

The Second International Conference
on the Conservation of Grotto Sites,
Mogao Grottoes, Dunhuang,
People's Republic of China,
June 28–July 3, 2004

Conservation of Ancient Sites on the Silk Road



Edited by Neville Agnew

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Proceedings of the Second International
Conference on the Conservation of Grotto Sites,
Mogao Grottoes, Dunhuang, People's Republic of
China, June 28–July 3, 2004

Edited by Neville Agnew

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FRONT COVER: Portrait of a donor, from cave 85 (corridor, south wall), Mogao Grottoes. Photo by Lorinda Wong

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Foreword

The Getty Conservation Institute and the Dunhuang Academy, with the endorsement of China's State Administration of Cultural Heritage (SACH), have traveled a long road together, one that began in January 1989 with a formal agreement between the institutions concerned. Since that time, our collaborative activities have included the first Silk Road conference, "Conservation of Ancient Sites on the Silk Road," held in 1993; development of China ICOMOS's "Principles for the Conservation of Heritage Sites in China"; a multiyear wall painting conservation project at the Mogao grottoes; a master's degree course in wall painting conservation, collaboratively organized with the Dunhuang Academy, Lanzhou University, and the Courtauld Institute of Art; and a visitor management and carrying-capacity plan for the fragile cave temples at Mogao.

It therefore gives me great pleasure to write the foreword to this publication of the papers from the second Silk Road conference, held at the Mogao grottoes in 2004. There has been a rich and dynamic interchange of expertise between SACH, the Dunhuang Academy, and the GCI over the two decades of our collaboration. SACH and the Dunhuang Academy have also generously provided resources that have advanced our ability to work in China. Reciprocally, the GCI has hosted visiting staff from both organizations, including participation in some of the GCI's other overseas activities, such as the Queens Valley project in Egypt.

Since the first Silk Road conference was held, an important aspect of our collaborative work has centered on wall painting conservation, with focus on cave 85 at the Mogao

site, a splendid cave temple dating from the late Tang dynasty. This work is summarized in these conference proceedings as a series of papers, intended to establish a methodological yardstick for future research and conservation treatment of the extraordinarily beautiful—yet threatened and delicate—paintings and polychrome sculpture at Mogao and other, similar Silk Road sites.

Lest anyone imagine otherwise, it is not always easy working and collaborating across barriers of language and culture. What is the "glue" that holds together a partnership such as the one that we have enjoyed with our partners in China? Succinctly stated, it is a combination of clearly defined roles and responsibilities, and common objectives. For his work on this volume and his decades-long leadership of the GCI's work in China, I thank Neville Agnew, whose extraordinary professionalism and dedication have been central to our successful partnerships in China. I am most grateful to Fan Jinshi, director of the Dunhuang Academy, and Zhang Bai, deputy director of SACH, for their lasting friendship and commitment to the conservation of China's remarkable heritage. They have been instrumental in making the GCI-China partnership the longest enduring collaboration of the Getty Conservation Institute. Now in the midst of our seventh three-year agreement with SACH at the Dunhuang Academy, we look forward to new challenges, as new opportunities beckon in our future work together.

TIMOTHY P. WHALEN
Director
The Getty Conservation Institute

Preface

Since the first Silk Road conference was held at the Mogao Grottoes in 1993, great changes have taken place—first, new construction and better facilities for visitors and personnel; and second, the professional development of Dunhuang Academy conservation staff. The site has become more accessible with expansion of the local airport, and visitor numbers have increased, at times beyond the capacity of management to cope. Mogao has continued to attract scholars who study the iconography of the wall paintings and statuary and the ancient documents from the famed Library Cave; it has developed expertise in site conservation, management, and presentation; and it has become recognized as a center of excellence in China. This has not been without some cost to the site, however, as greater burden has been placed on staff through demands for the expertise of the Dunhuang Academy to assist less-well-established organizations elsewhere in China in conserving their sites. Perforce, the Dunhuang Academy has had to divert some of its own fully extended personnel to undertake conservation projects elsewhere in China and in other Asian countries as well while serving in an advisory role to a number of national initiatives in conservation. Balancing these requests with the many urgent needs of the Mogao Grottoes and the two other sites, Yulin and the Western Grottoes, under the Dunhuang Academy's management and conservation jurisdiction has been no easy matter. Fortunately, Director Fan Jinshi, whose life has been devoted to the site, has kept an unclouded vision and maintained her priorities for Mogao.

This publication, an outcome of the Second International Conference on the Conservation of Grotto Sites, has appeared more than a decade after the first. While the first conference essentially focused on managerial and technical conservation,

the scope of the second was expanded to include art historical and related topics, though, as can be seen in the table of contents, the emphasis has remained primarily conservation. The purpose of addressing a larger subject matter has been to seek greater inclusivity and to build bridges between conservation and scholarly research on the history of the Mogao Grottoes and the Silk Road in its vast geographic reach. Moreover, because Mogao is a site in the top echelon of significance among China's extensive list of World Heritage Sites and a pivotal one along the ancient Silk Road trade routes, it was thought important in the spirit of exchange between East and West to seek participation from other central Asian countries. This was not entirely successful, but the gesture was made; Kyrgyzstan delegates participated in the event, and Uzbekistan contributors submitted their papers, which are included in this publication.

As stated in the preface to the first Silk Road conference proceedings, the collaboration between the Dunhuang Academy and the Getty Conservation Institute addressed broad site-wide issues of conservation at Mogao. In the present volume the work undertaken since the first conference is presented. These joint efforts reflect, we believe, the far greater synergy that can be generated when partners work together in mutual trust and understanding on problems and issues of common interest.

Looking back, both sides embarked together on ambitious undertakings that include, with the support of the State Administration of Cultural Heritage of China, participation in developing the *Principles for the Conservation of Heritage Sites in China* in partnership with the Australian Heritage Commission; drafting a master plan for the site; research, testing, and conservation of cave 85; and initiation of a

master's degree course in the conservation of wall paintings through a four-way partnership between Lanzhou University (the degree-conferring institution), the Dunhuang Academy, the Courtauld Institute of Art in London, and the Getty Conservation Institute.

Areas of acute need identified in the master plan were also addressed, including a use plan, a visitor management subplan, and a visitor carrying capacity study for the cave temples open to the public. Visitation to the site and increasing visitor numbers represent a dire threat. Unless a cap on visitor numbers, backed by sound research, is implemented as a policy of the Dunhuang Academy, the site will be degraded by overuse and commercial pressures.

Translation between Chinese and English, as always, proved a challenge: both languages, of course, have subtleties and nuances that tax the most expert of translators. Add to these the specialized terminology of conservation, scientific and technical terms, and geographic place-names—to mention but a few—and the problem is compounded.

Many colleagues have striven greatly, as acknowledged elsewhere, to bring this long-delayed publication to fruition. We hope it may prove of value well beyond the confines of the Mogao Grottoes.

NEVILLE AGNEW

Acknowledgments

The Second International Conference on the Conservation of Grotto Sites was a collaborative undertaking of the Getty Conservation Institute and the Dunhuang Academy, with the approval of China's State Administration of Cultural Heritage. The director of the Dunhuang Academy, Fan Jinshi, was an enthusiastic proponent of the event from the first, as was Tong Mingkang, deputy director of the State Administration. Timothy P. Whalen, director of the GCI, likewise endorsed the suggestion of a second conference as a milestone in these institutions' long-standing joint conservation and management planning efforts at the Mogao Grottoes.

It is appropriate to recognize the work of Su Bomin, at the Dunhuang Academy, who undertook arrangements on the Chinese side, and Kathleen Louw, at the GCI, who provided efficient logistical and planning support. Preparation of the manuscript for publication of the proceedings has been a collaborative effort of many colleagues, though an onerous one. Special thanks are due to Elizabeth Maggio, who coedited many of the papers and whose exacting standard has set the tone for the volume. Foremost among the many difficulties has been the challenge of translation from the Chinese. It is not the editor's purpose here to recount the tribulations of attempting to wrestle with the often-inscrutable English in some of the translations that were submitted, or to comment, other than in passing, on manuscripts with incomplete or missing references, but rather to gratefully express appreciation for the unstinting help of colleagues. Po-Ming Lin should be acknowledged first; it was he who spent countless hours on the telephone and via email communicating with authors in an attempt to

clarify points of meaning. His was the patience of Job. Peter Barker likewise was generous with his time and perseverance in attempting to unravel the often highly technical language and terminology. Po-Ming and Peter worked together, consulting with each other and frequently seeking clarification from other Chinese speakers at the Getty Conservation Institute, notably Ye Wa and Zhang Liangren, when their expertise was relevant to the subject matter. Jonathan Bell reviewed certain papers and clarified Buddhist terminology in cases where transliteration from the Chinese resulted in inconsistency with commonly recognized English translation (usually based on the Sanskrit term), Lorinda Wong assisted with a number of papers on wall painting conservation, and Martha Demas repeatedly provided useful counsel on matters of content. In the final throes of editing, Valerie Greathouse and Cameron Trowbridge of the GCI's Information Center reviewed bibliographic citations, completing some, finding others; the institute is fortunate in having staff who, undaunted, tackle such tasks with humor and a sense of challenge. An immense debt of gratitude is due to them.

Getty Publications has been forbearing in the long, often-stalled editorial process, and we are indebted also to Tevvy Ball, Sheila Berg, and Ann Lucke for their patience and their meticulous standards in the handling and copyediting of the manuscript. As always, the designers at Getty Publications have produced an elegant volume appropriate to the art of the site.

Beverly Weisblatt handled the manuscript flow and tracked versions as they were transmitted back and forth between the editors and the authors; her help was essential

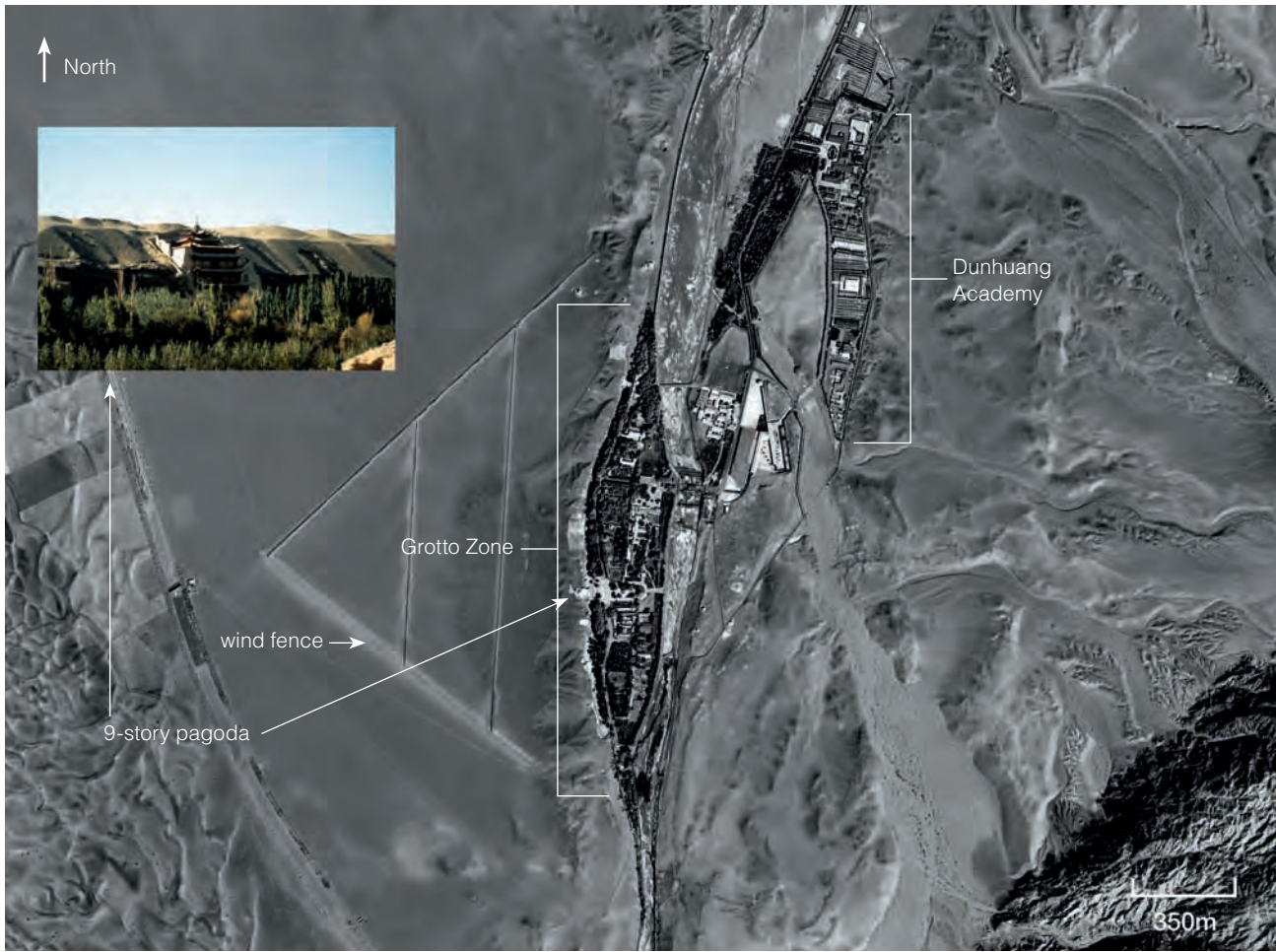
throughout the process. Cynthia Godlewski managed efficiently, and with her characteristic tact, all communication and transmission of the final manuscripts to Getty Publications for copyediting, design, and production.

To all of the above we are most grateful.

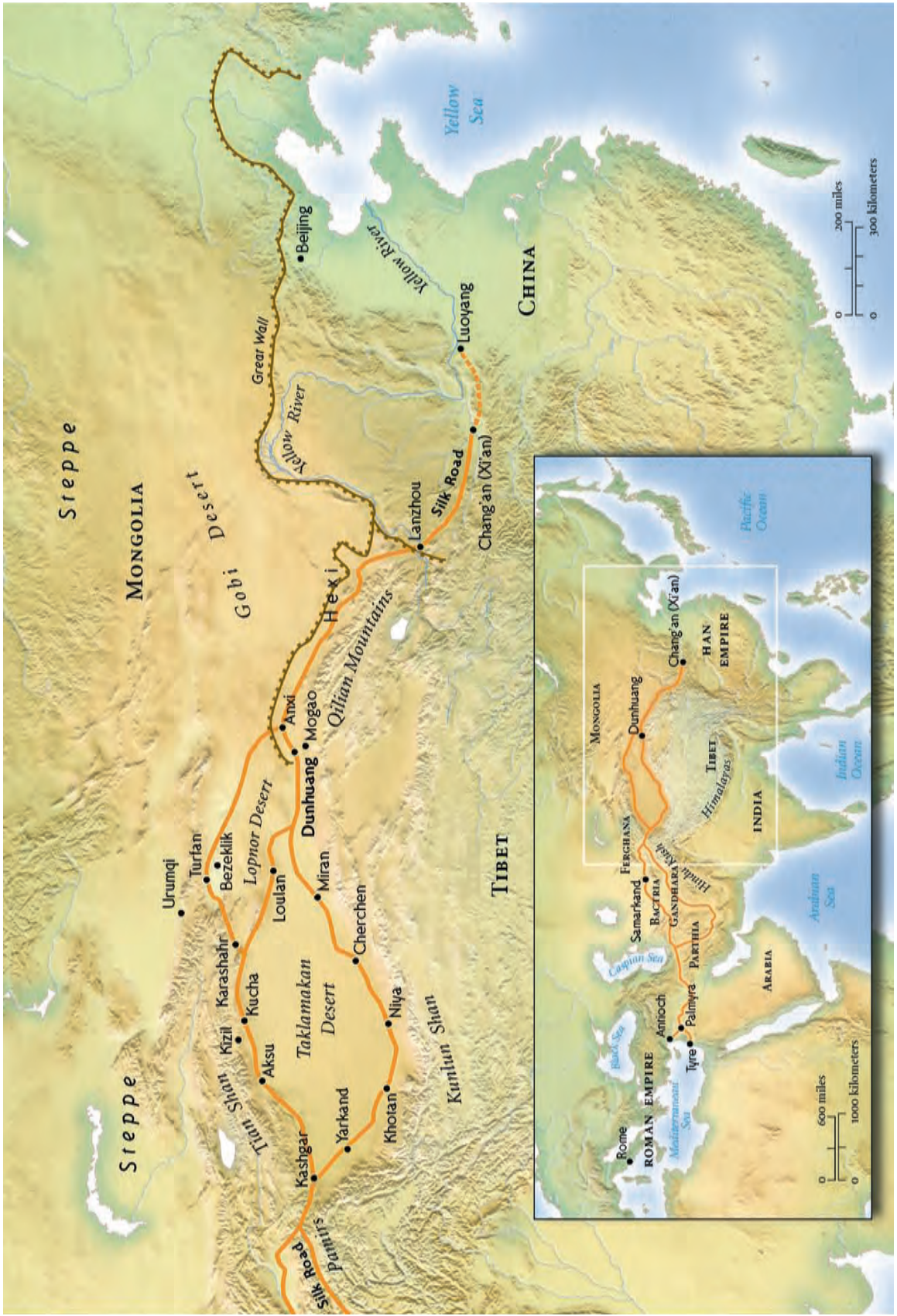
To those authors who submitted in a timely manner and whose manuscripts were complete and intelligible, we

apologize for the delay in seeing the work in print; we hope, despite the protracted process, that this volume will prove to have been worth the wait.

NEVILLE AGNEW



Mogao satellite image.
Satellite image courtesy of Digital Globe.
Inset photo by G. Aldana © J. Paul Getty Trust



China Dynasty Table

Xia	ca. 21st century–16th century B.C.E.
Shang	ca. 16th century–11th century B.C.E.
Western Zhou	ca. 11th century–770 B.C.E.
Eastern Zhou	
Spring and Autumn Period	770–476 B.C.E.
Warring States Period	475–221 B.C.E.
Qin	221–207 B.C.E.
Western Han	206 B.C.E.–24 C.E.
Eastern Han	25–220
Three Kingdoms	
Wei	220–265
Shu	221–263
Wu	222–280
Western Jin	265–316
Eastern Jin	317–420
Southern and Northern Dynasties	
Sui	589–618
Tang	618–907
Five Dynasties and Ten Kingdoms	
Song	
Northern Song	960–1127
Southern Song	1127–1279
Liao	916–1125
Jin	1115–1234
Yuan	1271–1368
Ming	1368–1644
Qing	1644–1911
Republic of China	1912–1949
People's Republic of China	1949–present