

Project Report



Valley of the Queens Assessment Report

Volume 1

A joint project of
the Getty Conservation Institute and
the Supreme Council of Antiquities, Egypt
for the Conservation and Management
of the Valley of the Queens



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Volume 1

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The Getty Conservation Institute works internationally to advance conservation practice in the visual arts-broadly interpreted to include objects, collections, architecture, and sites. The GCI serves the conservation community through scientific research, education and training, model field projects, and dissemination of the results of both its own work and the work of others in the field. In all its endeavors, the GCI focuses on the creation and delivery of knowledge that will benefit the professionals and organizations responsible for the conservation of the world's cultural heritage.



VALLEY OF THE QUEENS

ASSESSMENT REPORT

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Part I. Introduction to the Assessment Report

The Valley of the Queens Project is a collaboration of the Supreme Council of Antiquities (SCA) and the Getty Conservation Institute (GCI) with the aim to develop and implement a comprehensive plan for the conservation and management of the Valley. Phase 1 of the project comprised research and assessment, followed by development of concept proposals for conservation and management of the site. This report records the results of the research and assessment undertaken for Phase 1 from 2006 through 2008.

The assessment process

The planning process being followed for the Valley of the Queens (QV) project emphasizes research and assessment before making decisions. The research component was aimed at delineating the historical elements of the site and its cultural boundaries through collection and synthesis of information and documentation from the many expeditions and excavations at QV. Research has served to lay the groundwork for the assessment and analysis and for consistent reference throughout the planning process and in the planning documents. Three types of assessment were undertaken: significance, threats and physical condition, and management context.

The assessments were carried out mainly in 2007-2008 with preliminary research and collection of information beginning in 2006 and continuing throughout the process. In undertaking and writing up the assessment, the emphasis has been placed on the main Valley and its tombs and features, its management, including visitor management, and the history, threats, current condition and visitation potential of the 19th and 20th Dynasty tombs. The 18th Dynasty tombs were more difficult to assess. Some were inaccessible due to collapse or structural instability and many were inhabited by bats for perhaps decades and posed health issues. Less focus has been placed on tombs and site elements in the subsidiary valleys (Valley of Prince Ahmose, Valley of the Dolmen, Valley of the Rope, and Valley of the Three Pits), many of which are remote, and some inaccessible due to having been filled in or obscured by erosion over the years.

Research and assessments were undertaken by the QV project team, which included fourteen SCA staff members who received formal and informal training (in site management and wall painting conservation) through active participation in the process. Based on the assessments, initial concept proposals were developed in 2009 and presented to the SCA for consideration, followed by revisions and further development in 2010.

The assessment report

The assessment report is divided into two volumes with the organization following the three main assessments:

Volume 1

Part I: In addition to this introduction, Part I includes a summary table of Phase 1 project activities, the list of participants in this phase of the project, and tables of standardized names and acronyms used in the report.

Part II: The significance, components, and a broad historical overview of the use and context of the site from the 18th Dynasty through the Coptic period constitute Sections 1-3 of Part II. The historical overview includes family trees for the 19th and 20th Dynasties and selected profiles of tombs that are sufficiently well preserved to construct a plausible biography of the deceased for whom the tomb was constructed and to interpret the iconography. Section 4 is a table of the use,

research and interventions at the site from the earliest prehistoric evidence through the current project. Section 5 contains comprehensive bibliographies of the sources for QV research and for understanding site management practices in Egypt. Appendices 1-3 are the chronology of ancient Egypt, a history of mapping of the Valley, and a summary of archival photographic documentation. Appendix 4 is a brief record of interventions to the site undertaken by the SCA from 2006-2012 that were not part of the GCI-SCA project.

Parts III and IV: Part III is an assessment of the management context of QV, which includes the main issues that effect operations at the site such as personnel, infrastructure, storage, and waste management, as well as elements of an operational plan and considerations of financial sustainability. Part IV focuses on visitor management, an important sub-set of management. Visitor statistics at QV and in the West Bank are collated and results of visitor surveys and observations undertaken in 2007-2008 are summarized. This section also reviews the history of visitation to QV and its current status, and assesses the potential of other tombs and site elements to be opened for public visitation.

Part V: This part looks at site-wide threats and considerations. Environmental conditions prevailing at the site and within the tombs are summarized and considered in Section 1. The potential for flooding, which is the major threat to the site as a whole, is reviewed historically and assessed through computer modeling in Section 2. Finally, in Section 3, the bat colonies that inhabit many of the tombs are addressed.

Part VI: The fourteen site elements (non-tomb features) in the Queens Valley and its subsidiary valleys are assessed in Part IV. The assessment includes inventory forms (name; element type; date; general description; objects recovered; table of use, events and interventions; and documentation and references), followed by condition assessments for each site element.

Volume 2

The second volume of the report is the condition summary of all 18th, 19th, and 20th Dynasty tombs at QV. Included are a summary of tomb architectural development, the geological and hydrological context of the tombs, and the technology of the wall paintings of the 19th and 20th Dynasties.

For the seventy-seven 18th Dynasty tombs, many of which were not fully accessible, owing to safety or other reasons, there is a brief condition assessment. For each of the thirty-four 19th and 20th Dynasty tombs, an inventory form for each tomb summarizes basic general information (naming systems, attribution, reign, typology; description of tomb; objects recovered; table of use, events and interventions; and documentation and references). These are followed by a detailed assessment of the condition of individual tombs.

Acknowledgements

The report is based on research and field assessments undertaken over several years by the Queens Valley team members and consultants (see List of Participants following) and compiled by GCI team members.

In undertaking the three-year assessment for the project, we acknowledge the support of colleagues in the SCA, both in Cairo and in Luxor, in advancing the work. SCA team members and staff who participated in the project are named in the List of Participants. In particular, we wish to thank the Documentation Center of the SCA (CEDAE) for allowing access and use of CEDAE documentation and for supporting new photo-documentation of the painted tombs at QV, and the Conservation Center for assisting with the assessment of the bat colonies.

At all stages, the research and assessment has been informed by the knowledge and experience of archaeologist Christian Leblanc, who has been generous with sharing information, providing documentation and photographs from the time of the Franco-Egyptian investigations of the Valley, and for reviewing this report. We are especially grateful for permission to use published and unpublished photographs and plans produced by the Franco-Egyptian mission in this report.

Heather McCarthy and Emily Cole contributed significantly to the historical research, especially the iconography of the 19th and 20th Dynasty tombs. Kent Weeks provided advice on issues of mapping on the West Bank and facilitated the use of the 1981 TMP survey data of QV tombs for conversion to CAD drawings. Bibliographic searches and verification of citations were done by Valerie Greathouse, GCI Information Center. FTIR analysis was undertaken by Herant Khanjian, GCI Science Department. GCI consultant Ron Schmidting prepared and interpreted petrological thin sections for the geological assessment. Christian Dietz, University of Tuebingen, provided information on the ecology and identification of bat species.

We are grateful to Mamdouh Hamza for generously contributing time and effort of the staff of Hamza Associates to the assessment of flooding, geology, structural instability of the tombs, and visitor infrastructure, followed by development of architectural and engineering designs for implementation of these components in Phase 2 of the project.

We thank Romany and Mary Helmy for their essential and always generous and helpful role in facilitating our work in Egypt over many years of collaboration and friendship.

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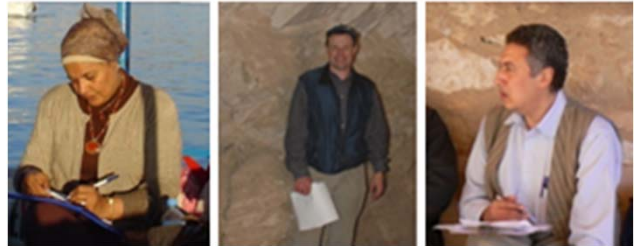
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QV Project Phase 1: Summary table of activities (2006-2009)

	Background research and gathering of information and photography of all tombs and site elements related to significance, history of use, and condition
	Condition assessment for rock structural stability of 18 th , 19 th and 20 th Dynasty tombs and development of intervention designs for stabilization and protection
	Risk and condition assessment and treatment planning for the 23 tombs of the 19 th and 20 th Dynasty that have surviving plaster or decoration
	Laser scanning of the valley to produce new topographical maps and a GIS integrating TMP and CNRS tomb drawings
	Geological and hydrological mapping, study, and design concepts for site-wide and tomb-specific flood protection
	Assessment of site and visitor management including collection of visitor data; surveys of visitors and guides; and analysis of visitation and interpretation potential
	Development of concept designs for site and visitor infrastructure and for presentation and interpretation of QV, based on visitor management assessment
	Inventory and relocation of study materials from 48 tombs into secure storage and extensive site and tomb cleanup
	Environmental monitoring for RH, temperature, CO ₂ , and dust in QV 44, 55, 66, and exterior environment (on-going)
	Research and trial tests by SCA Conservation Center for exclusion of bat colonies from most tombs and retention in a few selected tombs
	New baseline photographic documentation (digital color) by SCA – CEDAE of 19 th and 20 th Dynasty tombs with paintings
	Training of seven SCA inspectors in site management and seven SCA conservators in wall painting conservation. Included experience at the GCI for SCA inspectors.
	West Bank Coordination meetings: 2006, 2007, 2008 to promote integration of site management planning efforts

Standardized spellings and usage of names and terms in QV assessment report

English transliteration of royal names based principally on usage in Leblanc 2001.

Queens, Princesses, Princes and elites in QV	Kings (New Kingdom)	Sites and Places
Ahmose (Prince)	Ahmose	Abd el-Qurna
Ahmose (Princess)	Akhenaten	Asyut
Amenherkhepshef	Amenhotep	El-Assasif
Amenhotep	Amenmeses	El-Khokha
Baki	Ay	Deir el-Bahari
Bentanat	Hatshepsut	Deir el-Medina
Duatentipet	Horemheb	Deir Esh-Shelwit
Hatneferet	Merenptah	Dra Abu el-Naga
Heka-(...)	Rameses / Ramesside	Malkata
Henuttauy	Semenkhkara	Qurn
Henutmira	Seqenenra Tao	Qurnet Murai
Hori	Seti	Ramesseum
Imhotep	Setnakht	Other terms
Isis-ta-Hemdjeret	Siptah	<i>Khekheret-nesu</i> (lady-in-waiting)
Khaemwaset	Tausert	<i>Kheqer</i> frieze (decorative frieze)
Merytamen	Thutmosis / Thutmose	<i>Mastaba</i> (bench, platform)
Merytra	Tutankhamen	<i>Mouna</i> (earth & straw plaster)
Minefer	QV site	<i>Noria</i> (water pot)
Minemhat	Dam (pharaonic dam)	<i>Speos</i> (grotto)
Nebettauy	Deir er-Rumi	<i>Ushabti</i> (funerary figurine)
Nebiri	Dolmen	
Nefertari	Graffiti	
Nehesy	Grotto Cascade	Necropolis (s) / necropoleis (pl)
Pareherunemef	Hermit Shelters	Stele (s) / stelae (pl)
Rameses-Meryamen	Italian Mission Building /Schiaparelli Kitchen	
Satra	Kiln	
Sethherkhepshef	Menhir	
Tanedjemy	Observation Posts	
Tyti	Sanctuary to Ptah & Meretseger	
Tuy	Valley of the Queens/Queens Valley/Valley/QV	
Urmerutes	Workmen's Huts /Tomb Workers' Structures	
Names and terms used in iconographical description of tombs		
<i>Akhet</i> (horizon)	Herymaat	Nut
Amun	Horus / -Iunmutef / -in-his-youth	<i>Nyny</i> (welcoming ritual)
<i>Ankh</i> (life)	Imentet	Osiris / -Wennenefer
Anubis	Imset	Ptah/ -Soker
Atum	Isis	Pe
<i>Ba</i> (mobile aspect of the soul)	<i>Ka</i> (life force of the soul)	Ra / -Herakty
<i>Djed</i> (pillar, symbol of stability)	Kebehsenuf	Selkis
Duamutef	Ma'at	Taweret
<i>Duat</i> (underworld)	Meretseger	Thoth
Geb	Nebneru	<i>Uraeus</i> (s) / <i>uraei</i> (pl)
Hapy	Nekhbet	Wadjet / <i>Wadjet</i> eye
Harsiese	Nekhen	Was (dominion)
Hathor	Neith	
Hememet	Nephthys	

Acronyms and abbreviations of organizations used in this report

ARCE	American Research Center in Egypt
CEDAE	Centre d'Etude et de Documentation sur l'Ancienne Egypte
CNRS	Centre National de la Recherche Scientifique (Archaeological expedition of the French mission led by Christiane Desroches Noblecourt and later by Christian Leblanc
Antiquities Service/ EAO/SCA	Antiquities Service=Department of Antiquities, founded in 1858 by Mariette; renamed Egyptian Antiquities Organization in 1971; Supreme Council of Antiquities from 1993
Franco-Egyptian mission	Archaeological mission of CNRS and CEDAE which has been working at the Valley of the Queens since 1970
French mission	Archaeological expedition of the Centre National de la Recherche Scientifique (CNRS)
GCI	The Getty Conservation Institute
IFAO	Institut Français d'Archéologie Orientale
IGN	Institut Geographique National
Italian mission	Turin Museum expedition led by Ernesto Schiaparelli and Francesco Ballerini from 1903 to 1906 and by G. Farina in 1924, 1936-37
KV	Valley of the Kings
MAFTO	Mission Archéologique Française de Thèbes-Ouest (Director, Christian Leblanc as of 2003)
QV	Valley of the Queens
SCA	Supreme Council of Antiquities, formerly Egyptian Antiquities Organization until 1993
TMP	Theban Mapping Project (Director, Kent Weeks)
Turin Museum	Egyptian Museum of Turin / Museo Egizio di Torino

Image credits

Abbreviations used in report	Report pages	Image sources and credits
GCI & SCA	Throughout report	Unless indicated otherwise, images are joint copyright of the Getty Conservation Institute and the Supreme Council of Antiquities, Egypt, emanating from their collaborative projects in the 1980s (Tomb of Nefertari) or from 2005-2010 (Valley of the Queens Project)
CNRS	Pages 34, 37, 50, 54, 55, 60, 150, 153, 207, 208, 209, 210 221, 262, 263, 296, 297, 298, 301, 302, 304, 305, 307, 308, 309, 312, 313, 317, 320, 321, 322, 326, 327, 334, 337, 339, 349, 350, 356, 360, 364, 376, 379, 380, 381, 382	Photos, maps, plans, sections and drawings. © Centre National de la Recherche Scientifique, courtesy of Christian Leblanc
CEDAE	Pages 35, 36, 38, 41, 42, 45, 48, 51, 52 53, 54, 56 57, 58, 59, 60, 66, 68, 70, 71, 72, 74, 75, 77, 328, 329, 330, 331	Photos. © Centre d'Etude et de Documentation sur l'Ancienne Egypte (CEDAE 84, etc. = CEDAE 1984, the year photo was taken)
Museo Egizio	Pages 206, 208, 209, 216, 221, 343	Courtesy of the Ministero per I Beni e le Attività Egizie. © Archivio Soprintendenza per I Beni Archeologici del Piemonte e del Museo Antichità Egizie
Schiaparelli 1923	Pages 27, 28,29 35, 69, 207, 213, 215, 219, 259, 300, 328, 375	Schiaparelli, Ernesto, and Missione archeologica italiana in Egitto. [1923]. <i>Relazione sui lavori della Missione archeologica italiana in Egitto, anni 1903-1920: Vol. 1, Esplorazione delle "Valle delle Regina" nella necropoli di Tebe.</i> Torino: R. Museo di antichità and G. Chiantore
Fondazione Museo Egizio	Page 52	©Fondazione Museo Antichità Egizie di Torino
DigitalGlobe	Pages 15, 16, 143, 204, 205, 242, 266, 272, 292	Satellite imagery courtesy DigitalGlobe, ©2012 (satellite image taken in 2006)
Prisse d'Avennes	Page 73	Prisse d'Avennes, E.1878. <i>Histoire de l'art égyptien: d'après les monuments depuis les temps les plus reculés jusqu'à la domination romaine.</i> Courtesy Art and Architecture Collection, Miriam and Ira D. Wallach Division of Art, Prints and Photographs, The New York Public Library, Astor, Lenox and Tilden Foundations.
Rosellini 1832-1841	Page 53	Rosellini, Ippolito. 1832-1841. <i>I monumenti dell'Egitto e della Nubia disegnati dalla spedizione scientifico-letteraria toscana in Egitto; distribuiti in ordine di materie [Tavole].</i> Monumenta storici, Atlas vol. 1, pl. XXXV. Pisa: Presso Niccolo Capurro.
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Lepsius	369, 370	Lepsius, Carl Richard. 1879. <i>Denkmaler aus Aegypten und Aethiopien, Abtheilung III, Bd. VII, Blatt 204, Pl. VI and Blatt 206, Pl.V.</i> Leipzig: J. C. Hinrichs'sche Buchhandlung.
Griffith Institute	Page 37	© Griffith Institute, University of Oxford