The “Kernbau” of the Temple of Mentuhotep II at Deir al-Bahari

Luc Gabolde

► To cite this version:

Luc Gabolde. The “Kernbau” of the Temple of Mentuhotep II at Deir al-Bahari: A Monumental Sun Altar?. Richard Jasnow (University of Chicago); Kathlyn M. Cooney (UCLA). Joyful in Thebes, Egyptological Studies in Honor of Betsy M. Bryan, 1, Lockwood Press, pp.145-154, 2015, Material and Visual Culture of Ancient Egypt, 9781937040406. hal-01895079

HAL Id: hal-01895079

<https://hal.science/hal-01895079>

Submitted on 13 Oct 2018

HAL is a multi-disciplinary open access archive for the deposit and dissemination of scientific research documents, whether they are published or not. The documents may come from teaching and research institutions in France or abroad, or from public or private research centers.

L'archive ouverte pluridisciplinaire **HAL**, est destinée au dépôt et à la diffusion de documents scientifiques de niveau recherche, publiés ou non, émanant des établissements d'enseignement et de recherche français ou étrangers, des laboratoires publics ou privés.

Copyright

JOYFUL IN THEBES
EGYPTOLOGICAL STUDIES IN HONOR OF
BETSY M. BRYAN

MATERIAL AND VISUAL CULTURE
OF ANCIENT EGYPT

NUMBER ONE

JOYFUL IN THEBES
EGYPTOLOGICAL STUDIES IN HONOR OF BETSY M. BRYAN

JOYFUL IN THEBES
EGYPTOLOGICAL STUDIES IN HONOR OF
BETSY M. BRYAN

Edited by
Richard Jasnow and Kathlyn M. Cooney

With the assistance of
Katherine E. Davis

LOCKWOOD PRESS
ATLANTA, GEORGIA

JOYFUL IN THEBES

EGYPTOLOGICAL STUDIES IN HONOR OF

BETSY M. BRYAN

Copyright © 2015 by Lockwood Press

All rights reserved. No part of this work may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopying and recording, or by means of any information storage or retrieval system, except as may be expressly permitted by the 1976 Copyright Act or in writing from the publisher. Requests for permission should be addressed in writing to Lockwood Press, PO Box 133289, Atlanta, GA 30333 USA.

Library of Congress Control Number: 2015944276

ISBN: 978-1-937040-40-6

Cover design by Deborah Shieh, adapted by Susanne Wilhelm.

Cover image: Amenhotep III in the Blue Crown (detail), ca. 1390–1352 BCE. Quartzite, Ht. 35 cm. Face only: ht. 12.8 cm; w. 12.6 cm. Rogers Fund, 1956 (56.138). Image copyright © the Metropolitan Museum of Art. Image source: Art Resource, NY.

This paper meets the requirements of ANSI/NISO Z39.48-1992 (Permanence of Paper).

CONTENTS

Acknowledgments	ix
Introduction	xi
Abbreviations	xvii
Bibliography of Betsy M. Bryan	xxiv
Tabula Gratulatoria	xxviii
 TAMÁS A. BÁCS	
Some Aspects of Tomb Reuse during the Twentieth Dynasty	1
 YEKATERINA BARBASH	
The Lion-Headed Goddess and Her Lost Cat: Brooklyn Museum 37.1379E	11
 HUSSEIN BASSIR	
On the Historical Implications of Payeftjauemawyneith's Self-Presentation on Louvre A 93	21
 LAWRENCE M. BERMAN	
Flesh of Gold: Two Statues of Sekhmet in The Museum of Fine Arts, Boston	37
 EDWARD BLEIBERG	
John Garstang's Three Kushite Jewels: How Many Reproductions?	43
 MARTIN BOMMAS	
New Thoughts on the Late Transmission History of the Book of Amduat (including the Unpublished Papyrus Eaton College, Windsor, ECM 1573	49
 SIMONE BURGER ROBIN	
A Shift in Royal Graywacke Statuary in Dynasty 20	57
 VIOLAINE CHAUVET	
Who did What and Why: The Dynamics of Tomb Preparation	63
 KATHLYN M. COONEY	
Placating the Dead: Evidence of Social Crisis in Three Texts from Western Thebes	79
 W. V. DAVIES	
The God Nebmaatre at Jebel Dosha	91
 MARIANNE EATON-KRAUSS	
Usurpation	97

RICHARD A. FAZZINI and MARY E. MCKERCHER “What the Hell Is That Doing Here?” New Kingdom Detritus in the Ruins of the Mut Temple’s East Porch	105
MARIAN H. FELDMAN In Pursuit of Luxury in Mesopotamia	115
MARJORIE FISHER A Stelaphorous Statue of the Chief Steward of the King Amenhotep III, Amenemhet, Called Surer	121
RITA E. FREED An Addition to the Corpus of Statuary of Amenemhat I	131
LUC GABOLDE The “Kernbau” of the Temple of Mentuhotep II at Deir al-Bahari: A Monumental Sun Altar?	145
MARC GABOLDE La tiare de Nefertiti et les origines de la reine	155
DINA EL GABRY An Unpublished Stela in the Grand Egyptian Museum, Cairo C.G. 20151	171
JOSÉ M. GALÁN Hymns to Amun-Ra and Amun in the Tomb-chapel of Djehuty (TT 11)	183
OGDEN GOELET, Jr. Elements of Format in Middle Kingdom Papyri	197
ZAHY HAWASS Tutankhamun: The Discovery of His Family and New Evidence of His Life and Death	211
SALIMA IKRAM An Enigmatic Granite Fragment in the Gayer-Anderson Museum (Beit al-Kritliyya), Cairo	229
FATMA ISMAIL A Brief Investigation of the God Iaqs	233
RICHARD JASNOW and MARK SMITH New Fragments of the Demotic Mut Text in Copenhagen and Florence	239
JANET H. JOHNSON Women, Property, and Legal Documents: A Case Study from the Persian Period	283
W. RAYMOND JOHNSON The Duck-Throttling Scene from Amarna: A New Metropolitan Museum of Art/Copenhagen Ny Carlsberg Glyptotek Amarna Talatat Join	293
JACK A. JOSEPHSON The “MacGregor Man” (AN1922.70)	301
NOZOMU KAWAI The Administrators and Notables in Nubia under Tutankhamun	309

CONTENTS

vii

ARIELLE P. KOZLOFF	
More than Skin-Deep: Red Men and Yellow Women in Egyptian Art	323
DIMITRI LABOURY	
On the Master Painter of the Tomb of Amenhotep Sise, Second High Priest of Amun under the Reign of Thutmose IV (TT 75)	327
PETER LACOVARA	
An Egyptian Royal Pectoral Again	339
THEODORE J. LEWIS	
Egyptian Divinity in the Divine Speech in Job 38:36	343
JEREMY POPE	
Shepenwepet II and the Kingdom of Kush: Implications of a Recent Study	357
STEPHEN QUIRKE	
Becoming a Lion? On the Essence of the Book of the Dead	365
NICHOLAS REEVES	
The Birth of Venus?	373
JANET RICHARDS	
A New Kingdom Figurine from the Abydos Middle Cemetery	387
ROBERT K. RITNER	
Osiris-Canopus and Bes at Herculaneum	401
YASMIN EL SHAZLY	
Divine Princes in Deir el-Medina	407
JJ SHIRLEY	
An Eighteenth Dynasty Tutor of Royal Children: Tomb Fragments from Theban Tomb 226	429
ELAINE SULLIVAN and MICHAEL HARROWER	
The Future of Spatial Technologies in Egyptology	447
EMILY TEETER	
Oriental Institute 11050 and 13652: A Tale of Two Stelae	461
STEVE VINSON	
Into the Abyss: The Structure of the "Tale of the Shipwrecked Sailor" as <i>mise en abyme</i>	471
Subject Index	483
Index of Names	502
Index of Sources and Objects	510

Betsy Bryan in the Johns Hopkins University Archaeological Museum. Photograph courtesy of James T. VanRensselaer.

ACKNOWLEDGMENTS

The editors are first of all grateful to the contributors themselves, who so patiently endured an endless stream of email queries and “gentle reminders.” Their enthusiasm for the project truly made this a “joyful” experience. We would also like to thank those who aided in the preparation of this volume. Katherine Davis, a graduate student in Egyptology at Johns Hopkins, helped enormously during the complicated editing process. Not only has Katherine been a keen-eyed reader of manuscripts, but she also resolved problems of computer fonts and overcame other technological obstacles. We are further indebted to Deborah Shieh, a recent graduate of UCLA, who provided important support to the editors and designed the cover of the book. James (Jay) T. VanRensselaer, the Johns Hopkins University Senior Photographer, who has been a participant in Betsy’s excavations for years, kindly made available most of the images of Betsy published in this volume. We also thank Vonnice Wild, Senior Administrative Coordinator for the Department of Near Eastern Studies (JHU), and Glenda Hogan, Academic Program Coordinator for the Department of Near Eastern Studies (JHU), who both assisted in this project. It is a pleasure as well to acknowledge our debt to Sanchita Balachandran, Violaine Chauvet, Janet Johnson, Leslie Schramer, JJ Shirley, and Mark Smith, who have offered very useful insights and help in the project. Arielle Kozloff and Larry Berman kindly provided the wonderful images of Betsy at the British Museum and Seding Temple that follow the introduction. We thank Diana Craig Patch (Curator in Charge of Egyptian Art at the Metropolitan Museum) and Catharine Roehrig who arranged for us to use the image of the beautiful head of Amenhotep III Metropolitan Museum no. 56.138 on the cover of this volume. Christina Di Cerbo advised on many points of the editorial process, especially with regard to the selection of images accompanying this introduction. As always, she has been a tremendous source of encouragement. Finally, what is a book without a publisher? The editors were fortunate to have found in Billie Jean Collins of Lockwood Press an ideal collaborator. Her skill and experience were an invaluable resource to the editors through the years of work on the volume. Billie Jean’s unfailing support for the project is profoundly appreciated. May all editors be as lucky!

Richard Jasnow
Kara (Kathlyn) Cooney

INTRODUCTION

The editors of this book were deeply moved by the enormously positive response to the invitation to contribute to this collection of articles in honor of our friend and colleague, Betsy Bryan. Distinguished scholars, despite all of their other pressing obligations, volunteered to write. Even more remarkable, perhaps, most actually submitted their articles on time. While we could not predict the response to our initial invitation, we had in fact suspected that undertaking this project would indeed be a joyful experience. Having worked with Betsy for years, we knew that few Egyptologists have as many friends and colleagues as she throughout the world. Frankly, a major challenge to the editors was simply compiling a list of possible contributors from such a large circle of potential invitees. It seemed necessary to maintain an Egyptological focus for the volume while at the same time keeping it within practical bounds. We know well that we have omitted some who would have gladly participated. We apologize to them and hope they will understand our dilemma. The present volume is only a token of the great good will and esteem which Betsy has earned; it hardly represents the sum total of all her friends and well-wishers within the Academe.

It is often said of a particular scholar that she or he has a wide a range of interests. While this is sometimes mere rhetoric, in Betsy's case the phrase is perfectly apt. The imposing breadth of topics treated in this *Festschrift*, from Pre-Dynastic to Late Antiquity, truly reflects Betsy's Egyptological interests. A glance at the table of contents reveals, fittingly, that many authors wrote about New Kingdom objects from an art historical perspective or dealt with excavations and standing monuments, particularly those located in Thebes. Nevertheless, several articles treated philological subjects from the Middle Kingdom to the Roman period. Other contributors examined historical or gender issues. A few explored topics strictly speaking outside of Egypt proper; thus both Nubia and the Near East are represented. Those not knowing Betsy may doubt that she should be seriously interested in so many subjects. Nevertheless, her friends will surely agree that this rich diversity of interests is one of the most striking characteristics of Betsy's scholarly persona. Not only is she receptive to topics outside of her "formal" specialties, but she has the background knowledge and intellectual curiosity to engage productively with them. This point was quickly impressed upon Richard when in 1995 he began team-teaching Egyptian texts with her. Once, aware that Betsy had returned to Baltimore from Egypt around midnight, after a long excavation season, he hardly expected her for class early the next morning. Betsy nevertheless appeared, enthusiastic as always, declaring, "she could not bear to miss reading this particular Coptic Gnostic text." Some time after that he was equally amazed to learn that, before Richard's arrival at Hopkins she had also taught Demotic. We suspect few art historians have felt the urge to teach Demotic, but, as Betsy has said, "she thought it was important that the students know this stage of Egyptian." And so she taught it. Richard thus realized early on that Betsy was no "narrow specialist." Here was a colleague with whom one could talk about many scholarly topics in the expectation of receiving really constructive feedback and advice.

Of course, Betsy's interest in Coptic Gnostic texts and Demotic should hardly have been surprising. The graduate program at Yale was strongly historical and philological. She wrote her very much text-based thesis on the reign of Thutmose IV under the supervision of William Kelly Simpson, a scholar equally at home in art and language. Philology is therefore very much at the core of her Egyptological soul. It was really after receiving the doctorate that she proceeded to make her name as an art historian, with such groundbreaking exhibitions as that on Amenhotep III in the Cleveland Museum and the Louvre (in collaboration with Arielle Kozloff and Larry Berman). Already as a student she had participated in archaeological excavations, beginning with Donald Redford at the Akhenaten

Temple Project (1977–1980). Since 1993 she has staged annual expeditions—first at the Tomb of Suemniwet (Theban Tomb 92) on the West Bank and then at the Temple of Mut in Karnak.¹ This last project is a massive undertaking, involving excavation, epigraphy, conservation, and restoration of the monuments on a large scale. In addition to the many significant finds, Betsy and her team have been able to reconstruct such structures as the “Drinking Portico of Hatshepsut,” which now forms part of an “open-air” museum at the site. Many of us have had the opportunity to learn something about the various subdisciplines comprising Egyptology. A philologist may join an excavation for a season or two, an archaeologist may intern at a museum for a semester. However, Betsy’s intense work in these very different fields is clearly of an entirely different order. It is precisely this sustained engagement with philology, archaeology, and art history which gives her a unique Egyptological profile. The most casual reader of her articles and books quickly observes that she marshals evidence from all three subdisciplines (if not more) in her investigations of a given subject.

If Betsy’s scholarly work is nothing else, it is holistic—taking into account the materiality, production history, social importance, ritual place, and visual quality. She never looks at a tomb painting without considering the entire *chaîne d’opératoire*—which craftsmen painted which parts of a given tomb scene, whether sparkling yellow orpiment or the bright orange of realgar were included and in which scenes, what social markers were included in a painting and why. Her work always treats the entire monument or the entire assemblage, and beyond. It goes without saying that she can rattle off most of the Theban Tomb numbers together with their owners and titles, to the consternation of her graduate students. Her recent work, lectures, and articles on the festivals of drunkenness in Thebes are a *tour de force* of holistic examination, drawing on Theban tomb scenes, religious hymns, temple scenes and architecture, historical treatises, and arcane ritual instructions.² All are marshaled into a nuanced and beautifully intricate discussion of human behavior. She teaches her graduate students to look at Egyptian production, be it text or object, in the same holistic manner—what stone was the statue made of and what does this tell us about craft production? Where was the text placed and who was its intended audience? Was the piece reworked or recut? Where was the focus of attention meant to be drawn? Her work on women’s studies is particularly illuminating: simultaneously social, historical, anthropological, and visual, she has, for example, deftly swept aside outdated patriarchal assumptions about female kings like Hatshepsut (including some about her possible affairs) and placed Egyptian female power in its larger context of kingship, dynastic succession, elite power systems, and the Egyptian desire for continuity.

Teaching has always been central to Betsy’s scholarly activity. Having begun as an Adjunct Assistant Professor in Ancient History at Marymount Manhattan College (1978–1986) and as a lecturer at Yale (1980–1982), she came to Johns Hopkins in 1986. She was named the Alexander Badawy Professor of Egyptian Art and Archaeology in 1997. Thanks to her efforts, Hopkins has a vigorous graduate program in Egyptology. It is no surprise that applicants from all over the world have sought to study with her. Betsy has always taught far more than was required, both on the undergraduate and graduate levels. She has carefully balanced her offerings in language and art history. She has also presented regularly the essential introductory survey classes to ancient Egypt. Having led the effort to renovate the Johns Hopkins Archaeological Museum and to arrange for the long-term loan of many pieces from the Eton Collection, discussed in more detail below, Betsy has made first-hand examination of the objects an integral part of her art-historical classes.

As a teacher, Betsy impresses upon her students the importance of approaching a particular problem of ancient Egypt using all the available evidence. A theoretical framework is important, but lasting results require a first-rate knowledge of the material. You must “own the material,” as she says. Naturally, this is an aspirational goal; a scholar

1. The large site is divided between the Brooklyn Museum of Art Archaeological Expedition to the Precinct of Mut, directed by Richard Fazzini, and the Johns Hopkins University Expedition, directed by Betsy.

2. See, e.g., “Hatshepsut and Cultic Revelries in the New Kingdom,” in *Creativity and Innovation in the Reign of Hatshepsut*, ed. J. Galán, B. Bryan, and P. Dorman, SAOC 69 (=Occasional Proceedings of the Theban Workshop = Papers from the Theban Workshop 2010) (Chicago, 2014), 93–123.

constantly seeks to deepen his or her knowledge. A scholar never stands still and must be prepared to take risks. Clearly, Betsy herself has always been ready to explore new lines of research and to ask new questions. This willingness to face fresh challenges and never repeat herself makes her an exciting teacher and popular lecturer. Kara remembers a particular teaching moment that made an impression. In her first year of graduate school, in her first art-history seminar, Betsy asked Kara to present and critically compare the exhibition catalogue on Amenhotep III (the lauded *Egypt's Dazzling Sun*) with other academic work on the Eighteenth Dynasty king. Not only was this a daunting assignment for a beginning graduate student to be performed in front of her advisor, but it made clear to Kara that Betsy was entirely open to scrutiny and criticism. Betsy once said that some scholars are willing to change their minds and admit they were wrong; others stick to their story forever, especially once it has been immortalized in print. Betsy is, thankfully, of the former category.

While certainly an innovative scholar, Betsy can be proudly “old school” as a teacher. Students in Betsy’s Egyptian language classes know her systematic approach to texts. They can expect questions about the grammar and vocabulary of every sentence. Of course, there is a purpose to this preoccupation with philological detail; her goal is to enable the students to recognize the meaning and significance of the text. Aware that a simple resolution is often impossible in ancient Egyptian, she tries to ensure that the students understand clearly the nature of the problems. Her abomination is a superficial explanation of a text or the easy acceptance of an “establishment” rendering. Betsy happily reads with students from virtually every genre known from ancient Egypt: literature, religion, medicine, magic, history, or economics. While of course not neglecting the core works, such as Prahhotep or Sinuhe, she always keeps in mind the individual interests of her students in such reading classes. If a student would like to explore more specialized areas, Betsy has never hesitated to set up independent studies in such topics as Nubian period Texts or Hieratic ostraca from Deir el-Medina.

Betsy has been closely associated with museums through her entire career. While living in New York, she was a Research Associate with the Brooklyn Museum (1983–1986), establishing enduring scholarly and personal relationships of great importance in her academic development. Having moved to Baltimore, Betsy became deeply involved in the reinstallations of the Egyptian collections in both the National Museum of Natural History at the Smithsonian (1993–2000) and the Walters Art Museum (1996–2000). A particular highpoint was the exhibition “The Quest for Immortality,” which she organized with Erik Hornung for the National Gallery of Art. The above mentioned 1992 Cleveland Amenhotep III exhibition, hailed as “extraordinary,” certainly stimulated the study of that seminal period of Egyptian history.³ It is thus natural that, in addition to her teaching, research, and fieldwork, Betsy is the Director of the Johns Hopkins University Archaeological Museum. Together with her colleagues at the Museum and with the students, she has been working to set up an online catalogue of the objects in the Museum. She and her Museum colleagues have successfully applied for substantial grants to fund this catalogue project. Visitors to the Museum can often see groups of students, both undergraduate and graduate, closely examining a scarab or seal under microscopes. Sanchita Balachandran, the Curator/Conservator at the Archaeological Museum, who collaborated with Betsy on the new installation, has been ideally placed to observe Betsy’s interaction with Egyptian objects. We quote here Sanchita’s remarks, reflecting the point of view of a scientifically trained conservator:

I’ve long admired the fact that she loves the full object, the weight of it, the materiality of it, and doesn’t see an object as a mere substrate upon which text is inscribed. And she wants to know the details, the tiny technological details—such as her obsession with how the bow drill really worked—that have everything to do with how the final object was produced.

Betsy’s friends will immediately recognize how accurate is another of Sanchita’s observations: “What I love about talking to Betsy about objects is that she immediately gets drawn into them, and often loses track of the many other meetings she has scheduled.”

3. See, e.g., D. O’Connor and E. Cline, eds., *Amenhotep III: Perspectives on His Reign* (Ann Arbor, 1998), v.

Having traveled yearly (often twice yearly) to Egypt since at least 1977, Betsy has developed a close attachment to the land and people. She has made a special point of training young Egyptian Egyptologists in the Hopkins graduate program. The articles of these scholars in this volume bear witness to her mentorship. Betsy's dedication to strengthening cultural ties between Egypt and the United States also finds expression in her activity on behalf of the American Research Center in Egypt (ARCE), which promotes and expedites fieldwork in Egypt. Despite her heavy scholarly and university obligations, she has selflessly served on many important committees of the American Research Center in Egypt.

As colleagues have probably noted, the title of this Festschrift, *Joyful in Thebes*, evokes the various New Kingdom eulogies to the ancient capital. Certainly, Betsy has been closely associated with both ancient Thebes and modern Luxor through the years. However, her contributions to our knowledge of this important city go beyond her own personal research. Some years ago, for example, she began a series of extremely productive workshops with Peter Dorman of the Oriental Institute (and now of the American University in Beirut) for the purpose of bringing together scholars involved in all aspects of Theban Studies. These meetings have encouraged an open exchange of ideas and information in a most congenial setting. The workshops have explored such subjects as Ptolemaic Thebes, sacred space, and the iconography and ideology of war in New Kingdom Thebes. The latest publication of papers from this series is *Creativity and Innovation in the Reign of Hatshepsut* (2014), co-edited with Peter Dorman and Jose Galán.

Art Historian, Archaeologist, Philologist, and Historian, an impressive list of designations no doubt ... Still, academic credentials and achievements only partly explain why so many felt honored to contribute to this Festschrift. Betsy Bryan has always been more than a researcher; she has been a benevolent, if exacting, mentor to her students and a supportive ally to her colleagues. A true lover of Egypt and Egyptology, a believer in the importance of Near Eastern Studies to the Humanities, she has often sacrificed her own work (and time) for the good of our discipline and of the University. She is one of those fortunate people who have truly made a difference both as a scholar and as a person.

We conclude in the second person singular. As a modest individual, Betsy, this display of affection by your colleagues and students may well embarrass you. Still, we know you will accept this Festschrift with your characteristic grace and good will. May you continue for many years to be "joyful in Thebes!"

Richard Jasnow
Kara Cooney

Betsy examining archaeological plan drawn by a graduate student; back of the Mut Precinct. Photograph courtesy of James T. VanRensselaer.

Betsy in conversation with the conservator Hiroko Kariya at the Open Air Museum at the Temple of Mut. Photograph courtesy of James T. VanRensselaer.

Betsy recording excavation pottery from the Temple of Mut. Photograph courtesy of James T. VanRensselaer.

Betsy (with Dr. Zahi Hawass, then secretary general of the Egyptian Supreme Council of Antiquities, and others) at the discovery of the recarved statue of Queen Tiy (now on display at the Cairo Museum), the Temple of Mut, 2006 season. Photograph courtesy of James T. VanRensselaer.

Above: Betsy at Seding Temple, Sudan, 1989. Photograph courtesy of Larry Berman

Left: Betsy measuring a colossal statue in the British Museum. Photograph courtesy of Arielle Kozloff

FROM THE DEPARTMENT OF NEAR EASTERN STUDIES AT
JOHNS HOPKINS UNIVERSITY

The Department of Near Eastern Studies at Johns Hopkins prides itself on its collegial atmosphere and the harmonious cooperation between its subdisciplines. We are happy to acknowledge that we owe a great deal of this tradition of mutual interest and encouragement to our much admired and cherished colleague Betsy Bryan. Since joining the Department as an Assistant Professor of Egyptian Art and Archaeology in 1986, working with Professor Hans Goedicke to build the Egyptology Program, Betsy has always reached out to colleagues and students in the other subfields and encouraged a free flow of ideas and interactions. Having studied Akkadian at Yale, where she first developed a deep interest in the interaction between Egypt and the Near East, Betsy effortlessly established collegial and intellectual relationships with her other fellow departmental faculty members, Jerry Cooper, Del Hillers, Georg Krotkoff, Kyle McCarter, Glenn Schwartz, and Ray Westbrook. This group fostered a spirit of scholarly interaction, encouraged students to explore classes in other fields, and supported one another's projects. Indeed, Betsy already knew Glenn and Ray from Yale, all three having been graduate students there.

While the core faculty of the Department has, of course, changed and grown since the 1980s, the spirit of cooperation has continued. Betsy's empathy for, and interest in, sister-fields served her well when she chaired the Department of Near Eastern Studies for a number of years and helped to solidify and expand our program. In a broader context, Betsy has also been an extremely active university citizen, serving on high level committees and advising the administration on strategy. In this arena, she has been an advocate and eloquent spokesperson for the role of the Humanities (and of Near Eastern Studies) in university education, and we greatly appreciate her work in this regard, as we do all her efforts on behalf of Near Eastern Studies and Egyptology.

Prof. Glenn Schwartz, Chair

Jerry Cooper
Paul Delnero
Marian Feldman
Michael Harrower
Richard Jasnow
Jacob Lauinger
Ted Lewis
Kyle McCarter

ABBREVIATIONS

GENERAL

///	indicates damage
BCE	before the Common Era
Bd.	(German) <i>Band</i> , “volume”
BD	Book of the Dead
BM	British Museum, London
BP	before the present
Brooklyn	Brooklyn Museum, Brooklyn
ca.	<i>circa</i> , approximately
cat.	catalogue
CE	Common Era
cf.	<i>confer</i> , compare
CG	Catalogue Général
cm(s)	centimeter(s)
CNI	Carsten Niebuhr Institute
col(s).	column(s)
Dem	Demotic
diss	dissertation
ed(s).	editor(s), edited by, edition
e.g.	<i>exempli gratia</i> , for example
esp.	especially
et al.	<i>et alii</i> , and others
etc.	<i>et cetera</i> , and so forth
fasc.	fascicle
ff.	following
fig(s).	figure(s)
frag(s).	fragment(s)
GEM	Grand Egyptian Museum
ht.	height
ibid.	<i>ibidem</i> , in the same place
IFAO	Institut français d’archéologie orientale du Caire
JE	JdE = <i>Journal d’Entrée</i> , Cairo Museum
KV	Valley of the Kings
lit.	literally
m	meter
MFA	Museum of Fine Arts, Boston
MMA	Metropolitan Museum of Art, New York
n(n).	note(s)

NK	New Kingdom
no(s).	number(s)
NYHS	New York Historical Society
o.	ostrakon
OI	Oriental Institute (Chicago)
OIM	Oriental Institute Museum, Chicago
P., Pap.	Papyrus
p(p).	page(s)
pl(s).	plate(s)
PC	Papyrus Carlsberg
PT	Pyramid Text(s)
q.v.	<i>quo vide</i> , which see
RSV	Revised Standard Version (Old Testament)
SCA	Supreme Council of Antiquities
SR	Special Register
s.v.	<i>sub verbo</i> , under the word
Taf.	<i>Tafel</i> (German)
trans.	translator
TT	Theban tomb (tomb number)
UC	University College (London)
UCL	University College London
var.	variant
vol(s).	volume(s)
vs.	verso

BIBLIOGRAPHIC

ÄA	Ägyptologische Abhandlungen, 1960–.
ÄAT	Ägypten und Altes Testament, 1979–.
ACE	Australian Centre for Egyptology
ACER	Australian Centre for Egyptology: Reports. Sydney, 1989–.
ACES	Australian Centre for Egyptology: Studies. Sydney, 1989–.
AcOr	<i>Acta Orientalia</i>
ActAnt	<i>Acta Antiqua Academiae Hungaricae</i>
ADAIK	Abhandlungen des deutschen archäologischen Instituts Kairo. Ägyptologische Reihe. Glückstadt, 1958–.
AegHel	Aegyptiaca Helvetica. Geneva, 1974–.
AegLeod	Aegyptiaca Leodiensia, Liège, 1987–.
ÄF	Ägyptologische Forschungen. Glückstadt, 1936–.
Ä&L	<i>Ägypten und Levante</i>
AHAW	Schriften der Philosophisch-historischen Klasse der Heidelberger Akademie der Wissenschaften. Heidelberg, 1997–.
ÄIB	G. Roeder, <i>Ägyptische Inschriften aus den königlichen Museen zu Berlin</i> . 2 volumes. Leipzig: Hinrichs, 1913–24.
AJA	<i>American Journal of Archaeology</i>

AJP	<i>American Journal of Philology</i>
AJSLL	<i>American Journal of Semitic Languages and Literatures</i>
AnAe	<i>Analecta Aegyptiaca</i> . Copenhagen, 1940–1959.
AOAT	<i>Alter Orient und Altes Testament</i> . Neukirchen-Vluyn, 1969–.
AOB	<i>Acta Orientalia Belgica</i>
AoF	<i>Altorientalische Forschungen</i>
AOS	<i>American Oriental Series</i> . New Haven, 1925–.
ASE	<i>Archaeological Survey of Egypt</i> . London, 1893–.
ASAE	<i>Annales du Service des Antiquités d'Égypte</i>
ASCEVOA	<i>Archeologia e storia della civiltà egiziana e del Vicino Oriente antico</i> . Materiali e studi. Bologna, 1996–
AVDAIK	<i>Archäologische Veröffentlichungen/Deutsches Archäologisches Institut, Abteilung Kairo</i> . Mainz, 1970–.
BÄBA	<i>Beiträge zur ägyptischen Bauforschung und Altertumskunde</i>
BACE	<i>Bulletin of the Australian Centre for Egyptology</i>
BAe	<i>Bibliotheca Aegyptiaca</i> . Brussels, 1932–.
BAR	<i>British Archaeological Reports</i> . Oxford, 1978–.
BARIS	<i>British Archaeological Reports. International Series</i> . Oxford, 1974–.
BdE	<i>Bibliothèque d'Étude</i> . Cairo, 1908–.
BeiBf	<i>Beiträge zur ägyptischen Bauforschung und Altertumskunde</i> . 11 volumes. Cairo, Zürich, Wiesbaden, 1937–1997.
BEM	<i>Bulletin of the Egyptian Museum</i>
BES	<i>Bulletin of the Egyptological Seminar</i>
BESud	<i>Brown Egyptological Studies</i> . Oxford, Providence, 1954–79.
BidE	<i>Bulletin de l'Institut du désert d'Égypte</i>
BIE	<i>Bulletin de l'Institut égyptien</i> , later <i>Bulletin de l'Institut d'Égypte</i>
BIFAO	<i>Bulletin de l'Institut Français d'Archéologie Orientale au Caire</i>
BiOr	<i>Bibliotheca Orientalis</i>
BMFA	<i>Bulletin of the Museum of Fine Arts</i>
BMJ	<i>Brooklyn Museum Journal</i>
BMMA	<i>Bulletin of the Metropolitan Museum of Art</i>
BMOP	<i>British Museum Occasional Papers</i> . London, 1978–.
BMQ	<i>British Museum Quarterly</i>
BMSAES	<i>British Museum Studies in Ancient Egypt and Sudan</i>
BSA	<i>British School of Archaeology in Egypt</i> . London, 1905–1953.
BSAC	<i>Bulletin de la Société d'archéologie copte</i>
BSAK	<i>Studien zur Altägyptischen Kultur, Beihefte</i>
BSEG	<i>Bulletin de la Société d'Égyptologie Genève</i>
BSFE	<i>Bulletin de la Société Française d'Égyptologie</i>
CAD	I. J. Gelb et al., eds. <i>The Assyrian Dictionary of the Oriental Institute of the University of Chicago</i> . 21 volumes. Chicago: The Oriental Institute of the University of Chicago, 1956–2010.
CD	W. E. Crum, <i>A Coptic Dictionary</i> . Oxford: Clarendon, 1939.
CDD	J. Johnson, ed., <i>The Demotic Dictionary of the Oriental Institute of the University of Chicago</i> . 2001–. http://oi.uchicago.edu/research/publications/demotic-dictionary-oriental-institute-university-chicago .
CdE	<i>Chronique d'Égypte</i> . Bulletin périodique de la Fondation Égyptologique Reine Élisabeth

CENIM	Cahiers "Égypte Nilotique et Méditerranéenne." Montpellier, 2008–.
CGC	<i>Catalogue Général des Antiquités Égyptiennes du Musée du Caire</i> . Cairo, 1901–.
CHANE	Culture and History of the Ancient Near East. Leiden, 2000–.
CRIPEL	<i>Cahiers de Recherches de l'Institut de Papyrologie et d'Égyptologie de Lille</i>
CSEG	Cahiers de la Société d'Égyptologie. Geneva, 1991–.
DAWW	Denkschriften der kaiserlichen Akademie der Wissenschaften in Wien, philos.-hist. Kl., 1850–1918.
DCH	<i>Dictionary of Classical Hebrew</i> . Edited by David J. A. Clines. 9 volumes.
DDD	Karel van der Toorn, Bob Becking and Pieter W. van der Horst, eds. <i>Dictionary of Deities and Demons in the Bible</i> . Leiden: Brill, 1995.
DE	<i>Discussions in Egyptology</i>
DemStud	Demotische Studien. Leipzig 1901–1929; Sommerhausen, 1988–.
DGÖAW	Österreichische Akademie der Wissenschaften, Denkschriften der Gesamtkademie. Vienna, 1947–.
EA	<i>Egyptian Archaeology, The Bulletin of the Egypt Exploration Society</i>
EG	Alan Gardiner, <i>Egyptian Grammar Being an Introduction to the Study of Hieroglyphs</i> . 3rd rev. ed. Oxford: Griffith Institute, 1957.
ENiM	<i>Égypte nilotique et méditerranéenne</i>
EPRO	Études préliminaires aux religions orientales dans l'empire romain, Leiden, 1961–1992.
FIFAO	Fouilles de l'Institut Français d'Archéologie Orientale du Caire. Cairo, 1921–.
GM	<i>Göttinger Miszellen. Beiträge zur ägyptologischen Diskussion</i>
GOF	Göttinger Orientforschungen (IV. Reihe: Ägypten), Göttingen, 1973–.
HÄB	Hildesheimer ägyptologische Beiträge. Hildesheim, 1976–.
HALOT	Ludwig Koehler, Walter Baumgartner, and Johann J. Stamm, <i>The Hebrew and Aramaic Lexicon of the Old Testament</i> . Translated and edited under the supervision of Mervyn E. J. Richardson. 4 volumes. Leiden: Brill, 1994–1999.
Hannig, Wb. I	Rainer Hannig, <i>Ägyptisches Wörterbuch I: Altes Reich und Erste Zwischenzeit</i> . Hannig-Lexica 4; Kulturgeschichte der antiken Welt 98. Mainz: von Zabern, 2003.
Hannig, Wb. II	Rainer Hannig, <i>Ägyptisches Wörterbuch II: Mittleres Reich und Zweite Zwischenzeit</i> , 2 vols. Hannig-Lexica 5; Kulturgeschichte der antiken Welt 112. Mainz: von Zabern, 2006.
HO	Handbuch der Orientalistik, erste Abteilung: Der Nahe und Mittlere Osten. Leiden, 1952–.
HP	Georg Möller, <i>Hieratische Paläographie. Die ägyptische Buchschrift in ihrer Entwicklung von der fünften Dynastie bis zur römischen Kaiserzeit</i> . 3 volumes. Leipzig: Hinrichs, 1909–2012.
HTBM	<i>Hieroglyphic Texts from Egyptian Stelae, &c., in the British Museum</i> . London, 1911–.
IBAES	Internet-Beiträge zur Ägyptologie und Sudanarchäologie. Berlin, 1998–.
IJAHS	<i>International Journal of African Historical Studies</i>
JANER	<i>Journal of Ancient Near Eastern Religion</i>
JAOS	<i>Journal of the American Oriental Society</i>
JARCE	<i>Journal of the American Research Center in Egypt</i>
JEA	<i>The Journal of Egyptian Archaeology</i>
JEH	<i>Journal of Egyptian History</i>
JEOL	<i>Jaarbericht van het Vooraziatisch-egyptisch</i>
JES	<i>The Journal of Egyptian Studies</i>
JFA	<i>Journal of Field Archaeology</i>
JHS	<i>Journal of Hebrew Scriptures</i>
JNES	<i>Journal of Near Eastern Studies</i>

JRASup	Journal of Roman Archaeology, Supplementary Series. Ann Arbor, 1990–.
JSS	<i>Journal of Semitic Studies</i>
JSSEA	<i>Journal of the Society for the Study of Egyptian Antiquities</i>
KÄT	Kleine ägyptische Texte. Wiesbaden, 1969–.
KAW	Kulturgeschichte der antiken Welt. Mainz, 1977–.
KHWB	Wolfhart Westendorf, <i>Koptisches Handwörterbuch</i> . Heidelberg: Winter, 1977.
KRI	Kenneth A. Kitchen <i>Ramesside Inscriptions: Historical and Biographical</i> . 8 volumes. Oxford: Blackwell, 1968–1999.
KSG	Königtum, Staat und Gesellschaft früher Hochkulturen. Wiesbaden, 2004–.
KTU	Manfried Dietrich, Oswald Loretz, and Joaquín Sanmartín, eds. <i>Die keilalphabetischen Texte aus Ugarit</i> . Münster: Ugarit-Verlag, 2013.
LÄ	Wolfgang Helck, Eberhard Otto, and Wolfhart Westendorf, eds., <i>Lexikon der Ägyptologie</i> , 7 volumes. Wiesbaden: Harrassowitz, 1972–1992.
LAAA	(Liverpool) <i>Annals of Archaeology and Anthropology</i>
LD	Richard Lepsius, <i>Denkmäler aus Ägypten und Äthiopien</i> . 12 volumes. Berlin: Nicolaische Buchhandlung, 1849–56.
LGG	Christian Leitz, ed., <i>Lexikon der ägyptischen Götter und Götterbezeichnungen</i> , 8 volumes. OLA 110–116 and 129. Leuven: Peeters, 2002–2003.
LingAeg	<i>Lingua Aegyptia</i>
LingAegSM	<i>Lingua Aegyptia Studia Monographica</i> . Hamburg, Göttingen, 1994–.
MAe	<i>Monumenta Aegyptiaca</i> . Brussels, 1968–.
MÄS	<i>Münchener Ägyptologische Studien</i> . Berlin, 1962–.
MDAIK	<i>Mitteilungen des Deutschen Archäologischen Instituts, Abteilung Kairo</i>
MEEF	<i>Memoir of the Egyptian Exploration Fund</i> . London, 1885–1936.
MEES	<i>Memoir of the Egyptian Exploration Society</i> . London, 1885–.
MEOL	<i>Mededeelingen en verhandelingen van het Vooraziatisch-Egyptisch Gezelschap “Ex Oriente Lux.”</i> Leiden, 1934–1946.
MIFAO	<i>Mémoires publiés par les membres de l’Institut Français d’Archéologie orientale du Caire</i> . Paris, Cairo, 1902–.
MIO	<i>Mitteilungen des Instituts für Orientforschung der deutschen Akademie der Wissenschaften zu Berlin</i>
MMAF	<i>Mémoires publiés par les membres de la Mission archéologique française au Caire</i>
MMJ	<i>Metropolitan Museum Journal</i>
MonAeg	<i>Monumenta Aegyptiaca</i> . Brussels, 1968–.
MVAeG	<i>Mitteilungen der Vorderasiatisch-Ägyptischen Gesellschaft</i>
MVAG	<i>Mitteilungen der Vorderasiatischen Gesellschaft</i>
NAWG	<i>Nachrichten von der Akademie der Wissenschaften zu Göttingen, philologisch-historische Klasse</i> . Göttingen, 1941–2006.
NH	<i>Natural History</i> (Pliny the Elder)
OAJ	<i>Oxford Art Journal</i>
OBO	<i>Orbis Biblicus et Orientalis</i> . Freiburg, Göttingen, 1973–.
OCA	<i>Orientalia Christiana Analecta</i> . Rome, 1935–.
OEAE	Donald Redford, ed. <i>The Oxford Encyclopedia of Ancient Egypt</i> . 3 volumes. Oxford: Oxford University Press, 2001.
OLC	<i>Oriental Institute Communications</i> . Chicago, 1922–.
OIMP	<i>Oriental Institute Museum Publications</i> . Chicago, 1941–.
OIP	<i>Oriental Institute Publications</i> . Chicago, 1924–.

OIS	Oriental Institute Seminars. Chicago, 2004–.
OLA	Orientalia Lovaniensia Analecta. Leuven, 1975–.
OLZ	<i>Orientalistische Literaturzeitung</i>
OMRO	<i>Oudheidkundige Mededelingen uit het Rijksmuseum van Oudheden te Leiden</i>
ORA	Orientalische Religionen in der Antike. Tübingen, 2009–.
OrMonsp	Orientalia Monspeliensia. Centre d'égyptol. de l'univ. Paul-Valéry (Montpellier). Montpellier, 1979–.
PÄ	Probleme der Ägyptologie. Leiden, 1953–.
PM I ¹	B. Porter and R. L. B. Moss. <i>Topographical Bibliography of Ancient Egyptian Hieroglyphic Texts, Reliefs, and Paintings</i> . Vol. 1: <i>The Theban Necropolis, Part 1: Private Tombs</i> . 2nd ed. Oxford: Clarendon, 1960.
PM I ²	B. Porter and R. L. B. Moss. <i>Topographical Bibliography of Ancient Egyptian Hieroglyphic Texts, Reliefs, and Paintings</i> . Vol. 1: <i>The Theban Necropolis, Part 2: Royal Tombs and Smaller Cemeteries</i> . 2nd ed. Oxford: Clarendon, 1964.
PM II ²	B. Porter and R. L. B. Moss, assisted by E. Burney. <i>Topographical Bibliography of Ancient Egyptian Hieroglyphic Texts, Reliefs, and Paintings</i> . Vol. 2: <i>Theban Temples</i> . 2nd ed. Revised and augmented. Oxford: Clarendon, 1972.
PM III ¹	B. Porter and R. L. B. Moss, assisted by E. Burney. <i>Topographical Bibliography of Ancient Egyptian Hieroglyphic Texts, Reliefs, and Paintings</i> . Vol. III: <i>Memphis. Part 1. Abu Rawash to Abusir</i> . 2nd edition, revised and augmented by J. Málek. Oxford: Griffith Institute, Ashmolean Museum, 1974.
PM III ² fasc. 3	B. Porter and R. L. B. Moss, assisted by E. Burney. <i>Topographical Bibliography of Ancient Egyptian Hieroglyphic Texts, Reliefs, and Paintings</i> . Vol. III ² , <i>Memphis. Part 2. Saqqara to Dahshur</i> . Fascicle 3 (III ² , 777–1014). 2nd edition, revised and augmented by J. Málek. Oxford: Griffith Institute, Ashmolean Museum, 1981.
PM III ² fasc. 2	B. Porter and R. L. B. Moss, assisted by E. Burney. <i>Topographical Bibliography of Ancient Egyptian Hieroglyphic Texts, Reliefs, and Paintings</i> . Vol. III ² , <i>Memphis. Part 2. Saqqara to Dahshur</i> . Fascicle 2 (III ² , 575–776). 2nd edition, revised and augmented by J. Málek. Oxford: Griffith Institute, Ashmolean Museum, 1979.
PM III ² fasc. 1	B. Porter and R. L. B. Moss, assisted by E. Burney. <i>Topographical Bibliography of Ancient Egyptian Hieroglyphic Texts, Reliefs, and Paintings</i> . Vol. III ² , <i>Memphis. Part 2. Saqqara to Dahshur</i> . Fascicle 1 (III ² , 393–574). 2nd edition, revised and augmented by J. Málek. Oxford: Griffith Institute, Ashmolean Museum, 1978.
PM IV	B. Porter and R. L. B. Moss. <i>Topographical Bibliography of Ancient Egyptian Hieroglyphic Texts, Reliefs, and Paintings</i> . Vol. 4: <i>Lower and Middle Egypt (Delta and Cairo to Asyut)</i> . Oxford: Clarendon, 1934.
PM VI	B. Porter and R. L. B. Moss. <i>Topographical Bibliography of Ancient Egyptian Hieroglyphic Texts, Reliefs, and Paintings</i> . Vol. 6: <i>Upper Egypt: Chief Temples</i> . Oxford: Clarendon, 1939.
PM VII	B. Porter and R. L. B. Moss, assisted by E. Burney. <i>Topographical Bibliography of Ancient Egyptian Hieroglyphic Texts, Reliefs, and Paintings</i> . Vol. 7: <i>Nubia, The Deserts, and Outside Egypt</i> . Oxford: Griffith Institute, Ashmolean Museum, 1952.
PM VIII ¹	J. Málek. <i>Topographical Bibliography of Ancient Egyptian Hieroglyphic Texts, Reliefs, and Paintings</i> . Vol. 8: <i>Objects of Provenance Not Known, Part 1: Royal Statues Private Statues (Predynastic to Dynasty XVII)</i> . Oxford: Griffith Institute, Ashmolean Museum, 1999.
PM VIII ²	J. Málek. <i>Topographical Bibliography of Ancient Egyptian Hieroglyphic Texts, Reliefs, and Paintings</i> . Vol. 8: <i>Objects of Provenance Not Known, Part 2: Private Statues (Dynasty XVIII to the Roman Period). Statues of Deities</i> . Oxford: Griffith Institute, Ashmolean Museum, 1999.

PMMA	Publications of the Metropolitan Museum of Art, Egyptian Expedition. New York, 1916–.
PSBA	<i>Proceedings of the Society of Biblical Archaeology</i>
PTT	Private Tombs at Thebes. Oxford, 1957–.
RAPH	Recherches d'archéologie, de philologie et d'histoire. Cairo, 1930–.
RB	<i>Revue biblique</i>
RdE	<i>Revue d'égyptologie</i>
RecTrav	<i>Recueil de Travaux relatifs à la philologie et à l'archéologie égyptiennes et assyriennes</i>
RGRW	Religions of the Graeco-Roman World. Leiden, 1992–.
RILT	Reliefs and Inscriptions at Luxor Temple. Chicago, 1994–.
RIMAP	Royal Inscriptions of Mesopotamia Assyrian Period. Toronto, 1987–.
RTA	<i>The Rock Tombs of El Amarna</i> . London, 1903–1908.
SAGA	Studien zur Archäologie und Geschichte Altägyptens. Heidelberg, 1990–.
SAK	<i>Studien zur altägyptischen Kultur</i>
SAOC	Studies in Ancient Oriental Civilization, Chicago, 1931–.
SASAE	Supplément aux Annales du Service des Antiquités de l'Égypte. Cairo, 1946–.
SAT	Studien zum altägyptischen Totenbuch. Wiesbaden, 1998–.
SAWW	Sitzungsberichte der österreichischen Akademie der Wissenschaften, phil.-hist. Kl., Vienna, 1848–.
SDAIK	Sonderschrift des deutschen archäologischen Instituts, Abteilung Kairo. Cairo, 1975–.
SÖAW	Sitzungsberichte (Österreichische Akademie der Wissenschaften. Philosophisch-Historische Klasse). Vienna, 1848–1946.
SSEA	Society for the Study of Egyptian Antiquities. Toronto, 1977–.
StudDem	Studia Demotica. Leiden, 1987–.
TÄB	Tübinger Ägyptologische Beiträge. Bonn, 1973–1976.
TLA	<i>Thesaurus Linguae Aegyptiae</i> . Berlin, Brandenburg, 2004. http://aaew.bbaw.de/tla/
TTS	The Theban Tomb Series, London, 1915–1933.
TUAT	Texte aus der Umwelt des Alten Testaments. Gütersloh, 1982–2001.
TUATNF	Texte aus der Umwelt des Alten Testaments, Neue Folge. Gütersloh, 2004–.
UEE	<i>UCLA Encyclopedia of Egyptology</i> . Los Angeles, 2010–. https://escholarship.org/uc/nelc_uee
UGAÄ	Untersuchungen zur Geschichte und Altertumskunde Ägyptens. Leipzig, 1896–1956.
Urk. I	Kurt Sethe. <i>Urkunden des Alten Reichs</i> . Urkunden des ägyptischen Altertums 1. Leipzig: Hinrichs, 1903.
Urk. IV	Kurt Sethe. <i>Urkunden der 18. Dynastie</i> . Urkunden des ägyptischen Altertums 4, fasc. 1–16. Leipzig: Hinrichs, 1906–09. 2nd rev. ed., 1927–1930. Continued by W. Helck, fasc. 17–22. Berlin: Akademie, 1955–1958.
Urk. VII	Kurt Sethe and Wolya Erichsen. <i>Historisch-biographische Urkunden des Mittleren Reiches</i> . Urkunden des ägyptischen Altertums 7. Leipzig: Hinrichs, 1935–.
VA	<i>Varia Aegyptiaca</i>
VT	<i>Vetus Testamentum</i>
Wb.	Adolf Erman and Hermann Grapow, eds., <i>Wörterbuch der ägyptischen Sprache</i> , 7 volumes, plus 5 volumes. Belegstellen. Berlin: Akademie, 1926–1963.
WAW	Writings from the Ancient World. Atlanta, 1990–.
WZKM	<i>Wiener Zeitschrift für die Kunde des Morgenlandes</i>
WZKM-B	Beihefte zur Wiener Zeitschrift für die Kunde des Morgenlandes. Vienna, 1936–.
YES	Yale Egyptological Studies. New Haven, 1986–.
ZÄS	<i>Zeitschrift für ägyptische Sprache und Altertumskunde</i>
ZDMG	<i>Zeitschrift für Deutschen Morgenländischen Gesellschaft</i>

BIBLIOGRAPHY OF BETSY M. BRYAN

Books

MONOGRAPHS

The Reign of Thutmose IV. Baltimore: The Johns Hopkins University Press, 1991.

JOINT PUBLICATIONS

Aménophis III, le Pharaon-Soleil. With Arielle Kozloff; also with Lawrence Berman and Elisabeth Delange. Paris: Réunion des musées nationaux, 1993.

Egypt's Dazzling Sun: Amenhotep III and his World. With Arielle Kozloff; also Lawrence Berman and an essay by Elisabeth Delange. Cleveland: The Cleveland Museum of Art, 1992.

CO-EDITOR AND PRIMARY CONTRIBUTOR

The Quest for Immortality: Treasures of Ancient Egypt. With Erik Hornung. Washington, DC: National Gallery of Art, 2002.

EDITED VOLUMES

Co-Editor with Peter Dorman and Jose Galán. *Creativity and Innovation in the Reign of Hatshepsut.* Studies in Ancient Oriental Civilization 69 (=Occasional Proceedings of the Theban Workshop = Papers from the Theban Workshop 2010). Chicago: Oriental Institute of the University of Chicago, 2014.

Co-editor with Peter Dorman. *Perspectives on Ptolemaic Thebes.* Studies in Ancient Oriental Civilization 65 (=Occasional Proceedings of the Theban Workshop). Chicago: Oriental Institute of the University of Chicago, 2011.

Co-editor with Peter Dorman. *Sacred Space and Sacred Function in Ancient Thebes.* Studies in Ancient Oriental Civilization 61 (=Occasional Proceedings of the Theban Workshop). Chicago: Oriental Institute of the University of Chicago, 2007.

Co-editor with David Lorton and contributor. *Essays in Egyptology in Honor of Hans Goedicke.* San Antonio: Van Siclen, 1994.

ARTICLES, REVIEWS, CHAPTERS

- "The ABCs of Egyptian Painting in the Mid-Eighteenth Dynasty," forthcoming.
- "Icon Adaptation," forthcoming.
- "Sacred Environment." In M. Bommas, ed. *Blackwell Companion to Ancient Egyptian Religion*. West Sussex, UK: Wiley-Blackwell, forthcoming.
- "Just Say No." In O. Goelet and A. Oppenheim, eds. *The Art and Culture of Ancient Egypt: Studies in Honor of Dorothea Arnold* (= *Bulletin of the Egyptological Seminar* 19), forthcoming.
- "Portraiture." In M. Hartwig, ed. *A Companion to Ancient Egyptian Art*. Chichester: Wiley-Blackwell, 2015. Pp. 375–96.
- "Hatshepsut and Cultic Revelries in the New Kingdom." In B. Bryan, P. Dorman, and J. Galán, eds. *Creativity and Innovation in the Reign of Hatshepsut*. Studies in Ancient Oriental Civilization 69 (=Occasional Proceedings of the Theban Workshop = Papers from the Theban Workshop 2010). Chicago: Oriental Institute of the University of Chicago, 2014. Pp. 93–123.
- "Episodes of Iconoclasm in the Egyptian New Kingdom." In N. May, ed. *Iconoclasm and Text Destruction in the Ancient Near East and Beyond*. Oriental Institute Seminars 8. Chicago: Oriental Institute Publications, University of Chicago, 2012. Pp. 363–94.
- "The Egyptian Afterlife: What to Take with You and Why." *AnthroNotes: Museum of Natural History Publication for Educators* 33.1 (Spring 2012): 10–14.
- "New Kingdom Sculpture." In A. B. Lloyd, ed. *A Companion to Ancient Egypt*, vol. 2. West Sussex, UK: Wiley-Blackwell, 2010. Pp. 913–43.
- "Pharaonic Painting through the New Kingdom." In A. B. Lloyd, ed. *A Companion to Ancient Egypt*, vol. 2. Chichester: Wiley-Blackwell, 2010. Pp. 990–1007.
- "The New Kingdom Temple of Mut: An Emerging Image." In R. Danforth, ed. *Preserving Egypt's Cultural Heritage: The Conservation Work of the American Research Center in Egypt 1995–2005*. Cairo: American University in Cairo Press, 2010. Pp. 31–36.
- "Amenhotep III's Legacy in the Temple of Mut." In S. D'Auria, ed. *Offerings to the Discerning Eye: An Egyptological Medley in Honor of Jack A. Josephson*. Culture and History of the Ancient Near East 38. Leiden: Brill, 2010. Pp. 63–72.
- "Memory and Knowledge in Egyptian Tomb Painting." In E. Cropper, ed. *Dialogues in Art History, from Mesopotamian to Modern: Readings for a New Century*, Studies in the History of Art 74. Washington, DC: National Gallery of Art, 2009. Pp. 19–39.
- Contributor to R. Schulz and M. Seidel. *Egyptian Art: The Walters Art Museum*. Baltimore: Walters Art Museum, 2009.
- "The Golden Age." In Z. Hawass, ed. *Tutankhamun the Golden King and the Great Pharaohs*. Washington, DC: National Geographic Society, 2008. Pp. 46–57. Object entries in Zahi Hawass, *Tutankhamun the Golden King and the Great Pharaohs*: 98–105, 106, 112, 117–25, 128–31, 142–45, 151, 154–55, 160–61, 163–69, 176–77, 183, 185–88, 190–91, 198–99.
- "L'art et la culture sous la XVIIIe dynastie." In J.-L. Chappaz, F. Tiradritti, and M. Vandenbeusch, eds. *Akhénaton et Néfertiti: soleil et ombres des pharaons*. Milan-Geneva: Silvana; Musée d'art et d'histoire, 2008. Pp. 27–37.
- "2006 report on the Johns Hopkins University excavations at the Mut temple." *Annales du Service des Antiquités d'Égypte* 82 (2008): 27–38. In English and Arabic.
- "A Newly Discovered Statue of a Queen from the Reign of Amenhotep III." In S. D'Auria, ed. *Servant of Mut: Studies in Honor of Richard A. Fazzini*. Probleme der Ägyptologie 28. Leiden: Brill, 2007. Pp. 32–43.

- "2006 Report on the Johns Hopkins University Excavations at the Mut Temple." *Bulletin of the American Research Center in Egypt* 191 (2007): 4–11.
- "A 'New' Statue of Amenhotep III and the Meaning of the *Khepresh* Crown." In J. Richards and Z. Hawass, eds. *The Archaeology and Art of Ancient Egypt: Essays in Honor of David B. O'Connor*. *Annales du Service des Antiquités de l'Égypte Cahier* 36, vol. 1. Cairo: Conseil Suprême des Antiquités de l'Égypte, 2007. Pp. 151–67.
- "New Discoveries: Statue of Queen Tiye." In G. Scott, ed. *American Contributions to Egyptian Archaeology*. Cairo: American Research Center in Egypt, 2006. P. 55, plates facing p. 1 and # 50.
- "The Temple of Mut: New Evidence on Hatshepsut's Building Activity." In C. Roehrig with R. Dreyfus and C. Keller, eds. *Hatshepsut, from Queen to Pharaoh*. New York: Metropolitan Museum of Art; New Haven: Yale University Press, 2005. Pp. 181–83.
- "Administration in the Reign of Thutmose III." In E. Cline and D. O'Connor, eds. *Thutmose III: A New Biography*. Ann Arbor: University of Michigan Press, 2005. Pp. 69–122.
- "Property and the God's Wives of Amun." In D. Lyons and R. Westbrook, eds. *Women and Property in Ancient Near Eastern and Mediterranean Societies*. Washington, DC: Center For Hellenic Studies, Harvard University, 2005. <http://chs.harvard.edu/CHS/article/display/1219>.
- "Аменхотеп III и мемфисская теология" (The Memphite Theology and Amenhotep III). In V. Solkin, ed., Аменхотеп III и мемфисская теология. Петербургские сфинксы: солнце Египта на берегах Невы. St. Petersburg: Zurnal Neva, 2005. Pp. 153–90 and 270–90.
- "Temples of Millions of Year in Western Thebes"; "The Temple of Hatshepsut"; "Medinet Habu." In K. R. Weeks, ed. *Valley of the Kings: The Tombs and Funerary Temples of Thebes West*. Vercelli, Italy: White Star, 2001. Pp. 54–62, 66–76, 96–111.
- "Painting Techniques and Artisan Organization in the Tomb of Suemniwet, Theban Tomb 92." In W. V. Davies, ed. *Colour and Painting in Ancient Egypt*. London: British Museum, 2001. Pp. 63–72.
- "The 18th Dynasty before the Amarna Period (c. 1550–1352 BC)." In Ian Shaw, ed. *The Oxford History of Ancient Egypt*. Oxford: Oxford University Press, 2000. Pp. 218–71.
- "The Artists in the Tomb of Hormose, Part II." *Nekhen News* 12 (2000): 23.
- "The Egyptian Perspective on Mittani." In R. Cohen and R. Westbrook, eds. *Amarna Diplomacy: The Beginnings of International Relations*. Baltimore: Johns Hopkins University Press, 1999. Pp. 71–84.
- "The Artists in the Tomb of Hormose." *Nekhen News* 11 (1999): 20.
- "Antecedents to Amenhotep III." In D. O'Connor and E. Cline, eds. *Amenhotep III. Perspectives on His Reign*. Ann Arbor: The University of Michigan Press, 1998. Pp. 27–62.
- "The Statue Program for the Mortuary Temple of Amenhotep III." In S. Quirke, ed., *The Temple in Ancient Egypt: New Discoveries and Recent Research*. London: British Museum Press, 1997. Pp. 57–79.
- "In Women Good and Bad Fortune Are on Earth: Status and Roles of Women in Egyptian Culture." In A. Capel and G. Markoe, eds. *Mistress of the House, Mistress of Heaven: Women in Ancient Egypt*. New York: Hudson Hills Press, in association with Cincinnati Art Museum, 1996. Pp. 25–46.
- "Art, Empire, and the End of the Late Bronze Age." In J. Cooper and G. Schwartz, eds. *The Study of the Ancient Near East in the Twenty-first Century: The William Foxwell Albright Centennial Conference*. Winona Lake, IN: Eisenbrauns, 1996. Pp. 33–79.
- "The Disjunction of Text and Image in Egyptian Art." In P. Der Manuelian, ed., *Studies in Honor of William Kelly Simpson*, vol. 1. Boston: Department of Ancient Egyptian, Nubian and Near Eastern Art, Museum of Fine Arts, 1996. Pp. 161–68.
- "Striding Glazed Steatite Figures of Amenhotep III: An Example of the Purposes of Minor Arts." In E. Goring, N. Reeves, and J. Ruffle, eds. *Chief of Seers: Egyptian Studies in Memory of Cyril Aldred*. London: Kegan Paul, 1997. Pp. 60–82.

- "A Work in Progress: The Unfinished Tomb of Suemniwet." *Egyptian Archaeology* 6 (1995): 14–16.
- "Amenhotep III United in Eternity: A Join for Two Statue Parts from Medinet Habu." In B. Bryan and D. Lorton, eds. *Essays in Egyptology in Honor of Hans Goedicke*. San Antonio: Van Siclen, 1994. Pp. 25–30.
- "Egypt's Dazzling Sun: Amenhotep III and his World." With A. Kozloff. *Minerva* 3 (1992): 21–28.
- "An Early Eighteenth Dynasty Group Statue from the Asasif in the Johns Hopkins University Archaeological Collection." *Bulletin of the Egyptological Seminar* 10 (1989/1990): 25–38.
- "Private Relief Sculpture outside Thebes and its Relationship to Theban Relief Sculpture." In L. Berman, ed. *The Art of Amenhotep III. Art Historical Analysis: Papers Presented at the International Symposium Held at the Cleveland Museum of Art Cleveland, Ohio 20–21 November 1987*. Cleveland: Indiana University Press and the Cleveland Museum of Art, 1990. Pp. 65–80.
- "The Tomb Owner and His Family." In E. Dziobek and M. Abdel Raziq. *Das Grab des Sobekhotep: Theben Nr. 63*. Archäologische Veröffentlichungen, Deutsche Archäologisches Institut, Abteilung Kairo 71. Mainz: von Zabern, 1990. Pp. 81–88.
- "Portrait Sculpture of Thutmose IV." *JARCE* 24 (1987): 3–20.
- "The Career and Family of Minmose, High Priest of Onuris." *Chronique d'Égypte* 61 (1986): 5–30.
- "A New Stela of Thutmose IV from the Luxor Temple." With el-Sayed Higazy. *Varia Aegyptiaca* 2 (1986): 93–100.
- "Non-royal Women's titles in the 18th Egyptian Dynasty." *Newsletter of the American Research Center in Egypt* 134 (1986): 13–16.
- "Evidence for Female Literacy from Theban Tombs of the New Kingdom." *Bulletin of the Egyptological Seminar* 6 (1984): 17–32.
- "The Etymology of *hnr* 'Group of Musical Performers.'" *Bulletin of the Egyptological Seminar* 4 (1982): 35–54.
- "The Hero of the 'Shipwrecked Sailor.'" *Serapis* 5 (1979): 3–13.
- "The Title 'Foster Brother of the King.'" *Journal of the Society for the Study of Egyptian Antiquities* 9 (1978–1979): 117–23.
- "A note on an obscure title, *by tnfyt pd(t) n nb t3wy*." With Edmund Meltzer. *Journal of the Society for the Study of Egyptian Antiquities* 8 (1977–1978): 60–65.

BOOK REVIEWS

- Review of *Antiquities from the Collection of Christos G. Bastis. Part I Egyptian Antiquities* by Bernard V. Bothmer. *Journal of Egyptian Archaeology* 77 (1991): 202–4.
- Review of *Studies in the Reign of Amenophis II* by Peter Der Manuelian. *Journal of the American Research Center in Egypt* 28 (1991): 232–33.
- Review of *Eighteenth Dynasty before the Amarna Period* by Karol Mysliwiec. *Bibliotheca Orientalis* 46 (1989): 579–82.

CHILDREN'S BOOK

- You Can Be a Woman Egyptologist*, Careers in Archaeology, Part 1, with Judith Love Cohen. Art by David Katz. Marina del Rey, CA: Cascade Pass, 1993.

TABULA GRATULATORIA

James Allen

Susan Allen

Dieter Arnold

Dorothea Arnold

Sanchita Balachandran

Christina Di Cerbo

Peter Dorman

Jacobus van Dijk

Renée Friedman

Macie Hall

Melinda Hartwig

Glenda Hogan

Jennifer Kimpton

Susan McCarter

David O'Connor

Richard Parkinson

Diana Craig Patch

Carol Redmount

Gay Robins

Ellen Robbins

Catharine Roehrig

Ann Macy Roth

Gerry Scott III

Cynthia Sheikholeslami

Regine Schulz

Charles van Siclen

Hourig Sourouzian

Rainer Stadelmann

Francesco Tiradritti

Jay VanRensselaer

Roxie Walker

Elizabeth Waraksa

Henie Westbrook

Terry Wilfong

Vonnie Wild

Jacquelyn Williamson

THE “KERNBAU” OF THE TEMPLE OF MENTUHOTEP II AT DEIR AL BAHARI: A MONUMENTAL SUN ALTAR?

LUC GABOLDE

to Betsy, great lady of Thebes

THE “KERNBAU” OF MENTUHOTEP’S TEMPLE AND THE RELATED RECONSTRUCTION HYPOTHESIS

The excavations of the German Institute at Deir al Bahari have provided us with a splendid and comprehensive study of the funerary complex of Mentuhotep II at Thebes. One of the most debated features of the monument is the reconstruction of the structure in the central area, the “Kernbau.” The discussion was initiated by Naville and Winlock who both believed that it was once some kind of pyramid (fig. 1A).¹ The accurate study of the remains by D. Arnold, after numerous and remarkable research campaigns, had led this scholar to the conclusion that the central structure was in fact a square mastaba-like building adorned with cavetto cornices (fig. 1B).² R. Stadelmann elaborated another variant of the hypothesis, an Osirian mound crowned with trees (fig. 1C).³ More recently, D. Polz, through his close examination of the place and typology of the burial complex of Nubkheperre Antef in the series of funerary monuments of the west bank, has reverted to Winlock’s idea, and suggested that Mentuhotep II’s monument was in fact crowned by a pyramid, though of a much smaller size than that proposed by his predecessors (fig. 1D).⁴ One of the major observations of Arnold was that not a single casing stone with an appropriately sloping side, potentially fitting with the casing of a pyramid, has ever been found among the debris left on the spot. The hypothesis of a pyramid—at least a big one—appears thus rather unlikely.

In order, once more, to contribute to the debate initiated by these prominent scholars, I would like to present here another avenue of exploration, and to offer it to Betsy Bryan, as a tribute to her constant curiosity.

1. E. Naville, *The XIth Dynasty temple at Deir el Bahari I*, MEEF 28 (London, 1907), 28–29; H. E. Winlock, *The Rise and Fall of the Middle Kingdom in Thebes* (New York, 1947), 40.

2. D. Arnold, *Der Tempel des Königs Mentuhotep von Deir el-Bahari I*, AVDAIK 8 (Mainz, 1974), fig. on p. 6; 27–32, pl. 31.

3. R. Stadelmann, *Die ägyptischen Pyramiden, vom Ziegelbau zum Weltwunder*, KAW 30 (Mainz, 1991), 232 and fig. 74.

4. D. Polz, “New Archaeological Data from Dra’ Abu el-Naga and their Historical Implications,” in *The Second Intermediate Period (Thirteenth–Seventeenth Dynasties). Current Research, Future Projects*, ed. M. Marée, OLA 192 (Leuven, 2010), 349–50 and fig. 4.

Fig. 1. The various proposed hypotheses for the reconstruction of Mentuhotep II's temple. A) Naville's and Winlock's reconstructions; B) Arnold's reconstruction; C) Stadelmann's reconstruction; D) Polz's reconstruction.

PECULIARITIES IN THE LAYOUT OF MENTUHOTEP’S TEMPLE

The plan of Mentuhotep’s temple shows a rather strange feature: contrary to all the other structures of the building (passages, courtyards, burial chamber, sanctuary), the gate leading from the western corridor of the “Kernbau” to the western courtyard located behind the central building is not aligned with the main axis of the temple but shifted to the north. This peculiar arrangement is probably the consequence of an asymmetrical enlargement to the south of the original layout which included the six princesses’ mortuary shrines.⁵ However, the off-centered gate also allowed there to be an available space on the western side of the “Kernbau” left free for any architecture planned in the axis of the sloping corridor of the burial chamber (fig. 2).

THE QUESTION OF THE SOLAR ALTARS IN MORTUARY TEMPLES

Most of the mortuary temples of the west bank of Thebes seem to have been equipped with solar altars, intimately linked to the liturgies performed for the deceased king (they are probably connected with the solar-osirian concept underlying chapter 182 of the *Book of the Dead* and brilliantly expressed in the tomb of Nefertary as “Osiris who rests in Re, it is Re who rests in Osiris”).

The best preserved exemplars of such altars are the one in Hatshepsut’s temple at Deir el-Bahari (fig. 3)⁶ and the one in Seti I’s temple at Gurna.⁷ Traces of others have been found, in the mortuary temple of Thutmose III, in that of Merenptah, and by Ramses III’s temple at Medinet Habu.⁸ Their general shape is that of a mastaba topped with cavetto cornice and accessible through stairs that abut their eastern side.

A close examination of the very accurate plans of Mentuhotep II’s temple drawn by Dieter Arnold fails, however, to reveal any trace of such an altar, though the presence of this kind of element in a mortuary temple seems to have been likely and perhaps even mandatory.

Moreover, as we know now that solar altars existed already in the reign of Sesostris I at Karnak,⁹ we can legitimately expect that some version of the altar existed only a few decades earlier, under the reign of Mentuhotep II (fig. 4).

SOLAR ALTARS AND OBELISKS

Solar altars seem to have regularly been associated with obelisks. Originally a solar altar was attached to a monumental obelisk in the Old Kingdom sun temples, as is demonstrated by Neusera’s solar sanctuary at Abu-Gorab (fig. 5).¹⁰

5. Arnold, *Der Tempel des Königs Mentuhotep*, 64, “Bauphase B.” Note, however, that the door is not centered on the symmetrical axis between the two groups of three chapels.

6. E. Naville, *The Temple of Deir el-Bahari* I, MEEF 13 (London, 1895), 8, pl. VIII; J. Karkowski, *The Temple of Hatshepsut: The Solar Complex*, 2 volumes, Deir el-Bahari 6 (Warsaw, 2003), 1:250; 2:pl. 50-50bis.

7. J. Osing, *Der Tempel Sethos’ I. in Gurna*. Vol. 1: *Die Reliefs und Inschriften*, AVDAIK 20 (Mainz, 1977), 51–52 and pl. 36 a–c.

8. H. Jaritz et al., “Der Totentempel des Merenptah in Qurna, 3. Grabungsbericht,” *MDAIK* 52 (1996), 208–9, fig. 2 and pl. 36a; U. Hölscher, *Excavations at Medinet Habu III*, OIP 54 (Chicago, 1941), 10, fig. 5 (no. 18) and 15, fig. 8.

9. L. Gabolde, *Karnak, Amon-Ré: la genèse d’un temple, la naissance d’un dieu*, forthcoming. This altar was not yet known when Rainer Stadelmann wrote his article on the *Šwt-R’w* (“*Šwt-R’w* als Kultstätte des Sonnengottes im Neuen Reich,” *MDAIK* 25 [1969], 125–78), and therefore this scholar considered that the solar temples had played no role in the royal offerings. The existence of Sesostris I’s altar from Karnak now fills this gap.

10. F. W. von Bissing and L. Borchardt, *Das Re-Heiligtum des Königs Ne-woser-Re (Rathures)*, 3 volumes (Berlin, 1905–1928), 1:43–45, figs. 33–34, pl. I.

Fig. 3. Solar altar at Deir al Bahari. After Naville, *Deir el-Bahari I*, pl. VIII).

Fig. 4. Sun altar of Sesostri I at Karnak. Reconstruction by the author.

Fig. 5. Sun temple of Neusera with a sun altar adjoined to the obelisk. After von Bissing and Borchardt, *Das Re-Heiligtum*, pl. I.

Fig. 7. Solar altar of Ramses II at Abu-Simbel, framed with two small obelisks.

17016

Fig. 6. Obelisk from a sun altar of Thutmose IV at Elephantine. CGC 17016.

Fig. 8. Hypothesis 1: suggestion of an altar-shaped terrace with a sun-offering table and a sole obelisk (adapted after D. Arnold, *Der Tempel des Königs Mentuhotep*, pls. 27 and 28).

Fig. 9. Hypothesis 2: suggestion of an altar-shaped terrace with a sun-offering table and two obelisks (adapted after D. Arnold, *Der Tempel des Königs Mentuhotep*, pls. 27 and 28).

THE TEXTS, GRAFFITI, AND QUARRY MARKS

The mention in a stele, as well as the graffiti collected by Winlock, which seem to imply a pointed structure, either a pyramid ¹² (figs. 10A, B), or more interestingly an obelisk ¹³ (fig. 10C), as the central part of the monument, further support such an hypothesis. One of them even appears to show an obelisk topped with the sun disk and its rays ¹⁴ (fig. 10D).

This last quarry mark (fig. 10D) echoes significantly the determinatives of some of the obelisk-shaped sun temples of the Old Kingdom, as collected in the seventies by Georges Goyon (fig. 11).¹⁵

Fig. 10. A) Stele of *T*tw Abydos CGC 20088 = Mariette Cat. 605; B) Graffito Spiegelberg S.952; C) Graffito Spiegelberg S.948; D) Mark from the temple.

Fig. 11. Determinative signs of Sun Temples. After G. Goyon, *RdE* 22 (1970), 95, figs. 1–9.

THE ORIENTATION OF THE TEMPLE

In that respect, it is overall interesting to note that the orientation of the main axis of the temple did approximately point towards the direction where the sun would rise at the winter solstice.¹⁶

12. Stele of *T*tw Abydos CGC 20088, H. O. Lange and H. Schäfer, *Grab und Denksteine des Mittleren Reiches I* (Berlin, 1902), 105–97 and IV, pl. VIII; A. Mariette, *Catalogue général des monuments d'Abydos* (Paris, 1880), no. 60; W. Spiegelberg, *Ägyptische und andere Graffiti (Inschriften und Zeichnungen) aus der thebanischen Nekropolis* (Heidelberg, 1921), no. 948.

13. Spiegelberg *Ägyptische und andere Graffiti*, no. 952.

14. H. Winlock, *The Slain Soldiers of Neb-hep-et-Re Mentu-hotpe*, PMMA 16 (New York, 1945), 26; Arnold, *Der Tempel des Königs Mentuhotep*, 91, §4.6.

15. G. Goyon, “Nouvelles observations relatives à l'orientation de la pyramide de Khéops,” *RdE* 22 (1970), 95, fig. 1–9.

16. Personal data and calculations. The orientation of the temple itself is given in M. Shaltout and J.-A. Belmonte, “On the Orientation of Ancient Egyptian Temples: (1) Upper Egypt and Lower Nubia,” *Journal for the History of Astronomy* 36.3, no. 124 (2005), 273–98, table 1, 278.

<i>Deir al Bahari Dynasty 11 Temple</i>	<i>Longitude Φ</i>	<i>Latitude λ</i>	<i>Azimet a</i>	<i>Altitude h</i>	<i>Angle to horizon α</i>	<i>Sunrise at winter solstice</i>
Mentuhotep II	25° 44′ 14.47″ N	32° 36′ 22.73″ E	≈ 118°	125 m	0° 43′ 55.46″	116° 44′ 20″

The phenomenon of sunrise on the upper terrace of Mentuhotep's temple at Deir al Bahari would, in the case of a single obelisk (fig. 8), have prefigured the pattern of the prominent sole obelisk of Thutmose III—erected by Thutmose IV—in the eastern sector of Karnak, along the axis of the temple, which, at winter solstice would have produced the following image: ☀. If the structure featured two obelisks, then a parallel could be established with a text of Hatshepsut, from the great literary composition engraved on the lower part of the shaft of the northern Wadjyt obelisk: "The sun-disc rises between them (i.e. the two obelisks) as it appears at the horizon of the sky;"¹⁷ with a clear assimilation of with .

CONCLUSION

Though the present hypothesis does not answer all the questions raised by the problematic "Kernbau" of Mentuhotep's temple at Deir al Bahari and leaves some uncertainties unsolved, it may, however, fill the gap created by the absence of a solar altar in the temple and can explain some puzzling graffiti and quarry marks related to this building. The problem of reconstructing a wooden ramp in the absence of any remaining trace is of course crucial.¹⁸ However, it should be kept in mind that in some circumstances, such as the emblematic case of the main naos of Amun in the Akhmenu sanctuary, the accessibility to a shrine raised on a high podium (1.05 m high) and to its gates, for the daily ritual opening ceremony and for the complete liturgical services, was possible only through a wooden staircase of which, nevertheless, no material, iconographic, or textual trace has survived.¹⁹

17. *Urk.* IV:362, 15–16.

18. Most of the masonry covered by the hypothetical wooden ramp is destroyed down to the foundations: see Arnold, *Der Tempel des Königs Mentuhotep*, pl. 26.

19. J.-F. Carlotti, *L'Akh-Menou de Thoutmosis III à Karnak: étude architecturale*, 2 vols. (Paris, 2001), 1:133, 230.