



Susanne Gänsicke & Stefan Hagel (eds.)

MUSIC *from*
ANCIENT MEROË

Reconstructing
Queen Amanishakheto's Auloi

MFA/Boston

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RECONSTRUCTING QUEEN AMANISHAKHETO'S AUROI

edited by

Susanne Gänsicke and Stefan Hagel



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RECONSTRUCTING QUEEN AMANISHAKHETO'S AULOI

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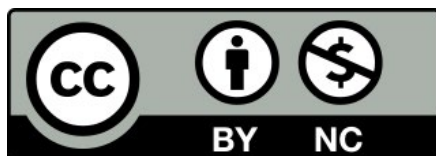
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Foreword

Lawrence Berman

“The auloi of Meroë.” So read the label on a gray archival box housed with our excavation records. What were the auloi of Meroë? I must confess, when I first arrived at the MFA in 1999, I had no idea. The name was so evocative, mysterious, romantic even. I soon found out that the auloi were remnants of musical instruments—double reed pipes, played in pairs—discovered in an ancient Nubian queen’s tomb in northern Sudan. Inside the gray box were not the auloi, of course, but a jumble of notes and papers relating to this important find, the single largest collection of such instruments ever discovered, “The Auloi of Meroë” being the title of a 1946 article by Nicholas Bodley on this important find. I also learned that their reconstruction posed a formidable challenge as they had been reduced to little more than fragments.

Darcy Kuronen, Matthew Siegal, and Rita Freed deserve all the credit for raising funds from the Visiting Committees of their respective departments to jumpstart the conservation project and the work of an international team of scholars beginning in 2013 to research and, so far as possible, reconstruct these precious instruments.

After May 2015, once or twice a year the team from Europe would come to Boston to work on the fragments. The scholars would camp out in our library; we could not use the room for any other purpose while the fragments were spread out on the big table. The pieces were kept in archival boxes that took up several shelves in our office safe. Every morning we would take the boxes out of the safe and every evening we would put them back again. I had the pleasure of seeing the number of fragments dwindle year by year as the instruments took shape before our eyes. It was the most extraordinary process of painstaking study, coordination, and reconstruction I have ever witnessed.

It was some time before the researchers were certain just how many instruments we had. Now we know: twelve pipes making six auloi, now beautifully housed. A magnificent achievement! We are very proud to present the results of our years-long collaboration to a wide audience of musicologists, archaeologists, historians, conservators, curators, and the public everywhere.

Lawrence M. Berman

John F. Cogan, Jr., and Mary L. Cornille Chair, Art of Ancient Egypt,
Nubia, and the Near East, Museum of Fine Arts, Boston

Perspectives

What were those strange bits of corroded metal in the basement of the Egyptian storerooms of the MFA? I remember asking Curator Emeritus Dows Dunham that during a summer internship with him following my first year of college. He shrugged and said sorrowfully, “They are auloi, important reed instruments found at Meroë, but unfortunately they are in such bad condition, little can be done with them.”

Fast forward decades, when Darcy Kuronen, then Chair of Musical Instruments at the MFA, approached me in my position as Chair of Ancient Egyptian, Nubian, and Near Eastern Art and asked if I would be interested in partnering in a joint effort to restore the auloi. Darcy had not only found funding, but also the ideal team to restore, study, and replicate them. What an opportunity!

Year followed year, as the dream team of a conservator and three music archaeologists with backgrounds in ancient studies, musicology, and engineering came together in Boston and slowly the auloi took shape. It is fair to say their results exceeded all our expectations.

As the sounds of the auloi come alive again, I rejoice in knowing how pleased it would have made Mr. Dunham.

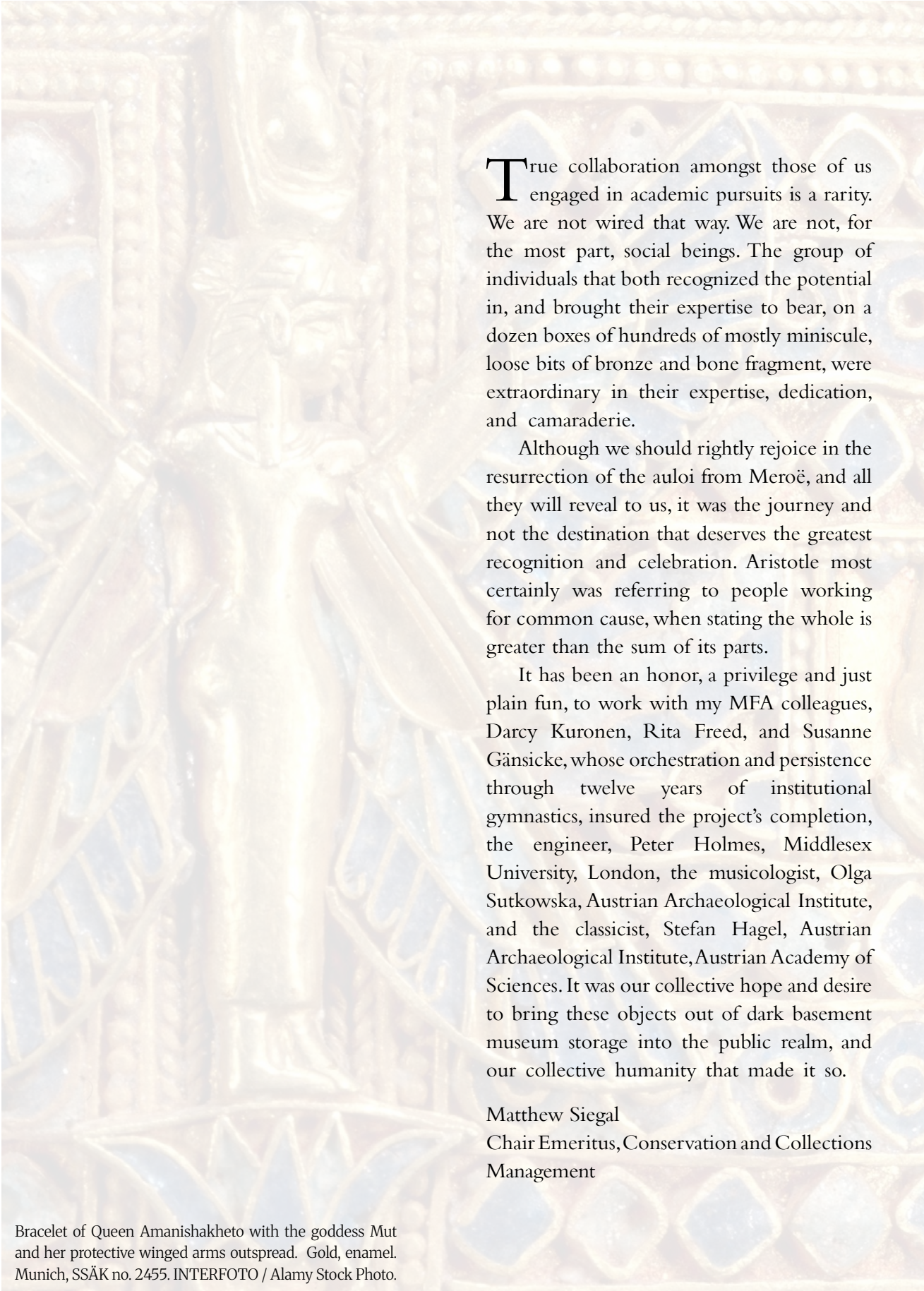
Rita Freed

Chair Emerita, Department of Ancient Egyptian, Nubian and Near Eastern Art

The Museum of Fine Arts, Boston, is home to an outstanding collection of over 1,200 musical instruments from all over the world, dating from antiquity to the present, and I was honored to curate that collection for nearly thirty-four years. Many in the field of instrument study, however, are unaware that what are arguably the rarest and most significant instruments at the MFA are cared for by the Department of Egyptian and Ancient Near Eastern Art, namely the auloi forming the basis of this book. I myself was unaware of these amazing instruments when I began working at the Museum in 1986, and I must thank my late colleague Gary M. Stewart for noticing some fragments from this cache on display just a few years later. Inquiring about the instruments with Dr. Timothy Kendall, an Egyptologist who was then an associate curator on the MFA’s staff, Stewart was told that there were several boxes of further fragments in storage. From then on it was clear to me that something must eventually be done to fully explore this extremely rare musical find. The rest of that story is presented elsewhere in these pages, but I am extremely gratified that the Museum’s auloi have finally become the source of serious scholarly study, of which this important book is just one manifestation.

Darcy Kuronen

Former Pappalardo Curator of Musical Instruments



True collaboration amongst those of us engaged in academic pursuits is a rarity. We are not wired that way. We are not, for the most part, social beings. The group of individuals that both recognized the potential in, and brought their expertise to bear, on a dozen boxes of hundreds of mostly miniscule, loose bits of bronze and bone fragment, were extraordinary in their expertise, dedication, and camaraderie.

Although we should rightly rejoice in the resurrection of the auloi from Meroë, and all they will reveal to us, it was the journey and not the destination that deserves the greatest recognition and celebration. Aristotle most certainly was referring to people working for common cause, when stating the whole is greater than the sum of its parts.

It has been an honor, a privilege and just plain fun, to work with my MFA colleagues, Darcy Kuronen, Rita Freed, and Susanne Gänsicke, whose orchestration and persistence through twelve years of institutional gymnastics, insured the project's completion, the engineer, Peter Holmes, Middlesex University, London, the musicologist, Olga Sutkowska, Austrian Archaeological Institute, and the classicist, Stefan Hagel, Austrian Archaeological Institute, Austrian Academy of Sciences. It was our collective hope and desire to bring these objects out of dark basement museum storage into the public realm, and our collective humanity that made it so.

Matthew Siegal
Chair Emeritus, Conservation and Collections
Management

Bracelet of Queen Amanishakheto with the goddess Mut and her protective winged arms outspread. Gold, enamel. Munich, SSÄK no. 2455. INTERFOTO / Alamy Stock Photo.

Preface and Acknowledgments

Susanne Gänsicke and Stefan Hagel

This book presents the publication of our recent research and conservation project on the Auloi of Meroë. The cache of ancient wind instruments was excavated in 1921 in the tomb of Queen Amanishakheto at Meroë in the northern Sudan by the Harvard University-Museum of Fine Arts Expedition. Although recognized as important at the moment of discovery, the instruments were highly deteriorated and fragmented due to their thin-walled nature, potential intentional damage inflicted during interment, and two thousand years of burial in the desert sand. Over decades, scholars had attempted to understand the find, but the sheer number of fragments had made a meaningful interpretation almost hopeless. Incompletely published, this largest instrument find of the western ancient world had thus remained a mystery treasure, and a distant dream of possible music-archaeological achievement.

In 2013, finally, special funding at the Museum of Fine Arts, Boston allowed a multidisciplinary team of conservator, scientists, and music archaeologists, to start a collaboration that has now entered its twelfth year, piecing together material evidence and reconstructing various types of reed aerophones physically and theoretically. Computer simulation and ultimately experimental models made it feasible to explore their musical potential.

With this volume, we present a contextualized narrative of discovery, detailed documentation of the cache as we have analyzed it, and the technical and musical interpretations of these pipes. The complex nature of the material and its degradation necessarily impose limitations, and there remain gaps in our understanding; also, not all elements have survived. We hope this volume will serve readers with various interests, ranging from Nubia and the ancient Nile valley through the histories of music and technology, and particularly the community of scholars and practitioners of the aulos, and will provide information and resources that may stimulate further research.

The first year of the project was funded by donations of the Visiting Committee of Musical Instruments. The following years were supported jointly by the three Visiting Committees of the above-mentioned departments. From 2018 on, our research was mostly funded by the European Research Council (ERC) under the European Union's Horizon 2020 research and innovation programme (grant agreement No. 787522), with the kind support of the J. Paul Getty Museum. It goes without saying that the views presented here reflect only those of the authors; none of the funding bodies is responsible for any use that may be made of the information contained in this volume.

This work required a large team and we wish to express our sincere thanks not only to all authors but to the many individuals and institutions who assisted us with access to the material, analysis, documentation, insights, photography, reconstruction, and support: Damon Beale, Brenda Breed, Timothy Chung, Michele Derrick, Bobby Giglio, Rajiv Gupta, Pamela Hatchfield, Peter Holmes, Christine Kondoleon, Abigail Hykin, Jayme Kurland, Stacey Leonard, Meredith Montague, the Rafter Radiocarbon Laboratory, Deborah Schorsch, David A. Scott, Michael Suing, MeiAn Tsu, Frank Willer, John Woolf, Kamila Wyslucha, and Michael Zach. Billie Jean Collins, finally, expertly and patiently shaped our manuscripts and innumerable images into this book.