PREFACE AND ACKNOWLEDGMENTS

The present report on the excavations at the mound of Sonkh, District Mathura, incorporates a detailed account of the material remains unearthed in eight seasons (1966–74) by a team of German archaeologists sent out by the Museum of Indian Art, Berlin, under the direction of the author. It replaces the more than 20 campaign and preliminary articles in journals published through the years.

The main objective of the excavation was to collect material informations on the early history of the once-flourishing State of Mathura, one of the most important cultural centres of ancient India. Explorations led to the decision that a thorough excavation of a less disturbed mound outside of Mathura would be more promising than a place in the city itself. The choice fell on the mound of Sonkh which, in spite of visible damages in the upper part of the citadel elevation, showed signs of presumably intact strata of habitation in its base. These expectations came true. The excavations resulted in a terrace-like exposition of not less than 40 habitation levels covering the span from the 8th century BC up to the 19th century AD. The colonization began in the time of the Painted Grey Ware which in Sonkh, according to radiocarbon dates, lasted from about 800 to 400 BC. The excavated structural remains reach in uninterrupted sequence from the PGW period via the mud wall and mud-brick settlements of the period of the Mauryas and the Śunga Cultural Phase up to the beginning of baked brick constructions about the end of the 2nd century BC, i.e. the time of the Mitras of Mathura. On top of the Mitra levels (27-25) followed the remains of the Kşatrapas (Levels 24-23) and Kusānas (Levels 22-16). From Level 27 to 16 the unearthed structures represented each time a part of a densely built-up area of habitation. With Level 15 the situation changed considerably. Although the structural remains of Level 15 were, in their layout, clearly connected with those of Level 16, it became evident that now the lowest level of the disturbed part of the citadel was in sight or, seen the other way round, that in Level 16 for the first time a closely built-up area of habitation was found preserved. Consequently, the richer lower levels with all their wealth of remains and finds occupy much more space in this report. Nevertheless, the upper Levels 15 to 1 could, though with difficulties, be assigned to distinct periods, as Gupta and Post-Gupta Levels, Medieval Levels, and Late Fortress Levels.

The results of the work in the just portrayed main excavation area form Part I of this report, consisting firstly of a technical section dealing with the architectural details of the different levels, and secondly, of a descriptive study of the finds.

Part II records the surprising discovery of a temple area, situated ca 400 metres north of the main excavation zone, where the foundation walls of an apsidal sanctuary have been excavated, its first phase dating from the beginning of the first century BC, the second one, being erected partly upon the walls of the first, belonged to the early Kusāna period about two centuries later. This second temple served as a sanctuary for the Nāga cult the existence of which was known for Mathura from inscriptions only. Remains of a carved stone railing and of its southern gate, preserving a number of magnificent sculptures, were the most conspicuous finds in the temple area.

The State Department of Cultural Affairs of Uttar Pradesh as well as the Director Generals of the Archaeological Survey of India readily gave permission for the excavations. I would like to take the opportunity to thank all the Indian officers occupied with the matter, and to express my deeply felt gratitude to the then Director Generals of the Survey, the late Mr. A. Ghosh, Professor B. B. Lal, Messrs. M. N. Deshpande and B. K. Thapar, the latter having been associated closely with our work from the very beginning.

The excavations were sponsored by two German institutions, the Deutsche Forschungsgemeinschaft (German Research Society) and the Stiftung Preußischer Kulturbesitz (Prussian Cultural Trust). Their help was simply vital. My thanks are also due to the Embassy of the Federal Republic of Germany in New Delhi, especially to the members of the Cultural Department, Mrs. M. Duckwitz and Mr. A. Würfel, who made the excavations a part of their own work. With the help of scholarships, granted by the Deutscher Akademischer Austauschdienst (German Academic Exchange Service), one or two students of Indian art and archaeology were able to join each excavation campaign.

The most essential and practical help has been extended to us by the Curators resp. Directors of the Government Museum, Mathura, and its staff members. Dr. N. P. Joshi, the then chief of the museum, not only helped the author in the discovery of the site but took care of all the mutual problems arising naturally during such a venture in an exemplary way. The common keen interest in ancient Mathura made

the cooperation most profitable for both sides. When Dr. R. C. Sharma took the chair in the museum in 1969 I experienced the same friendly support and an equal interest in the problems of Mathura archaeology and art. I have no words to express my gratitude to both, Dr. Joshi and Dr. Sharma, for all the help and cooperation they extended to us. I have benefited greatly from the discussions with them as also with colleagues visiting Sonkh during the time of excavations, especially with Messrs. R. C. Agrawala, P. L. Gupta, S. P. Gupta and Dr. S. C. Kala. I wish to express my thanks also to the late Prof. H. D. Sankalia and Prof. S. B. Deo for the encouraging interest they have always shown in our work. Similarly, I am obliged to Mr. M. C. Joshi, now Director General of the Archaeological Survey, who in 1973 started excavations in Mathura City, for the fruitful exchange of opinions. I am indebted greatly to Dr. A. K. Srivastava, then Numismatic officer at the State Museum, Lucknow, for the identification of coins found in the excavation, and to Dr. O. P. Agrawala, the then Chief Chemical Officer of the National Museum, New Delhi, who kindly treated the two bronze images unearthed in the Kusāna levels. Concerning the identification of coins, I would like to acknowledge with thanks the contributions of Dr. P. L. Gupta on the hoard of punch-marked copper coins, and of Prof. Dr. R. Göbl of Vienna University who took care of the Kuṣāṇa copper coins (see IV. K. COINS). The extraordinary Kuṣāṇa coin no. 6 in Part II inspired not only Dr. P. L. Gupta but also Prof. B. N. Mukherjee to publish their valuable opinion on it (see Part II, V.G.).

The German excavation architects and field-supervisors were Prof. Dr. A. v. Müller (1966-67), Mr. W. K. Hecker and Mrs. G. Hecker (1967-70), and Dr. R. Weber (1970-74). They were responsible for the digging procedure and the drawing of the plans and sections. At times, they were assisted herein by Messrs. W. Brettschneider, G. Grimmenstein, C. Stollfuß and M. Zimmermann. In the second campaign Dipl. Ing. W. Fauer carried out a topographic survey in order to get a contour plan of the mound of Sonkh. During the first five campaigns Dr. G. Kreisel, at that time a student of Indian art and archaeology, was taking part as an assistant of versatile abilities. I wish to express my gratitude to him for his untiring readiness wherever help was needed.

The photographs accompanying the report have been taken by Messrs. W. Gie-

senhagen and W. Moisa of the Museum of Indian Art, Berlin. Both were providing first-aid also to the metallic objects and other antiquities in the field. Mr. Moisa, a perfect man in all situations, was helpful even through all the time of my writing this report. The drawings of pottery and other small finds have been produced by Messrs. K. Hennies, H.-J. Paech and J. Klein

The publication of this report is, in distinct parts, due to the cooperation I have received from Dr. Rolf Weber and Mr. Hans-Jürgen Paech. Dr. Weber contributed to the architectural section (I.D., II.A—H) and helped the author by critically reading part of the manuscript as well as by valuable suggestions during the accomplishment of the report. Mr. Paech, technical assistant in the Museum of Indian Art, contributed the sections on metal objects, beads and pottery along with the pottery drawings. To both of them the author expresses his deep-felt thanks.

The upper levels, i.e. Levels 16 to 1, had originally been treated by Mr. and Mrs. Hecker in a comprehensive German manuscript. Due to the growth and importance of the material found in the lower levels the author had to decide to write a shorter report on Levels 16 to 1. Nevertheless, parts of the summaries in Hecker's unpublished manuscript have been helpful for the purpose at hand and are properly quoted in the respective places.

The photographs of the full-sized plates, especially those of the coins, have been laboriously reproduced in distinct sizes by Mrs. I. Papadopoulos, the photographer of the Museum. I am most thankful to her for all the pains she has taken. Very helpful was the systematic order of the huge triple card index of finds so meticulously organized by Dr. W. Lobo of the Museum of Indian Art. Caused by the growing expenses for the publication, only reduced versions of the plans of the levels could be published in the report. They were redrawn from reproductions of the original drawings (1:50) by Mrs. M. A. K. Kitt, who finalized also figs. 1, 6 and 46 and sketched the hump types of the terracotta bull figurines.

During the long and numerous campaigns the office in Berlin was administered in an exemplary way by the colleagues who had to stay at home. I wish to thank especially Dr. V. Moeller and Mrs. H. Kunz, who made it possible for us to take leave from the daily work for such a long time.

I owe the deepest and foremost debt to Prof. Dr. (Mrs.) M. Yaldiz, the Director of the Museum of Indian Art, Berlin, for her permission to use all the sources and facilities of the museum including the help of staff members. As chairwoman of the council of the Stiftung Ernst Waldschmidt she is also the editor of this volume. I am also very much obliged to the members of the official bodies of the Stiftung Ernst Waldschmidt for including this work in the monograph series and for financing the print of the book.

I am much beholden to Dr. R. Weber, Mr. H.-J. Paech, Dr. L. Sander and the late Mr. S. Sinha for going through parts of the manuscript and for reading the proofs. Not the least I am indebted to Mr. O. Holy, Reiter-Druck Berlin, for his untiring and friendly cooperation and careful printing.

In the end, the author cannot but thank his wife, Rosemarie Härtel, for her help as well as for her understanding and patience during years of work at home.

Finally I crave indulgence of the readers for the remaining misprints and other blemishes due to the "foreign" English that have crept into the report.

H. Härtel