSIONS AND PROJECTS IN 2009 (WITH MAP) 19

EGYPT

ALEXANDRIA

ALEXANDRIA KOM EL-DIKKA: EXCAVATIONS AND PRESERVATION WORK.
PRELIMINARY REPORT 2008/2009

Grzegorz Majcherek 27

APPENDIX: AUDITORIUM E: EXPLORATION IN SEASON 2009

Karol Juchniewicz, Katarzyna Lach ... 43

KOM EL-DIKKA 2005–2009: SELECTED ANTHROPOLOGICAL RESEARCH

Robert Mahler 49

MAREA

MAREA. REPORT 2009

Hanna Szymańska, Krzysztof Babraj 59

MAREA 2009: POTTERY FROM THE EXCAVATIONS

Anna Drzymuchowska 72

MARINA EL-ALAMEIN

MARINA EL-ALAMEIN. CONSERVATION WORK IN THE 2009 SEASON

Stanisław Medeksza, Rafał Czerner, Grażyna Bąkowska with contributions by I. Fuks-Rembisz, W. Grzegorek, G. Majcherek, M. Mrozek-Wysocka, P. Zambrzycki 79

CONTENTS

TELL EL-RETABA

- TELL EL-RETABA: SEASON 2009
Stawomir Rzepka, Jozef Hudec 107
APPENDIX: TELL EL-RETABA: ARCHAEOBOTANICAL STUDIES
Claire Malleson 118
TELL EL-RETABA 2009: THE POTTERY
Anna Wodzińska 124

TELL EL-FARKHA

- TELL EL-FARKHA (GHAZALA). SEASON 2009
Marek Chłodnicki, Krzysztof M. Ciałowicz 135

SAQQARA

- SAQQARA 2008–2009
Karol Mysliwiec 157
APPENDIX: CONSERVATION WORK IN SAQQARA (2008–2009)
Zbigniew Godziejewski 167
SAQQARA 2008–2009: THE POTTERY
Teodozja I. Rzeuska 175

NAQLUN

- NAQLUN (NEKLONI) EXCAVATIONS IN 2008–2009
Włodzimierz Godlewski 193
APPENDIX: NAQLUN 2008: ARCHAEOBOTANICAL STUDIES
Jarosław Zieliński 210
REFUSE DUMP IN SECTOR B IN NAQLUN: EXCAVATION REPORT 2008–2009
Tomasz Derda, Dorota Dzierzbicka 212
POTTERY FROM THE REFUSE DUMP UNDER UNIT B.26 IN NAQLUN
Katarzyna Danys-Lasek 222
TWO BURIALS FROM CEMETERY A IN NAQLUN: ARCHAEOLOGICAL
AND ANTHROPOLOGICAL REMARKS
Dorota Dzierzbicka, Marzena Ożarek 233
ON THE COLLECTION OF WOODEN FINDS FROM NAQLUN AGAIN
Jarosław Zieliński, Iwona Zych 244

DEIR EL-BAHARI

- CONSERVATION WORK IN THE HATSHEPSUT TEMPLE IN DEIR EL-BAHARI (2009)
Rajmund Gazda 251
SANDSTONE SPHINXES OF QUEEN HATSHEPSUT FROM DEIR EL-BAHARI:
PRELIMINARY REMARKS
Agata Smilgin 255

CONTENTS

TEMPLE OF TUTHMOSIS III IN DEIR EL-BAHARI IN 2008 AND 2009: WORK IN THE STORES AND FIELD <i>Monika Dolińska</i>	261
THE TEMPLE OF TUTHMOSIS I REDISCOVERED <i>Jadwiga Iwaszczuk</i>	269
DAKHLEH OASIS	
DAKHLEH OASIS PROJECT. PETROGLYPH UNIT: ROCK ART RESEARCH, 2009 <i>Ewa Kuciewicz, Michał Kobusiewicz</i>	279
SUDAN	
OLD DONGOLA	
DONGOLA 2008–2009 <i>Włodzimierz Godlewski</i>	289
APPENDIX: CONSERVATION OF WALL PAINTINGS INSIDE THE FORMER THRONE HALL OF THE MAKURIAN KINGS IN DONGOLA (2009 SEASON) <i>Cristobal Calaforna-Rzepka</i>	312
DONGOLA 2009: POTTERY FROM BUILDING I (KOM A) <i>Katarzyna Danys-Lasek</i>	315
WALL INSCRIPTIONS IN A BURIAL VAULT UNDER THE NORTHWEST ANNEX OF THE MONASTERY ON KOM H (DONGOLA 2009) <i>Adam Łajtar, Jacques van der Vliet</i>	330
CRYPTS 1 AND 2 IN THE NORTHWEST ANNEX OF THE MONASTERY ON KOM H IN DONGOLA: REPORT ON THE EXPLORATION IN 2009 <i>Włodzimierz Godlewski, Robert Mahler, Barbara Czaja-Szewczak</i>	338
EL-ZUMA	
THE POTTERY FROM FOUR TUMULI GRAVES IN EL-ZUMA (2009) <i>Edyta Klimaszewska-Drabot, Ewa Czyżewska</i>	361
FOURTH CATARACT	
RESEARCH IN THE PCMA UW CONCESSION ON THE FOURTH CATARACT (HAMDAB DAM RESCUE PROJECT). INTERIM REPORT 2009 <i>Marek Chłodnicki</i>	377
ROCK ART RESEARCH IN THE FOURTH CATARACT REGION, SEASON 2009 <i>Ewa Kuciewicz, Andrzej Rozwadowski</i>	387
EXCAVATIONS IN 2009 IN THE ENVIRONS OF EL-AR VILLAGE (FOURTH CATARACT REGION, SUDAN) <i>Anna Longa</i>	393
EL-AR 31: EXCAVATIONS OF LATE/POST-MEROITIC TUMULI. PRELIMINARY REPORT <i>Artur Buszek, Michał Kurzyk</i>	399

CONTENTS

CYPRUS

NEA PAPHOS

NEA PAPHOS. SEASON 2009

Henryk Meyza in cooperation with Wiktor Andrzej Daszewski, Aleksandra Brzozowska, Joanna Michalska, Joanna K. Rądkowska, and Monika Więch..... 407

LEBANON

JIYEH

PRELIMINARY REPORT ON THE 2008 AND 2009 EXCAVATION SEASONS AT JIYEH (PORPHYREON)

Tomasz Waliszewski, Karol Juchniewicz, Mariusz Gwiazda 423

APPENDIX 1. SUNKEN VESSELS IN LATE ROMAN AND BYZANTINE HOUSES IN AREA D

Mariusz Gwiazda 439

APPENDIX 2. PRELIMINARY REMARKS ON THRESHOLDS FROM PRIVATE HOUSES IN JIYEH (PORPHYREON)

Mariusz Gwiazda 441

LOCAL HELLENISTIC 'PHOENICIAN'-TYPE AMPHORA AND OTHER POTTERY VESSELS FROM EXCAVATIONS IN JIYEH (PORPHYREON) (SEASONS 2008–2009)

Urszula Wicenciak 446

GROUND AND AERIAL PHOTOGRAMMETRIC DOCUMENTATION IN JIYEH (PORPHYREON)

Miron Bogacki 454

SYRIA

PALMYRA

POLISH ARCHAEOLOGICAL MISSION TO PALMYRA. SEASONS 2008 AND 2009

Grzegorz Majcherek 459

HAWARTE

EXCAVATIONS IN HAWARTE 2008–2009

Michał Gawlikowski 481

GLASS FINDS FROM THE MITHRAEUM IN HAWARTE

Krzyszyna Gawlikowska 496

TELL ARBID

TELL ARBID 2008–2009. PRELIMINARY REPORT ON THE RESULTS OF THE THIRTEENTH AND FOURTEENTH SEASONS OF POLISH-SYRIAN EXCAVATIONS

Piotr Bieliński 511

CONTENTS

ADAM MICKIEWICZ UNIVERSITY EXCAVATIONS IN SECTOR P AT TELL ARBID (SPRING 2009) <i>Rafał Koliński</i>	537
TELL QARAMEL	
TELL QARAMEL: EXCAVATIONS 2009 <i>Ryszard F. Mazurowski</i>	559
PAM STUDIES	
ADULT BURIALS OF NINEVITE 5 DATE ON TELL ARBID (2007–2008) <i>Dariusz Szela</i>	585
CHARIOT TERRACOTTA MODELS FROM TELL ARBID <i>Mattia Raccidi</i>	605
NEW PROTODYNASTIC <i>SEREKHS</i> FROM THE NILE DELTA: THE CASE OF FINDS FROM TELL EL-FARKHA <i>Mariusz A. Jucha</i>	625
<i>PITHOS</i> -TYPE VESSELS FROM CHHÎM: PRELIMINARY ASSESSMENT OF FINDS FROM 1996–2009 <i>Zofia Kowarska, Szymon Lenarczyk</i>	643
BUILDINGS ON SITE B AT NAQLUN (NEKLONI) <i>Szymon Maślak</i>	653
ZOOARCHAEOLOGICAL ANALYSIS OF MATERIAL FROM CISTERNS STR 1/96–97 AND HA/NEH 2.16.3 IN NEA PAPHOS <i>Ewelina Tepe</i>	677
ANIMAL BONE REMAINS FROM SHEIKH ABD EL-GURNA: ISSUES AND OPPORTUNITIES <i>Urszula Iwaszczuk</i>	691
ANIMALS IN ROCK ART. RESULTS OF ARCHAEOZOOLOGICAL RESEARCH AT THE SITE OF EL-GAMAMIYA 67 (FOURTH CATARACT, SUDAN) <i>Marta Osypińska</i>	703
INDEX OF SITES	715
GUIDELINES FOR AUTHORS	716